



ROTHAMSTED
RESEARCH



Final Evaluation Report

Evaluation of a public dialogue on
Rothamsted Research working with industry



September 2014



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Executive Summary

Context: This report shares findings from an evaluation of Rothamsted Research's public dialogue to gauge public opinion as to how it might work with industry in the future. The dialogue will inform Rothamsted Research's Knowledge Exchange and Commercialisation Strategy which will set out the organisations guiding principles for its work with industry. It was the first public dialogue that Rothamsted has undertaken.

Funding and Governance: The dialogue was funded by BBSRC, Sciencewise and Rothamsted Research with a total project cost of £193,973¹. An external delivery contractor (OPM) managed the public dialogue events. All of these organisations (BBSRC, Rothamsted, Sciencewise² and OPM) formed the Management Group, the key decision-making body. An Oversight Group involved eight external stakeholders as well as three Rothamsted staff, and provided a broad range of expertise and advisory support. Evaluators (3KQ) undertook an independent evaluation of the process which included formative feedback as well as the summative conclusions in this report.

Process: The process spanned over ten months from submission of a proposal by Rothamsted in August 2013, to completion in April 2014. This included contracting of the delivery contractor in November 2013 and evaluators in December 2013.

The project process was as follows:

- A scoping exercise involved a web-based review and 11 stakeholder interviews. The results were used to inform the dialogue process, workshop materials and the recruitment of the public.
- The dialogue events were held over a two week period and comprised two public workshops held simultaneously (on 25 January 2014) at two Rothamsted sites (in Harpenden and North Wyke, Devon) in order to develop initial 'guiding principles' on Rothamsted's future work with industry. A total of 49 public participants were involved in the two workshops.
- A stakeholder workshop with 24 participants (16 external to Rothamsted) was held on 29 January 2014 to discuss the public's guiding principles.
- A 'collaborative' workshop was held on 8 February 2014 which brought together a total of 37 participants (29 public and 8 stakeholders) to review, discuss and agree upon a set of guiding principles.
- Analysis and reporting was carried out after this by the delivery contractor, with the final report being completed in April 2014.
- Within Rothamsted, there was awareness-raising of the dialogue throughout the process and a debrief seminar was held on 14 April 2014 to inform Rothamsted staff of the process and findings. Approximately one quarter of all staff attended.

Evaluation Findings

Satisfaction: Satisfaction levels were very high for all workshop participants. 98% of

¹ This project cost includes financial support and in-kind contributions.

² 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, and encouraging its wider use where appropriate. www.sciencewise-erc.org.uk

public participants stated that they were “overall satisfied with the events” . Stakeholders were also highly satisfied with the stakeholder workshop – 100% were “overall satisfied with the events”. Those involved from Rothamsted have also expressed high levels of satisfaction. Specific areas of satisfaction raised (within evaluation interviews) were the strong collaboration between the organisations throughout the project, and that dialogue outputs would be acceptable and useful. Areas of dissatisfaction raised were the time pressures towards the end of the project and the effect that this had on the project. The Oversight Group members expressed mixed levels of satisfaction, including whether more depth of understanding of the public’s views could have been achieved.

Governance: The governance of the dialogue was very successful. The role of the external Oversight Group was clear, and the group agreed the Terms of Reference early on. There was also clarity around who was in the Management Group, and their roles, which was considered particularly helpful by the delivery contractor.

Collaboration was very strong. The Rothamsted project manager was engaged and productive. Overall the OG played a valuable role as a source of diverse expertise, and gave reassurance to the project manager that the process was being carried out appropriately to the best judgment at the time. Unfortunately, the Chair of the OG was not able to attend two of the three OG meetings, which was seen to have reduced the social science input into the dialogue, although the Chair did input to the project in other ways (e.g. via email).

Credibility: The evaluation showed that Rothamsted staff and the Management Group involved in the process considered it a credible process. One issue which was questioned as a potential methodological shortcoming was the way that case studies were used in the public workshop materials and whether they skewed the findings. As evaluators, we conclude that the use of case studies was a useful way to engage the public in a complex topic; if they had been presented as background information rather than reviewed and discussed in detail, they may have played a less prominent role. This has shaped the findings, but does not invalidate the findings overall.

Timeframe: The timescales were set out in the ITTs, and the project was delivered on time. However significant time pressures were felt within the delivery phase which challenged administrative systems (more forward planning may have reduced this) and reduced opportunities for reflection and refining the process of workshop plans.

Overall Impact: The main achievement of the dialogue to date has been the dialogue’s reinforcement that Rothamsted is working in a way that is commensurate with the expectations and interests of the public. This will potentially add weight to any negotiations with industry, the media or others as to what has been learnt from the public dialogue about the principles within which they feel that Rothamsted should engage with industry in future. The medium-long term impact of the dialogue is closely linked to the KEC strategy that will be developed and can only be assessed at a later stage, although indications are that the dialogue results will inform that strategy.

One other immediate impact is that the results of the public dialogue were seen to add weight to any negotiations Rothamsted has in future with industry, the media and others:

“It gives Rothamsted more evidence to back up any standards that they have and advocate” Oversight Group member

Lessons learnt include that:

- Sufficient time is required for the design and planning phases of a public dialogue
- A multi-stage public dialogue requires sufficient time *between* events
- Clarity at the outset is required around the depth of the public's views being sought
- A final collaborative workshop bringing together public participants and stakeholders can be a valuable element to a public dialogue
- Public recruitment by sub-contracted agencies may have risks attached that can be difficult to manage
- Having a clear and effective management group can be pivotal to an effective process.

In conclusion, the overall findings of the evaluation are that:

- The project was completed to budget and on time. In retrospect, more time could have been allowed for design and delivery, and also between dialogue events.
- The governance of the dialogue was strong, and benefitted from the clarity of roles at the outset. The Management Group ran efficiently and effectively and collaboration between the organisations was strong.
- The process and the findings are credible; the methodology shaped the findings but did not invalidate them.
- The main achievement of the dialogue was the dialogue's reinforcement that Rothamsted is working in a way that is commensurate with the expectations and interests of the public. The medium-long term impact of the dialogue is closely linked to the KEC strategy that will be developed and can only be assessed at a later stage.

1 - Introduction

This report presents the findings from an evaluation of a public dialogue to gauge public opinion about how Rothamsted Research might work with industry in the future. It was commissioned by Rothamsted Research in 2013/14, and supported by the BBSRC and Sciencewise.

The aim of the evaluation was to provide an independent assessment of the public dialogue's credibility, effectiveness against its objectives and to provide an independent assessment of impacts. We also identify lessons to help develop good practice in public dialogue on science and technology issues.

2 - Background

Rothamsted is an agricultural research institute that has been in existence for 170 years. During this time it has established an international reputation for producing high quality scientific research that has shaped modern agricultural practice. It continues to provide scientific innovations and advice to the farming community and has established itself as a respected authority, largely due to its independent status and the fact it is predominantly publicly funded. The majority of this funding is from the Biotechnology and Biological Sciences Research Council (BBSRC).

There are a number of critical contextual factors that have contributed to Rothamsted Research holding a public dialogue to inform their new Knowledge and Exchange Commercialisation Strategy:

- Global Challenges - the global challenges of providing enough food, water and energy, within the context of climate change are strongly interlinked with the future of agriculture. Rothamsted has recently refocused its priorities to deliver the knowledge, innovation and new practices to increase crop productivity and quality and to develop environmentally sustainable solutions for agriculture. It is recognised that central to this is the need to strengthen its work with agribusiness and farmers (as well as government policymakers and non-government organisations (NGOs) for the research to have significant relevance and impact.
- There is also increasingly a drive from the UK Government to engage with industry in agricultural sciences. An Agri-Tech Strategy published by BIS and Defra (July 2013) sets out a strategy for the UK to maintain its position as a leader in agricultural science, and become a world leader in agricultural technology, innovation and sustainability.
- Value for Money: Rothamsted is exploring collaboration with non-publicly funded partners. By partnering with SMEs, start-ups and established agribusinesses, this will help improve Rothamsted's income portfolio as well as give it access to the necessary infrastructure and market understanding to put innovations into farmers' hands.
- Responsiveness to Public and Societal Needs – BBSRC is aware that it must ensure its £500m/year research programme is responsive to public and societal

needs. Parallel to this, BBSRC is looking increasingly to research institutes to lead and own public dialogue activities. As a result of a recent assessment, all those organisations who receive strategic funding from BBSRC are expected to change their approach to public engagement to be more dialogue-driven.

The Public Dialogue project was developed *to explore the social and political implications of Rothamsted working with industry partners on joint research and development projects*. The phrase 'public dialogue' is used in this report to mean "A process during which members of the public interact with scientists, stakeholders, and policy makers to deliberate on issues relevant to future policy decisions", taken from the Sciencewise definition in their Guiding Principles³.

An Oversight Group (OG) was set up for the project, in order to include a range of people with specialist knowledge who could advise upon the engagement process and dialogue material. This group included experts from the following fields: public dialogue/science communication/media/public affairs; science/research; social science; agri-business; NGOs; food ethics; knowledge exchange and commercialisation of science; policy/regulatory body (full membership and Terms of Reference in Appendix 1).

The oversight group (OG) was charged primarily with ensuring good governance of the project throughout, from design to final reporting; and the OG Terms of Reference focused particular attention on quality assurance of the dialogue material (ensuring it was comprehensive, balanced and accessible to the lay audience) and the engagement process (ensuring it was far reaching, accessible and targeted all relevant stakeholder groups).

In addition, members were expected to:

- Bring diverse views and perspectives to the framing of the dialogue
- Bring intelligence from their own organisations to help shape the dialogue
- Disseminate and promote findings through their own networks

The public dialogue was commissioned by Rothamsted Research via competitive tender in November 2013 and ran for around 6 months (with the workshops spanning over two weeks at end of January/ early February 2014). The OPM Group was appointed as the delivery contractor for the dialogue, and 3KQ was appointed as the independent evaluators.

The public dialogue was funded by a Sciencewise grant to BBSRC (£51,000 including VAT), BBSRC (£22,823.00), and Rothamsted (£18,292 including VAT): a total of £92,115. Additionally, in-kind contributions totalling £101,858 were received.

The full Dialogue Report of the findings can be found online on the Rothamsted⁴ and Sciencewise⁵ websites, together with the materials used during the dialogue.

³ Sciencewise (2013). *The Government's approach to public dialogue on science and technology*. <http://www.sciencewise-erc.org.uk/cms/assets/Uploads/Publications/Sciencewise-Guiding-PrinciplesEF12-Nov-13.pdf>

⁴ <http://www.rothamsted.ac.uk/>

⁵ <http://www.sciencewise-erc.org.uk>

3 – The Public Dialogue

The overall aim of the public dialogue was *to explore the social and political implications of Rothamsted working with industry partners on joint research and development projects.*

The objectives were refined during the planning process and agreed with the Oversight Group (OG), and were as follows:

1. To engage in discussion with a diverse group of public and stakeholders on Rothamsted Research's work with industry:
 - a. To enable the development of public participants' understanding of Rothamsted Research's work and the issues arising when working with industry.
 - b. To listen to the views of public participants on the issues arising from Rothamsted Research's work with industry.
 - c. To inform stakeholders of Rothamsted Research's work with industry and listen to their views.
 - d. To ensure that the public and stakeholders are adequately informed to provide input that will enable the improving and validating of the Knowledge Exchange and Commercialisation Strategy and Policy for Rothamsted Research.
2. To develop a set of guiding principles, on the basis of the public and stakeholder engagement, for Rothamsted Research's work with industry:
 - a. To understand, analyse and report public views and suggested guiding principles to stakeholders and Rothamsted staff.
 - b. To understand, analyse and report stakeholders' views and suggested guiding principles to the public and Rothamsted Staff.
 - c. To reach a common set of guiding principles between the public and stakeholders (and/or understand where differences may arise) that will be used to inform Rothamsted Research's KEC strategy.
3. To support the development of a culture of listening and engaging in dialogue within Rothamsted Research:
 - a. To involve Rothamsted Research staff in the dialogue in a range of ways
 - b. Disseminate research outcomes to Rothamsted Research staff and, if applicable, other BBSRC-funded institutes
4. Outputs disseminated to other public-funded research institutions:
 - a. To inform Rothamsted's KEC Strategy and publicly report on the actions taken
 - b. To share the outcomes of the dialogue, and the lessons learnt for example with the Leadership Forum of the Agri-Tech strategy, and communicate the work through to BBSRC, other research councils, BIS, Defra and the Government Office for Science, through established governance arrangements

Management Arrangements

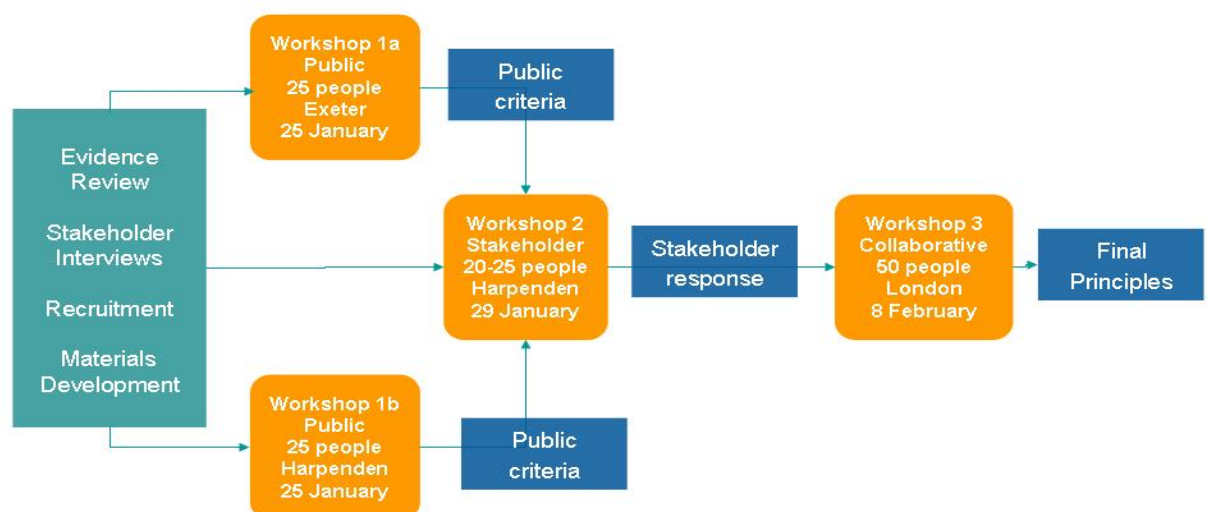
The Management Group (MG) comprised Rothamsted, the delivery contractor (OPM), Sciencewise and BBSRC. The Group was established early in the dialogue planning stage and had weekly 30-minute telephone calls (which the Evaluation Lead also joined) in order to plan and formulate the dialogue. The delivery contractor organised and facilitated these calls, and particularly sought input to the process design and materials development from those in the Group.

The Oversight Group (OG) which comprised eleven members (including the Chair) met three times⁶ throughout the course of the dialogue, and was convened by Rothamsted. At the first meeting, the group provided input on the overall approach to the dialogue, the planned scoping stage and the stakeholder and public recruitment approach. At the second meeting, the group provided input on draft workshop methodologies and case study materials. The final meeting comprised a presentation and discussion of the findings from the dialogue, and the dialogue report. In practice, the chair of the Oversight Group was only able to attend the last of the three meetings in person but was involved in the project in other ways (e.g. commenting by email). The meetings were chaired by BBSRC in the absence of the Chair.

Scoping and Planning Stage

The dialogue began with a Scoping stage to identify the main issues surrounding the project brief and to develop the initial agenda for the dialogue process, as agreed with the OG. The delivery contractor carried out a web-based review of information and eleven scoping interviews with relevant experts and stakeholders from Rothamsted, NGOs, industry and the legal profession. The findings from these activities informed: the process design for the dialogue and workshops; the materials to be used during the workshops; the recruitment of public participants; and the invitation list for the stakeholder workshop (see below).

Dialogue Process



The various stages of the dialogue process are shown diagrammatically below in Fig. 1. This includes the planned number of participants – the actual numbers who attended are

⁶ OG meetings were held on December 13th 2013, and January 15th and March 13th 2014

included in the text below. It should also be noted that the 'collaborative workshop' consisted of public and stakeholder participants.

As shown above, the sequence of the events was:

- **Scoping.** An initial scoping and planning stage comprising a review of evidence and stakeholders' perspectives which informed the process and sequencing of the workshops, as well as public recruitment and development of workshop materials.
- **Public workshops.** Two simultaneous public workshops (with a total of 49 members of the public: 24 at one and 25 at the other). Within the planning phase it was proposed by the delivery contractor that 25 would be optimum – and that a larger number of participants may reduce the effectiveness of the days. The workshops were held at the Rothamsted site in Harpenden and near to the other Rothamsted site in Exeter. This was so that they were on or near site so that participants could gain a familiarity of the institute (before a final workshop in a 'neutral' venue in London). The workshops aimed to familiarise public participants with Rothamsted's work, to share some of the potential tensions of Rothamsted working with industry and to develop initial 'guiding principles' from this.
- **Stakeholder workshop.** A stakeholder workshop was then held at Rothamsted (24 participants, 16 of them external to Rothamsted) in Harpenden to elicit a response to the initial sets of guiding principles that had been developed by the public.
- **Collaborative workshop.** A final collaborative workshop brought together members of the public from the first workshops who were interested and available (29 participants) and stakeholders (3 external, 5 from Rothamsted) to discuss, review and develop a prioritised list of guiding principles.

Some of the key aspects of the methodology are set out below:

Recruitment

Underpinning decisions around recruitment was the focus upon an intensive set of activities with a relatively small group of people to produce deeper insights, rather than a larger group. The aim was to explore the perspectives of a diverse and inclusive group of people who have had opportunities to develop a considered opinion on the issues. The dialogue did not intend to use quantitative research methods, or to deliver outputs that were statistically representative of the general public. A recruitment specification and questionnaire was developed by the delivery contractor (and agreed with the MG), and implemented by a recruitment agency. The recruitment criteria aimed towards a mix of age, socio-economic status, ethnicity and gender at each workshop, and that at least two thirds of participants had never heard of Rothamsted Research before (see appendix 3 for the specification and questionnaire). The intention was for the agency to recruit on-street in the local towns and villages around Harpenden and Exeter (and is discussed further in section 5).

The total of 49 public participants was considered appropriate and sufficient for the methodology used⁷: 25 people were recruited for each public workshop in Harpenden

⁷ The Sciencewise Guiding Principles states that "Public dialogue does not claim to be fully representative, rather it is a group of the public, who, after adequate information, discussion, access to specialists and time to deliberate, form considered advice which gives strong indications of how the public at large feels about certain issues".

and Exeter (some of whom were then invited to participate in the collaborative workshop in London).

Recruitment: Public workshops

Participants were recruited by a recruitment agency sub-contracted by the delivery contractor. The aim was to recruit a total of 50 members of the public: 25 to attend each public workshop. Actual attendees numbered 24 in Harpenden and 25 in Exeter. These locations were chosen because they were at (in Harpenden) or close to (in the case of Exeter) Rothamsted sites and thus provided some initial familiarity of the institution to the participants. A breakdown of the demographic diversity of actual participants is given in Appendix 9.

Workshop Materials

Stimulus materials for the two initial public workshops were developed by the delivery contractor and the Management Group. These were based upon prior findings (from the scoping stage) of the potential tension in industry-research collaborations that could occur. The materials were further refined following input from the Oversight Group. The materials included:

- An exercise to understand the concept of guiding principles
- Case studies illustrating Rothamsted-industry tensions
- A presentation (by Rothamsted) setting out the history of Rothamsted, its relationship with industry and its motivation for working with industry in the future

Guiding principles

The notion of developing 'guiding principles' was within the original Invitation to Tender (pg. 9) as a key output. Concerns around the understanding the concept of 'guiding principles' were raised by the delivery contractor, and discussed with the MG and OG. In order to provide clarity and build a shared understanding among participants of the practical use of guiding principles, a hypothetical scenario was developed for public participants to discuss. This discussion enabled participants to see how guiding principles might be used by an organisation, and so made the concept of principles relevant to Rothamsted. The scenario was that their local GP is considering outsourcing some of its services to the private sector. Having been introduced to NHS guiding principles, participants were asked to discuss how these applied to the notion of commissioning services, as well as to making decisions as to which services to commission.

Three main areas of tension which could potentially arise in industry-research collaborations were identified during the scoping stage and further refined following input from the Oversight Group. Case studies were developed by the delivery contractor in consultation with the MG to provide practical illustrations of these tensions to the public participants. These were:

- 1) **Mosquito Repellent.** The hypothetical scenario of a pharmaceutical company approaching Rothamsted to develop an innovative mosquito repellent. The work diverges from Rothamsted's usual focus, but the company offers a substantial sum that will free up resources for other projects. However, the company insists on exclusive ownership of all products developed and offers Rothamsted a 1% share in global profits. The first case study was intended to highlight issues surrounding the ownership of intellectual property in collaborative projects as well as the allocation of profits derived from these.
- 2) **Pesticides and salmon stocks.** The situation of local concerns that a pesticide developed by a pharmaceutical company that Rothamsted has partnered with,

was possibly polluting local rivers and harming salmon stocks. The government is considering a ban of the pesticide, but based on scientific evidence that salmon reduction is not attributable to the product, Rothamsted advises that they should not. Environmentalist organisations are heavily critical of Rothamsted's advice, and point to Rothamsted's conflicting interests between protecting funders and influencing government policy. Rothamsted runs the risk of suffering severe reputational damage. This case study was developed to highlight conflicts between carrying out privately funded research and acting as an institute that can give independent advice, and, just as importantly, be perceived to be doing so.

- 3) **Improving the nutritional quality of food.** A scenario of Rothamsted seeking to build upon the results of a project by partnering with industry to develop the commercial potential of findings that could improve food production. However, the original research used a computer-based modelling system provided by a research institute that does not allow its systems to be used for commercial purposes. If Rothamsted cannot negotiate access, the research will be compromised. This case study was intended to highlight constraints placed upon Rothamsted's freedom to operate by partnering with industry.

The key characteristics of the workshops are shared below:

Public workshops: (Saturday January 25th 2014 10 a.m. - 4p.m.)

- **Diverse participants:** The aim of these workshops was to engage a group of the local public (as set out in the ITT) who would not be expected to have any prior knowledge of the topic, beyond perhaps having heard of Rothamsted before. The participants were recruited by a recruitment agency to meet a quota broadly representative of the local population. Participants were incentivised by a thank-you payment of £60.
- **Mirrored Events:** The two workshops were held simultaneously due to constraints during the delivery phase, rather than for any methodological reason. The workshops were designed to mirror each other as far as possible with the same introductory presentation by Rothamsted and case studies presented. An initial presentation introduced public participants to Rothamsted and its work (including how it works with industry and why) and the need for guiding principles. The second presentation summarised a real example of how Rothamsted currently works with industry. Attempts were made to ensure a similar balance of Rothamsted staff.
- **Facilitated and structured.** A team of at least four facilitators and/or note-takers from the delivery contractor staffed these events. In Harpenden, five Rothamsted staff observed the events and assisted by answering questions when appropriate (three of whom gave short presentations). Participants were taken through a schedule of activities that enabled them to become more familiar with Rothamsted, ask questions, read and discuss case studies and the possible tensions of working with industry issues, and develop an initial set of guiding principles (Appendix 2 provides more detail).
- **Capturing of views.** Data was captured in a variety of ways: audio-recording, the facilitators took notes, and occasionally the participants were asked to generate their own outputs such as a ranking of the draft guiding principles .

- **Full days, reconvened.** Both workshops at each location were a full day long, held on Saturdays and then those who were available and interested attended a further, 'collaborative' – or combined - public and stakeholder workshop two weeks later.

Stakeholder workshop: (Wednesday January 29th 2014 4:15 p.m. – 7p.m.)

- **Expert/stakeholders perspectives:** The aim of the workshop was to familiarise stakeholders with the understanding of the public participants on the topic (prior to the collaborative workshop), and to identify the points of difference between the public's guiding principles and the stakeholders' views.
- **Targeting:** stakeholders were identified through initial suggestions from the OG and invitees were asked to recommend colleagues ('snowball' sampling strategy). The initial list included stakeholders from diverse relevant sectors including academic researchers, industry, NGOs and end users such as farmers. 60 were invited and the final attendees were 16 external stakeholders and 8 from Rothamsted. All sectors were represented, apart from NGOs. One NGO agreed to provide a perspective on the written principles prior to the workshop (see section 6 for further discussion)
- **Familiarisation of the public workshops:** The delivery contractor facilitated these sessions with at least four facilitators / note-takers, using a structured process. In order to share the workshop process that the public had experienced, the stakeholders listened to the Rothamsted presentation that had been given at the public workshops, read the case studies that had been shared with the public participants and reviewed the public's guiding principles. It was also intended that a stakeholders briefing statement would be developed. Small table and plenary discussions took place. Appendix 2 sets out the design for the workshop.
- **Capturing of views.** Data was captured by audio-recording and the facilitators took notes on flipcharts and in notebooks.

Collaborative Workshop: (Saturday February 8th 2014, 10a.m. - 4p.m.)

- **Sharing of Participants and Stakeholders Views:** The aims of the final workshop were to deepen public participants' knowledge of Rothamsted and its work with industry (informed by the stakeholders), develop mutual understanding between the public and stakeholders and the development of a final principle statement based on considered judgement by the public. Public participants were incentivised by a 'thank you' payment of £70.
- **Recruitment/ Invitations:** All of the public participants were asked whether they were interested in attending the collaborative workshop. 34 (of 48) participants expressed an interest and were available and 29 attended (18 from Harpenden, 11 from Exeter). All stakeholders were invited to attend and 8 attended – 3 were external (and had attended the stakeholder workshop), 5 were from Rothamsted. At least two stakeholders sat with each of the table of public participants.
- **Iterative review and development of principles:** The workshop was facilitated in a structured way. First, the public participants' guiding principles (from each of the workshops) were shared by the facilitator and discussed in small groups; the response from the stakeholder workshop was then presented and discussed;

there was then a focused discussion and review of the principles. These were then prioritised and finalised.

- **Capturing of views.** Data was captured in various ways: the facilitator/note-taker taking notes during the discussion; audio-recording on tables; records from flip charts; and note-taking of plenary discussions.

Data Analysis

The delivery contractor analysed the data. As described within the delivery contractor's report, the data collected (using the methods set out above) were transcribed into electronic format and uploaded into a qualitative data analysis software package called NVivo⁸ with notes from table discussions (see Box 1), complemented by the prioritised lists of guiding principles. Audio recording were also referred to.

Box 1. Software Used to Analyse the Data

NVivo Qualitative data analysis software offers a useful aid in the organisation of the unwieldy data sets that characterise qualitative research. It enables a more effective organisation of the dataset through the classification of different parts of the data set. These allow for the creation of 'sets' which enable the researcher to isolate different groups of respondents and explore and compare themes within these. Qualitative analysis software is also especially useful in the latter stages of analysis to explore issues which might not have been covered in initial coding rounds through the use of queries. A coding framework was developed following standard qualitative research procedures: an iterative process involving the incremental application and refinement of codes, beginning with samples of the data set and progressively applying refined coding frameworks to larger samples until full coverage is achieved.

Reporting

The Dialogue Report was compiled which set out the context, methodology and findings of the process. It also included reflections, in response to a request from the Rothamsted Policy Dialogue. The key themes were: working for the public good; open access to results; transparency and public involvement; independence and integrity; reconciling idealism and pragmatism. It was reviewed by the Management Group and the Oversight Group and was finalised following two rounds of comments.

Rothamsted Research Internal Awareness-Raising

The Rothamsted team also followed a process internally to raise awareness of the process before, during and after the dialogue took place. It is an objective of the project to 'Support the development of a culture of listening and engaging in dialogue within Rothamsted Research' (objective 3). In chronological order, the following activities were undertaken by the Rothamsted Project Manager.

- An initial meeting with the Rothamsted Director, Head of Knowledge, Exchange and Commercialisation and Associate Director of Operations to discuss the process, hear suggestions as to others to engage and disseminate too.

⁸ NVivo is a qualitative data analysis computer software package designed for use on qualitative, unstructured data.
http://www.qsrinternational.com/products_nvivo.aspx?utm_source=NVivo+10+for+Mac

- Individual meetings with 7 key Rothamsted staff (Heads and Deputy Heads of different departments) to raise awareness about the project and what they would like to hear/ discuss with the public about working with industry.
- A message was included in the Rothamsted Internal bulletin which each staff member receives, introducing the project.
- Other individual meetings (7) were held with those who were identified as staff or who expressed interest .
- The project has been discussed at every Rothamsted Institute Management Committee meeting (all Heads of Departments participate and disseminate information to staff) since August 2013, and it has been a standing item in the agenda since December/ January.
- A visit was made to Rothamsted's other site in North Wyke, Devon to inform the senior management about the dialogue and engage them to participate in the upcoming workshop in North Wyke, near Exeter.
- A Debrief Seminar was held at Rothamsted (April 14th 2014) in order to raise awareness of the findings of the project. It was a seminar style with presentations from the (i) Rothamsted Project Manager who 'set the scene' ; (ii) the project director of the public dialogue who gave an introduction to public dialogues ; and (iii) the delivery contractor who presented the process and findings. There were 49 attendees (see Section 5 for further discussion).
- The plans for sending out reports to public participants include:
 - o Issue of a press release and make publicly available both the delivery report and (this) evaluation report.
 - o Send both reports with a thank you email/letter to the stakeholders that were invited - irrespective of whether they attended or not.
 - o Send both reports to the members of the public that participated in the workshops.
 - o All members of staff will have access to paper copies apart from the electronic ones that will be online.
 - o The OG members will also receive both reports.

4 - Evaluation Aims and Methodology

The **aim** of this evaluation is to provide an independent assessment of the public dialogue's credibility, and its effectiveness against its objectives, including an assessment of impacts.

- i. Objectives: has the dialogue met its objectives? Were they the right ones?
- ii. Good practice: has the dialogue met the Sciencewise principles of good practice?
- iii. The value and benefits of the project, including the extent to which all those involved have been satisfied with the outcomes and process?
- iv. Satisfaction: have those involved been satisfied with the dialogue and its value?
- v. Governance: how successful has the governance of the project been, including the role of the Oversight Group, the Rothamsted and the Sciencewise support role?
- vi. Impact: what difference or impact has the dialogue made?
- vii. Costs/Benefits: what was the balance overall of the costs and benefits of the dialogue?
- viii. Lessons: what are the lessons for the future?

This evaluation report is based on the following data collection and assessment methods, conducted between 3rd December 2013 (when appointed) and May 2014:

- **Observation.** The evaluator directly observed a variety of events and meetings: Oversight Group meetings⁹, 1 public workshop¹⁰, the stakeholder workshop¹¹, and the collaborative workshop¹². Reports from these observations are presented in Annexe 6. In addition (beyond the scope of the contract) a Rothamsted debrief seminar¹³ was observed.
- **Interviews.** Stakeholder interviews were conducted at key points throughout the dialogue. A limited round of interviews before any of the events had happened established the context for the dialogue events to baseline the evaluation. A second round of interviews was conducted of OG members, Rothamsted Research and the delivery contractor at the end of the project, to assess learning and impact.
- **Questionnaires.** Written self-assessment questionnaire data was gathered from all four of the workshops. The response rate was 88%. Additional data was gathered from the Rothamsted Research debrief seminar.
- **Document review.** The evaluators reviewed the majority of written correspondence¹⁴ and documents that were circulated such as minutes, Terms of Reference, dialogue stimulus materials, draft process plans and the Dialogue Report.
- **Formative evaluation.** Throughout the process the lead evaluator was engaged in the process: observing, listening and questioning where appropriate. For example the premature aggregation of the data was highlighted and later changed. **An Interim evaluation report (2 pages)** provided initial insights and was shared immediately after the dialogue events (see appendix 7)

Limits to the scope of the evaluation

It is important to outline what the evaluation has not done, as well as what it has done. This was the agreed scope of the evaluation as per the Terms of Reference. It is included in order to set out the boundaries of the analysis and reporting.

- The public dialogue workshop in Exeter (25th January) was not observed by evaluators, although participant questionnaires were distributed, completed and analysed. It is normal evaluation practice to observe a sample (e.g. one of each type), and not all, events. In this case, the evaluation team was able to provide an observer, but it was agreed with the Management Group that observation of 3 of the 4 events was sufficient. The evaluator carried out a brief meeting with the Knowledge Exchange and Commercialisation Manager who attended and presented at the Exeter workshop in order to hear some insights from the day
- The evaluators were not included in any correspondence between the delivery contractor and any third parties (such as the recruitment agency or participants)
- The evaluators were not involved in, or observers of, the analysis of the data from the workshops (other than any questions/ issues that arose within the

⁹ Oversight Group meetings observed took place on 13th December, 15th January 2014

¹⁰ The public event observed was at Rothamsted Research on Saturday 25th January

¹¹ The stakeholder event took place on Wednesday 29th January

¹² The collaborative event was held in London on Saturday 8th February

¹³ The debrief seminar was held at Rothamsted Research on 14th April

¹⁴ Over 300 emails were read and reviewed as part of the evaluation.

- weekly MG meetings)
- Participants were not interviewed regarding any further (short-term) impact that the workshop/ process had upon them (beyond completion of the questionnaires at the end of the workshops, as stated above).

5 – Objectives

- i. *“Has the dialogue met its objectives? Were they the right ones?”*

The evaluation aims to address eight main questions (discussed above), of which the one above is the first, focussing on objectives.

There were four objectives of the project. The objectives are analysed individually, given that the objectives have been met to different degrees. This evaluation concludes that Objective 1 was ‘well met’¹⁵, objective 2 was ‘fairly well met’¹⁶; objective 3 was ‘well met’ and objective 4 is likely to be ‘well met’. The definitions of these terms (e.g. ‘well met’) are given in Appendix 8.

Evidence for the evaluation conclusions comes from direct observations, interviews with OG members, review of the Dialogue Report, and participant questionnaires.

Objective 1:

1. To engage in discussion with a diverse group of the publics and stakeholders on Rothamsted Research’s work with industry
 - a. To enable the development of public participants’ understanding of Rothamsted Research’s work and the issues arising when working with industry
 - b. To listen to the views of public participants on the issues arising of Rothamsted Research’s work with industry
 - c. To inform stakeholders of Rothamsted Research’s work with industry and listen to their views
 - d. To ensure that the public and stakeholders are adequately informed in order to provide input that will enable improving and validating the Knowledge Exchange and Commercialisation Strategy and Policy for Rothamsted Research

There were divergent opinions across the OG as to how well objective 1 had been achieved.

“Objective one was met to the best ability and a good environment was created to discuss different views” OG member

“Given the limited resources, objective 1 was achieved as much as we could have hoped for. But there were problems with recruitment that could have led to less diversity [amongst public participants] than hoped”, Delivery contractor staff member

The issues of ‘diversity’ and ‘representativeness’ are discussed in more detail below.

- a) The public participants felt that their understanding had increased – 98% felt that they had a good understanding of what Rothamsted does (Harpenden 96%, Exeter 100%). 94% felt that they were adequately informed to provide input (96% Exeter, 92% Harpenden). 94% also felt that they had a better understanding

¹⁵ Met, with only one or a few relatively small improvements identified, but without any substantive impact on the output of the dialogue

¹⁶ Met, but with a series of improvements identified that could have substantively improved the process and/or impact of the dialogue.

(than before the workshop) of the issues involved for Rothamsted working with industry (Harpenden 96%, Exeter 92%). Observation of the Harpenden event endorsed this – and the supportive and constructive perceptions and discussions around Rothamsted was striking.

As discussed above, it was intended that the format of the day was as identical as possible at the Harpenden and Exeter simultaneous events. However in reality the opening presentation which gave the background setting about Rothamsted, what it does and why and how it works with industry was completed in Exeter, but was not in Harpenden (where the presenter discussed questions at length which emerged from earlier slides). The KMEC Manager was concerned that this may have led to a narrow understanding at the Harpenden workshop – specifically that the motivation for Rothamsted working with industry was purely financial rather than about the impact of research (which often requires commercialisation for this to occur). The evaluator's view, based upon observation at the Harpenden event, was that there was indeed greater emphasis upon the revenue-raising impetus of working with industry than maximising impact.

- b) The public felt that they were listened to - 93% felt that they were able to contribute and have their say (Harpenden 91%, Exeter 96%). Observation of the Harpenden event confirmed that participants were given sufficient time to ask questions, and of those who asked questions (9 of the 24 participants) were engaged and seemed highly interested.
- c) Of the stakeholders who attended the stakeholder workshop, 94% felt at the end of the workshop that they had a good understanding of what Rothamsted Research does; 95% felt that they had a better understanding of the issues involved for Rothamsted in deciding how it works with industry and 94% felt that they were adequately informed to provide input. However only 38% felt that they had enough time to discuss the issues (from observation - time slippage in the event meant that a final session to develop a 'stakeholder' summary briefing did not occur).
- d) At the collaborative workshop, comprising the public and stakeholders, 97% of all attendees felt that they were adequately informed to provide input, and 97% felt that they could ask questions easily and get appropriate answers. 97% also felt that they could contribute their views and have their say. The same percentage also felt that they understood the next and final stage of the process was to agree the guiding principles and receive feedback as to what had been done.

In terms of the *diversity* of participants, there was concern about the recruitment of the public participants. As mentioned above, a well thought-through recruitment specification was developed by the delivery contractor, as well as on-street recruitment questionnaires (all agreed with the MG). As shown in Appendix 9, there was a good mix across the different criteria. There was almost equal spread across men and women (although there were slightly more men at the final workshop); and a good spread across different age groups. In terms of socio-economic categories there was a mix at both of the public workshops. There was an absence of 'A' category (professional) but representation across all of the other categories. There was also representation of different ethnic groups at the public workshops (with more at Harpenden than Exeter) and the collaborative workshop.

However the recruitment agency sub-contracted by the delivery contractor recruited 14 of the 24 participants for the Harpenden workshop through another agency who used a database rather than on-street recruitment. Although the public participants that were ultimately recruited did fulfil the criteria, and they had not participated in a similar process for over a year (as per the specification) there was a concern expressed by Rothamsted that this may have affected the process as some were 'repeat participants' who were used to taking part in such processes, and were not 'fresh' to such an approach. While this may have shaped the dialogue to some degree we would conclude that it does not invalidate the findings.

“ The recruitment company that the delivery contractor sub-contracted let them down. Recruitment from the database meant that there were repeat participants who are used to taking part in such events”, OG member

“It took me a while to realise that it was not intended to be representative opinion but diverse opinions – I feel that the project did rather well in diversity. However there is an important question still about what local people think because of the small sample size”, OG member

The delivery contractor commented:

“We were disappointed that there were issues with the recruitment, and that we did not deliver on recruitment in the way that we said that we would. We have had an internal review of the process, and one of the action-points is to be careful about quality assurance and risk assessment - for example if participants drop out, what is in place to mitigate against this”, Delivery contractor staff member

In terms of the diversity of the stakeholders, it is notable that there were 18 external stakeholders at the stakeholder workshop and only 3 at the collaborative workshop (all had attended the stakeholder workshop). This may be due to the event being held on a Saturday, and also limited notice being given, but it does signify a significant drop-off rate between the two workshops. 77% of participants felt that there was a full range of representative views at the stakeholder workshop. However, despite efforts, there were no participants from NGOs at the stakeholder or collaborative workshop. In an attempt to ameliorate the lack of NGO voice, the NGO representative from the OG (Friends of the Earth) commented on a version of the draft principles that had emerged from the public workshops prior to the stakeholder workshop. An NGO representative has informed the evaluation that insufficient time was given in order to field someone the event.

The delivery contractor's report attempts to share the diversity of views by providing some quotes and also including the reports from each of the workshops as annexes. However the agreed structure of the report upon final themes and guiding principles means that the executive summary and presentation of findings is largely around the convergence or consensus of views, with limited unpacking of diverse voices.

Objective 2:

To develop a set of guiding principles, on the basis of the public and stakeholder engagement, for Rothamsted Research's work with industry

- a. To understand, analyse and report the public's views and suggested guiding principles to stakeholders and Rothamsted staff

- b. To understand, analyse and report stakeholders' views and suggested guiding principles to the public and Rothamsted Staff
- c. To reach a common set of guiding principles between the public and stakeholders (and/or understand where differences may arise) that will be used to inform Rothamsted Research's KEC strategy.

Objective 2 was considered to be 'fairly well met'.

"We have gained reassurance/ self confidence that we are doing things in the right way that the public want and expect. It's all important - good to see how much RR is valued and that the public appreciate that we continue to do research to safeguard researchers and their prospects", Rothamsted staff member

"As a result of the dialogue, we are not changing direction but the dialogue had reinforced that the course that we are following is the right one" Rothamsted staff member

"Rothamsted just had an affirmation that what they already had was ok", OG member

"The set of principles was not a great revelation..... The results will give RR some leverage in negotiation with industry" OG member.

"What came out of the project will be useful to the RR team but it was not the engagement with people and analysis that the project should have been able to achieve. The timescale and budget were impossible to get anything more than a simple dialogue. The facilitation and analysis were not sufficiently probing about why people had thought of ideas and come up with them", OG member

- a) In terms of public views being listened to - as discussed above, a very high percentage of public participants (96%) felt that they were listened to during the workshop. As observed at the Harpenden workshop, there were opportunities for small group discussion and also plenary discussion, and sufficient time for answering questions (as discussed above). Note-taking was carried out by the table and plenary facilitators (rather than by the public). Although this is done in this way because the delivery contractors are experienced in this, and sufficient notes will be taken, the 'ownership' of the comments could then move away from the participants. In this case there is no evidence that this caused problems for the participants, but it is worth considering for future dialogues.

The draft principles that emerged from the Harpenden and Exeter workshops were amalgamated and presented in a combined form to the stakeholder workshop. This reduced the integrity of the original list of principles, and meant that the principles presented were less contextualised, and internally consistent. This posed a significant risk to the integrity of the data . This was reflected upon by the delivery contractor and commendably significant effort was placed into developing succinct and accessible lists of the principles for the final collaborative workshop. This enabled the process to get back on track.

However as pointed out by one of the OG members, there was very little probing by the facilitator as to why the public were commenting as they were, their motivations or for example what they meant by specific terms. The lack of analysis of public voices is also evident in the Dialogue Report where there is limited discussion of divergent views (in many places the 'public' are presented as a homogeneous voice), analysis of what the public mean by any terms (such as 'humanitarian' which was used repeatedly but it was unclear as to what was meant), understanding of why people commented as they did, or indeed patterns across any criteria. There are various possible contributory reasons for this including lack of time within the workshop with the number of participants, lack of significant knowledge of Rothamsted. As stated earlier it may also have been that there was not sufficient direction given about the depth of understanding that was required.

- b) Stakeholder views were elicited initially within the stakeholder workshop. Again there was small group discussion as well as plenary discussion in order to provide the opportunity for all to participate. There was written note-taking of both by the delivery contractor. There was limited time at the workshop (3 hours) and only 38% of participants felt that they had sufficient time. The planned 'briefing statement' which was to be developed as a summary of 'which of the guiding principles the stakeholders agreed with 'and which ones they have questions about' was not carried out, so it was the delivery contractor who summarised what had been said within the workshop.
- c) A set of guiding principles has been developed which Rothamsted feels to be a useful set of principles, and whilst there are "no surprises" it provides strong reassurance that they are approaching their work with industry in a way that is considered to be commensurate with the public views. The collaborative workshop enabled some more discussion and debate around the guiding principles. However as a member of the MG stated "there was not as much testing of the principles as had been hoped for".

It is important to note that the guiding principles will be used to inform the next stage of the Knowledge Exchange and Commercialisation (KEC) Strategy. It became apparent within the course of the work that there are already draft guiding principles which had been developed by Rothamsted (and have been used as a benchmark for assessment by BBSRC) and these as well as the public's principles will be used in the next stage. One of the OG members felt that *"If I had been on a panel and realised that Rothamsted had already had a draft strategy and that the public was in a way reinventing the wheel then I would have been disappointed"*.

Objective 3:

- e) Support the development of a culture of listening and engaging in dialogue within Rothamsted Research
 - a. To involve Rothamsted Research staff in the dialogue in a range of ways
 - b. Disseminate research outcomes to Rothamsted Research staff and, if applicable, other BBSRC-funded institutes

Some Rothamsted staff members said:

“Some Rothamsted senior people had been nervous about asking for views from the public but the process reassured them - that has great value)”, Rothamsted staff member

“I was surprised that the public were as open-minded and supportive of Rothamsted – they saw the value and quality of Rothamsted”, Rothamsted staff member

“I don’t know if it caused any engagement. There is a certain amount of cynicism, and most would say that they could use money better for science research projects”, Rothamsted staff member.

OG members stated:

“The Rothamsted Project Manager did very well to get so many people involved in the project which has really helped to meet the objective”, OG member

“Rothamsted staff’s participation in the dialogue events and the OG means that the dialogue output is likely to be more useful than if they hadn’t been involved”, OG member

“If participants had been able to visit scientists and see the research, then more people (at Rothamsted) would have had first-hand experience and understanding of Rothamsted”, OG member

Objective 3 has been ‘well met’.

- a) As discussed in section 3 the Rothamsted manager has worked within Rothamsted to engage staff across different departments in the public dialogue work. This has been through individual meetings, the internal bulletin and senior management meetings¹⁷. Three staff were also members of the OG (see annexe 1).

Rothamsted staff were also involved in the events. 8 participated in the public workshops as presenters/ resource people at Harpenden and Exeter on a Saturday (4 attended each workshop); 7 were also involved in the stakeholder workshop and 5 in the collaborative event (also a Saturday event). These were across a range of departments. As highlighted by the Rothamsted manager, if there had been more time between the workshop events she might have been able to engage people in a step-by-step way at the different stages of the project.

A debrief seminar was held in April, following the production of the dialogue report. The Rothamsted project manager and the delivery contractor presented the process and the findings. 48 participants (of approximately 200 staff) were there – the majority were from senior levels within Rothamsted. It was also commented that those who attended were those who are already interested and/ or engaged in the process (i.e. unlikely to include those who may be more cautious/ sceptical within the organisation). 18 of the

¹⁷ Evidence of agendas, minutes of meetings and bulletins available on request

participants completed evaluation questionnaires. The feedback on the events included that

- 72% felt that the key messages were just as they expected them to be
- Key messages that they took away were 'it is important to listen to the public's views more frequently' (4 similar comments) , 'the public support Rothamsted and want it to maintain its independence' (7 comments),
- 33% believe that the public dialogue would make a change to Rothamsted's Knowledge Exchange and Commercialisation Strategy; 50% did not and 16% did not respond to that question
- 78% felt that they had a greater understanding of how listening and engaging in dialogue could affect Rothamsted's work in the future
- 62% felt that they dialogue had credibility, and 28% did not (6% did not respond)
- Key aspects that reduced the credibility for participants were cited as 'relatively limited case studies which could introduce bias' (four participants commented on this), 'the size of the sample' (2 participants commented).
- Key aspects that added to its credibility were 'collaborative stakeholder / public workshop' , 'a strong methodology' , 'independent facilitators' , 'independent evaluators' (all mentioned once).

- b) It is not possible to evaluate this objective yet – the evaluation team have been informed that the research outcomes will be disseminated alongside the evaluation report in due course, and we do not have any reason to believe that this will not occur.

One area of concern highlighted by the project manager in meeting the overall objective of developing a culture of listening and engaging in dialogue is that the majority of the seminar participants who were involved were working at a senior level. Whilst reaching the senior staff is highly positive and strategic, any further dialogue which takes place should ensure that it engages staff who are also less senior and/ or younger as well.

Objective 4:

Outputs disseminated to other public-funded research institutions

- a. to inform Rothamsted's KEC strategy and publicly report on the actions taken
- b. to share the outcomes of the dialogue, and the lessons learnt for example with the Leadership Forum of the Agri-Tech strategy, and communicate the work through to BBSRC, other research councils, BIS, Defra and the Government Office for Science, through established governance arrangements

Some dissemination has already been done such as meetings held with the local MP and MEP in Harpenden in which the findings were shared (and report provided). There are also plans in place for Rothamsted staff to make presentations about the public

dialogue (process and findings) at BBSRC meetings for both Communications (May 2014) and also Knowledge Exchange and Transfer (July 2014). The Dialogue Report and (this) Evaluation Report will also be shared with the public and stakeholder participants. Objective 4 is likely to be 'well met'.

6 – Good Practice

“Has the dialogue met the Sciencewise principles of good practice?”

Sciencewise principles of good practice¹⁸ combine theoretical understandings and practical experience to frame the essential elements of good public dialogue on policy involving science and technology. There are five broad principles:

- **Context:** The conditions leading to the dialogue process are conducive to the best outcomes.
- **Scope:** The range of issues and policy options covered in the dialogue reflects the participants’ interests.
- **Delivery:** The dialogue process itself represents best practice in design and execution.
- **Impact:** The dialogue can deliver the desired outcomes.
- **Evaluation:** The process is shown to be robust and contributes to learning.

Each principle is taken in turn below. We provide an assessment of how well the principle has been met, what evidence this assessment relies on, and what contributed to the principle being met or otherwise.

Context Principle: The conditions leading to the dialogue process are conducive to the best outcomes.
--

This principle was **well met**.

Objectives. The objectives of the dialogue were stated from the outset. These were reviewed prior to the workshops in order to increase clarity, ensure that ‘stakeholders’ and the ‘public’ were treated separately and that there was clarity around the emphasis that should be placed upon the guiding principles as the outputs. Although this occurred closer to the designing of the methodology and workshop planning than would have been ideal, the process itself was useful in order to arrive at a shared understanding across the MG of the purpose/s of the project.

Policy route and timing. The dialogue was planned to specifically feed into a strategy for Rothamsted, and therefore had a clear focus and uptake for it. There was no specific timing attached to the strategy.

However there was a high degree of time pressure in the planning, delivery and reporting from the dialogue. This was partly due to the project having taken a long time to start (as is often the case with these projects). The project was originally developed in 2012 in response to a BBSRC Institute Assessment Exercise report (March 2012) which encouraged institutes to consider two-way dialogue. Following further discussion and planning, a Concept Note was put forward to Sciencewise by Rothamsted for a public dialogue around agri-technologies in November 2012. However feedback was received from Sciencewise that this should be reframed, to be more focused around broader

¹⁸ ¹⁸ Sciencewise (2013). *The Government’s approach to public dialogue on science and technology*. <http://www.sciencewise-erc.org.uk/cms/guiding-principles/>

challenges. The idea for changing the focus to Rothamsted's work with industry came from a workshop in April 2013, funded by the BBSRC. Sciencewise can only provide grants to government departments, agencies and non-departmental public bodies (such as BBSRC). Sciencewise makes recommendations about funding decisions but the grant relationships are formally between BIS and the public body responsible for the dialogue. In this case, therefore, the formal grant relationship was between BIS and BBSRC. A complete Business Case was submitted and agreed by BIS in August 2013. The final grant arrangements were concluded in October 2013.

The timescales were set out in the ITTs, and the project was delivered on time. The MG was developed, OG appointed, delivery contractor ITT created and distributed, and then tenders assessed, and delivery contractors appointed in November 2013. However the planning and delivery phase felt pressurised, to ensure that sufficient time was allowed for analysis and reporting. The decision was taken to hold all the workshops over a two week period. Holding four workshops over two weeks placed a lot of pressure on administrative systems and reduced opportunities for reflection and refining the process of workshop plans. Increased upfront planning may have reduced this.

A timeline is shown below (see Fig 2).

Governance. The governance of the project was effective. Over time a very productive relationship developed between Rothamsted Research, Sciencewise, the delivery contractor and BBSRC. Weekly conference calls were held which benefitted the process and methodology of the dialogue. The delivery contractor drove the practicalities and process planning of the dialogue, Rothamsted inputted and/ or steered some of the process where needed to ensure that there was sufficient understanding of the institution; BBSRC and Sciencewise supported and gave advice where needed. The Oversight Group also operated effectively and transparently, and is explored later in this report.

Resources. There is separate comment on resources/ costs and benefits for the evaluation later in the report. Extra funds were required for the Exeter public workshop, which was added as an extra element to the original dialogue design and delivery contract, as was evaluation of the stakeholder workshop.

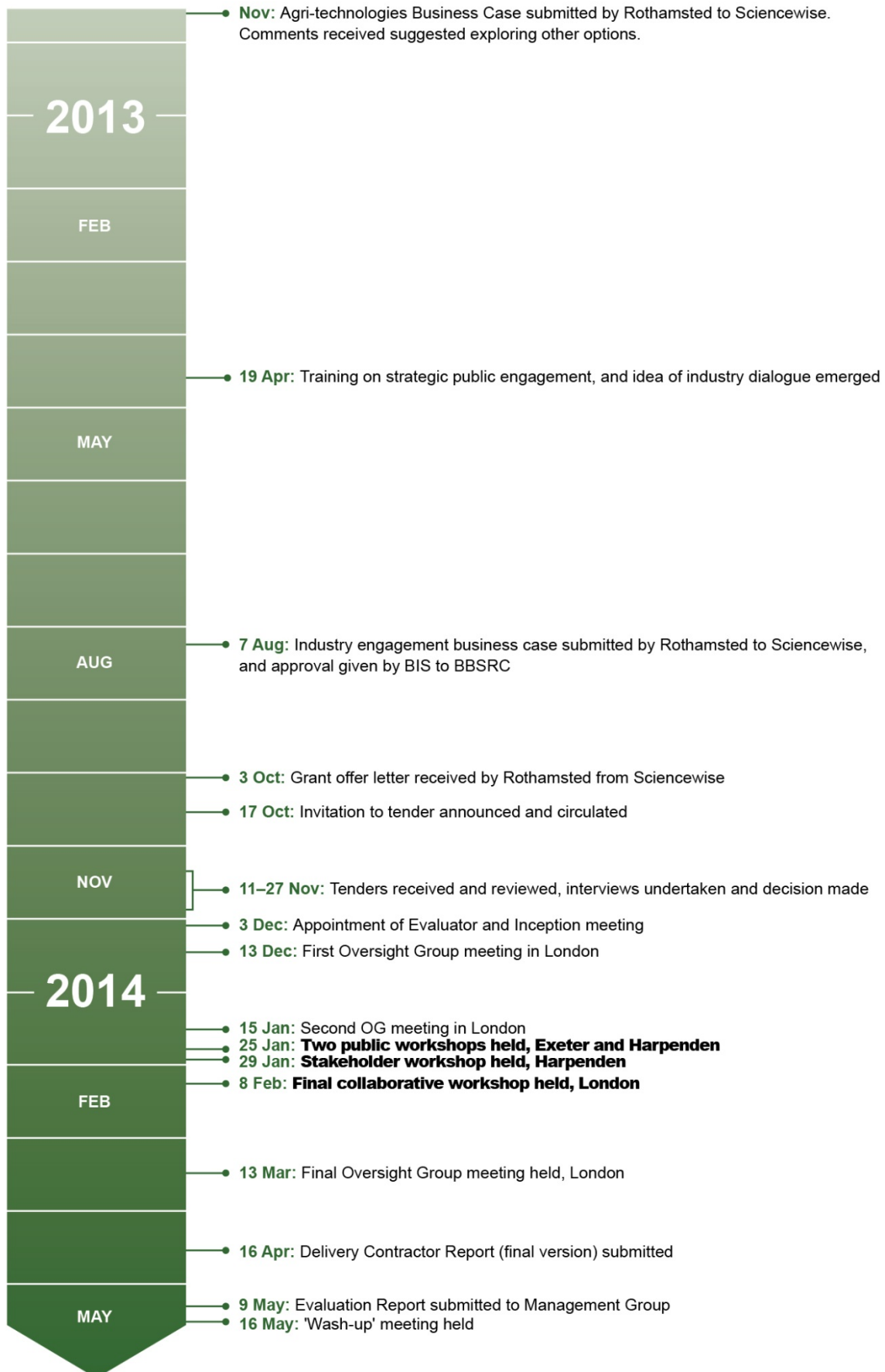
Hard to reach groups. A purposive quota sample was agreed to guide recruitment of public participants, specifying a broadly defined set of criteria such as age, gender and socio-economic status to ensure participants had a range of socio-demographic characteristics that were broadly representative of the local population. A great deal of attention was given by the delivery contractor to ensure the appropriate selection criteria, and this was discussed and agreed with the MG. The criteria included: equal numbers of male and females; a range of people from different age brackets, ethnicities and socio-economic groups. Participants were also expected to come from a mix of urban and rural postcodes. Further criteria included that two thirds of participants should not have heard of Rothamsted, and they should not be involved in media, farming, biotechnology or environmental campaigning. This is considered in further detail in Appendix 3 and 9.

In terms of 'hard to reach groups', the specification included ensuring nine participants from socio-economic group 'E' (Casual or lowest grade workers, pensioners, and others who depend on the welfare state for their income) which was surpassed. It did not include the other extreme 'A' (Higher managerial, administrative or professional) who are also often hard to reach and include in such processes. Different ethnicities were

included, for example there were two Black/Afro Caribbean participants and two British Asian participants amongst the 24 participants in Harpenden.

Overall the target (which was achieved) to include the harder to reach groups were appropriate, given that there was no particular reason that the topic of the dialogue (Rothamsted working with industry) would affect a specific group more than any other in the country.

Timeline of the Rothamsted Research Public Dialogue



Scope Principle: The range of issues and policy options covered in the dialogue reflects all the participants' interests (the public, scientists and policy makers).

This principle was **well met**. Factors for this are explained below.

Framing. The objectives of the dialogue were set out in the ITTs. These were reviewed by the MG and evaluator at the planning stage of the project, and agreed with the OG. Due to the tight timescales this overlapped with the start of the project implementation phase. The scope of the project did not change, but the clarity improved and enabled a shared understanding of the expectations and priorities.

Participants. There was a good return rate for participants from the first workshops to the collaborative workshop. Out of 48 participants, 34 expressed an interest (and felt they were available) to attend the collaborative workshop and all of those people were invited. Participants were therefore self-selected rather than being selected upon any specific criteria. However those who attended (29) represented a good spread across the initial selection criteria, and exceeded the target of 50% of participants (25). 18 were from Harpenden, and 11 from Exeter, which is likely to reflect Harpenden's closer proximity to London. If one accepts a high return rate as a proxy indicator for participants' interest, then this implies they were interested in the topic. From the evaluators' observations, participants were also largely very engaged in the events, and interested in both Rothamsted as an institution (as they learnt about it) and the process itself.

Stakeholders. There were 16 external stakeholders (and 6 Rothamsted stakeholders) at the stakeholder workshop. 60 (including some from Rothamsted) had been invited. Tight timescales and some administrative shortcomings may have led to only 16 of 60 stakeholders invited attending, less than expected by Rothamsted (discussed further below). There was a gap in NGO presence as discussed above. From the evaluator's perspective the stakeholders were supportive and engaged, but did not come with the fresh enthusiasm shared by many of the public participants.

Of the 16 external stakeholders, three attended the final collaborative workshop (on a Saturday in London) alongside five Rothamsted stakeholders. "The number of external stakeholders at the collaborative event was less than the MG hoped and expected, and was disappointing." It may have been due to it being on a Saturday (which was appropriate for the public participants) and insufficient notice being given, again due to the tight timescales of the project.

Diversity of perspectives. The OG brought a range of perspectives to the framing of the dialogue from the start (see Appendix 1 for the organisations represented). It is fair to say that everyone on the OG was familiar with Rothamsted albeit to different degrees. There was nobody on the OG who thought that Rothamsted working with industry was fundamentally inappropriate, although there were differing perspectives as to the degree and ways of working. To this extent, the dialogue included a diversity of perspectives in its framing.

There was a balance to attain throughout the design of the dialogue about how much information to provide in order to ensure a degree of understanding of the potential tensions in Rothamsted and industry relations, without framing the discussion disproportionately. Whilst the materials were informed by tensions which had been identified through the delivery contractor's scoping interviews with stakeholders and discussions with Rothamsted staff, the concern has been raised by OG members and

Rothamsted that the case studies framed and guided the dialogue too much (this is discussed further below).

The Rothamsted staff that attended the public dialogue events (see Appendix 6) were well informed and helpful when answering questions, as observed at the events. The evaluators saw no evidence of specialists trying to persuade the public participants of their view, and the specialists seemed open to listening to public views. The attendance of the specialists was essential for the public to get answers to their questions that in turn informed their deliberations.

Comments at the public dialogue included:

“Great to have people here from Rothamsted” Public participant

“The experts [from Rothamsted] were good and available” Public participant

The majority (97%) of the public participants at the public events said they could ask questions easily and get appropriate answers, from either the specialists or facilitators.

<p>Delivery Principle: The dialogue process itself represents best practice in design and execution.</p>

This principle was **well met** in that there were definite improvements to make but they didn't substantively impact on the success of the dialogue. Factors for this are described below.

Appropriateness of design. The dialogue employed a sequential series of workshops: facilitated public dialogue sessions, stakeholder workshop, and the final collaborative workshop. This was in order to build up the public's knowledge, test it amongst stakeholders and develop a refined list of guiding principles as a final output. Care was taken in planning to ensure that the sequence was approached appropriately – for example so that all public participants were exposed to the same materials (at the simultaneous public events), stakeholders were informed of the presentation, materials and process that the public had been exposed to. In practice there were some slight inconsistencies (for example the presentation at the Harpenden workshop was not completed, as it was in Exeter) as discussed above.

Stimulus materials and case studies. The selection and use of the case studies has been raised as a methodological concern both within the Rothamsted debrief seminar and also the impact evaluation interviews. The use of case studies was included in the original proposal by the delivery contractor because overall this was an abstract, technical topic and it was felt that using case studies would help to make the topic more real with the public participants. This was agreed as an appropriate method at the inception meeting. The case studies were developed via the following steps:

- During the scoping stage, eleven scoping interviews with stakeholders were carried out which asked about the potential tensions between Rothamsted and industry, and questions were asked such as 'what are the benefits of Rothamsted working with industry', 'what are the downsides?', ... and possible examples/ case studies were asked for
- From the findings of these interviews the three main areas of tension which could potentially arise in industry-research collaborations were identified.

- These tensions were shared at the OG (in briefing documents beforehand and discussed at the OG). As a result of the discussions, one tension was replaced and another one altered.
- From these identified tensions, case studies were drafted as practical illustrations of the tensions. The KEC manager provided a case study to match one of the tensions, and then other two were created / drafted by the delivery contractor
- These were then shared with the MG for comments and agreed upon by the MG

There was attention placed upon avoiding specific topics which had received a lot of media attention, for example 'neocottonoid' salmon was not specifically mentioned although issues over pesticides in salmon stocks was the focus of a case study. There was also a decision taken to avoid a case study around the development of GM Omega 3, given that this decision was taken and there was a lot of press interest in it at the time of the dialogue. However apart from this desire to avoid specific topics which had a lot of media attention, there was no intention to avoid contentious subjects.

It should also be stated that the finalising of the case studies was also being carried out to very tight timeframes, in the development phase leading up to the initial three workshops.

It has been pointed out that many of the tensions which were highlighted and principles which were developed could be seen in the context of the case studies which had been developed. Various OG members raised the issue that the terms 'humanitarian access' and 'public good', which were used in a case study, became terms that were used within the principles. However there was no unpacking of what those terms meant to participants in this context.

The case studies were agreed as an approach at the outset, and developed following a sound methodical process. They played an important role in setting out different scenarios and tensions and it is difficult to put forward other methods which could have conveyed that any better within the time constraints in this 'model' of public dialogue. However it was felt (by some of the OG) that the case studies did guide discussion and perhaps if they had been presented as background information rather than reviewed and discussed in detail that they may have played a less prominent (and more appropriate) role. However it should be noted that a question raised about the role of case studies in skewing the dialogue results (this was the only question raised at the Rothamsted debrief seminar) unduly risks the undermining of the findings of the dialogue, which would be both unfortunate and inappropriate.

Comments included:

"The case studies skewed areas of importance, and may have somewhat undermined the value of the principles put forward", OG member

"The outputs are credible, but if we dig more deeply then may say that steered by case studies", OG member

"Was too much made of the case studies? Did they become too central and then drove the discussion? Perhaps they could have been kept as examples in the background rather than working specifically on them?", OG member

The issue of credibility is discussed further in section 10.

Organisation. The practical organisation of the dialogue seemed smooth in terms of

suitable venues booked, materials provided and deadlines were met. However the professional recruitment agency had provided incorrect address details for the event, so about 15 people went to the incorrect address for the public workshop in Harpenden. This meant that 38% of people disagreed that ‘the invitation process and advance details for the event were well handled’. Some of the participants – particularly Rothamsted staff were only sent event information the day before the events.

The evaluator did not observe email correspondence between the delivery contractor and third parties. Most appeared to go smoothly; however there were some administrative shortfalls. Some stakeholders who had been invited (by an initial invitation letter from the Director at Rothamsted) and replied and then did not receive further information. This was potentially damaging to the project and was reported to be embarrassing to Rothamsted (particularly as one potential participant who did not receive follow-up correspondence was the local MP) who value their stakeholders highly.

The tight timescales at this stage (having held three workshops over 5 days) may have contributed to these shortcomings which should be avoided in any future similar process.

Clear objectives communicated. The OG generally had a clear sense of what the dialogue was trying to achieve, as represented by the original purposes agreed and included in the Invitation to tender for the contractor. However there was some debate as to what extent the project was trying to arrive at ‘guiding principles’ as outputs, and whether the participants were intended to be ‘representative’ or a ‘diverse set of people’.

At the events, participants generally felt that the objectives had been clearly communicated, particularly at the final collaborative workshop. 79% felt that they were ‘aware of and understood the objectives for the day’ (Exeter 88%, Harpenden 70%) . At the stakeholder workshop, 78% agreed with the same statement and at the final collaborative workshop 100% agreed (and 88% strongly agreed).

Involvement of external stakeholders. The 11 members of the OG (8 of whom were external to Rothamsted) were the first main conduit for external stakeholder interests to be involved in the dialogue. The OG was convened to scope out and helps Rothamsted set up the project, as well as provides advice and feedback throughout. This is covered above.

The second main conduit for external stakeholder interests to be involved was the stakeholder workshop as discussed. The event was deliberately framed and designed by the contractor as a “presentation of the findings” which was then reviewed in order to inform the stakeholders of the process and engage them. It was an opportunity for a wide variety of stakeholders to attend, get involved, and review the findings of the public dialogue to date. NGOs were involved in the scoping interviews, but did not attend the stakeholder workshop.

The final collaborative workshop, which was less well attended (only 3 external stakeholders), provided the opportunity to finalise the discussions around the guiding principles. The role of the stakeholders was important in sharing their knowledge and insights from the sector and led to more informed principles.

Non-biased. As discussed above the dialogue design seemed to achieve good balance and neutrality by encouraging public and stakeholder views. As discussed at length

above, the case study materials added to a degree of shaping the discussion and various OG members have expressed the opinion that they biased the principles, as evident in the report.

There was also concern by an OG member that there was an 'anti-business' sentiment at times in the public workshops. This was linked to the initial introductions which set out Rothamsted's positive motivations for working with industry i.e. to achieve greater impact but it was felt that this was underplayed and the emphasis within plenary and table discussions was upon purely a financial impetus for working with industry.

Be deliberative. The events offered a good opportunity for members of the public to deliberate on the issues, with time, information and specialist support to assist them. Participants largely agreed that they had enough time (Exeter 90% Harpenden 87%), they could ask questions easily and get appropriate answers (Exeter 97%, Harpenden 96%), that they could contribute their views (Exeter 97%, Harpenden 90%) and that they felt comfortable with the specialists answering questions (97%).

"We had enough time" Public participant, Harpenden

"Issues were explored fully", Public participant, Exeter

However at the (3 hour) stakeholder workshop only 38% of participants felt that they had sufficient time. Comments by stakeholders included *"another hour was needed, it was somewhat rushed"*, *"bit pushed for time"*.

At the final collaborative workshop 91% of participants agreed that they had sufficient time to discuss the issues.

It was therefore felt overall by participants that the public events and collaborative workshop were long enough events, whereas the stakeholder event could have been longer. As commented earlier, it has also been raised that if there had been more time, a deeper and more probing process may have been facilitated.

Mapping out views vs consensus. The process facilitated and captured the views of the public participants at the two workshops. There was a potentially premature move to combine the two public workshop principles into one (as mentioned above) but this was then reversed by producing both sets of the draft principles at the collaborative workshop which preserved the origin of the public's materials more clearly for participants to see, before any amalgamation or summary occurred. The issue (which was considered a concern at the time) has not been raised as an issue within the short-term impact assessment evaluation so the evaluator does not consider it to have had a longer-term effect on the findings of the dialogue.

There is a commitment, evident within the Dialogue Report, to produce a list of principles which are owned and agreed upon by 'the public'. The Report refers to 'the participants' or 'the public' as a consensual voice within the 'headline findings' at the start of the report. As the reader progresses there are some more divergent 'voices' through quotes, and also some discussion of differences as well as convergences of ideas. This may relate to an inherent tension of seeking diversity of public opinion within the process, whilst aiming to arrive at a set of (agreed) guiding principles.

Facilitation. The facilitation was independent, professional and effective. Public participants agreed (95% Harpenden, 100% Exeter). It was observed by the evaluation team that it was friendly and approachable at the Harpenden workshop, and similarly

observed by Rothamsted staff in Exeter.

“Well facilitated”, public participant at Harpenden workshop

One of the OG members commented that a more in-depth understanding of what people were saying was lacking. He/ she identified that this requires facilitators who are very familiar with the topic, and/ or probe to a greater extent in order to gain deeper understanding of what is being said and why. On the evidence the evaluator has, it is unclear whether a perceived lack of probing identified by at least one OG member was due to time pressures, different facilitating style, lack of content knowledge, or something else.

Appropriate scale and diversity. The dialogue engaged a total of 49 public participants across two locations (which as discussed met the criteria), 16 stakeholders and at least 10 Rothamsted staff prior to the debrief seminar.

The Sciencewise Guiding Principles say that public dialogue should *“be of appropriate scale and 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 principles also say that *“public dialogue does not claim to be fully representative, rather it is a group of the public, who, after adequate information, discussion, access to specialists and time to deliberate, form considered advice which gives strong indications of how the public at large feels about certain issues.”*

However there are divergent views amongst the OG as to the appropriateness of the scale:

“The low number of public participants involved limits the dialogue’s value” OG member

“It was a useful exercise but the small sample size affects how it can be used” OG member

“There could have been a different approach for deeper analysis – for example smaller groups coming in over 2-3 events within Rothamsted, then time to reflect in social networks and amongst themselves” OG member

In the light of this and the evidence gathered via observations, interviews and questionnaires, the dialogue does appear to have been conducted with appropriate scale and diversity given that it met and in places exceeded expectations. The choice of two locations was seen as appropriate to provide members of the public who were local to both Rothamsted facilities (this was advocated for strongly by the OG and the additional Exeter workshop was added) and to gain greater geographical coverage and potentially diversity of opinion.

Involve participants in reporting. All public participants, and the stakeholders at the final workshop, were informed at the end of the workshops that they would be contacted again with a link to the Dialogue and Evaluation Reports when they are published. Beyond this, it will be important for Rothamsted to inform participants of the KEC strategy and how their views have been included.

It is debateable whether participants were ‘involved in reporting’ as mentioned in the Sciencewise guiding principles. The ways in which participants were involved in reporting include:

- Being able to hear what their small group facilitator verbally fed back to the wider group in the plenary sessions of the public workshops (during work sessions where this happened).
- Being able to see what others wrote on post-its and sometimes on note-taking sheets, as well as browsing round the materials blu-tacked to the walls that were generated by participants earlier in the day.
- 29 public participants attending the collaborative workshop, and seeing the two sets of draft principles being fed in as raw material.

However, they did not see or review any kind of summary report from their sessions until the Dialogue Report was published. To improve the degree to which participants were involved in the reporting, it would have been useful to email a brief summary of each public workshop to participants.

Impact Principle: The dialogue can deliver the desired outcomes.

This is covered under section 11.

Evaluation Principle: The process is shown to be robust and contributes to learning.

The principle appears to be **very well met**. Others are invited to judge this from their perspective too, and feedback is welcome.

Factors addressing this principle include:

- There was an independent evaluation.
- The evaluation was adequately resourced, approximately 10% of the delivery project budget.
- The evaluation was commissioned by competitive tender (although only one company applied).
- The evaluation started early, at the same time as detailed design and delivery started.
- The evaluation addressed the objectives and expectations of stakeholders including Rothamsted and the OG, as well as standards of good practice set by Sciencewise.
- The evaluation gathered both qualitative and quantitative data so that conclusions could be evidence-based.
- The dialogue process ended with an open discussion of learning at a 'wash-up' meeting, as well as planned publication of a case study to share learning more widely.

MG members commented that:

"The contribution that the evaluation has made has been disproportionate (more than the 10%) to the allocation of funds", MG member

“The inputs have been really helpful. It was useful for Rothamsted to bounce ideas around with the evaluator”, MG member

The evaluators welcome feedback on any aspect of the evaluation.

7 - Satisfaction Levels

“Satisfaction: have those involved been satisfied with the dialogue, and its value and benefits to them?”

Satisfaction levels appear **very high for the workshop participants**.

The public participants were certainly satisfied with the dialogue, with 98% of public participants saying that they were “overall satisfied with the events” (Harpenden 95%, Exeter 100%). The majority of these agreed strongly, which does indicate high satisfaction levels from a participant perspective.

“It was an eye opener into the work that Rothamsted conduct and the decisions that are critical to their future”. Public participant, Harpenden

“A well run day” Public participant, Harpenden

Stakeholders were also highly satisfied with the stakeholder workshop – 100% were “overall satisfied with the events”, and 56% strongly agreed with this statement. The collaborative workshop had a 97% satisfaction level, of which 81% strongly agreed with the statement that there were “overall satisfied with the event”. The perceived lack of time available did not appear to adversely affect stakeholder satisfaction.

Rothamsted have expressed **high** levels of satisfaction. Specific areas of satisfaction raised have been the collaboration between the organisations throughout the project, and the outputs which were acceptable and useful. Areas of dissatisfaction raised were the time pressures towards the end of the project, and shortcomings of the administration for the workshops as discussed above.

“What came out was acceptable, objectives were laudable - I was pleasantly surprised by how well it went. There were negatives – I felt that I needed to provide a lot of input to steer it in the right direction”, Rothamsted staff member

“I would score the overall collaboration across all those involved as 10/10 and the output 8/10. If there had been more time we could have processed more (material and content). We could also have reached out to more of Rothamsted”, Rothamsted staff member

OG members expressed **mixed and some lower levels of satisfaction**.

“I would score it 5 or 6/ 10 - it was an impossible time scale. The findings will be useful to the Rothamsted team but it was not the engagement with people and analysis that should have been able to achieve”, OG member

“This was a really good initiative and it will help Rothamsted when inevitably challenges around its work with industry arise”, OG member

“I would give it 5/10 – they went out to try to create a framework for decision-making to help them to decide whether to take on commercially funded pieces of research, and didn’t come out with anything more than they went in with. It’s very important that RR is trying to talking to people more, particularly regarding contentious issues where

polarised views exist. I hope this is a step towards more dialogue between the public and Rothamsted”, OG member

Value and Benefits

OG members cited three main ways in which the project had been valuable to them.

It has given Rothamsted confidence that they were working in ways that the public expect

“It has given us self confidence that we are and have been doing things in the way that the public want and expect”, Rothamsted staff member

“ It will give RR some leverage in negotiation with industry. Time will see how much”
Rothamsted staff member

It may provide a more balanced discussion around how Rothamsted / agricultural institutes work with industry *“if media assertions conflict with public opinion ... then it provides some weight for more balanced discussion”* Rothamsted staff member

More benefits and ways in which the dialogue delivered value are covered under Impacts, in section 11.

8 - Governance

“How successful has the governance of the project been, including the role of advisory panels, stakeholder groups and the Sciencewise support role?”

The governance of the dialogue was **very successful**. Factors contributing to this are set out below, mainly focussing around the role of the Oversight Group as the key governance structure in place.

Governance Clarity. The role of the external Oversight Group was clear, and the group agreed the Terms of Reference early on. There was also clarity around who was in the Management Group, and their roles, which was considered particularly helpful by the delivery contractor. Collaboration was perceived to be very strong.

“All those involved had a good attitude and very positive interactions - collaboration between us and the OG members was excellent”, Rothamsted staff member

“All worked together to make it go well” Rothamsted staff member

The Oversight Group. The Oversight Group (OG) in general worked well. Meetings were constructive and OG members (see Appendix 1 for list of members) were engaged. The turnout was good, which was impressive given the time pressures that people of that level of seniority are working under and also the short notice that was sometimes given. This was partly due to the tight timescale of the project but it is fair to say that the meetings could have been organised further in advance (as highlighted by two OG members within the evaluation interviews).

It was unfortunate that the Chair of the OG was not able to attend the first two meetings although she gave feedback via email (e.g. on the ITT, and the decision to hold another meeting at North Wyke), and had calls with the Rothamsted Project Manager. Her absence at the meetings meant that there was not a strong social science perspective present throughout discussions.

It was also noted by a Rothamsted staff member that while some of the OG were very keen and consistent participants, others contributed less, which is perhaps inevitable in such a forum which is additional to people's other work. It has also been questioned by a member of the OG as to whether a project of this size needed to have an Oversight Group at all - this was raised by two members of the OG, particularly in relation to the extra 'layer' of decision-making which it added to the process.

The evaluators however would conclude that the OG played a valuable role as a source of diverse expertise, and gave reassurance to the project manager that the process was being carried out appropriately to the best judgment at the time (as it was a new initiative for Rothamsted and the Project Manager).

Rothamsted

The Rothamsted project manager had a clear role to manage the OG and the delivery contractor. The project manager was engaged and productive. The Rothamsted project manager set the OG meeting dates, set the agendas, and took the record of actions and decisions. This ensured an effective connection between the OG's role and the evolving needs of the project: the OG was asked to comment on the right things at the right time.

However, partly due to the time pressures of the project, insufficient notice was sometimes given for meetings.

There has been a strong emphasis upon drawing on the experience from those who have worked on public dialogues before and also on ensuring the appropriate environment and opportunity for the public to have their say. Rothamsted has worked in an inclusive way with the MG and the OG. The monetary value of the in-kind contribution to overall project funding from RR was set out at the start of the project (£15,000) but it is estimated that the time invested was ultimately a lot higher than this amount. The 'behind the scenes' administration appears to have been smooth and efficient and has not caused any hurdles in the project.

OG members commented that:

"Rothamsted really took to the opportunity and genuinely wanted to know and take part"
OG member

"I am impressed by the Project Manager who has given it a lot of energy to make it happen", OG member

The delivery contractor stated that:

"It was very good to have the involvement of the KEC manager, who will be the main 'user' of the findings of the dialogue", delivery contractor staff member

The BBSRC role. The BBSRC was involved in the OG meetings (and helpfully chaired them in the absence of the designated Chair), the weekly meetings and contributed to decision-making. It was a good working relationship with the other organisations.

Sciencewise. The OG members, and in particular Rothamsted staff, were positive about the Sciencewise Dialogue and Engagement Specialist's (DES) input. Interaction was through the MG meetings, 1:1 calls with the Rothamsted project manager and OG meetings. The continuing role of Sciencewise as advisor was seen as important and productive. It has been questioned by one of the OG members (absent at meetings) as to whether the DES could have been more assertive in trying to steer the dialogue towards a higher quality process and output in the time provided. However, the evaluation team would consider that there is a wide scope for interpretation of how public dialogue should be run, in what ways, and to what quality standards. If particular standards or aspects of the public dialogue are important to the credibility of the output, then the standards could usefully be specified in the ITT, or discussed at an early stage such as the inception meeting.

Management Group

The Management Group had a decision-making role, and comprised Rothamsted, BBSRC, Sciencewise and the delivery contractor, and the evaluator also participated. Effective weekly calls were arranged by the delivery contractor which enabled the group to be consulted and input in a timely way. It has been commented by Rothamsted staff who were new to such a process that it would have been beneficial for the original MG to meet (i.e. before the Delivery Contractor was appointed) in order to gain a shared understanding of the expectations of the dialogue at an earlier stage.

9 - Costs and Benefits

“What was the balance overall of the costs and benefits of the dialogue?”

Judging the cost/benefit trade-off of public dialogue is notoriously difficult. This is for various reasons, including:

- Benefits are often intangible and so hard to quantify in a meaningful way. How does one quantify a benefit such as “I’ve become more open-minded about what the public have to say”?
- Benefits arise down the track instead of at the close of the dialogue, so risk being left out of a traditional cost/benefit analysis.
- Benefits are often difficult to attribute in isolation to the public dialogue alone. For example, “The dialogue was one part of the evidence that led us to X”.
- There is no counterfactual to assess against. One can only speculate as to what “might have happened without the dialogue”.

However, it is possible to identify the benefits and impacts that have arisen already (listed in section 11), although we do not attempt to quantify or monetise them.

The costs of public dialogue on the other hand are easier to quantify. Invoices are paid and recorded, and people’s time can be tracked or at least fairly easily and accurately estimated. Below we list the costs of the dialogue so that a full picture is on record:

<i>Financial Contribution</i>	
BBSRC contribution	£22,823
Rothamsted contribution	£18,292
Sciencewise contribution	£51,000
<i>In-kind support</i>	
Sciencewise	£15,130
Rothamsted	£33,786
BBSRC	£20,000
Time of OG members	£32,942 ¹⁹
Total	£193,973

One indicator of relative value of a dialogue process is the view of the funders upon closure. In this context, the funding for the project – once the extension for the Exeter workshop had been agreed – was considered fine:

“I sought input from colleagues as to the amount, and it seemed to be just about right. Very worthwhile”, Management Group

¹⁹ This figure has been arrived at drawing upon time and costs provided by four of the ten OG members (an average of £856/ day fee rate and an average input of 3.84) and then extrapolated for the full ten members

Rothamsted perceived it as an expensive process:

“It is a very complex and expensive process, so need to do it when have an issue that affects how we operate and have enough time to dedicate to it” , Rothamsted staff member

“The cost to Rothamsted has been value for money (we paid 25% of the costs) - but it is an expensive process overall”, Rothamsted staff member

However other interviewees held divergent views:

“More should have been spent, for a higher quality and deeper analysis - this would have enabled more people in the room to question and analyse”, OG member

“I am convinced that the money has been well spent and a good thing to do. In the future, there is a need to be realistic about objectives and the resourced needed ... and in the future think about how would use resources more wisely and how use ongoing events to provide complementary information” OG member

It is the evaluator's conclusion that as a first 'experiment' for Rothamsted, the benefits of having learnt from the process, and having developed a body of knowledge about the public's priorities for the guiding principles (whilst cognisant of any shortcomings) - and if optimised in future negotiations - outweigh the costs of the process.

10 - Credibility

In the context of this dialogue, there are two main groups of people that formed a judgement about the credibility of the project (either explicitly or implicitly). Firstly, the OG and others close to the delivery of the project such as the Management Group. Second, Rothamsted staff of whom the majority were not involved in the delivery of the dialogue and attended a debrief seminar at Rothamsted after the dialogue.

Management Group and Oversight Group

The MG and OG members had differing views as to whether it was a credible process (as also discussed above regarding scale and diversity of the process):

Rothamsted and the Management Group who had been closer to the process considered it a credible process:

“It is credible having seen the process and given people the opportunity to discuss and express their ideas” Rothamsted staff member

“It certainly reflected reality. If we dig more deeply, some may say that it was unduly steered by the case studies” Rothamsted staff member

“The scoping stage was broad and the OG was broad and effective which all went into the design of process and materials – which provided a good basis for the project. It helped to add in the extra workshop in Exeter and that OG flagged that in order to be taken seriously was useful, and budget for that” , Management group member

Some OG members however had different views:

“With a social science hat on – it was not very credible! There was a lack of listening to, probing and understanding of public views”, OG member

An alternative view was put forward by another OG member:

“It is credible if it is honestly reported together with the shortcomings or limitations of the process”, OG member

Rothamsted Staff

The Rothamsted debrief seminar enabled staff to learn more about the process and findings of the dialogue. 67% of questionnaire respondents tended to agree or strongly agreed with the statement that ‘the public dialogue has credibility’ (i.e. the process and outputs appear valid and convincing). 6% did not respond and 28% disagreed. As mentioned above, the one question that was raised after the presentation at the seminar was focused upon how much the case studies could have guided - and skewed - the discussions by the public, and this is likely to have informed people’s opinions as they completed the questionnaire at the debrief seminar.

As discussed above, in the evaluator’s view the use of case studies was a useful way to engage the public in a complex topic, and an appropriate process was in place to decide upon the topics and case studies themselves. However we would conclude that, if the

case studies had been presented as background information rather than reviewed and discussed in detail, they may have played a less prominent and more appropriate role. This was a shortcoming of the process, and was likely to have shaped the findings, but does not invalidate the findings overall.

11 – Impacts

“What difference or impact has the dialogue made?”

It is too early to report upon medium-long term impacts of whether the dialogue has informed the KEC Strategy, although there is clear intention that the dialogue findings will be used to inform the Strategy as discussed above and also to raise awareness internally and externally (see Section 3).

The key achievement of this dialogue to date as cited by various OG members was the dialogue’s reinforcement that Rothamsted is working in a way that is commensurate with the expectations and interests of the public.

“The results are inn line with what we are doing. As a result of the dialogue, we are not changing direction but reinforcing that the course that we are following is the right one”.
Rothamsted staff member

“We can now say that we consulted the public – and have more confidence that when say what doing that it reflects what people want”. Rothamsted staff member

“The real value was for Rothamsted when sat in the process and heard it for themselves”. OG member

“I have learnt that Rothamsted is fundamentally not doing anything wrong, and needs to do more communicating and research. It is more of a question that it is going in the right direction and understanding that there is a need to continue to engage – particularly where most active”. OG member

One other immediate impact is that the results of the public dialogue were seen to add weight to any negotiations Rothamsted has in future with industry, the media and others:

“It gives Rothamsted more evidence to back up any standards that they have and advocate” OG member

There were also reflections about how the process had had an impact on themselves or their individual organisation:

“The dialogue has shown me that Rothamsted is keen to talk and communicate and certainly it is something that I should be encouraging our organisation to do more of”.
OG member

“I have learnt how hard it is to really understand the diversity of opinion; and also that it is challenging to get the methodology right”, OG member

“It was good to do an unusual workshop process - multi-stage and smaller scale so it

was a deeper process”, Delivery contractor

Public participants said that they are more convinced of the value of public participation (Harpenden 95%, Exeter 95%) and that they are more likely to get involved in these kinds of events in the future (Exeter 95%, Harpenden 86%). At the collaborative event, 97% of participants felt that they had learnt something new from being involved.

“I feel that I have learnt a lot today and gained more knowledge” Public participant, Harpenden

“Extremely insightful”, Public participant, Harpenden

These participants from the final collaborative workshop could usefully be followed up in coming months to assess the extent to which there have been any longer-term impacts.

Future impacts

As discussed above, the impacts of a public dialogue project cannot often be fully identified and quantified immediately upon the close of the dialogue. Impacts take time to emerge, and in this dialogue is closely linked to the KEC strategy that will be developed (planned for July):

“This will be part of our strategy, and will contribute to how we [Rothamsted] will operate in the next two years”, Rothamsted staff member

A few OG members highlighted that they hope that this will be part of ongoing work at Rothamsted:

“ I hope this is part of a process, and not the start and finish of it”, OG member

“ I am very supportive of the initiative and conscious of the work and effort – wasted if there is not a follow up. I believe that we are touching on something here as policy-makers are often hit by more extreme views, and those who shout the loudest are often heard. This provides more diversity of opinion” OG member

There were also some reflections about how a public dialogue could be carried out differently in the future:

“Is there an option in the future for including questionnaires to Rothamsted’s open days - approximately 4000 people attend, and they could be asked to do a small questionnaire at the end? Or when they do tours? It could be another piece of information / evidence”, OG member

“There could be small groups coming in over 2-3 events within Rothamsted, providing time in between to reflect in their social networks and amongst themselves”, OG member

12 - Lessons

“What are the lessons for the future (what worked well and less well, and more widely)?”

There are a variety of lessons to take from this dialogue – each of the lessons is taken in turn.

Sufficient time is required for the design and planning phases of a public dialogue

The Sciencewise funding for this project was agreed in August 2013 and the grant from BBSRC to Rothamsted was provided in October 2013, the delivery contractor was appointed at the end of November, the evaluator was appointed in early December and the first OG meeting was in mid-December. The workshops then were planned for the end of January/ start of February 2014 to allow enough time for analysis and reporting before the end of March deadline to complete the project by the end of the financial year, as originally agreed. The ITT was clear about this timescale and the tenders for the delivery of the project were made on that basis.

In practice, the project was delivered to time and budget, which was a significant achievement. However, the tight timescale of design and planning meant that many activities were being carried out in an overlapping fashion, and perhaps inevitably some administrative errors and oversights occurred. Projects need to be planned to include sufficient time for design and planning, which also needs to factor in the multiple layers of decision-making (i.e. consultation with the MG and OG) and iteration of plans and materials. The ability of this project to do this was severely constrained. The time constraint could have been managed more effectively if the implications of the tight timescale had been flagged earlier as a cause for concern, and appropriate action taken (e.g. ensuring sufficient notice given to stakeholders to enable them to attend events).

A multi-stage public dialogue requires sufficient time *between* events

The sequence of events and tight timescales meant that four workshops were held over two weeks. This was highly ambitious for even the most administratively efficient systems. It also did not allow enough time to digest findings, and reflect upon the appropriate methods for taking the findings forward to the next stage. Projects need to factor in sufficient time to do this. A related point is that the two public dialogues were held on the same day thus requiring different facilitators and presenters, which reduced the ability to ensure that they were ‘mirrored events’ and following the same process and meant that the relevant RR staff were not able to attend both (as they would have preferred).

Clarity is needed around the depth of the public’s views being sought

Expectations diverged across those involved as to the depth of understanding of public views being sought. The project documents (e.g. business case and resulting ITT) could have been clearer in terms of the depth of information expected (which could have been highlighted by OG members – a diversity of views was emphasised in these documents but the depth of views required was not discussed (e.g. unpacking why comments were being made by the public, and what was meant by them).

A final collaborative workshop can be a valuable element to a public dialogue

Holding the collaborative event at the end enabled the public participants to engage with the stakeholders and for the contribution to the guiding principles to be finalised. For the public participants, this event provided an opportunity to gain more of an understanding of the reality for stakeholders, and to explain themselves and be able to pose questions;

for the stakeholders it enabled them to gain insights into the questions and priorities of the public (although it could be questioned as to whether there was sufficient checking and 'testing' of the principles). Although it was valuable for the public and stakeholders to meet separately initially, the understanding of and reaction to the public's guiding principles was a richer engagement when carried out face-to face with stakeholders.

Having a clear and effective management group is very useful (in addition to an OG)

Of note within this dialogue was the effective role of the management group within the project. There was clarity from the outset as to who was part of it, and the role. Routine weekly 'catch up' calls were held throughout the project design/ planning and implementation process for half an hour. These were invaluable to the process in order to develop, question and take forward the workshop design and materials. Half hour meetings encouraged a focus and prioritisation of issues, and also enabled the team to work effectively together.

Public recruitment by sub-contracted agencies may have risks attached that can be difficult to manage

As reflected upon by the delivery contractor, it is critical when contracting a third party to carry out the recruitment of public participants that measures are in place to ensure that it is carried out as per the brief. Clarity on what is required is very important, as is ensuring that systems and safeguards are in place if on-street recruitment is not initially successful. Having an open and constructive relationship between contractors and commissioning bodies is also key so that any concerns and risks are raised in an ongoing way in the process.

Areas for further research/ exploration

There are three areas that the evaluator proposes that could be explored in the future in order to answer some unresolved questions of the evaluation:

- 1) What impact does recruiting from a market research database have, in comparison to 'on-street' recruitment? Although it is clear that these different approaches may lend a different 'feel' to the process, and that those who participate may be 'seasoned' participants, the evaluator could not access research that actually defines the effect on the quality of the process.
- 2) The evaluation research did not include interviews with any of the public participants as to the short-term impacts of the process (although some data was obtained from questionnaire responses). It would be interesting to follow this up in the future.
- 3) The evaluation also has not carried out a full analysis across Rothamsted of the impacts of the process on the awareness-levels and perspectives of all staff (beyond those that attended the debrief seminar: 48 out of approximately 200 staff in total). It is recommended that when the 'next steps' are set out by Rothamsted as to whether and if so how it would engage with the public in the future, that an 'audit' of interest and awareness of this initiative is carried out, to baseline and inform any future initiatives.

13 - Conclusions

The overall findings of the evaluation are that:

- The project was completed to budget and on time. In retrospect, more time could have been allowed for design and delivery, and also between dialogue events.
- The governance of the dialogue was strong, and benefitted from the clarity of roles at the outset. The Management Group ran efficiently and effectively and collaboration between the organisations was strong.
- The process and the findings are credible; the methodology shaped the findings but did not invalidate them.
- The main achievement of the dialogue was the dialogue's reinforcement that Rothamsted is working in a way that is commensurate with the expectations and interests of the public. The medium-long term impact of the dialogue is closely linked to the KEC strategy that will be developed and can only be assessed at a later stage.

Appendices

- 1 – Membership of the Oversight Group, and Terms of Reference
- 2 – Dialogue Events/ Agendas Used in Public and Stakeholder Workshops
- 3 – Recruitment Criteria for Public Participants
- 4 – Case Studies Provided to Participants
- 5 – Evaluation Baseline Summary Report
- 6 - Evaluation Data from the Observation of Workshops
- 7 - Interim Evaluation Report
- 8 – Calibration and Definition of Assessments
- 9 – Diversity of Public Participants

Appendix 1: Oversight Group Membership

Oversight Group

Chair: Professor Judith Petts CBE, Pro-Vice-Chancellor, University of Southampton

Members:

Professor David Castle, Chair of Innovation in Life Sciences, Director MSc BIG Programme, ESRC Innogen Centre, University of Edinburgh
Mr James Dancy, Head of Sustainable Agriculture Team, Sustainable and Competitive Farming Strategy, Defra
Professor Linda Field, Head of Biological Chemistry and Crop Protection Department, Rothamsted Research
Mr Stephen James, Associate Director – Operations, Rothamsted Research
Dr Gordon Jamieson, Head of Business Development, John Innes Centre
Mr Paul Leonard, Trustee/Director - Board of Directors Rothamsted Research, Head of Innovation and Technology Policy at the BASF Group, Director - Board of British Chamber of Commerce in Belgium
Dr Julian Little, Communications and Government Affairs Bayer CropScience, Chair of the Agricultural Biotechnology Council
Ms Yolanda Rugg, Chief Executive Hertfordshire Chamber of Commerce
Mr Geoff Tansey, Trustee/Director Food Ethics Council, Writer and Consultant
Ms Amanda Yorwerth, St Albans Friends of the Earth and Presenter Environment Matters Radio Verulam

Management Group

Lead: Dr Matina Tsalavouta, Communications Officer, Rothamsted Research
Dr Andrew Spencer, Head of Knowledge Exchange and Commercialisation, Rothamsted Research
Dr Darren Hughes, Head of External Affairs, Rothamsted Research
Dr Patrick Middleton, Head of Public Engagement, BBSRC
Mr Daniel Start, Public Dialogue Specialist, Sciencewise – ERC
Mr James Tweed, Public Dialogue Project Manager, Sciencewise – ERC

Oversight Group Terms of Reference



Criteria for selection of members

The Group will be comprised of 11 members with a range of views and expertise on the following;

- Public dialogue/science communication/media/public affairs
- Science/research
- Social science
- Agri-business interests
- NGOs
- Food Ethics
- Knowledge Exchange and Commercialisation of science
- Policy/Regulatory body

Members should represent a range of different perspectives and be committed to the following:

- open dialogue
- mutual respect
- tolerance of other views and
- willingness to see their own and others' opinions reviewed and discussed on their merits.

Members will join on an individual basis and will not formally represent the organisation they work for.

Chair

The Group will be chaired by Professor Judith Petts CBE, Dean, Social and Human Sciences, University of Southampton

Role and purpose

The role of the group is to oversee the dialogue process and materials, and to help ensure that:

- The dialogue material is:
 - Comprehensive
 - Balanced
 - Accessible to the lay audience
- The engagement process is:
 - Far reaching
 - Accessible
 - Targets all relevant stakeholder groups

In addition, members will be expected to:

- Bring diverse views and perspectives to the framing of the dialogue
- Bring intelligence from their own organisations to help shape the dialogue
- Disseminate and promote findings through their own networks
- Help select appropriate experts to inform the dialogue process, materials and speak at events, where necessary

The role of the Oversight Group is advisory. It is the responsibility of Rothamsted Research and the management group (comprised of members of Rothamsted Research, BBSRC and Sciencewise – see Appendix I) to make decisions on the consultation process, materials and disseminate the outcomes within Rothamsted Research and its stakeholders.

Time commitment

The dialogue process will take place over a 4 month period, commencing December 2013. Members are expected to commit about 2 working days during the dialogue period. Members will be asked to attend formal meetings and give advice on their areas of expertise on an ad hoc basis.

The first Oversight Group meeting with OPM and the independent evaluators 3KQ, will be convened on 13th December 2013. The last meeting will centre on a presentation of the final report by OPM and 3KQ evaluation report of the dialogue process conducted by OPM.

One interim meeting will take place between workshops 2 and 3, on presentation of topline findings. Every effort will be made to find dates when all Oversight Group members can attend meetings. For key items of business where the group's opinion is sought then those not attending meetings will be invited to submit comments and views in advance and these will be presented to the rest of the group.

Members will be reimbursed for travel expenses.

Transparency

Oversight Group meetings will be minuted; minutes will be sent to members five working days after each meeting. Members will have five working days to comment on meeting minutes before they are published on the Rothamsted/Sciencewise and BBSRC websites.

Guiding Principles

The guiding principles of the dialogue are as follows:

Inclusivity

The dialogue should seek at all stages to include the perspectives of a range of UK residents, in addition to taking account of the plurality of knowledges and interests in the topic area.

Influence

The dialogue must include mechanisms that ensure it has a clear means of influencing relevant policy making processes.

Openness, honesty and transparency

The dialogue must make clear the different roles of different stakeholders and explain how decisions are reached within the process.

Participation

A broad spectrum of voices must be involved as participants throughout the dialogue including use of unbiased experts.

Oversight

Oversight Group members and the Evaluation Team should also be able to hear first-hand the views that are being expressed during the dialogue process.

Appendix 2: Workshop Agendas

Agenda - Public Workshops in Exeter and Harpenden , 25nd January 2014

Time	Session
10.00 - 10.30	Arrival, registration, coffee
10.30 - 10.45	PLENARY: Welcome, introductions and overview of the day Rothamsted OPM
10.45 - 11.10	What do we mean by guiding principles? Small table discussions
11.10 - 11.45	Introduction to Rothamsted Research Rothamsted Research presentation and Q&A
11.45 - 12.00 Coffee break	
12.00 - 12.35	Life of a Rothamsted scientist Rothamsted Research presentation and Q and A
12.35 - 13.15 Lunch	
13.15 - 14.30	Rothamsted case studies Small table discussions
14.30 - 14.50 Coffee break	
14.50 - 15.25	Challenge and prioritisation of guiding principles Plenary
15.25 - 15.40	Next steps
15.40 - 16.00	PLENARY: Close and thanks Evaluation questionnaires and 'thank you' payments

Agenda – Stakeholder Workshop at Rothamsted Research, Harpenden, Wednesday 29th January 2014

Time	Session
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Time	Session
16.00 - 16.15	Arrival, registration, coffee
16.15 - 16.30	PLENARY: Welcome, introductions and overview of the workshop OPM
16.30 - 17.00	Introduction to Rothamsted Research Rothamsted Research presentation and Q&A <ul style="list-style-type: none"> - Overview of Rothamsted Research and its work with industry - Aims and objectives of the dialogue - Example(s) of working with industry
17.00 - 17.45	Rothamsted case studies Small table discussions to identify tensions and generate principles
17.45 - 18.00 Coffee and snack break (OPM to cluster principles)	
18.00 - 18.10	Challenge and clarification of guiding principles Plenary OPM to present back clustered principles and generate one set of principles on a flip chart
18.10 - 18.30	Review of outputs from the two public workshops Small table discussions to review public principles from 25 January workshops
18.30 - 18.50	Development of briefing statement Plenary Briefing statement to show stakeholder response to the following questions about the public's guiding principles: <ul style="list-style-type: none"> - Which of the public's guiding principles do you agree with? - What do you still have questions about? - What do you think is missing?
18.50 - 19.00	Next steps Close and thanks Evaluation questionnaires

Agenda – Collaborative (Public and Stakeholder) Workshop in London , Saturday February 8th 2014

Time	Session
10.00 - 10.30	Arrival, registration, coffee

Time	Session
10.30 - 10.45	PLENARY: Welcome, introductions and overview of the day Rothamsted OPM
10.45 - 11.30	Sharing outputs from the public workshops Presentation and small group discussions
11.30 - 11.45 Coffee break	
11.45 - 12.30	What did stakeholders have to say? Developing a mutual understanding Presentation and small group discussions
12.30 - 13.15 Lunch	
13.15 - 13.30	Plenary Q and A
13.30 - 14.30	Focussed discussions and stress-testing of the principles Small group discussions
14.30 - 14.55	Finalising the principles Plenary Q and A and small group discussions
14.55 - 15.15 Coffee break	
15.15 - 15.40	Summary and prioritisation Plenary
15.40 - 15.50	Next steps
15.50 - 16.00	PLENARY: Close and thanks

Appendix 3 Recruitment specification

This public participant recruitment specification developed by the delivery contractor (in consultation with the MG) was based on:

- Recruiting 25 people to attend one workshop in Harpenden on Saturday 25 January 2014
- Recruiting 25 people to attend one workshop in Exeter on Saturday 25 January 2014

- c50% from each workshop attending a further workshop in London on Saturday 8 February 2014

Workshop: Sat 25 January, Harpenden. 50% to attend Sat 8 February, London

Age	Number	Segment	Gender	Ethnicity	Other quota
18 – 25	6	2 x C1 2 x C2 2 x DE	50/50 M/F throughout (as close as possible)	Black/ Black British: At least 2 Black/ Caribbean and at least 2 Black/ African Asian/Asian British At least 2 British Indian, At least 2 Asian others/ Chinese 17 remainder white / other	Nobody who works in the media industry Attitudinal questions: <i>Do you work in any of these industries or professions?</i> 1. <i>Farming</i> (BETWEEN 0 AND 3 RESPONDENTS) 2. <i>Biotechnology</i> (BETWEEN 0 AND 3 RESPONDENTS) 3. <i>Environmental campaigning</i> (BETWEEN 0 AND 3 RESPONDENTS) <i>Have you heard of Rothamsted Research?</i> Yes (AT LEAST 5 RESPONDENTS) No (AT LEAST 10 RESPONDENTS) Participants must live in Hertfordshire or Bedfordshire AT LEAST 4 participants must be recruited from the following postcodes: <i>LU1/ LU2/ LU3/ LU4 (Luton)</i> AT LEAST 5 RESPONDENTS <i>AL5 (Harpenden)</i> AT LEAST 4 RESPONDENTS <i>AL1 (St Albans)</i> AT LEAST 4 RESPONDENTS <i>AL3/AL4</i> AT LEAST 4 RESPONDENTS
26-40	7	2 x B 2 x C1 1 x C2 2 x DE			
41-55	6	1 x B 2 x C1 1 x C2 2 x DE			
56-70	6	2 x B 1 x C1 2 x C2 1 x DE			

Workshop: Sat 25 January Exeter, 50% to attend Sat 8 February, London

Age	Number	Segment	Gender	Ethnicity	Other quota
18 – 25	6	2 x C1 2 x C2 2 x DE	50/50 M/F throughout (as close	Black/ Black British:	Nobody who works in the media industry Attitudinal questions:

Age	Number	Segment	Gender	Ethnicity	Other quota
26-40	7	2 x B 2 x C1 1 x C2 2 x DE	as possible)	At least 2 Black/ Caribbean /Black/ African Asian/Asia British: At least 2 British Indian/ Asian others/ Chinese 21 remainder white / other	<i>Do you work in any of these industries or professions?</i> 1. <i>Farming</i> (BETWEEN 0 AND 3 RESPONDENTS) 2. <i>Biotechnology</i> (BETWEEN 0 AND 3 RESPONDENTS) 3. <i>Environmental campaigning</i> (BETWEEN 0 AND 3 RESPONDENTS) <i>Have you heard of Rothamsted Research?</i> Yes (AT LEAST 5 RESPONDENTS) No (AT LEAST 10 RESPONDENTS) Participants must live in Devon Participants must be recruited from AT LEAST 5 different Devon postcodes
41-55	6	1 x B 2 x C1 1 x C2 2 x DE			
56-70	6	2 x B 1 x C1 2 x C2 1 x DE			

Appendix 4: Case Study Material Provided to Participants

Case study 1: Mosquito repellent

Rothamsted researchers usually work on publicly funded projects, where it is expected that the results of research will be published in peer-reviewed academic journals. However, publication it is often against private firms that Rothamsted might collaborate with because it limits the exclusivity of their access to findings and therefore the ability to generate profitable products.

Also, another controversy is that some privately funded research is based on previous findings from publicly funded research, but leads to knowledge or products which private companies can patent and profit from.

For example, in a hypothetical scenario, scientists from a pharmaceutical company read the results from a government funded study on the mosquito repelling properties of the Citronella plant. They identify an opportunity to develop a more effective natural mosquito repellent but need to carry out more research in order to do this.

They approach Rothamsted scientists with a proposition to fully fund the research and provide a 1% share of global profits.

This is not the kind of project that Rothamsted (an agricultural research institute) usually engages in, but it offers a lucrative deal that can provide resources for further research that fits more closely with Rothamsted mission statement. It also provides an opportunity to develop a product that provides relief from insect bites and contribute to the fight against world infections like Malaria and Dengue. There is also a humanitarian rationale for the project.

However, the company wants exclusive ownership over all the results and products developed, meaning that they have veto power over any publications that Rothamsted researchers might develop based on the project (thereby controlling the availability of information in the public domain) and grants no rights to use products to other parties, including humanitarian access rights (rights to use products for humanitarian reasons, e.g. to provide relief following a natural disaster).

Case study 2: Pesticides and Salmon Stocks

As well as having a formal role on regulatory committees, Rothamsted researchers speak and / or write publicly on political issues of science relating to their expertise, often informing public opinion and government policy.

The public trusts the opinions of Rothamsted researchers as an authoritative, independent voice. In order for this trust to be maintained researchers must remain visibly trustworthy.

However, closer links to industry might create a situation where the independence and integrity of Rothamsted's advice relating to products from collaborator companies is put to question.

Take this hypothetical scenario. Local Scottish fishermen have noted a rapid reduction of salmon stocks in their local rivers. The science is unclear, but locals firmly believe that this is down to a new pesticide used by local farmers that is infecting river waters. Under public pressure, the Scottish Government considers acting to ban the use of this pesticide, and calls for expert opinion on the issue.

Rothamsted researchers, who have shared projects with the agro-chemical company that developed the pesticide, have a sound scientific basis upon which to conclude that reduction in fish stocks is not attributable to this product. They release a press release to this effect, which receives national media attention. As a result of this, campaigners from Environmental organisations opposing pesticides use their airtime on the issue to question the integrity of Rothamsted researchers, pointing to previous experiences, such as in the tobacco industry, where scientific advice was biased and served big business at the cost of the public interest. Rothamsted risks reputational damage as well as losing its voice as an independent authority on the matter.

Case study 3: Improving the nutritional quality of food

Rothamsted researchers often find that industry is not only the best source of funding for particular work, but it also has crucial expertise that can be valuable in research.

Working with industry is often important to success, but it can create limitations for Rothamsted's freedom to operate as it usually would.

For example, researchers at Rothamsted recently developed a way of improving the nutritional quality of food and were keen to work with experts in the food industry to find ways of applying the benefits of this new technology to food production and processing. A joint project was developed which was funded both by a group of companies and the government. This produced interesting results that should be useful in producing better quality food. The companies involved are keen to use the results as soon as possible to develop products but want to keep results secret until they have a patent, so they can profit.

This presents three problems to Rothamsted.

Firstly, as a public research institution, Rothamsted has a duty to publish its results. Also, scientific publications are crucial to the careers of Rothamsted scientists involved in the project.

Secondly, some companies want to involve Rothamsted in product development, but since they are in competition with each other they do not want the results of the project to be shared. So, if Rothamsted cannot find a way of keeping the projects separated, it will need to choose one company above the others.

Finally, the original research used a computer based modelling system and data provided by another public research institute. This system is very important for further

research, but the other institute does not allow its data and systems to be used for commercial purposes. If Rothamsted works with the companies and cannot successfully negotiate access to the system with the other public institute, it will not be able to use this system.

Questions for participants:

- What are the issues involved in each case study?
- Which issues do you think the research institution and the industry organisation might have different views on?
- Which issues do you think are of particular public interest (e.g., relate to good use of taxpayers' money)?
- What guiding principles might help in each case study?
- Where are there overlaps in the guiding principles for each case study?

Appendix 5: Evaluation Baseline Summary Report

Rothamsted Research Public Dialogue: Evaluation Baseline Background

A baseline evaluation has been carried out to inform the evaluation of the aspirations for the projects and any concerns. This will be used within the ongoing and final assessment of the project, in order to assess whether expectations have been met and fears allayed. The baseline assessment comprised a brief round of telephone calls with six stakeholders who have an active interest and involvement in the project (from Rothamsted, Sciencewise and the Oversight Group). The interviews were carried out on a confidential basis, and the following questions were asked:

- 1) What do you hope that the Rothamsted Research public dialogue will achieve?
- 2) Do you have any fears about the public dialogue?
- 2) What challenges do you foresee occurring within the process?

The responses are summarised below, and are presented anonymously. Some of the points are related, but have been kept separate in order to retain the integrity of what was said.

Hopes for the project:

- A useful output as to how Rothamsted should work with industry, and the boundaries of that relationship
- Interesting and novel insights into the public view of what Rothamsted does and its role with industry
- Broader and more challenging frameworks emerge from the public's insights
- The development of a meaningful set of criteria which will safeguard the future of Rothamsted (and its integrity) in an era of commercialisation
- Ideas as to how public and private institutions can work together for the greater public good
- That the experience of public engagement is embedded and learnt from within Rothamsted
- It is excellent that Rothamsted is opening up the dialogue – almost any dialogue is to be applauded (Rothamsted is very famous for those who know it, invisible for those who don't)

Fears for the Project

- There is limited actual time within the workshop for discussion around the essence of the public dialogue. How meaningful will the output be? It may be quite a superficial output
- It's a restricted budget - Are the numbers of people involved going to be sufficient to provide a meaningful output?
- It's a statistically small number – what can really be said as a result of the project? Should the process open up to a broader national dialogue in order to be more representative?
- Are the contributions of the public genuinely going to be listened to? It will be important that the public are aware of the parameters of how the public dialogue will be taken forward within decision-making and the process
- People's views may not be what was hoped for, and that may change perceptions as to the value of public engagement

- That specific and unambiguous feedback is received which is inconsistent with what Rothamsted need to do
- Is the project aiming to do too much by trying to be a 'pathfinder' for public engagement projects within Rothamsted?
- The process is being done so quickly - in terms of embedding the public engagement process within Rothamsted , the best way is to bring in staff from the start. Has there been sufficient opportunity for this to occur?
- It has taken a lot of time to put together and manage the project – if it is not considered useful, it will have been a lot of time wasted.

Challenges Foreseen within the Project Process

- There is likely to be a big disparity between the knowledge and confidence of stakeholders within decision-making - it will be a challenge to enable them to have an equal voice within decision-making
- Is enough time allowed in the workshop for people to engage with the subject?
- The ability to bring participants up to speed about Rothamsted and different tensions of working with industry so that they are able to make informed and independent judgements
- There may be individuals who have extreme and dominant views – others may be slower to express their views and have more subtle opinions. How can it be ensured that the quieter ones are listened to?
- The Oversight Group is very light on those who are not already familiar with Rothamsted so may miss perspectives those who do not know Rothamsted well
- How will the workshops manage to focus on developing guiding principles rather than controversial issues
- The timescale is very tight so it may be hard to get people to come
- Rothamsted already has a good idea what stakeholders think but need to make sure that give enough space for the public to be listened to
- Making sense of the data that emerges may be a challenge

Appendix 6: Evaluation Observation Data from Workshops

Public Workshop 25th January , Rothamsted Research , Harpenden

Event Observation/Evaluation

Overall the event enjoyed a good level of engagement with a positive, supportive and interested group of participants. The participants were a diverse mix of ages, equal number of men and women, and included representation from most socio-economic groups. There was a logistical challenge at the start of the day as some participants had been given the incorrect postcode , and the address of a different venue on the Rothamsted campus. This needs to be explored further; as does the issue that participants were recruited not only from on-street recruitment but also market research companies.

The focus of discussions – to develop guiding principles as to how Rothamsted should engage with industry – went further than anticipated both in depth and breadth. The process of the workshops, and how the information will be used (and how participants can be informed) was set out clearly. An indicator of the level of interest in the workshop was that 19 of 24 participants would like to attend the next workshop which includes stakeholders.

Some ‘tea break’ quotes:

“ I came with the idea of being open minded; but had no idea how blown away by it I would be”

I’m enjoying it – it’s really interesting but very complex . I’m realizing how little I know about it all”

“ It’s fantastic to have people from Rothamsted who know what they are talking about here”

The table below offers observations on different aspects of the event. Please see the colour code to help readers scan through and focus on the changes that might be required:

Green means ‘no action required’

Yellow means ‘for reflection and possible action now or in future’

Red means ‘for action now’

Aspect	Comments	Status
Location, venue, catering	The venue was not selected for its ease of location but rather because it was in situ at Rothamsted.	Need to investigate directions given in participants invitation details,

	<p>In terms of accessibility: for drivers – the turning to the Manor is not well signed from the road; for public transport, Harpenden train station is 10-15 minutes walk away; and for walkers, again it is not well signed.</p> <p>The selection of the Rothamsted manor house however seemed to be a good choice for relevance - participants spoke to were pleased to have the opportunity to come in ('driven past many time's but never been in') and appreciated the rural/ 'pretty' location. It did not appear to bias the process (a concern raised during the planning process) but rather provide more meaning to the discussion for participants.</p> <p>The venue proved difficult to find for some people. At least 10 of the participants were given the wrong postcode and location (conference centre) . This was an unfortunate start (for which the facilitator apologised at the start).</p> <p>The Rothamsted attendees received documentation about the event (the day before it was due to happen) which also did not provide the venue location on it.</p> <p>Catering: good, and on time, and appeared to cater to different tastes and needs (1 vegetarian, no other dietary needs specified)</p>	<p>and how the miscommunication occurred . Participants stated that 'The Studio' a market research company informed them of the incorrect address.</p> <p>Check that subsequent workshop invitations are sent early enough and with correct venue details; and signage is considered.</p>
Recruitment	<p>Participants were from Harpenden, Luton, St. Albans . Also from further afield , Broxbourne, Tring, Berkhamsted</p> <p>When asked how they were approached , some was through on-street (or in a café by an 81 year old recruiter!) by recruiters. It's important to note that others from market research company (individual signed up and sent email as to whether interested).</p> <p>Also noted was that some were recruited in postcodes other than those planned (Hertford - SG14)</p> <p>The Management Team had been informed that it would be on-street recruitment rather than market research (the implication of this is that it may mean a greater interest in such activities and different profiling) .</p>	<p>Investigate the rationale for using a market research company, and why the management team had not been informed.</p> <p>Further, why was on-street recruitment in different locations than those the MT had been informed</p> <p>Require further analysis of recruitment data (numbers across different profile characteristics)</p>
Meeting and greeting	No signage at approach, or on the door , and a Rothamsted staff member offered to direct from	Reflect upon signage, and

	<p>the path (somebody who would have been well placed to meet and greet at the entrance). Could have benefitted from clear signs and 2 people providing directions.</p> <p>At the entrance , a Rothamsted catering staff member greeted but the facilitation team/ Rothamsted were not a constant presence. Participants had to go through main room to the registration which was not always staffed.</p> <p>Participants were left for the first 10-15 minutes to talk amongst themselves . The incorrect address details may have contributed to that too as OPM/ Rothamsted were transporting those who had gone to the conference centre instead of the Manor House.</p> <p>Hot drinks and pastries were out which was good , and welcoming</p>	<p>how to organise 'meet and greet' for other events</p>
<p>Time keeping</p>	<p>The event started 5- 10 minutes late (because of the earlier problems stated). It was unfortunate that there was a delay to timing through the day but it felt well managed and that the facilitator was conscious of timing and there was reassurance that the day would finish before or at 4pm as planned – which it did.</p>	
<p>Room size, layout</p>	<p>Room size was good; grand (slightly dark) but quite welcoming and not an intimidating space . Three round tables were well laid out, and projector at the front.</p>	
<p>Attendance</p>	<p>24 of 29 attended. The intention was 25 participants so this was fine and beneficial to ask more than was planned. As far as known, no explanation was given for the absentees.</p> <p>Of the 24 participants, 12 were men; 12 women</p> <p>In terms of age, one was 18-20; four were under 30; four were 30-40; six were 40-50; four were 50-60; three were above 60 and two did not provide their ages</p> <p>As regards socio-economic groups: 5 were 'B's' ('middle class'); 10 were 'C1's' ('lower middle class', 5 were 'C2' (skilled working class); 3 were 'D' (working class) and 1 was 'E' (those at lowest level of subsistence).</p> <p>From observation, those who asked questions in plenary – 9 of 24 participants – gave the impression of being more interested and</p>	<p>Request final analysis on participants from recruitment company, and explore bearing on process of having has recruitment from market research company</p>

	informed than anticipated.	
Introductions	<p>The facilitator asked all externals to stand up and introduce themselves – and gave clarity of names and roles.</p> <p>There were no ice breakers but the individual tables meant that people introduced themselves within a table and conversation occurred within those groups.</p> <p>Ground rules were set out clearly and seemed to work effectively. ‘No acronyms’ is an important ground rule.</p>	
Health and Safety	Fire precautions were mentioned in the introduction	
Aims, agenda, scope and purpose of conversation	<p>There was a clear outline of the process regarding the different workshops and how they would link together; asked people to say if they would like to attend the 8th Feb final workshop and 19 of 24 said they would ! Did say that would try to get a good mix of people (age , gender, where live etc.).</p> <p>At appropriate stages of the day, set out the next steps in the process and how the content that had been developed would be used.</p>	
Presentation1 Scientist (Prof John Crawford)	<p>Good accessible style, clear, good structure and outline. Very good at bringing it to life. Useful and interesting overview of the history of Rothamsted (important to OG group), Sparked interest amongst participants who asked questions (about long term experiments; data availability; climate change; UK or global perspective; commercial global interests vs benefits for developing countries; how to tap into Rothamsted knowledge as just around the corner; balance of productive vs other land; sustainability of funding) and answered clearly. The PowerPoint presentation was not finished because so many questions.</p> <p>Mix of questions from 8 individuals (2 asked more than once) men and women</p>	
Presentation 2 Prof Huw Jones Prof Lin Field	The presenter went into the case study at the outset. It was perhaps too much of a narrow focus too quickly. The case study example given , needed some questions of clarification but did give a balanced view . Then brought it into one generic issue (concern that not a typical case, don't normally sign property rights – to what extent is it a representative case?)	

	<p>Seemed a sense in the room that 'big business is bad' at this stage.</p> <p>Lin Field – re insecticides and common interests between industry and Rothamsted (a strong other view). Expressed own role / commitment but difficulties of being linked to business (and reduce the credibility of what states). Clear.</p> <p>Questions were around working with smaller companies, more sustainable focused companies.</p> <p>There could have been broader contextual understanding before the first case study (this suffered from the lack of time from the first presentation so did not set out the differing objectives of Rothamsted and industry).</p>	
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Event Observation - Stakeholder Workshop , 29th January

Overall, the event was an engaged interaction between stakeholders and Rothamsted. It was a supportive environment with stakeholders bringing their own perspectives about how Rothamsted can work with industry , in Rothamsted's best interests.

A concern is that the public guiding principles that were provided combined the data from the Harpenden and Exeter workshops (for the purpose of being more accessible) , and led to a merged and at points confusing representation of what had been said, and lacked some context of the information provided.

There was also an issue around time, as to whether (i) enough time had been allowed for the critical discussions of the workshops and (ii) timekeeping on the day. The intention was to produce a 'briefing statement' but there was not enough time at the end of the day, so a final stakeholder briefing statement was not produced by stakeholders at the meeting.

The table below offers observations on different aspects of the event. Please see the colour code to help focus on the changes that might be required:

Green means 'no action required'

Yellow means 'for reflection and possible action now or in future'

Red means 'for action now'

Aspect	Comments	Status
Location, venue, catering	All of the stakeholders are familiar with Rothamsted and there did not appear to be any difficulties in finding the venue.	

	<p>It is appropriate to host it at Rothamsted, given the focus of the meeting, and inviting stakeholders from outside to input their ideas.</p> <p>There is a nice unplanned 'thread' and continuation of the process i.e. 'in the same room on Saturday a group of the public were in here discussing this... ' which may have added to the sense of association of participants with the public dialogue.</p> <p>Catering good - teas and coffees, and biscuits on arrival. Good mix of sandwiches and fruit platter for all tastes.</p>	
Invitations	<p>The evaluator was only sent the confirmation email the day before the event on request (and had not been copied into any of the correspondence with participants). Some of the Rothamsted staff did not receive confirmation emails about the event.</p> <p>The evaluator will follow up and ask to be sent the invitations.</p>	Evaluator to follow up as to when invitations were sent out and how clear and informative they were.
Meeting and greeting	<p>There was an atmosphere in the entrance hall of people talking informally, and knowing each other beforehand. Rothamsted mingled with participants. The assistant Director of Rothamsted was there to welcome the participants.</p> <p>OPM were 'manning' the registration desk, in the room behind the hall and did not come out to 'meet and greet' . It may have been better if they had been greeting/ or the registration desk was in the main hall because after the initial teas/ coffees in the lobby people then queued to register.</p>	To note for 8 th Feb
Time keeping	<p>Started on time , but first session overran by 15 minutes and was delay of approximately 15 minutes during the event.</p> <p>It finished promptly at 7 but the last session - briefing statement and next steps was just over 5 minutes, rather than 20 minutes!</p>	The delays meant that the last session did not occur. This is a concern as the briefing statement is now not an output of the stakeholders, but will be developed by OPM (drawing on stakeholders views)
Room size, layout	The room is highly suitable, with round tables	

	<p>set out well and making use of the space. It is an established, appropriate venue, and a good space with entrance lobby separate areas for the catering and refreshments.</p>	
Attendance	<p>16 stakeholders, 8 from Rothamsted accepted to come but 1 Rothamsted participant did not come (no reason given as known – Matina will follow up)</p> <p>There were challenges in attendance levels leading up to the event (6 confirmed approx. 10 days before the event) however OPM made calls, suggested other stakeholders, and managed 16 and Rothamsted so a total of 23 (target had been 25).</p> <p>Rothamsted however was aware of an invitee who was able to attend but was not listed as a participant, revealing an administrative issue in the correspondence with invitees.</p> <p>One stakeholder group that was missing was NGOs. Despite attempts to include a local NGO (particularly one who sits on the OG group) unfortunately no one was able to attend at that stage (invited the day before the event, although it had been discussed before that).</p> <p>The facilitators have stated that they will aim to ensure that NGO stakeholders are at the meeting on the 8th Feb.</p>	<p>Check NGO involvement on 8th Feb</p> <p>Follow up on correspondence (and ask to be copied into all correspondence)</p>
Introductions	<p>Introductions at the event were of the hosts/ key organisers – Rothamsted, OPM, myself from 3KQ. There were not introductions by all participants, but this was carried out on the tables. In this forum it may have been good to introduce themselves so that knew the organisations/ likely perspectives and expertise in the room.</p> <p>Everyone had name badges with their name and institution on it. They were also asked to introduce themselves when they asked questions/ commented in plenary.</p>	<p>Could have benefitted from plenary introductions</p>
Health and Safety	<p>No fire hazards noticed.</p>	
Aims, agenda, scope and purpose of conversation	<p>The purpose of the meeting was clearly set out, and it was situated within the overall project process. The introduction was geared towards the participants e.g. with a definition of what we mean by a guiding principle. All participants had an agenda.</p> <p>However Rothamsted staff and the evaluator were not provided with workshop documents</p>	<p>Request workshop document for Rothamsted/ evaluator for the 8th</p>

<p>Session 1 – Introduction to Rothamsted</p>	<p>Part of the purpose given for this presentation was to share what had been presented to the public. The presentation clearly set out the history and background of Rothamsted, the motivations for working with industry and why industry works with Rothamsted . It also set out the differing aims and objectives. It was clear, and methodical, and stakeholders seemed interested and some wrote notes.</p> <p>[Themes that emerged with Q&A. three areas underplayed of Rothamsted’s contribution – to UK economy, training of scientists , public good advice; other interest in public dialogue and who they were ; and industry funds as % of overall budget, Contract research organisations – role; industry funding now; work that doing with industry now. Industry stakeholder urged balance between getting involved and retaining integrity]</p> <p>Responses ok, considered but could have been more enthusiastic/ engaged.</p>	
<p>Session 2 Rothamsted Case Studies</p>	<p>There was a lot of interaction and discussion on the tables. The exercise seemed to work well, and post its were developed so that each had an opportunity to input in the process/ have a voice.</p> <p>There were some quieter individuals and difficult to know to what extent they were engaged by the table facilitators.</p>	
<p>Session 3 Challenge and Clarification of Guiding Principles</p>	<p>There was a very brief introduction to the session (informed that had group together their post it), and then participants were asked (in their table groups) to read the guiding principles and comment. This was shorter than on the programme, and meant that some of the background, context, explanation and ‘flavour’ of the public workshops were not provided.</p>	
<p>Review of Outputs from two public workshops</p>	<p>There was a lot of discussion and engagement . The evaluator heard process questions to understand the source of the principles that were written.</p> <p>In terms of participation, certainly one group appeared to be dominated by 2 participants and it was difficult to see whether the table facilitator ensured that quieter participants were listened to.</p> <p>The evaluator heard various questions about the context of the information in the document</p>	<p>Review the documents and how they will be used (meeting already held)</p>

	<p>One participant from the Harpenden workshop from Rothamsted stated that she did not recognise some of the information on the guiding principles sheet!! Need to review it against original data.</p> <p>Within a brief discussion with OPM after the event, there was reflection as to how they could have done the document differently.</p>	
Development of briefing statement	<p>Time ran out, 3 minutes left.</p> <p>Asked for broad sense on table – ‘bit confused’, ‘some naïve comments’, ‘some anti-business’, agreed with some principles. ‘Some could have been tidied up’.</p> <p>Next step OPM will develop a briefing statement on what they said!!! And then it will be introduced within the workshop on the 8th Feb. This is counter to the philosophy behind the process as it should be the stakeholders output.</p>	Highlight that briefing statement should have been created by stakeholders within management meeting (done)
Close	<p>Spoke about the workshop on the 8th Feb – purpose and outline and their role.</p> <p>Also a question was asked about receiving information. It felt quite rushed.</p>	
Facilitation	<p>Facilitation was fine, clearly setting out the process and ensuring that all understood terms (e.g. hinted when speakers needed to spell out acronyms). It was also relaxed/ informal which led to a more relaxed meeting.</p> <p>A power cut in the first half of the meeting was not allowed to disturb proceedings too much and was well managed.</p> <p>However the timekeeping at the start of the workshop (where one session overran) had a knock on effect on the end of the workshop with ramifications for the briefing paper as discussed above.</p>	
Energy, atmosphere	<p>The atmosphere was of constructive engagement, with considered and contributions. It served as an interesting comparison to the public workshop in terms of energy– it lacked the sparks of energy and enthusiasm (as a result of participants, atmosphere, and other inputs?).</p> <p>The power cut acted as a bit of a warming up /</p>	

	ice breaker within the first plenary session (and was resolved)	
Recording	There were digital audio recorders on each of the tables. It was clearly explained within the introduction that these would be switched off during introductions on the table, and then switched on afterwards to cover the conversation.	
As an exposure event for Roth Research to Public Dialogue	<p>Attendees – some were the same as workshops held to date: Matina (Press, External Affairs), Huw Jones (Wheat) , Lin Field (Crop Protection) who were all at Harpenden public dialogue Andrew Spencer (knowledge and exchange) who was at Exeter workshop</p> <p>Others - John West (Plant biology – crop protection) -Smita Kurup (Plant biology - head of bio-imaging) Kim Hammond- Kosack Acting Deputy Head of Plant biology (part of big industry work, Syngenta) Some Rothamsted participants also asked questions , as if stakeholder</p> <p>The staff represented different departments, and of those from one they were from different teams within the department. A mix of those with strong industry experience and those without were included.</p>	
Commitments to stakeholders	<p>A participant asked about how they would learn more. OPM did not know but talked about their report . Matina spoke about 3 outputs that would send to them OPM report – would send to each and on web Evaluation – on web Knowledge and Commercialisation Strategy – on web</p>	

Event Observation – Collaborative Workshop , 8th February

Overall, it was a very engaged and constructive meeting. It felt that there was enthusiasm for the event and wider process, and various participants commented that they were pleased to 'be back again'. At the start of the day the stakeholders and Rothamsted were more vocal , but this seemed to become more balanced as the day progressed. The presentation and availability of data in its 'raw' form from the 3 events was appropriate and presented in an accessible way. It appeared that there was progress in developing guiding principles (having been challenged by stakeholders and

Rothamsted) but it is unclear whether this was the best approach for the clients (Rothamsted had raised focusing discussions around themes which had emerged in the process, rather than focusing upon the guiding principles to such an extent in the culminating sessions).

Green means 'no action required'

Yellow means 'for reflection and possible action now or in future'

Red means 'for action now'

Aspect	Comments	Status
Location, venue, catering	<p>The Friend's Meeting house on Euston Road was a good choice of venue – very accessible by public transport. It was particularly accessible for those who had come from the Harpenden workshop, although those who had attended the Exeter workshop stayed overnight. It was easy to find from nearby public transport.</p> <p>The venue is appropriate for its facilities and location.</p> <p>Catering was fine in quality and variety (albeit not inspiring). Special dietary needs appeared to be taken care of (e.g. one was gluten free) . However at times, there was insufficient of certain foods/ drinks e.g. milk, no water in the room after lunch and the sandwich trays ran out quickly.</p>	
Meeting and greeting	<p>The initial reception from OPM was effective and organised. The registration desk was at the front so at the entrance, and participants received a friendly and clear reception (name badges and coloured spots for tables).</p> <p>Matina from Rothamsted also welcomed people on behalf of Rothamsted in an informal way. Other Rothamsted staff did not appear to mingle quite as much.</p> <p>There was a sense of anticipation when people arrived, and participants were observed reading the hand-outs closely. People also chatted informally a lot , and it was a very 'comfortable' atmosphere. Many arrived 30-45 minutes early.</p>	
Time keeping	<p>A prompt start , timings were at the latest 10 minutes during the day, and then time was made up in the afternoon and it finished 20 minutes early.</p>	
Room size, layout	<p>The room size was fine – quite long and thin, but set out well with 5 round tables of up to 8 participants. They are close to the front and (big) projector screen.</p>	

Attendance	<p>There were 28 public participant attendees. 30 had said they could come , 1 informed was unable to attend and another did not arrive on the day.</p> <p>Five stakeholders confirmed. These were from Syngenta (agri-business), BASF () Food and Environment Research Agency, National Farmers Union and an LEP (?). However only 3 attended in practice (1 informed that was unable to attend and the other did not turn up). Final participants were from Syngenta, Food and Environment Research Agency and NFU.</p> <p>Of Rothamsted, there were six participants (see below).</p>	Explore the 'gaps ' in stakeholder participation
Introductions	<p>There were introductions of all non-'public' participants – so that all knew who they were . The facilitators ensured that the stakeholders gave some introduction to the organisations that they work with.</p> <p>Ground rules were clear and emphasised the importance (respect views, ask questions if not clear, respect timetable, commit to timekeeping)</p>	
Health and Safety	<p>There were no obvious trip hazards or fire escape blockages</p> <p>Fire precautions were explained in a slightly dismissive way – 'head for the door' and had not been researched before.</p>	
Aims, agenda, scope and purpose of conversation	<p>The aims, agenda and purpose of the day were clearly set out. It was emphasised that this is to hear the public.</p> <p>The wider process , and where today's event 'sits' was also shared clearly. There was also a reminder of the process that people had been through so far.</p>	
Presentation1 – Refresher of first public workshops	<p>This focused upon providing a refresher from the public workshops and described convergences of ideas, and also differences. Also highlighted what the stakeholders had done in terms of reviewing the public principles.</p>	
Small group discussion	<p>Rothamsted and stakeholders voices were heard more , Perhaps this was due to being at the start of the day and wanting to listen to Rothamsted/ stakeholders initially.</p> <p>The 'raw' data from all three workshops was discussed and the amount of data did not seem to overwhelm participants.</p>	

Presentation 2 – what did stakeholders say?	The process in relation to public dialogue was clearly set out, and the areas of agreement and slight disagreement were shared well.	
Small group discussions	<p>The discussions particularly within 3 tables began to feel more participatory, and groups seemed to be comfortable with each other. Again the evaluator heard some of the table facilitators trying to get views from all.</p> <p>The lack of plenary discussion was raised by the evaluator during the lunch break, as it was felt that the morning discussion were at the table with occasional opportunity for questions in plenary. The facilitator responded positively that it was a helpful idea (then revisited his schedule and saw that was on there) .</p>	Insufficient plenary in the morning (only focused upon Q&A) and there was no feeling of a shared picture being build up by this stage
Afternoon session Plenary / Q&A	<p>There was then plenary feedback from the tables which was useful in building a shared idea across the plenary as to what had been extended.</p> <p>Small group discussions to explore case studies (again) seemed to invoke engaged discussion, and there was a sense of focus and hard work.</p> <p>A shared list of broad areas of principles was developed and presented. The facilitator asked if this seemed to reflect discussions and 1-2 questions / clarifications were raised regarding about the role of the public and Rothamsted. Overall there seemed to be lots of nodding and agreement that the areas reflected the conversations that had been had. These were then prioritised.</p> <p>There was explanation of the next steps by both OPM , and Rothamsted.</p> <p>There seemed to be a sense of satisfaction and as if people had achieved something by the end of the day.</p>	
Role of stakeholders	<p>There were 3 non-Rothamsted stakeholders. 5 had stated that they could come, but 2 were absent on the day.</p> <p>There were no NGO stakeholders present ,(not at the stakeholder meeting) and one (Amanda Yorweth who is on OG) gave perspective on the principles. This was not ideal but the ideas were shared with the participants during an initial presentation.</p> <p>The stakeholders seemed to have a stronger</p>	Follow up on stakeholder representation

	<p>voice than their numbers , but this is not surprising given the context knowledge for the guiding principles and participant raised questions during the day. This became more balanced during the day (although still a strong presence).</p>	
Recording	<p>Table facilitators wrote notes, and facilitated the sessions. The facilitators were writing/ recording and then sharing them afterwards. Combining both roles, it can be naturally hard to capture all. The use of facilitators to record and also present was perhaps for quality, efficiency and expediency, although there is a balance in making sure that the voices were heard (more use of post-its?).</p> <p>Recording was via digital recorders</p>	
Facilitation	<p>The facilitation was strong, clear and effective. There was an informal but working and constructive atmosphere. It was flexible enough that they changed one of the sessions to catch up time (which worked well).</p> <p>Some table facilitators were observed ensuring that it was as inclusive as possible, and encouraging quieter voices to participate. It was observed by one of the participants that it was better to have table facilitators who had attended the previous workshops and had that base of knowledge around the work area.</p> <p>However discussion with various facilitators after the event revealed that they found it difficult for the conversation to be inclusive and balanced.</p>	
Energy and tone	<p>The energy was positive, strong, with an air of hard work and appreciation of being involved . At the start of the day there was a sense of anticipation and excitement about the day ahead.</p>	
Public voice	<p>Within the small group discussion, ensuring that the voices were heard was up to the table facilitator to manage (who was also writing). They seemed to try to make it as participatory as possible, and I heard the facilitators asking for opinions from e.g. those who hadn't spoken, rep from Exeter/ Harpenden workshop if had not been heard (see above).</p> <p>However there was limited plenary discussion for participants to share comments as a wider group and then build up a plenary / wider group understanding of the process. This was rectified in the afternoon session when there was plenary</p>	

	<p>feedback from the groups.</p> <p>Plenary was largely Q &A or presentations.</p>	
Rothamsted	<p>There were six participants from Rothamsted.</p> <p>Matina Tsavalouta</p> <p>Andrew Spencer</p> <p>Adela de Paula (Communications dept., attended Harpenden public workshop)</p> <p>Prof Lin Field (attended Harpenden public and stakeholder),</p> <p>Dr Penny Hirsch (had not attended other)</p> <p>Prof John Lucas (had not attended other)</p>	<p>Yet to assess if this was representative of a good spread across the different departments.</p>

Appendix 7: Interim Evaluation Report

This interim report provides high-level observations about the delivery of the Rothamsted Research public dialogue on how Rothamsted Research should work with industry. The evaluation has been conducted between December 2013 and February 2014. This interim evaluation focuses on the delivery of the dialogue, including some top-level observations and some specific challenges that have arisen. A full Evaluation Report will follow, once the following are complete:

- The Dialogue Report has been submitted by the delivery contractor (end March)
- A round of interviews to consider impacts of the public dialogue (March – April)
- A short questionnaire to Rothamsted staff who participate in a seminar to brief Rothamsted on the process (mid-April)

Overall, the evaluators believe the process to have been *a constructive dialogue with high levels of engagement*. The evidence for this comes from direct observation (of 3 public dialogue events) and the participant questionnaires. This will be built upon with the remaining evaluation activities over the coming weeks.

At a high level, the evaluators make three key high level observations regarding delivery:

Enabling public voice. There has been a strong commitment by Rothamsted to (i) engage a diverse group of the public ; (ii) provide the right arena / opportunity for them to participate ; and (iii) to have the appropriate processes to listen to them. There were debates at the start of the process as to the emphasis that should be placed on the public vs stakeholder views, but the decision and resulting process was focused upon the public as the key voice with stakeholders as a ‘resource’ and ‘sounding board’ for the public ‘guiding principles. (More clarity would have helped at the start of the process on this, especially given time constraints). The public dialogue events were well facilitated to enable the public to have the opportunity to learn more about Rothamsted, raise questions and discuss issues within small groups. Overall , 95% of public participants were satisfied with the events they attended, and 100% of public participants felt that they were able to contribute their views²⁰. This process was not without challenges and tensions (discussed below).

Engaged oversight group, management team and Rothamsted staff. The oversight group (OG) were selected to provide broad perspective of views – they have acted as ‘critical friends’ and helped to gain clarity in the process such as the development of the objectives and the degree of importance of the guiding principles. The management team has worked effectively to develop, question and support the process, particularly through weekly catch-up calls (as well as email correspondence) which has proved an efficient way of working. Rothamsted staff from different departments have been engaged in the process, and the knowledge and expertise has been appreciated by participants (evidenced by participant questionnaires). The Rothamsted co-ordinators have been pro-active in including a mix of staff from different departments, with different degrees of experience and openness to working with industry. Further research is required by the evaluators as to the extent, mix of awareness and participation and

²⁰ This data is from evaluation questionnaires completed at the two public dialogue workshops (held in Exeter and Harpenden) on 25/1/14

wider implications for Rothamsted as a whole.

Time. A significant time constraint existed from the start of the public dialogue. This was driven by the commitment to deliver the project by end of March 2014, and followed a long process to develop the project (due to the exploration of ideas for the focus of the public dialogue as well as staff changes at Rothamsted). This has meant that the four workshops were held within two weeks (and the first three within 5 days). This has caused considerable pressure on all involved in delivering and overseeing the process, as well as tangible downsides to project delivery. For example the objectives were being finalized as the workshop content was being developed. Whilst as said above the events have been run well given the compressed timescales, there have been some administrative issues that have impacted on the quality of the process: invitations and confirmation emails sent very close to the event, lack of follow ups, individual correspondence to stakeholders was at times delayed and impersonal. Whilst it cannot be said whether these administrative errors would have occurred if there was more time, it *can* be said that the timeframe has meant that some planning for the process had to be rushed. It is important to reflect for the future as to whether so many workshops in a short space of time should be delivered, or whether the time constraint of end FY 2014 was ultimately useful.

Specific **challenges** within the process are worthy of note at this stage:

- In order to have a 'diverse' group of public participants, careful consideration was given to how this would be achieved and the selection criteria for recruiting a 'diverse' public by the Management Group (and OG). However a recruitment agency contracted by the delivery contractor used a market research company (using a database) to recruit members of the public for approximately half of the participants in the Harpenden workshop. This was a matter of concern for a number of reasons:
 - It was not what had been planned and communicated between Rothamsted and the delivery contractor;
 - There was a different 'feel' of recruiting from a database i.e. those who were on the database already had an awareness of such processes and was likely to have particular interest and or experience of such events. Although this is qualitative research not quantitative, there is a clear risk of non-response bias in this kind of sampling. Quantifying this risk is however very difficult.
 - As a related issue it had logistical implications, as the market research agency provided incorrect direction and postcode details, and it is unknown as yet as to the search criteria, and email selection process which led to the recruitment of the participants (to be investigated further in coming weeks by the delivery contractor).
- Within the process, a balance needed to be struck of maintaining the integrity of the public contributions vs moving forward towards an output. A tension in the process occurred when two sets of guiding principles (from the two public workshops) were amalgamated for consideration at the stakeholder workshop (so analysed, edited and changed by the delivery contractor in the process). This was then reflected upon by the Management Team and the Delivery Contractor - whilst combining the data was intended to reduce the burden on the stakeholders, the data risked lost its context and integrity. Having reflected on this, the delivery contractors presented the 'raw' data from each of the three workshops to participants (with handouts) at the final workshop, which was a positive step and return to the integrity of the data and methodology of the process.

- One concern around the governance of the process has been the absence of the designated OG Chair within the process (unable to attend either OG meeting so far). Given that there is a strong OG, it is difficult to assess the real impact that this has had (although it has limited the participation of the stand in from BBSRC within this forum). The role of the chair going forward is questioned given the value of being part of the process when the chair has had limited participation to date.

Appendix 8 - Calibration and Definitions of Assessments

Very well met	Met to the greatest degree that could be expected. No improvements are identified that could realistically have been implemented.
Well met	Met, with only one or a few relatively small improvements identified, but without any substantive impact on the output of the dialogue.
Fairly well met	Met, but with a series of improvements identified that could have substantively improved the process and/or impact of the dialogue.
Not very well met	Falls short of expectations in a substantive and significant way.
Not met	Effectively not met at all.

Appendix 9 – Diversity of Participants

Public participants at the Harpenden public workshop, 25 January 2014

Recruitment method	Male/ female	Age	SEG	Ethnicity	Other criteria
All on-street	13 M	7 (18 – 25)	6 B	1 Asian	2 participants aware of Rothamsted Research No participants worked in the farming, environmental campaigning or biotech industry Mix of 10 different postcodes
	12 F	4 (26 – 40)	6 C1	24 White	
		7 (41 – 55)	4 C2	British/White	
		4 (56 – 70)	5 D	other	
			4 E		

Public participants at the Exeter public workshop, 25 January 2014

Recruitment method	Male/ female	Age	SEG	Ethnicity	Other criteria
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All on-street	13 M	7 (18 – 25)	6 B	1 Asian	2 participants aware of Rothamsted Research No participants worked in the farming, environmental campaigning or biotech industry Mix of 10 different postcodes
	12 F	4 (26 – 40)	6 C1	24 White	
		7 (41 – 55)	4 C2	British/White other	
		4 (56 – 70)	5 D 4 E		

Public participants attending the London collaborative workshop, 8 February 2014

Exeter / Harpenden	Recruitment method	Male/ female	Age	Ethnicity	SEG	Other criteria
18 Harpenden 11 Exeter	Self-selecting from workshop 1, resulting in: 10 database 19 on-street	16 M 13 F	7 (18 – 25) 7 (26 – 40) 10 (41 – 55) 5 (56 – 70)	2 Black/Afro Caribbean 2 Asian/Asian British 25 White British/White other	8 B 10 C1 4 C2 4 D 3 E	7 participants aware of Rothamsted Research No participants worked in the farming, environmental campaigning or biotech industry Mix of 14 different postcodes

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