

A close-up photograph of a rock face showing distinct, dark brown, layered sedimentary rock formations. The layers are tilted and separated by lighter-colored bedding planes. Some sparse, dry vegetation is visible at the top of the rock face.

Public dialogue on geological disposal and working with communities

March 2016

About this report

This report presents the findings of a 2016 public dialogue on geological disposal and working with communities.

The project was jointly funded by the Department of Energy and Climate Change (DECC) and Sciencewise,¹ as a mechanism for exploring the views of small groups of members of the public on key policy issues relating to the geological disposal of radioactive waste.

The project took a dialogic approach rather than an academic social research or market research approach. The process enabled a series of in-depth discussions on selected topics guided by experienced facilitators, as well as enabling close interaction between specialists and members of the public. Sessions were designed to explore the range of participant views and to enable examination of the underlying reasoning behind specific points – why something was said, not just what was said. The dialogue was designed and delivered with Sciencewise’s quality framework and guiding principles in mind.

A key context for this work is the open policy making² approach being taken by DECC. This meant that some of the questions being asked covered areas of policy that have not yet been fully defined, and where DECC wanted to seek early input into a range of options.

This report presents a summary of the range of views expressed by dialogue participants on specific issues, including any observed areas of convergence or divergence. It is a qualitative report based on conversations with a selected group of people over two given days, and as such should not be used to infer what “the public” thinks in a statistically representative way.

¹ The UK’s national centre for public dialogue in policy making involving science and emerging technology issues: www.sciencewise-erc.org.uk

² See <https://www.gov.uk/guidance/open-policy-making-toolkit> for more details

Executive summary

Background

The UK Government's policy³ for the long-term management of higher activity radioactive waste is geological disposal.

The 2014 Implementing Geological Disposal White Paper sets out the proposed approach for working with communities, but leaves much of the detail open with a view to developing the practicalities in consultation with stakeholders and members of the public. Following a call for evidence on working with communities in autumn 2015, the Department of Energy and Climate Change (DECC) wanted to engage directly with members of the public to hear their views on a number of key aspects of the White Paper – to inform policy development prior to wider consultation later in 2016.

Co-funded by DECC and Sciencewise,⁴ the aim of this public dialogue process was to provide the Geological Disposal Facility (GDF) Policy Team within DECC with an understanding of the opinions of a cross-section of the public on particular issues around the siting of a geological disposal facility; why they hold these opinions, and the values that underlie them. The issues were:

- Community representation.
- Test of public support.
- Right of withdrawal.
- Community investment.

A key context for this work is the open policy making⁵ approach being taken by DECC. This meant that some of the questions being asked covered areas of policy that have not yet been fully defined, and where DECC wanted to seek early input into a range of options.

3KQ⁶ was commissioned to design and deliver the process, in close liaison with DECC, Sciencewise and the dialogue project's Independent Oversight Group (IOG).

This report presents a summary of the range of views expressed by dialogue participants on specific issues, including any observed areas of convergence or divergence.

Dialogue process

The dialogue process centred on reconvened workshops at two locations (Manchester and Swindon), involving two full Saturday sessions 1–2 weeks apart. The choice of workshop locations was based on the following principles:

- Involving areas in the north and south of England.
- Going to places that do not have nuclear sites nearby so that participants were relatively unaware of nuclear issues and had not previously been involved in similar discussions.

³ Excluding Scotland, which has a separate devolved policy on radioactive waste.

⁴ The UK's national centre for public dialogue in policy making involving science and emerging technology issues: <http://www.sciencewise-erc.org.uk>

⁵ See <https://www.gov.uk/guidance/open-policy-making-toolkit> for more details

⁶ A consultancy providing independent public and stakeholder engagement expertise: <http://www.3kq.co.uk>

- Enabling recruitment of a mix of rural, semi-rural and urban participants.

Prior to the workshops there was a period of planning and design throughout December and January, involving discussions between 3KQ, DECC, Sciencewise and the IOG.

27 members of the public attended each workshop – 54 participants in total. The workshops mixed educative and deliberative content.

Sessions focusing on each of the key issues (community representation, test of public support, right of withdrawal and community investment) enabled in-depth conversations at tables (three groups of nine participants per location), guided by a table facilitator, and with input from DECC and Radioactive Waste Management (RWM)⁷ specialists to provide technical input and answer questions as required. A separate note-taker kept a record of the conversation at each table.

A range of stimulus materials was developed to support information-giving and discussions, including presentations, posters, worksheets and exercises.

Key findings

Baseline knowledge and views. Participants reported low levels of knowledge about the issue of radioactive waste at the beginning of the workshops, and a visibly increased level of knowledge by the end of Day 2.

Participants also reported low to middling levels of trust in the Government “to take the right decisions about nuclear waste” at the beginning of the workshops. Discussions indicated this was a general mistrust rather than specifically related to the topic of radioactive waste. Trust levels did not show a marked increase by the end of Day 2. However, discussions indicated that this lack of movement was focused on the word “Government”. At least one participant said they associated this word with politicians. Participants in both locations commented on their positive experience with the specialists in the room and many indicated that had the question been about “DECC” rather than “Government”, they would have answered differently i.e. a higher level of trust.

Particularly during the earlier educative / Q&A sessions, participants asked a huge range of questions about radioactive waste, geological disposal, and the broader context. Common areas of questioning included the GDF siting process and considerations, potential impacts of a GDF, broader UK energy policy, monitoring and future considerations, international experience and involvement, and radioactive waste (science and current arrangements) – as well as a range of other topics.

Community representation. Participants were asked to consider who (or what type of person / organisation) should be able to make initial contact with RWM with a view to taking discussions further. Discussions focused on a number of qualities that might make someone eligible, including connection to and representation of the community, level of influence, potential to be impacted, time available to engage, and trust that the person or organisation would act in the interests of the wider community.

⁷ Radioactive Waste Management (RWM) is the organisation responsible for delivering a geological disposal facility and providing radioactive waste management solutions. RWM is a wholly-owned subsidiary of the Nuclear Decommissioning Authority (NDA), which is an Executive Non-Departmental Public Body of the Department of Energy and Climate Change.

Overall, there was a sense that *anybody* should be able to make contact to find out more information, but that there was a difference between making contact and doing it on behalf of a community. For many participants, some sense of agency or legitimacy with respect to the community was felt to be a necessary quality in order to carry forward contact on behalf of a community, and certainly when it came to future decisions. The conversations suggested a couple of overarching principles underlying participant views, as follows:

- Information about the GDF process should be widely publically available, with anyone being able to access it.
- In inviting contact with RWM, there should be clarity over what the contact is for (e.g. what does it trigger), on whose behalf it should be made (household, community of interest, geographical community, county, etc.), and what would happen next (e.g. sending of more information, escalation to council level, etc.).

Participants were also asked to consider who might sit on a group to represent community interests in discussions with RWM (a community representative group, or CRG). Conversations at both locations clearly identified residential / community interests as an important presence on a community representative group. Further exploration suggested some underpinning qualities that made this type of representation desirable, including trust, independence and a genuine interest in or care for the local area.

This final quality – interest in and care for the community – appeared to underpin a number of participants' desire for some form of local council involvement, while for others, concerns over lack of trust or lack of representation were strong reasons not to include local councils.

Other popular or less controversial types of involvement were regulators and specialist knowledge – primarily because it was felt these types of people could provide independent and unbiased input based on specialist knowledge.

This raises the wider point of representation versus advice. In any future similar process, it would be interesting to explore this topic further, extending conversations to cover membership based on representation compared to membership based on ability to advise, linked to options for permanent group members and observers or advisors.

A number of general principles for the formation and management of a representative group were raised during discussions, including maintaining transparency and clear communication with the community, having accountability to the local area, seeking to involve trusted individuals representing a range of balanced interests, and avoiding vested interests.

Participants discussed how they would expect a CRG to keep in touch with the community, with suggestions including targeted communications and updates (e.g. newsletters, web-based Q&A sessions, TV and radio), ongoing communications via a website, email and contact phone number, and holding meetings in public. A number of people stressed the importance of a CRG being aware of public views, and some commented on the importance of power balance within a CRG (for example with the help of a chair or facilitator). Trust was highlighted as an important underlying issue – if the group is trusted by the community to get on with their work and represent them, there is a greater trust in the overall process. This was often linked to the need for transparency.

Test of public support. Participants were asked to think about their own experience with being asked for their views on an important issue. This was followed by discussion of three examples of methods that might be used to test public support for proceeding with a siting process for a GDF in a specific community: a statistically representative public opinion survey, a local referendum and an open consultation and registration of views.

Although there were three specific mechanisms being discussed, conversations in both locations very quickly led to the identification of two more general key qualities for defining the test of public support:

- It needs to enable everyone in the community to have their say – although note that how this community should be defined was much less clear.
- It should be an informed decision e.g. with time to learn about the process and form opinions before being asked the question.

For most participants, based on the conversations about the three specific examples, a mixed approach combining consultation with a final referendum was favoured because it fulfilled these qualities.

Some participants suggested a representative survey (or surveys) might also be used as part of this overall process – for example early on in the process to gauge what people know, partway through to give a sense of the direction of opinion, or on an ongoing basis to see whether people were picking up on the information being provided.

Right of withdrawal. Participants were asked to consider a scenario in which CRG discussions with RWM are progressing, boreholes are being drilled and community investment is being received and used, but where a few organisations on the CRG want to stop discussions and exercise the right of withdrawal. This discussion proved to be a little more difficult for participants to come to solid conclusions on than with other activities, perhaps because it covers such an unfamiliar situation with little firm detail (see comments on the open policy making context, above).

The question of “why withdraw at this stage?” underpinned several conversations. Specialists explained that new information coming to light regarding lack of geological suitability or unacceptable safety risks would be cause for RWM to withdraw and would not require a separate decision to withdraw from the CRG. Further exploration with participants suggested a desire to withdraw from within the CRG might be more likely to come from a lack of trust and presence of uncertainty (for example where evidence conflicted).

Participants were clear that triggering withdrawal could not just be based on one person’s say-so. Some suggested there would have to be a clear majority of CRG members on board, while others said if it was one person expressing concern they would have to explain why to enable other people (e.g. in the CRG or wider community) to gauge the validity of their reasoning.

Participants tended to favour a CRG, or CRG in close consultation with the community, taking the final decision over withdrawal. For example, it was suggested that the CRG could form an initial opinion and then test it with the wider community, or that the CRG could communicate the issues with the community, then use the same method to decide on withdrawal as is used for the test of public support.

There seemed to be a lack of clarity in some participants’ minds about the timing of a right of withdrawal compared to a test of public support, suggesting the need for clear communication when it comes to explaining this particular part of the process.

Community investment. Participants were asked to imagine that they were the funding panel whose job it is to decide how to invest the money received by a community during the period of discussions with RWM. Discussions focused on a range of five fictional projects designed to cover a range of qualities and outcomes.

In terms of specific types of project to fund, common qualities that participants tended to say they liked included projects that: were local to the area; had long-term benefits to the community; and that benefited a wide range of people in the community.

Overall, there was some suggestion from both locations that each community would need to decide on its own list of priorities or criteria against which to judge funding applications. One group went further, arguing that there should be no restrictions from the Government with respect to what the money is spent on. Another discussed the long-term nature of the project, highlighting the potential for new types of projects or additional needs to arise as the process progresses.

There was no clear consensus about the exact set of skills and qualities required for those sitting on a funding panel, although there were many suggestions for soft skills (e.g. communication, listening, team working and empathy), hard skills (e.g. funding or finance knowledge and legal skills) and qualities (e.g. life experience, youth, impartiality).

Diversity (of background or interest, professional / life experience, temperament, skills and demographics) was widely suggested as a desirable quality for the panel as a whole. Specific discussion of what the funding panel could or should do in order to maintain the trust of the community focused strongly on two key principles: transparency of process and communication with the local community.

Overarching observations

Views and values. Participants demonstrated a clear capacity to absorb, understand and apply new knowledge of a fairly complex subject in order to form views and debate key issues (although some conversations were noticeably more challenging, for example where the topic was difficult to connect to people's lives and experience). Participants were clear that for others being asked to form opinions on this subject, knowledge and understanding of the issues would be critical – for example to avoid on-the-spot reactions to words such as “nuclear”.

In relation to levels of trust, participants seemed to disconnect DECC from “the Government”. This may be because, as a result of the workshops, they could connect DECC with a human face, or because they were making a mental split between civil servants and politicians. This emphasises the impact of positive interactions with organisational representatives – which has implications for the level of face to face engagement that might be desirable as the GDF process progresses.

Various threads were noticeable across the range of participant discussions during the workshops, including reference to existing knowledge and experience, limited expression of obviously strong pro- or anti-nuclear sentiments (in line with the desired sample), and the context of trust (introduced via a baseline exercise at the first workshop, but also underlying discussions about local government and community representation).

There were a number of areas where participants appeared to express a strong level of consensus around particular issues, including use of a mixed method approach for testing public support and the

need for transparent processes and regular communication between all parties. In other areas, views between participants tended to diverge, including the degree to which local councils genuinely represent their communities, and the coverage of a potential referendum or other test of public support.

Across many conversations, participants frequently referenced the safeguarding of community interests, or specific parts of the community such as future generations – suggesting participants were working with the interests of “the group” rather than “the individual” in mind. Indeed, participants often referenced the need to avoid self-interest, corruption, or the undue influence of political or business interests. Another point to note is that participants were asked questions without reference to specific communities – with some indications that asking about “a hypothetical community” and asking about “your own community” could potentially lead to different responses.

Points for further exploration. In any future similar public dialogue processes, it would be worth considering the following points for further exploration with other groups of members of the public:

- Testing areas of broad agreement to see whether these hold true.
- Testing areas of divergence to see if any firmer conclusions can be drawn, for example coverage of a referendum or other test of public support.
- Extending some of the topics into further detail – for example the potential for observers and advisors to be involved in a community representative group.

Contents

| | |
|-----------------------------------------------------------------------------------------------|-----------|
| About this report | 2 |
| Executive summary | 3 |
| 1. Introduction | 10 |
| 1.1. Project background | 10 |
| 1.2. The public dialogue | 11 |
| 1.3. Methodology | 12 |
| 1.4. Abbreviations and acronyms | 16 |
| 2. Findings | 17 |
| 2.1 Baseline knowledge and views | 17 |
| 2.2 Community representation | 26 |
| 2.3 Test of public support | 38 |
| 2.4 The right of withdrawal | 46 |
| 2.5 Community investment | 50 |
| 2.6 Overall advice to DECC | 56 |
| 3. Overarching observations | 57 |
| 3.1 Views and values | 57 |
| 3.2. Areas of interest | 60 |
| Appendices | 61 |
| Appendix 1: Independent Oversight Group and Community Representation Working Group membership | 62 |
| Appendix 2: Recruitment questionnaire | 63 |
| Appendix 3: Participant demographics | 71 |
| Appendix 4: Workshop process | 72 |
| Appendix 5: List of materials by workshop | 81 |
| Appendix 6: Workshop 1 presentation: radioactive waste | 82 |
| Appendix 7: Workshop 1 presentation: a permanent solution / geological disposal | 85 |
| Appendix 8: Workshop 1 presentation: finding a site | 90 |
| Appendix 9: Workshop 2 presentations – key slides | 94 |
| Appendix 10: Handout materials and posters from all workshops | 96 |
| Appendix 11: Baseline exercise – what does community mean to you? | 113 |
| Appendix 12: Final exercise in workshop 2 – overall advice to DECC | 115 |
| Appendix 13: Participant questions across all workshops | 117 |

PART ONE:

Introduction

1.1. Project background

The UK Government's policy⁸ for the long-term management of higher activity radioactive waste is geological disposal.

The construction of a geological disposal facility (GDF) involves placing the waste deep underground within a suitable rock formation, with the rock providing a barrier to the escape of radioactivity and isolating the waste from the surface.

The 2008 Managing Radioactive Waste Safely White Paper and later the 2014 Implementing Geological Disposal White Paper set out a framework for delivering a GDF – including the site selection process. Selecting a suitable site will rely on two fundamental factors: geological suitability and a willing community – a facility will only be built where the community willingly accepts it, and where the geology is suitably robust.

The 2014 White Paper sets out the proposed approach for working with communities, but leaves much of the detail open with a view to developing the practicalities in consultation with stakeholders and members of the public. The Department of Energy and Climate Change (DECC) convened a Community Representation Working Group (CRWG) to support this process (see **Appendix 1** for membership). Following a call for evidence on working with communities in autumn 2015, DECC wanted to engage directly with members of the public to hear their views on a number of key aspects of the White Paper – to inform policy development prior to wider consultation later in 2016.

Open policy making. DECC's process for engaging with members of the public on the topic of geological disposal is underpinned by open policy making: an approach to collaborative, evidence-based and iterative policy making.

As a result, many of the topics covered in discussions during this dialogue process were at a formative stage of policy development, where principles and overall approaches may have been defined, but detail on specifics was still open for deliberation.

This approach engaged members of the public at an early stage in decision making, enhancing the potential for formative and impactful input. It also meant that some of the topics covered had less sense of clarity than others – for the simple reason that this process was one line of evidence feeding into the development of specific policies, rather than being used to “test” existing policies.

⁸ Excluding Scotland, which has a separate devolved policy on radioactive waste.

1.2. The public dialogue

Co-funded by DECC and Sciencewise,⁹ the aim of this public dialogue process was to provide the GDF Policy Team within DECC an understanding of the opinions of a cross-section of the public on particular issues around the siting of a geological disposal facility; why they hold these opinions, and the values that underlie them. The issues were:

- Community representation.
- Test of public support.
- Right of withdrawal.
- Community investment.

3KQ¹⁰ was commissioned to design and deliver the process, in close liaison with DECC, Sciencewise and the dialogue project's Independent Oversight Group (IOG).

The IOG consisted of four members (see **Appendix 1** for membership), who provided guidance and input to the project by:

- Ensuring that the dialogue process was balanced.
- Supporting the overall process, ensuring the overarching aims and objectives for the workshops were being carried out.
- Helping to quality-check dialogue materials to ensure they were fit for purpose and accessible.
- Acting as a sounding board for potential activities or decisions about the process or content.
- Observing workshop events.

The dialogue was also independently evaluated by Ursus.

For the purposes of the workshops, “specialist” refers to a person (from DECC or RWM) present at participant tables to interact and ask questions. There were also “observers” present at the workshops. This included members of the IOG, the independent evaluator, and Sciencewise, who attended the workshops and observed discussions but did not actively participate.

Public dialogue

Public dialogue (as defined by Sciencewise)¹¹ is a type of engagement that brings together members of the public with policy makers and other stakeholders, to deliberate and reflect on national public policy issues.

Public dialogue processes are built around conversations. They explore why participants hold specific views as much as what these views are. They also enable interaction between members of the public and specialists, so that they can learn from each other and so that participants' questions can be readily answered.

⁹ The UK's national centre for public dialogue in policy making involving science and emerging technology issues: www.sciencewise-erc.org.uk

¹⁰ A consultancy providing independent public and stakeholder engagement expertise: www.3kq.co.uk

¹¹ For more detail see: www.sciencewise-erc.org.uk/cms/what-is-public-dialogue-2/

Use of quotes in this report

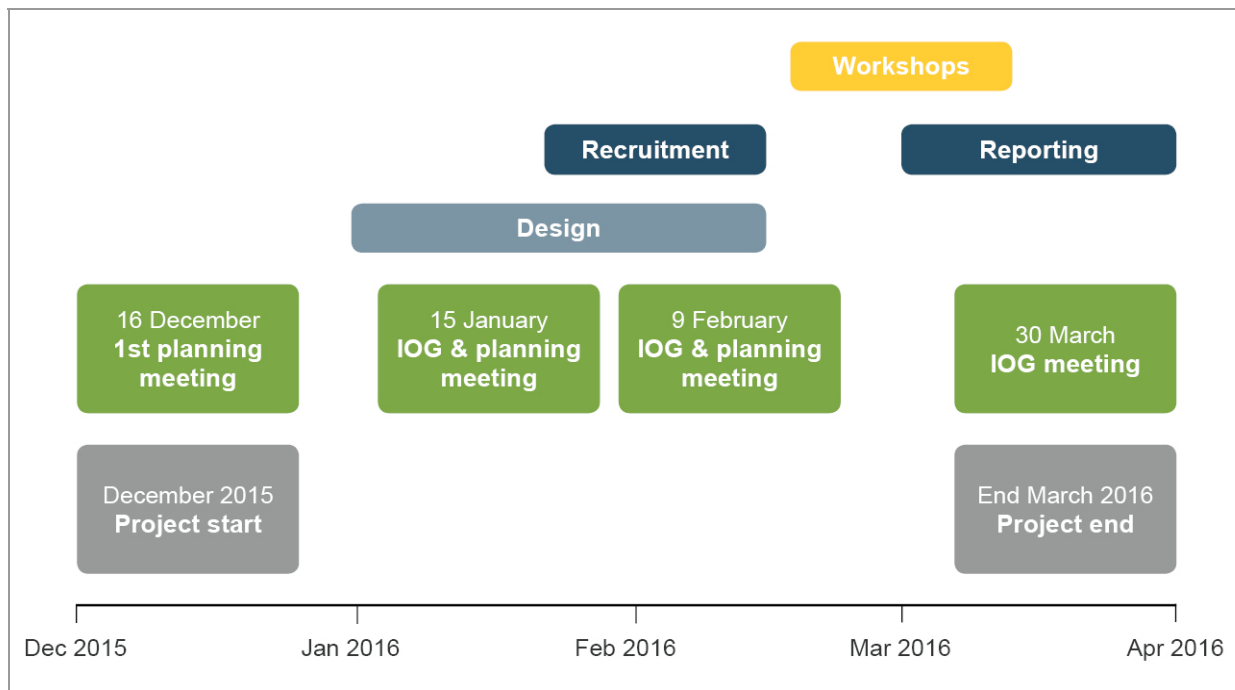
Because of the nature of the dialogue process i.e. a focus on conversations – this report contains a large number of quotes from participants. The quotes were chosen to represent a balance of participants across all workshops and sub-groups (table discussions within individual workshops). They represent a mix of views – from points made by only one or two participants to those where there was consensus amongst many or most participants. The presence of quotes should therefore not be seen as confirmation of a strong or common view amongst participants, but rather an illustration of the types of things being said in relation to specific topics.

1.3. Methodology

1.3.1. Timeline

This project took place between December 2015 and March 2016 with a view to feeding in to DECC's ongoing policy development prior to consultation later in 2016. Figure 1 shows the key stages in the process.

Figure 1 Project timeline.



1.3.2. Design considerations

A number of factors were taken into account during early discussions on process design. These included:

- Key findings from the previous public dialogue that took place as part of DECC's 2013 consultation on revisions to the GDF siting process.
- Key questions to answer through the dialogue, identified by DECC.
- Balancing factual information provision with purposeful conversations.
- Balance and neutrality of materials and presentational input.
- Linking materials and discussions to relevant policy choices.
- Interaction between participants and specialists.
- Facilitating and recording discussions to enable clear and useful analysis.
- Adhering to the Sciencewise guiding principles on public dialogue.¹²

The final agreed dialogue process consisted of two sets of reconvened workshops, involving two full Saturday sessions 1–2 weeks apart, as follows:

- **Swindon:** 20 February and 5 March
- **Manchester:** 27 February and 5 March

1.3.3. Recruitment

Manchester and Swindon were chosen as the locations because they represent two hubs in the north and south of England that do not have nuclear sites nearby, enabling recruitment of participants that are relatively unaware of nuclear issues and have not previously been involved in similar discussions. These locations also enabled recruitment of a mix of rural, semi-rural and urban participants.

The selection of participants without prior or existing connection to the nuclear sector was designed to enable open and frank discussions on key issues without being steered by obvious preconceptions in favour of or against nuclear power. Although each participant would probably have come to the workshops with a range of views and attitudes on many topics including nuclear power, observations suggest the discussions were not visibly affected by any particularly positive or negative views on this topic.

Recruitment was undertaken by independent research organisation TNS BMRB. Participants were recruited to be broadly representative of local demographics, screening out specific groups such as those with strong ties to or views on the nuclear industry, journalists, and those who had recently participated in market research. See **Appendix 2** for the full recruitment questionnaire.

27 members of the public attended each workshop – 54 participants in total. See **Appendix 3** for a demographic breakdown of participants. As mentioned above, this is a small sample in a qualitative dialogue exercise: the results should not be inferred to be fully representative of the wider public.

¹² www.sciencewise-erc.org.uk/cms/guiding-principles/

1.3.4. Workshop design and delivery

The workshops took the approach of mixing educative and deliberative content, with the educative process being centred on the morning of Day 1. See **Appendix 4** for a more detailed outline of each day's activities. Broadly speaking, the workshop content was split as follows:

Table 2 Summary of key activities across the two days of workshops.

| Day 1 | Day 2 |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Baseline exercise. Questions gauging levels of prior knowledge and trust in government.</p> <p>What is radioactive waste? Presentation from DECC followed by Q&A.</p> <p>A permanent solution, and geological disposal. Presentation from DECC followed by Q&A.</p> <p>Discovery session. Roaming reading covering key aspects of geological disposal, followed by discussion at tables.</p> <p>Finding a site. Presentation from DECC followed by Q&A.</p> <p>Quiz. Embedding learning from prior activities.</p> <p>Community representation. Discussions about the nature of people / organisations who might legitimately contact RWM about the siting process.</p> <p>Forming a representative group. Discussions about what types of people / organisations might sit on a representative group to reflect a community's interests during discussions with RWM.</p> <p>Representing the community – a two-way street. Discussions about communications and engagement between a representative group and the wider community.</p> | <p>The test of public support. Discussions about possible mechanisms for gauging public support for a specific community continuing with a GDF siting process or not.</p> <p>The right of withdrawal. Discussions about the potential withdrawal of a community from the process, including who might make the decision and how.</p> <p>Community investment – 1. Discussions about the type of projects that might be suitable to fund (or not fund) using investment received by those communities involved in discussions with RWM.</p> <p>Community investment – 2. Discussions about the skills and qualities that might be required for a funding panel that oversees allocation of the community investment.</p> <p>Final advice. Short exercise asking participants to highlight the key thing they think DECC needs to get right.</p> <p>Closing session. Repetition of baseline questions from the beginning of Day 1 to understand the journey travelled.</p> |

Discussion sessions were all introduced in plenary by the lead facilitator, followed by in-depth conversations at tables and often a final summary of key points back in plenary. At each table (three groups of nine participants per location), a table facilitator guided discussions, a separate note-taker kept a record of the conversation, and a specialist from DECC or RWM was available to provide technical input and answer questions as required.

The workshops were designed to encourage interaction between specialists and participants to the extent to which it aided conversations rather than steering them. Specialists were given a clear briefing by the lead facilitator prior to each workshop in order to clarify their role.

In between the two workshops, participants were asked to complete a homework task (See **Appendix 10**) to:

- Help maintain interest between the two sessions.
- Reconnect groups with the subject matter at the start of Day 2.
- Develop their thinking on some of the key issues related to managing radioactive waste.

Figure 3 Participants working at tables.



1.3.5. Materials

A range of materials was developed to support information-giving and discussions, including presentations, posters, worksheets and exercises. See **Appendices 5 and 10** for a complete list and set of the materials.

The aim for all materials was to strike a balance between simplicity and complexity, as well as to be impartial, clear, informative and well balanced. The materials were also designed to *stimulate* discussion rather than constrain additional issues or perspectives being raised.

1.3.6. Analysis

The analysis process feeding into this report involved the following stages:

- Compiling notes from all conversations across both workshops at both locations.
- Coding each participant contribution according to the themes and topics raised – these were structured around the key questions asked during the workshops and refined as the data was processed.
- Summarising the breadth and depth of views under the relevant headings in this report.
- Identifying areas of convergence and divergence.

1.4. Abbreviations and acronyms

Below is a list of abbreviations and acronyms relevant to the process – many of which are used in this report. Participants were provided with this list at both workshops.

Table 4 Abbreviations and acronyms.

| Term | Definition |
|-------|-----------------------------------------------------------------------|
| CoRWM | Committee on Radioactive Waste Management |
| CRWG | Community Representation Working Group |
| DECC | Department of Energy and Climate Change |
| GDF | Geological Disposal Facility |
| IAEA | International Atomic Energy Agency |
| IOG | Independent Oversight Group |
| MRWS | Managing Radioactive Waste Safely |
| NDA | Nuclear Decommissioning Authority |
| Nirex | Nuclear Industry Radioactive Waste Executive (no longer in existence) |
| RoW | Right of Withdrawal |
| RWM | Radioactive Waste Management (part of the NDA) |
| UKAEA | UK Atomic Energy Agency |
| IAEA | International Atomic Energy Agency |

PART TWO: Findings

2.1 Baseline knowledge and views

Day 1 at both locations began with some baseline exercises to gauge participants' initial levels of self-reported knowledge about radioactive waste, and levels of trust in the Government to take the right decisions about radioactive waste. Participants were also asked to consider what community or a community meant to them.

As well as providing a warm-up exercise for participants, these exercises provided a baseline against which to repeat the questions at the end of the two days. Although not a central part of the workshop content or discussions, the exercises provide some interesting insight into the journey taken by participants during the dialogue process.

2.1.1. Knowledge of radioactive waste

An initial gauging of participants' knowledge about radioactive waste showed an overall low level of self-reported knowledge of the topic (see **Figure 5** below, the green and red dots for Swindon and Manchester respectively).

Further discussion indicated one or two participants had some familiarity with the wider subject of nuclear energy, with at least one participant displaying a more detailed knowledge of the issue of waste storage.

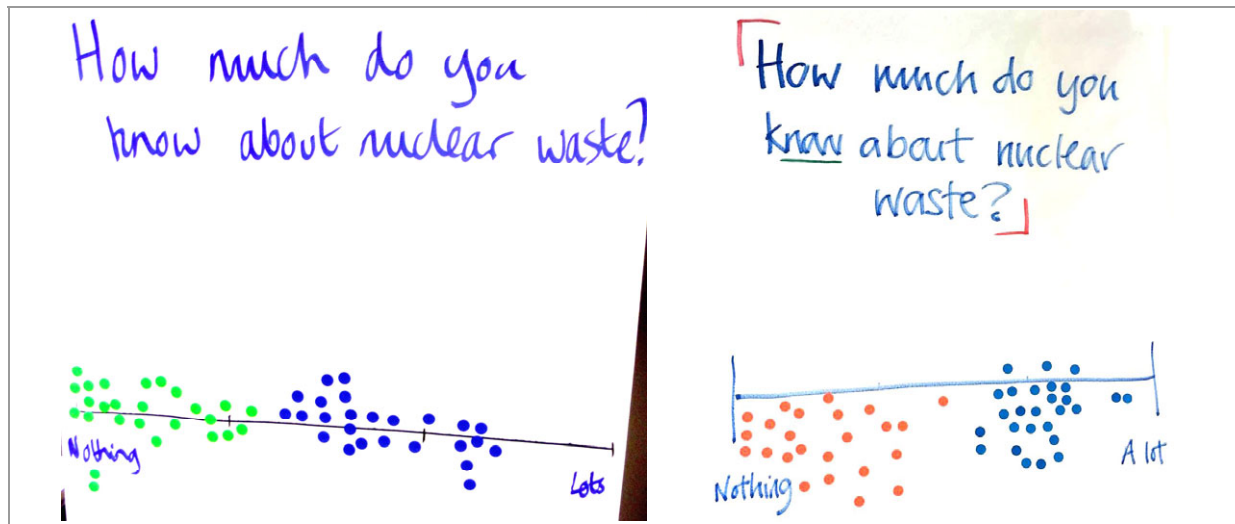
This initial low level of knowledge was to be expected given that participant recruitment deliberately screened out people with prior or existing connection to the nuclear sector (see section 1.3 above). This indicated that recruitment had been successful in terms of recruiting a relatively "fresh" sample of members of the public.

*"I know nothing about it, it's embarrassing really. I don't think it's publicised quite enough. If they made it a bit more interesting, if they made programmes on it – I like watching programmes like that."
Manchester, workshop 1*

This exercise was repeated at the end of the second workshop at each location. In both cases, participants reported a visibly increased level of knowledge – see **Figure 5** below. Upon further discussion, the volume of information received over the two days was cited as the key factor, as well as the presence of articulate specialists to answer questions. When asked what else could have been done to contribute to this increased level of knowledge, a participant in Manchester suggested a field

trip, or the presence of a specialist not related to the Government who could give a ‘completely impartial view’ on nuclear waste.

Figure 5 Self-reported knowledge about nuclear waste at the beginning (green or red dots) and end (blue dots) of the two-stage workshops in Swindon (left side) and Manchester (right side).



2.1.2. Trust levels

When asked, at the beginning of the first workshops, “How much do you trust the Government to take the right decisions about nuclear waste?”, participants unanimously reported low to middling levels of trust.

More detailed discussion indicated that many participants simply do not trust the Government when it comes to most issues, or question whether the Government always tells the truth. One participant commented they hoped the Government knew what they were doing, while another referenced decision making on other national issues (e.g. junior doctors’ contracts) as a reason for mistrust.

“I went 50:50 because they don’t always tell the truth do they?”

Swindon, workshop 1

“I think just recently with the way they’re making decisions about other things, the junior doctor thing is quite a big sticking point for me. I used to work in the NHS, and I just feel they’ve made their decisions and they pretend they’re going to consult people but they just force the policy through. I just don’t trust the Government at all.”

Manchester, workshop 1

Again, this exercise was repeated at the end of the second workshop at each location. The results were very similar in each location, with overall levels of trust showing little movement since the beginning of the workshops.

Discussion at both locations revealed that participants had relatively low levels of trust in the Government regardless of the issue at hand. Specific issues included past experience with decisions being pushed through regardless of public opinion, and a question about what exactly cross-party support means.

Discussions indicated that this lack of movement was largely focused on the word “Government”. At least one participant said they associated this word with politicians. Participants in both locations commented on their positive experience with the specialists in the room, and many indicated that had the question been about “DECC” rather than “Government”, they would have answered differently. Indeed, in Manchester, the facilitator asked how people would have responded had the question been changed in this way. More than half of participants indicated they would have moved their dots further up the scale (i.e. higher trust levels) in response to the question being focused on DECC.

“I just don’t trust the Government at all. It is not particularly related to this project. But I do feel confident they have people involved in this I can trust.”

Manchester, workshop 2

“I wouldn’t trust the Government to take care of it, but I would trust DECC to take care of it. Obviously I don’t know everyone at DECC, but the representatives they’ve sent have given me enough information that I feel I can leave it in their hands. I don’t know if they’ve just picked the best of the bunch, but I believe these guys. The question should be DECC not Government.”

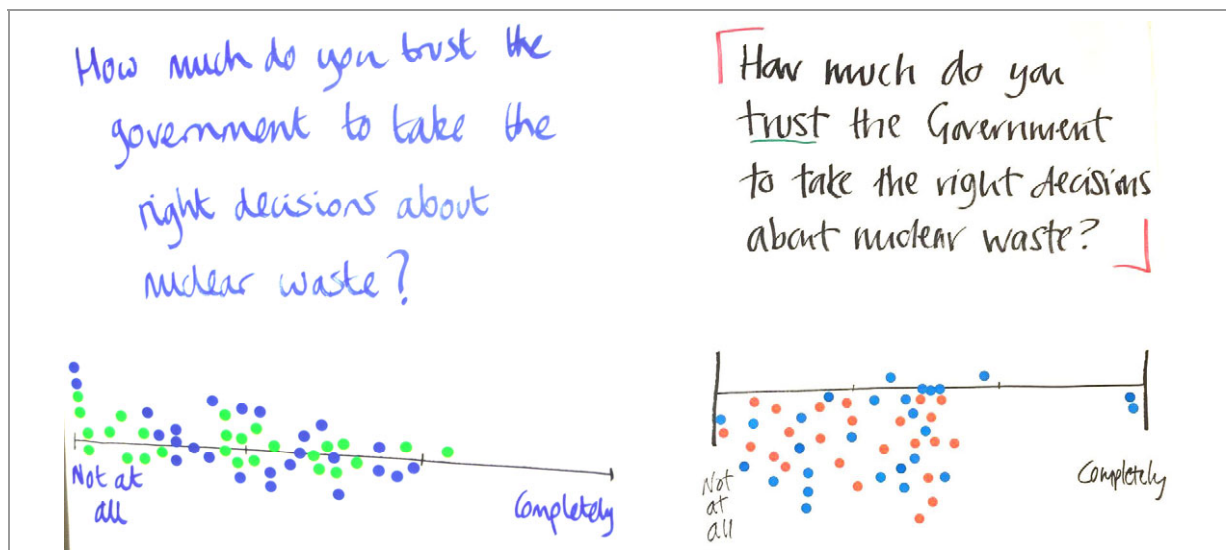
Manchester, workshop 2

“I think it was good to have somebody like [specialist] here because he’s an expert. But if you put something online, or the pamphlet, you can’t ask questions of a pamphlet – but you can ask questions of an expert. [Specialist] was very articulate.”

Swindon, workshop 2

This indicated the potential impact of positive interactions and conversations between members of the public and decisions makers in relation to increased levels of trust – albeit in individuals rather than institutions.

Figure 6 Self-reported levels of trust in the Government at the beginning (green or red dots) and end (blue dots) of the two-stage workshops in Swindon (left side) and Manchester (right side).



2.1.3. The meaning of “a community”

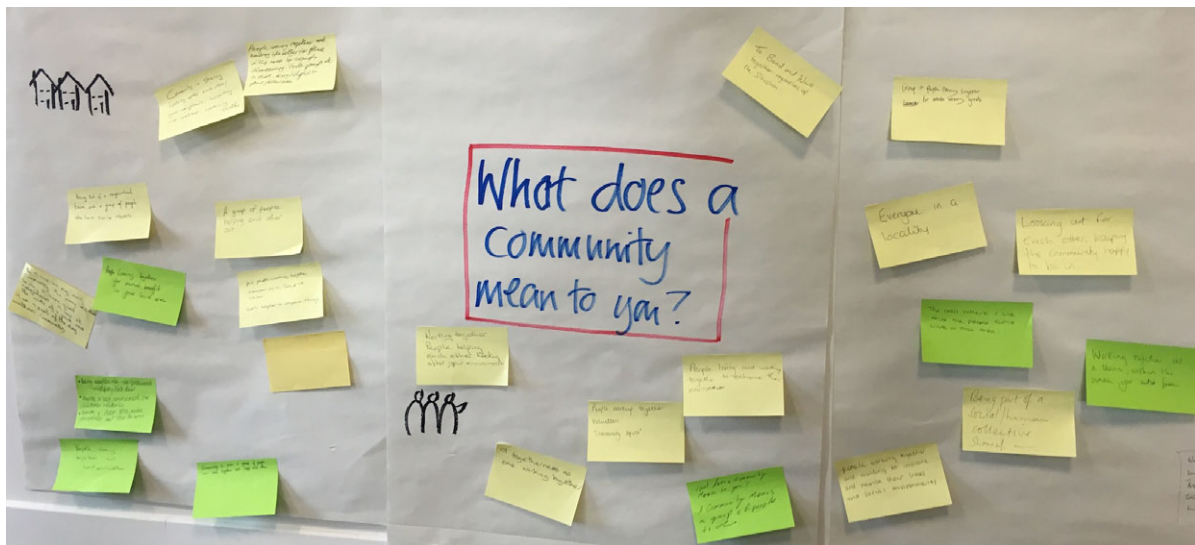
Alongside the baseline exercise (see 2.1.1. and 2.1.2. above), participants were asked to think about what a community meant to them, writing their thoughts on one or two post-it notes each – see **Appendix 11** for a full write up.

Participants tended to define community according to one of a few different descriptions:

- The area they live, for example saying “my neighbourhood”, or “where I live and work”.
- A feeling of togetherness of community spirit and relationship, where people look out for each other or work together.
- Groups with common interests (e.g. family, sports clubs).
- A safe environment (e.g. to raise a family).
- Nothing / there is no community any more.

In Manchester, the majority of participants focused on the second of these meanings – the feeling of togetherness. In Swindon, participants tended to focus on the first and third points.

Figure 7 What does a community mean to you? Exercise from the first Manchester workshop.



2.1.4. Presentations on radioactive waste, a permanent solution / geological disposal, and finding a site

Throughout the morning of Day 1, DECC gave three presentations, each followed by a Q&A session. There was also a 'discovery session', which broke up the presentations and enabled participants to find out more about specific topics – see 2.1.5. below. The presentations covered:

- Radioactive waste (see **Appendix 6** for slides). The presentation introduced radioactive waste and current storage arrangements.
- A permanent solution / geological disposal (see **Appendix 7** for slides). This presentation covered the history and current thinking behind geological disposal.
- Finding a site (see **Appendix 8** for slides). This presentation covered the process for finding a site – including the overall timeline and introduction of the four key issues for more in-depth discussion during the workshops: community representation, a test of public support, the right of withdrawal and community investment.

Following each presentation, participants were invited to discuss their reactions with the specialists present at each table and to ask any questions they had. Throughout both days, participants in each location were also invited to capture any further questions they had on a "graffiti wall". Specialists added their responses, so that participants could revisit the wall, get answers to their questions, and add further queries if needed.

The questions asked by participants were of specific interest to DECC, because they highlighted topics where people wanted to know more, or were particularly concerned about – this in turn has implications for the nature of future communications surrounding the GDF process.

The full list of questions raised by participants throughout the workshops is contained within **Appendix 13**. Some examples are provided below, grouped by theme – a larger set of themes are included in the appendix. This list illustrates the types of things participants were interested in, based on what they had been told. Some participants asked questions outside the scope of the workshops – for example about wider energy policy. Answers to the questions were provided to participants were provided on the day, but are not reproduced here in order to keep the focus on participants' interests.

- **Communications and engagement with communities.** E.g. Why is there not more publicity about where the waste is? How will councils know who to contact?

“Will communities have a say as to whether this is brought to their area?”

Swindon, workshop 1

“If it was publicised more people would understand it more; the next generation would understand it more.”

Manchester, workshop 1

- **Disposal methods.**¹³ E.g. Can it be sent to space, or left where it is? Why did at sea disposal stop?

“Why can’t we just blast it into space?”

Swindon, workshop 1

“I’m still confused by why they can’t use the sites they’re already using? Because surely that’s where the risk has been for the last x years so why move it round?”

Swindon, workshop 1

- **GDF monitoring and future considerations.** E.g. How would the waste be monitored? What about future weather changes, or the potential need to retrieve the waste?

“When you bury it will there be signage, so people won’t be able to go down there by accident? There will be testing to make sure it doesn’t leak won’t there?”

Swindon, workshop 1

“What about climate change, say if the ice melts, and with all the water that we’ve had recently in Cumbria?”

Manchester, workshop 1

- **GDF siting considerations, including community response.** E.g. Does it get to a point where the Government will just have to go ahead and do it regardless? What if no community says yes? Who makes a decision? What are the criteria for selection? How many sites are on the table?

“If the community says no will they move on to another community?”

Manchester, workshop 1

“Wouldn’t it be easier and cheaper to just find an area that’s suitable and get on with it?”

Swindon, workshop 1

- **Impacts.** E.g. What are the impacts on the environment? How safe is it? What about security considerations? And transport?

“How is it going to affect the environment?”

Manchester, workshop 1

“What are the cancer / illness rates around these sites – have these been researched?”

Swindon, workshop 1

- **International experience and involvement.** E.g. Can’t we just do the same as other countries? Can other countries take our waste? Who governs international procedures? Are the laws the same everywhere?

“If other countries are doing it in such a good way, why don’t we just copy them?”

Manchester, workshop 1

¹³ For more about the history and current work on management of higher activity radioactive wastes in the UK, see the website of the Committee on Radioactive Waste Management (CoRWM): <https://www.gov.uk/government/organisations/committee-on-radioactive-waste-management>

“Where is the waste actually going to go? Can we send to France if they have their facility ready? How would that work if we left the EU?”

Swindon, workshop 1

- **Radioactive waste – science and current arrangements.** E.g. Where is the waste now and why? Could it be used in the future?

“The high level waste still generates an amount of heat, is that heat used to generate power?”

Manchester, workshop 1

“Where is the waste now? How is it being stored?”

Swindon, workshop 1

Questions from both workshops covered a range of fundamental issues about radioactive waste, geological disposal and the siting process, as well as questions that linked forward to topics due to be discussed further during other sessions.

Table discussions and across locations often covered different topics based on the lines of enquiry participants chose to pursue: this was encouraged by facilitators to allow participants to ask the questions most relevant to them. For example, the emphasis of discussions at the Manchester workshop following the geological disposal presentation differed between tables: one focused on communication and trust, another on the operation of a GDF itself (including discomfort with the idea of “walking away” once it had been built), and the third tended to discuss international experience and long-term impacts. Conversations at the Swindon workshop covered similar ground, as well as additional focus on historical efforts to dispose of the waste from one table.

Some participants delved into deeper discussions rather than simply asking questions. For example, at the Manchester workshop, there was an overall sense of surprise at the amount of waste, with a few participants indicating that they felt this should not be underplayed. Others at this workshop commented that it was important to inform people of the process in order to allay fears. Participants in Swindon also mentioned the importance of education and involvement, as well as recognising the difficulties in making a decision about siting – for example because of the need to find a community willing to host a GDF.

“A lot of it is about how it’s put across, but countryside we’ll get told when the decision’s already been made. And the only time we’ll find out about it is when the decision has been made. But if the Government were to inform us that this process is going on...Like today, now, we’re all going to go away but it’s not going to seem as scary as when we came in here this morning”.

Manchester, workshop 1

2.1.5. Discovering more about geological disposal

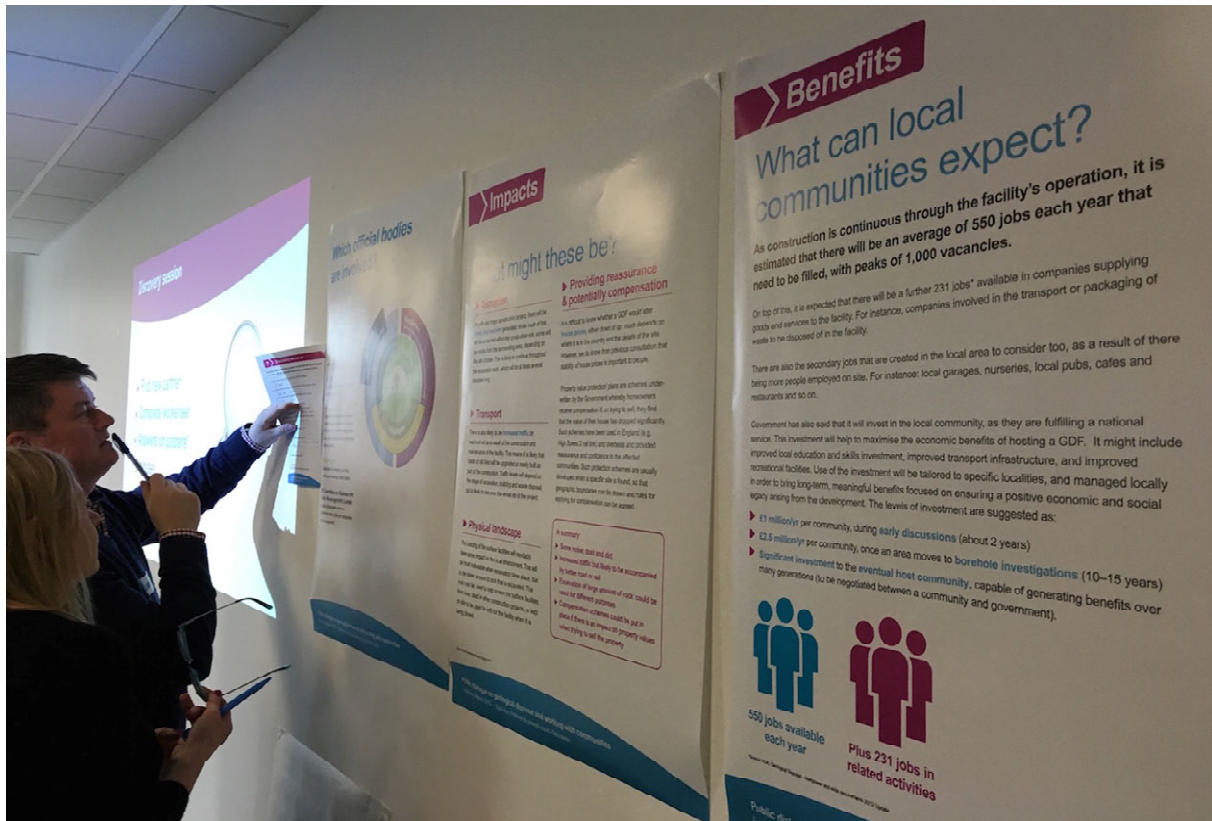
Having heard from DECC about radioactive waste and the GDF process, participants were invited to find out more detail on some specific aspects of geological disposal through a 'discovery' session. In pairs, they browsed five posters (see **Appendix 10**) covering the following topics:

- Size and look of a GDF
- Time: how long it takes to site and build
- Impacts
- Benefits
- Who is involved: DECC, RWM, regulators

As they examined the posters, participants worked in pairs to use a worksheet (see **Appendix 10**) to fill in answers to questions based on what they found out about key information – including timescales, key impacts and community benefits. They then returned to their tables, where they discussed their responses to the posters. Table facilitators focused the discussions on three key questions:

1. Anything you found surprising?
2. Anything you don't understand?
3. What else do you want to know?

Figure 8 Browsing posters during the first workshop.



Key discussion points are summarised below. Many of these issues were revisited and discussed in more detail during later sessions.

Outstanding questions. For many participants, finding out more about a possible GDF and the process surrounding its development raised more detailed questions. These ranged from technical questions to those focused on topics for further discussion during the workshop, such as the siting process and community benefits. See **Appendix 13** for a full list of questions.

The size of a GDF. A few participants were surprised at the size of a potential GDF, suggesting it was bigger than they had anticipated.

*“You see pictures of Sellafield, but you can’t really picture how big it is.”
Manchester, workshop 1*

Impacts. Several discussions focused on impacts, with property prices and a property value protection scheme receiving particular attention. Some people said they thought prices would definitely be negatively impacted due to proximity to a potential GDF, with some citing the HS2 project as a recent example. Others disagreed, suggesting that they thought that a site might be far enough from residential areas not to have an impact, or that the presence of jobs might increase house prices.

*“That’s why house prices might go up [because of the jobs].
People will move to the area if they want a job.”
Swindon, workshop 1*

*“It’s bound to have a negative effect [on property prices].”
Manchester, workshop 1*

Participants asked a number of questions of clarification about other potential impacts, or simply raised them as possibilities – these included disruption to the physical landscape, construction impacts, and possible health effects.

Benefits. A few participants debated whether or not local people would have access to jobs at a GDF. Others raised possible benefits such as improved infrastructure and Government investment in the local area. For some participants this was an expectation i.e. a community hosting a GDF should benefit from increased investment. One or two participants were more sceptical, commenting it felt like a pay-off.

*“It didn’t sound like a lot of jobs [several agreed with this] – when you think
about an office block there’s a lot more people working there.”
Swindon, workshop 1*

Timescales. Some participants expressed surprise at how long the overall process would take. This led to related discussions, for example: would a better solution arise in the future and replace this one; after 20 years a GDF would simply be part of the landscape and community; the timescale offers opportunities for younger people to develop relevant career prospects.

*“It’s amazing to think that none of us will be here to see what the final impact will be.
I guess that’s why we need to get it sorted now.”
Manchester, workshop 1*

Roles and responsibilities. There was some discussion of specific organisations. For example, one table in Swindon discussed the role of local and national government, with a few participants expressing concern at the short-term focus of politicians and lack of representation of “the normal person”. Another table discussion in Manchester touched on the potential role for organisations or individuals that disagree with the idea of a GDF, with one person asking what the role of NGOs might be (e.g. to test or challenge the process).

“I think the problem is that the Government in power at that time are only interested in the short term – they’re only interested in their 4 years that they’re in power, and local politicians are the same, they’re only interested in their career path and what’s happening at that time. It would be interesting to ignore local politicians and make a plan with the local community because they are the ones that are going to be affected by it.”

Swindon, workshop 1

“Are you going to get NGOs that will test/challenge etc.? What’s the role of the NGOs?”

Manchester, workshop 1

2.1.6. Contextual issues and suggestions

As the presentations and discussions during the Day 1 workshops progressed, some participants began to comment on how interesting the topic was or raised specific suggestions for DECC or RWM to consider. See section 2.6 for a summary of a specific final session on overall advice to DECC. Throughout these discussions there were a number of questions and discussions arising about contextual issues such as energy policy, international collaboration and general trust of the Government. See section 3.2 and **Appendix 13** for more detail.

2.1.7. Embedding participant learning

Following lunch on Day 1, participants were invited to take part in a quiz. Working in teams, they were asked a number of questions reflecting the morning’s sessions, with a view to embedding the learning from the morning and catalysing further discussion.

See **Appendix 10** for the full list of quiz questions.

2.2 Community representation

2.2.1. Who makes the initial contact?

This session focused on the specific stage of the GDF process where invitations have gone out from RWM to communities inviting initial contact from those who might be interested in discussing the process further.

Working at tables, facilitators asked participants to consider what qualities and characteristics might make a person or organisation eligible to make contact with RWM or not, focusing on areas of agreement or divergence. The aim of this session was to help DECC consider who should be able to

make this initial contact – for example whether this could be anyone, or a person or organisation with a specific mandate, or whether or not specific conditions should be attached.

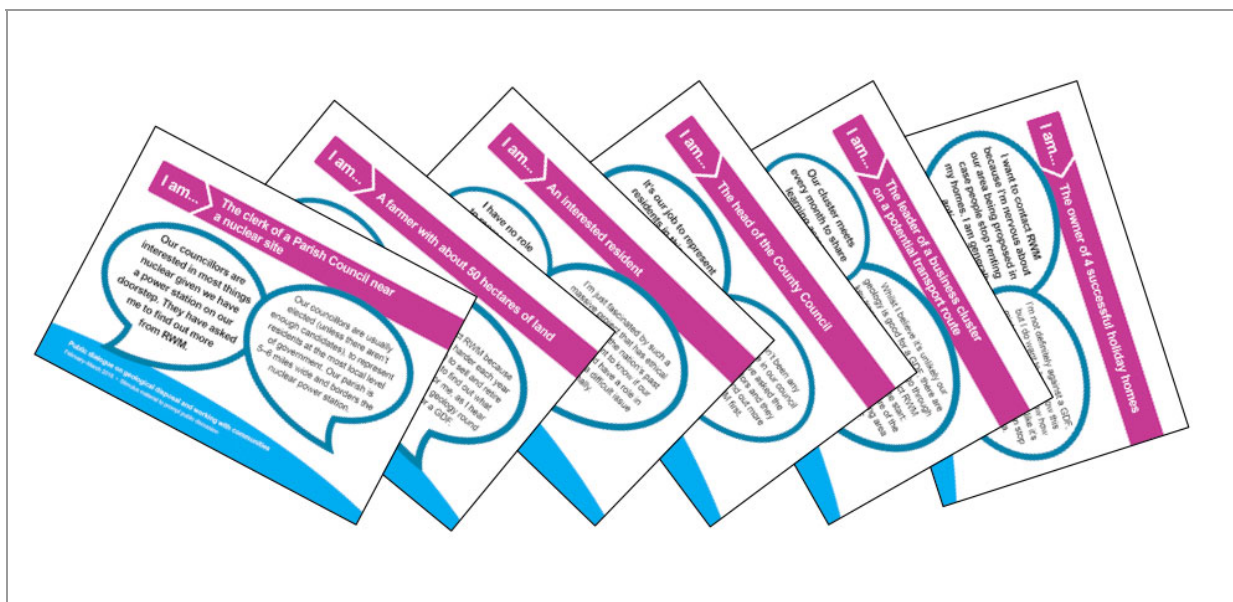
To aid discussions, participants were presented with six “people portraits” summarising a range of different types of people with different hypothetical backgrounds and qualities/characteristics. These were provided as examples rather than an exhaustive list, and were designed to elicit discussion of specific qualities and characteristics rather than a list of people. The examples given were:

- The head of a County Council.
- The clerk of a Parish Council near a nuclear site.
- A farmer with about 50 hectares of land.
- An interested resident.
- The owner of 4 successful holiday homes.
- The leader of a business cluster on a potential transport route.

See **Appendix 10** for the detailed set of materials.

Based on these discussions, the range of views expressed by participants about the key qualities or characteristic is summarised below alongside a commentary of the main concerns or benefits expressed in each case. This is followed by a summary of key points and conclusions.

Figure 9 People portrait cards.



Connection to and representation of the community. For many participants this was a necessary quality because it would enable:

- The passing on of key information to residents – ability to access information and to distribute this more widely.
- Taking soundings – access to a range of views from within the community to inform decisions.
- Understanding the needs of the community – and, by inference, acting in its best interests.

Participants differed in the degree to which they felt the various people portraits fulfilled this quality. For example, some people felt the head of the County Council would only pass on selected information to the community, while others felt the council head (or at least the Council as an organisation) represented a huge range of people and would be a first point of contact for many in the community, and/or that this was part of their job. The degree to which participants felt that local councils genuinely represent their communities was a common area of debate eliciting some strong and opposing views, with many participants basing their comments on personal experience (both positive and negative).

“You are more likely to have had a long-term relationship with your council. You’d be leading the initiative – I’d want to land that with my local council, they should know what’s going on.”

Manchester, workshop 1

“I think [head of county council] is more in the middle, because in Swindon I don’t think they really represent the wishes of the community. I question how representative they are.”

Swindon, workshop 1

Several participants commented that individual residents, farmers, or business leaders would be more likely to be representing their own interests than those of the wider community, and a number felt uncomfortable with this. However, there were also some comments that the resident represented “the normal person” who doesn’t usually have a voice, and that the business person might represent a broader group of businesses than just their own. For some participants, a sense of “being local” contributed to the sense of connection e.g. a parish councillor receiving more favourable comments than a county councillor – although this was not always the case.

“I’m part of a village community and people who are part of the parish council are part of the village. I’d be happy with that one because it’s local people concerned with local issues.”

Manchester, workshop 1

Level of influence. A few participants commented on the level of influence being a relevant quality – for example the ability to engage in strategic conversations and influence decisions. So, while some participants were uncomfortable with the idea of the council representing their interests, they did acknowledge the structures, connections and access to information in place at local councils as advantageous characteristics.

“You wouldn’t expect [the farmer] to have much influence on the discussions.”

Manchester, workshop 1

Potential to be impacted. For several participants, the potential for a person to be impacted meant they were at least entitled to relevant information about a potential GDF, and that this should be readily available through clear contact points. This did not equate with the right to make contact *on behalf of* a community, however. This point is expanded below as an overarching comment.

“Anyone with an interest, no matter where it comes from, should be able to ring and ask for more information.”

Swindon, workshop 1

Time. One or two participants commented that entering into discussions would require someone with sufficient time to engage or pass on information to the community.

“Have they even got the time to pass that information out?”

Manchester, workshop 1

Trust. Underlying many of the conversations was the sense that there needed to be trust in the individual or organisation making contact to act impartially or in the best interests of the community, and that any sense of vested interest would be unwelcome. One discussion touched on the point that everyone has a level of personal interest.

“[Leader of business cluster] doesn’t care though, he just wants money, and wants the investment and that’s why I am not comfortable with it.”

Swindon, workshop 1

Overarching comments. In several conversations, the idea of reflecting community views and not acting in self interest came across clearly. However, there was some initial uncertainty about what this contact would mean in terms of the organisation or individual’s ongoing ability to make future decisions or “carry” the process. Many participants appeared to be more relaxed about the general idea of “contact” in general if it was clearly not connected to decision making. Overall, there was a sense that *anybody* should be able to make contact to find out more information (although one participant commented this could lead to hundreds of people phoning up), but that there was a difference between making contact and doing it on behalf of a community. For many participants (particularly in Manchester) some sense of agency or legitimacy with respect to the community was felt to be a necessary quality in order to carry forward contact on behalf of a community, and certainly when it came to future decisions.

This was a complex area of discussion, with many participants drawing on personal experiences with specific individuals or organisations as a basis for their views – particularly those relating to trust and legitimacy of representation. The conversations suggest a couple of overarching principles underlying participant views, as follows:

- Information about the GDF process should be widely publically available, with anyone being able to access it.
- In inviting contact with RWM, there should be clarity over what the contact is for (e.g. what does it trigger), on whose behalf it should be made (household, community of interest, geographical community, county, etc.), and what would happen next (e.g. sending of more information, escalation to council level, etc.).

The issue of representation underpinned a number of conversations later in the process, on Day 2 – for example debate over the degree to which local councils truly represent the local community, the need to ensure community interests and views are represented throughout the process, and the importance of trust between the community and any group representing them.

2.2.2. Forming a representative group

Participants were next asked to imagine that contact had been made with RWM and discussions had begun regarding a possible geological disposal facility in their own community or area. They were asked to think about the formation of a group to represent the community’s interests as discussions with RWM progressed.

At tables, each participant was asked to write down two organisations or people they *would* want to be on this representative group, and one they *would not*.

This was followed by a more detailed exploration of the reasons why people chose or excluded specific representatives, for example the qualities required in order to create confidence.

Table 10 shows compiled results from both locations, with responses from the groups in Manchester in purple and from Swindon in red. There is potentially some overlap in definition between particular groups (e.g. local council or councillors and local MPs; residents and community interests) – however, each post-it comment has only been counted once.

Table 10 Suggestions for people or organisations who should be in or out of a representative group – from both the Manchester (purple) and Swindon (red) workshops.

| Organisations or people who should be... | |
|-----------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|
| IN the representative group | OUT of the representative group |
| Local or parish council and councillors | |
| Including parish council, city council, local council, council member, council executive committee, local planning authority. | Including local council, planning officer. |
| MPs | |
| Including local MPs. | Including MPs, MEPs, politicians. |

| Residents / local residents | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>A bar chart with two bars. The first bar is purple and has the number 3 inside it. The second bar is red and has the number 10 inside it.</p> | <p>A bar chart with one purple bar containing the number 2.</p> |
| Community groups or interests | |
| <p>Including faith groups, educational interests and schools, health interests.</p> <p>A bar chart with two bars. The first bar is purple and has the number 6 inside it. The second bar is red and has the number 13 inside it.</p> | |
| NGOs or civil society interests | |
| <p>A bar chart with two bars. The first bar is purple and has the number 3 inside it. The second bar is red and has the number 2 inside it.</p> | <p>A bar chart with one red bar containing the number 2.</p> |
| Business interests | |
| <p>Including local business community, business owners, Chamber of Commerce.</p> <p>A bar chart with two bars. The first bar is purple and has the number 6 inside it. The second bar is red and has the number 4 inside it.</p> | <p>Including business council, corporate companies, landowners, anyone with vested interest.</p> <p>A bar chart with two bars. The first bar is purple and has the number 6 inside it. The second bar is red and has the number 2 inside it.</p> |
| Regulators | |
| <p>A bar chart with two bars. The first bar is purple and has the number 2 inside it. The second bar is red and has the number 5 inside it.</p> | |

| Government and related organisations | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
| Including Defra, RWM, Department of Environment. | Including Government. |
| Specialist knowledge | |
| Including geologists, expert in the field, independent scientists. | |
| Other | |
| Including local historian, local news, barrister, local transport authority. | Including protesters, the self-appointed, over 50s. |
| In the middle (one table in Swindon): <ul style="list-style-type: none"> • RWM • New-build builders • Local affected landowners | |

Table 10 shows that participants were clearly in agreement about the potential to include some types of organisation – for example residential or community interests, regulators and those with specialist knowledge. Other types of organisation or individual caused more debate – for example local council representation and business interests. Below, we discuss each group in turn, focusing on the underlying reasons for people choosing specific types of representative.

Local or parish council or councillors, and MPs. This was an area of much debate and divergence of views. Those in favour of including these types of representatives tended to highlight their mandate to represent local interests, the power and structures in place to do so, connection with local priorities and feelings, and the ability to keep local people updated. Those not in favour questioned the degree to which local interests would really be represented by these groups, citing financial interests or previous experience with a lack of engagement or representation. For one participant based in rural Manchester, the idea of an urban-based council making decisions on this topic on behalf of a rural constituency area felt uncomfortable.

“The main thing about councils is the more local the better. I’m worried that a skint town centre would vote in their rural area to be involved to get the money.”

Manchester, workshop 1

“It is their job to represent the people, those local MPs should be with the community groups together so they are keeping check of each other.”

Swindon, workshop 1

Several participants did not seem to differentiate between council officers and elected members, simply referring to “the council”. Others specifically referred to “councillors”. A couple of people referenced other specific council roles: executive committee and council officer – both were positive about the involvement of these types of people in a representative group. There were differences in opinion between those saying elected members would represent local interests, and those suggesting a short-term self interest from elected members who are not genuinely connected to their communities (e.g. live elsewhere). Others commented that over the long timescales involved, MPs’ current positions of authority would be irrelevant.

Residents / local people. For several participants, the involvement of residents in some form was felt to be a good thing because they are the people who have to live in the area and stand to benefit or be impacted by the development. This was tempered by some comments that personal gain or interests should be avoided, and that residential involvement should focus on connectedness to the wider community – see comments on community groups or interests below.

“There needs to be a local resident because they’re having to live there. They’re just a local person and don’t have an agenda.”

Manchester, workshop 1

“I don’t think it really matters – when it comes to it you need people from the community, it doesn’t matter what their jobs or titles are.”

Swindon, workshop 1

Community groups or interests, including faith, youth / schools and health interests. The representation of community interests received unanimously positive response. Some participants suggested a general community interest should be represented, while others pointed towards particular types of interest such as faith groups, healthcare, and education or youth representation (with reference to the next generation and long timescales). The rationale for choosing these groups included: an existing level of trust and respect for these organisations or individuals; independence from council budgetary issues; genuine care for the local area; and concern for impacts on local people.

[Community groups] *“They’re genuine – I think when you’re in the council it’s your job, you’ve got a big wage, you’ve got the power, you’re not really bothered about the community, whereas some of these they’re interested, they’ll look after you, they’ll give you the right information. But a council they won’t even give you the time of day.”*

Manchester, workshop 1

[Schools] *“They need to be well informed, it is about education, they can find out all the information they need and relay it to vast amounts of people, it’s about the future.”*

Swindon, workshop 1

NGO or civil society interests. Calls to include groups such as NGOs or environmental campaigners tended to be based on a desire for the presence of someone who would protect and focus on the interests of the local environment, could provide useful information, or have existing experience with this type of conversation. Other participants commented that these types of group might enter into the process with a preconceived idea of the outcome they wanted – for example definitely wanting to say “no” to a GDF. Some participants explicitly wanted to exclude these types of group for that reason, while others thought they could provide valuable input and balance. At least one participant commented that leaving these environmental NGOs out could make them more keen to engage in the process (for example by protesting).

“Greenpeace – they’ll speak up! Because they’re going to say a definite no.”

Swindon, workshop 1

“I want someone who is going to protect the land and wildlife.”

Manchester, workshop 1

Business interests. Participants advocating the inclusion of business interests commented on the need to understand implications for the local economy and interactions with other developments. Others wanted to avoid vested interests around financial gain, and felt that business involvement could bring these interests to the table. Private landowners were mentioned as a specific example of a group not to include, although one participant commented that areas such as national parks and Crown Estate owned land would need separate consideration.

“There are two lots of people – the local people who care about the area and all those other people whose interest is just making money or business related.”

Manchester, workshop 1

“There needs to be a community representative, we can’t leave it to government and business alone.”

Swindon, workshop 1

Regulators. The involvement of regulators in the representative group was felt by many participants to be important in order to reflect current requirements on issues such as safety and ensure the process was being run correctly.

“They [Environment Agency] know the law and the land and they know how the law should be implemented.”

Manchester, workshop 1

Government and related organisations. The presence of certain organisations such as RWM or Defra was suggested by a few participants as a good channel for the representative group to receive answers to specific questions, although the table in Swindon that discussed wider involvement of government was clear that central government, RWM and political parties should not be involved due to lack of connection to the community and vested interests.

“I wouldn’t want them [RWM] standing up and representing us because they’ll put a positive spin on everything. When the group is having discussions they should be in the room but they shouldn’t represent us.”

Swindon, workshop 1

Specialist knowledge. This was another area of unanimous approval from those who discussed it. Participants felt that involving experts could offer an unbiased opinion (for example on technical issues) based on specialist knowledge.

“They [expert in the field] would give an unbiased opinion.”

Manchester, workshop 1

Other. Various other people and organisations were suggested for inclusion or exclusion from a representative group. Not all of these received detailed discussion, but relevant comments included:

- **Historian:** could uphold the interests or protection of local historical assets
- **Media:** could provide honest reporting
- **Protestors:** risk the presence of unproductive and biased input
- **Non-local:** could provide independent input, but also has limited knowledge of the local area.

One table discussed the possibility of a jury service-type approach with random selection of representatives. They felt that people with no knowledge might be a good thing to add independence, but also acknowledged that members could bring existing strong opinions to the table. This led to the suggestion that a clear mechanism for succession on the representative group would be important, given the long timescales involved.

What else is important?

Participants raised a number of general principles that they felt were important in the formation and management of a representative group. These included:

- Maintaining transparency and clear communication with the community.
- Sticking to promises.
- Having accountability to the local area.
- Keeping the size manageable.
- Access to clear answers on issues such as geology as early as possible.
- Putting in place a process for educating / informing the representative group itself.
- Seeking to involve trusted individuals representing a range of balanced interests, and avoiding vested interests.

Overarching comments. Conversations at both locations clearly identified residential / community interests as an important presence on a community representative group. Further exploration suggested some underpinning qualities that made this type of representation desirable, including trust, independence and a genuine interest in or care for the local area.

This final quality – interest in and care for the community – appeared to underpin a number of participants’ desire for some form of local council involvement, while for others, concerns over lack of trust or lack of representation were strong reasons not to include local councils. Other popular or less controversial types of involvement were regulators and specialist knowledge – primarily because it was felt these types of people could provide independent and unbiased input based on specialist knowledge.

This raises the wider point of representation versus advice. In any future similar process, it would be interesting to explore this topic further, extending conversations to cover membership based on representation compared to membership based on ability to advise, linked to options for permanent group members and observers or advisors.

2.2.3 Representing the community: communication and input of view

The final task on Day 1 was for participants to imagine a representative group had been formed, and that the membership was satisfactory (i.e. contained the people or organisations they wanted). They were asked to consider the degree to which they would want to be kept informed by the representative group, or whether they would simply trust the group to progress discussions on the community's behalf.

Discussions covered a range of points as follows:

- **Targeted communications and updates.** Many participants said they would expect some form of regular communication, for example: mail shots, meeting minutes, webinars, newsletters, school handouts (e.g. in children's bags to take home for parents to see), web-based or library-based Q&A sessions (e.g. with RWM), quarterly reports, TV and local radio. Some commented that not every mechanism will reach all people, so a mix of methods would be appropriate.

“If you've got something as big as this you need things on TV.”

Swindon, workshop 1

“I think they should do handouts, leaflets, things like that.”

Manchester, workshop 1

“Local libraries should have some facilities where local residents can ask questions, because not everyone's computer literate.”

Swindon, workshop 1

- **Ongoing communications.** For several participants, an ongoing presence in the form of social media (e.g. Facebook, Twitter), a website and contact phone number were felt to be essential – providing the ongoing ability to see what is happening and ask questions. One person suggested adding relevant content to the school curriculum, although this was countered by concern over the volume of content teachers already have to get through.

“If you want to tackle young people's views, then social media is the way to go.”

Swindon, workshop 1

- **Public meetings.** A number of participants were keen on the idea of the representative group holding open meetings – either on an ongoing basis or one in every few meetings. They felt this would enable visibility of the process and the opportunity to ask questions. One participant suggested filming meetings to post online.

“Organise meetings so that people can go if they want to.”

Manchester, workshop 1

- **Gathering public views.** Mechanisms for the wider community to input their views were felt by a number of participants to be important. For some, this was in the context of the long process timescales – with a sense that a lot of things could change over time and therefore the consistent ability to connect with the feelings of the wider community and keep them informed would be important.

“You could have an ambassador in the community, so if no one is available to answer questions, you can contact Jenny in your local church or John in the sports centre and information will be gathered by them.”

Swindon, workshop 1

- **Sub-groups.** One participant suggested the idea of a sub-group or task group to handle communications and engagement strategy on behalf of the representative group.

“You’d be wanting to set up sub-groups or task groups and then look at how people might want to receive that information”

Manchester, workshop 1.

- **Management and administration.** A few people commented on the need for the representative group to have appropriate administrative support – for example from the local council.

“I think that’s where the local council comes in [re management] because they have the manpower/resources to deal with all of that.”

Manchester, workshop 1

- **Equality of power.** The need to ensure equality of input from within the representative group was mentioned at one table. There were a few suggestions for a group head, chairperson or independent person such as a facilitator – to help balance power and interests within the group, or to oversee proceedings.

“Whatever title they hold, whatever profession they hold, we’re all equal.”

Swindon, workshop 1

“I think there would have to be a head of this group – somebody who overlooks it, makes sure everybody’s doing it right, talking to the right people.”

Manchester, workshop 1

- **Trust.** Some participants commented that the issue of trust underlies the whole process – if the group is trusted by the community to get on with their work and represent them, there is a greater trust in the overall process. This was often linked to the need for transparency.

“There should be some transparency – meeting minutes etc. to be made public.”

Manchester, workshop 1

Overarching comments. Conversations about maintaining lines of communication between the community and a representative group covered four key areas: targeted information-giving, ongoing communications, gathering and consideration of community views, and maintenance of trust and credibility (for example as a result of transparent process and equality of power within the representative group). All four were felt to be important, although there was an overarching sense that maintaining trust with the community was of underlying importance because it would:

- Enable the representative group to legitimately carry out its work on behalf on the community.
- Enhance trust in the overall process.

2.3 Test of public support

At the beginning of Day 2, participants were reminded of the approach to the test of public support – a one-off test of public acceptability that would be used to determine whether a community moved beyond the borehole drilling stage into the planning and construction phase (see **Appendix 9** for the relevant slides).

They were first asked to recall mechanisms that had been used to test their own views on any local or national decision in the past.

Following this exercise, participants were presented with three cards showing examples of methods that might be used to test public support for proceeding with a siting process for a GDF in a specific community. These methods were:

1. A statistically representative public opinion survey.
2. A local referendum.
3. An open consultation and registration of views.

At tables, participants discussed what they liked or disliked about each method, as well as any other points that needed to be considered in designing a test for public support.

2.3.1. Experience of testing public support

Participants listed the following as examples of times when their support for a local or national issue had been tested:¹⁴

- Social media poll with multiple choice or yes/no.
- Referendums.
- Petitions.
- Elections for councillors, MPs, police commissioners.
- Postal and ballot votes.
- Community forums.

¹⁴ Note the, due to differences in the flow of conversation at each location, the majority of examples are from the Manchester workshop.

- Complaints processes or procedures as a way of making views known – a route by which people can input and apply pressure.
- Opportunity to get onto the board of something, e.g. local NHS organisation – so the member of the public almost became a decision maker
- Surveys – questionnaire, telephone surveys, sample surveys, street surveys, online surveys.
- Council doing budget cuts and inviting responses to people's ideas. So a consultation – an advert in the paper, response during a particular time, etc. Planning applications, etc.
- Reviews you might leave online – tripadvisor, starring system.
- Housing developments – voting returns slip to send back / comments slips.
- Suggestions box with a freeform note.
- Feedback surveys by text or on the back of a receipt, possibly with an incentive.
- Being asked directly by a decision maker e.g. local councillor.
- Door knocking.
- Focus groups.
- Tokens in the box – a different mechanism of voting.
- Planning process – window of opportunity to input views, open meetings.
- Face to face meetings to make decisions on specific issues (e.g. at work).
- A process for finding out whether or not people support turning school into academy – large meeting with multiple stakeholders, conversations around tables, etc.

In Swindon, initial discussion of this topic in plenary uncovered a few negative examples of existing experience – for example where people had input into decisions, but felt they had not been listened to.

2.3.2. Views on a statistically representative opinion survey

Participants discussed the option of a statistically representative public opinion survey as a method for the test of public support. See **Figure 11** for a description of the method under discussion. Facilitators guided participants to think about the specific characteristics that they liked or did not like about this method, in order to gain insights into principles for a test of public support more broadly, rather than wedded to a specific method.

Figure 11 Discussion card – opinion survey.

1 Statistically representative opinion survey

This method could involve:

- ▶ A telephone opinion survey of residents at different distances from the proposed GDF site
- ▶ Survey enough residents to ensure a *statistically reliable* result
- ▶ Everyone has equal chance of being surveyed
- ▶ Have to be on electoral roll: 18+, British resident, registered
- ▶ Choose a specific level of 'support' to warrant continuing, such as "more people supporting than opposing"
- ▶ Publishing the results to allow all to see them

▶ What do you like/dislike about this method?
▶ How could you improve it?
▶ When is the best time to do it?

Public dialogue on geological disposal and working with communities
February–March 2016 • Stimulus material to prompt public discussion

Mechanism. Several conversations in both Swindon and Manchester initially focused on the mechanism for this approach. There was a general reaction against a telephone survey – several people commented cold calling is rife and often unwelcome, while others pointed out the advent of mobile phones means that many people rarely use landlines, or that telephone questionnaires put people on the spot. One or two people, however, favoured telephone surveys as being discreet and personal, and enabling input from people who might find speaking easier than writing.

“A lot of people have call-blocking now so they don’t answer the phone if they don’t recognise the number.”

Swindon, workshop 2

Some participants suggested mixed methods might work – for example a social media poll might appeal to younger members of the community (and could provide high volume responses), while others might prefer a postal form, individual online survey or face to face engagement.

“You can do votes three or four different ways – online, post, in person.”

Manchester, workshop 2

Coverage and approach. Focusing on the nature of the sample, participants raised a number of issues with the idea of a representative survey, including:

- Not wanting a selection of people to speak on behalf on the whole community.

“I think fundamentally doing it that way the percentage is not good enough, if you do 1000, 2000, 3000 out of a million, you’re not getting a true view of the community.”

Swindon, workshop 2

- Concern that this method assumes people in similar demographic categories will hold similar views.

“Just because I might fit the same demographic as someone else, our opinions might not be the same – it is presumptuous about people fitting into the same box.”

Manchester, workshop 2

- The lack of inclusion of younger people. Some participants discussed what the minimum age should be – with suggestions including any child of secondary age, or 16+ (like for the Scottish referendum).

“I say why 18, why are we not asking the residents of the future, the younger people?”

Swindon, workshop 2

- It might not enable those who feel very strongly about the issue to have their say.

“I just think some people might not be able to attend some meeting but would still feel like they should have their input. They might feel very strongly about it.”

Manchester, workshop 2

- The way the survey is presented or framed might impact people’s responses (although presumably this could be true of any method).

“It is open to abuse. People could lie about the statistics [those running the survey].”

Swindon, workshop 2

- It doesn't give people much chance to consider their views. Several participants commented on the need for informed views rather than on the spot reactions.

“Sometimes people are better if they have time to think, so it's best if you have a survey then you can sit down and compose what you want to say than just being off the cuff and responding to whatever is being said.”

Manchester, workshop 2

A few participants pointed out positive aspects of this mechanism, namely: it is quick, simple, and necessarily includes people on the electoral role (i.e. genuine residents).

There was the suggestion from one table in Manchester that a few surveys might be run, potentially focused on different demographics to see if views differed.

“A few [surveys] with different people, possibly within the same timescale, and see what you get fed back from different people. If you do it based on certain bits of society you'd get different views.”

Manchester, workshop 2

The issue of distance from a potential site was raised a couple of times, with participants differing in their views of what area a survey should cover – ranging from only those closest to the site, to a 20 mile radius, to any connecting conurbation.

Overall, participants were not keen on this method as the sole test of public support. During discussions of representation and the need for informed input, many participants began to consider a mixed method approach. See 2.3.5. below for more on this.

2.3.3. Views on a referendum

Participants discussed the option of a referendum as a method for the test of public support. See **Figure 12** for a description of the method under discussion. Again, facilitators guided participants to think about the specific characteristics that they liked or did not like about this method.

Figure 12 Discussion card – referendum.

2 Referendum

This method could involve:

- ▶ An opportunity for residents at different distances from the proposed GDF site to vote
- ▶ Have to be on electoral roll: 18+, British resident, registered
- ▶ Choose a specific level of 'support' to warrant continuing, such as "more people supporting than opposing"
- ▶ Publishing the results to allow everyone to see them

▶ What do you like/dislike about this method?
▶ How could you improve it?
▶ When is the best time to do it?

Public dialogue on geological disposal and working with communities
February–March 2016 • Stimulus material to prompt public discussion

Discussions about a referendum as a potential mechanism for a test of public support focused less on the physical mechanism and more on the overall approach. This mechanism was generally received more positively than the opinion survey, with participants commenting that it is more inclusive, fairer, allows more time for deliberation, and gives a more accurate picture of people's views. Those participants who did discuss mechanisms tended to say it should be as inclusive as possible e.g. including online, postal, and in-person mechanisms.

***“It feels like the only fair way we can do it is this way [by referendum].
At least then we know it is down to the number of ticks in the boxes.”***

Swindon, workshop 2

“I think that’s a definite yes/no answer so it’s clearer.”

Manchester, workshop 2

Several discussions quickly focused in on who should be included, with a range of views including:

- The smaller the better – only people directly affected.

***“The smaller the better regarding opinion –
the main people who will be affected, then it is less cost.”***

Manchester, workshop 2

- A postcode zone.

“Maybe a postcode zone.”

Manchester, workshop 2

- The whole city or county.

“Could it be an entire county?”

Swindon, workshop 2

- Anyone who might be affected (e.g. due to transport impacts).

“The initial community and everyone else who it might also affect.”

Manchester, workshop 2

- The area of the underground facility and the same distance again.

***“My personal thing was perhaps it should be however much it
covered underground, plus the same distance again.”***

Manchester, workshop 2

- A specific radius from a potential site.

“I would say a 20 mile radius.”

Swindon, workshop 2

“I think 10 miles is fair.”

Swindon, workshop 1

- The wider the better, given the potential for impacts further afield.

“I think involving the wider area is important, as somewhere down the line it will affect them.”

Manchester, workshop 2

- National (for example: one particular discussion focused on this because of the potential impact on the UK tax payer, with counteracting concern that this would lead to nowhere hosting a GDF, or that people from other locations could determine what happens in someone else’s community; another suggested a national approach but later changed their mind).

“Where do you draw the line then? If it was in the Lake District, it would still be my taxes paying for it – and you might want a say in that as a UK resident. It affects everyone in the UK – although some more than others. With a referendum, you would have to ask everyone in the UK.”

Manchester, workshop 2

- Not sure.
- Who should be asked depends on the potential location e.g. a site next to a city could have the potential to impact many more people than one in the middle of nowhere.

“Because if it is in our town, you’d expect it to be very important to involve the local residents, but if it’s in the middle of nowhere it’s a very different question.”

Swindon, workshop 2

In summary, there was no consensus about the most suitable coverage of a referendum – with views tending to be based on participants’ definition of who would be impacted by the development (ranging from those in direct contact with a site to the UK tax payer). This is an area of discussion that would benefit from more detailed exploration in any similar future process, or potentially once it is clearer where the potential sites might be (e.g. see final bullet point above).

One point to note is that the discussions about coverage tended to focus on the referendum rather than the other two mechanisms. This may be because the opinion survey tended to be dismissed as a sole method by most participants (and thus the discussion of coverage was perhaps felt to be less relevant) and the referendum discussion came before the discussion about a consultation in most cases (and thus coverage had already been discussed). In any case, although the discussion on coverage focused on a referendum, it has wider implications for other possible mechanisms of a test of public support, as well as for the definition of “a community”.

The minimum age for participation again received some discussion, with those who discussed it settling around 16 (balancing impacts on future generations with ability to form their own opinion) – although a couple of people felt it should be younger because of the relevance to their future lives (e.g. 14).

Potential issues raised with respect to this method included the risk of people not understanding the question and its implications, and the risk of a low turnout jeopardising the legitimacy of the outcome. A couple of people suggested that a majority of people voting would be needed (e.g. a 60% turnout) to make a referendum count. Overall, however, these conversations tended to move towards a common conclusion, that a period of education and information-giving leading up to a referendum would help to alleviate these risks.

“I would want to know more about this before this point. My wife and I Googled nuclear waste and you could hardly find any information. You’ve got to flood the market first so that people have got access, to engage people in the topic that, up until last weekend none of us knew anything about.”

Swindon, workshop 2

2.3.4. Views on an open consultation

Participants discussed the option of a referendum as a method for the test of public support. See **Figure 13** for a description of the method under discussion. Again, facilitators guided participants to think about the specific characteristics that they liked or did not like about this method.

Figure 13 Discussion card – open consultation.

3 Open consultation and registering of views

This method could involve:

- ▶ Partnership announces a 3 month consultation window
- ▶ A written document explaining the work done, and the pros and cons
- ▶ A questionnaire asking what people like and dislike about the GDF, and why
- ▶ Final question is “Do you wish to continue?”
- ▶ Open to **anyone** who wants to fill in the answer questionnaire
- ▶ Parallel series of consultation events

- ▶ What do you like/dislike about this method?
- ▶ How could you improve it?
- ▶ When is the best time to do it?

Public dialogue on geological disposal and working with communities
February–March 2016 • Stimulus material to prompt public discussion

Conversations about open consultation as a potential method for a test of public support generally happened in the context of the other methods already having been discussed. In some cases this immediately led to the idea of a mixed method (see 2.3.5. below), with participants feeling this method could fulfil some of the educative and deliberative needs touched on above.

Particular aspects of this approach that participants said they liked, were the ability for community members to engage, learn and think about the issue over an extended period of time.

“You get the chance to think about something and read up to make a decision whereas if you just send something by email or in the post you can’t.”

Manchester, workshop 2

“I like this idea [consultation]. There seems to be a lot of information, plenty of information to make a right judgement. And you’re having the 3 months as well. I just like the amount of information and it’s a long period of time.”

Swindon, workshop 2

Some participants expressed caution, saying that a consultation should only be open to those most affected by a potential GDF, or that those with strong opinions would be likely to respond. A couple of people expressed a preference for a consultation over a referendum or vice versa, although this tended to lead into discussions of combining the methods – see below.

“I think the only downside is that you only get the people that are willing to take the time to fill out the questionnaire.”

Swindon, workshop 2

The issue of how to get people engaged in the process was discussed at some tables, to ensure not just those who are already aware and interested take part. The key messages here were around regularity and variety of channels (including social media, libraries, shopping centres, TV adverts) i.e. provide opportunities for as many different types of people as possible to engage, and communicate regularly.

“This model provides you with an opportunity to be a bit more creative and innovative e.g. pop ups in shopping centres.”

Manchester, workshop 2

2.3.5. A mixed method

In both Manchester and Swindon, most participants came to a similar conclusion – that a mix of methods would be preferred.

At least one participant suggested combining a survey with a referendum, but for the majority, a period of consultation (including consistent communications and education through the provision of information) was preferred as an initial method, followed by a referendum once people had been given the chance to engage with the topic and form opinions. There were also some further supporting comments implying that the ongoing presence of communications during the consultation period would help to increase overall levels of engagement and understanding, so that more people would be likely to turn up to vote and know what they were voting for.

“On the referendum – we thought it gives everyone a chance. We thought a mix between two and three – consultation first for everyone to get information, then everyone gets a vote so they can make an educated decision.”

Manchester, workshop 2

“You need an education process early down the line for people to see the issues, completely non-politicised, then you have the partnership, then you have your referendum.”

Swindon, workshop 2

Some participants suggested a representative survey (or surveys) might also be used as part of this overall process – for example early on in the process to gauge what people know, partway through to give a sense of the direction of opinion, or on an ongoing basis to see whether people were picking up on the information being provided.

Overall qualities of a process to test public support that participants tended to stress as important were:

- Ability for everyone in the community to have their say (though opinions differed on who “everyone” should refer to) – see 2.3.3. above.
- Ability for people to make an informed decision e.g. having time to learn about the process and form opinions before being asked the question.

Overarching comments. Although there were three specific mechanisms being discussed, conversations in both locations very quickly led to the identification of two more general key qualities for defining the test of public support:

- It needs to enable everyone in the community to have their say – although note that how this community should be defined was much less clear.
- It should be an informed decision e.g. with time to learn about the process and form opinions before being asked the question.

For most participants, based on the conversations about the three specific examples, a mixed approach combining consultation with a final referendum (and possible surveys at various points to gauge public views) was favoured because it fulfilled these qualities.

2.4 The right of withdrawal

Following a reminder of the context and approach to a potential host community’s right of withdrawal (see **Appendix 9** for the relevant slides), participants were asked to consider a scenario in which:

- A community representative group¹⁵ (CRG) is set up and is progressing well in its discussions with RWM.
- Borehole investigations have started, and community investment has risen to £2.5 million per year, with some good projects being funded.
- However, a few of the organisations on the CRG now want to stop discussions, and are calling for the right of withdrawal to be exercised.

In the context of this scenario, participants discussed who would be best to make the decision to withdraw, and why. They were given the option to choose: the council, the community representation group (CRG), the wider community, other suggestions, and not sure. This exercise was followed by discussion at each table to consider participants’ preferences in more detail.

¹⁵ Note that in the workshops a variety of names for such a group were used: group, body, partnership etc. These have been standardized in this report to community representative group for simplicity.

2.4.1. Overview of thoughts on who is best to decide

The process of participants selecting who they thought should have the right to withdraw from the process led to the following overall picture (with specific numbers from Manchester in **purple** and Swindon in **red**) before and after discussions (participants in two groups moved their choices as a result of discussions):

Table 14 Who is best to decide to exercise a right of withdrawal?

| | Before discussions | After discussions |
|---------------------------------|--------------------|-------------------|
| Council | 1 (1 + 0) | 1 (1 + 0) |
| CRG | 23 (5 + 18) | 24 (5 + 19) |
| CRG / wider community | 10 (9 + 1) | 14 (12 + 2) |
| CRG / wider community / council | 0 (0 + 0) | 1 (1 + 0) |
| Wider community | 4 (2 + 2) | 2 (1 + 1) |
| Other | 3 (0 + 3) | 3 (0 + 3) |
| Not sure / don't know | 11 (10 + 1) | 7 (7 + 0) |
| None of the above | 1 (0 + 1) | 1 (0 + 1) |
| Middle (i.e. any of them can) | 1 (0 + 1) | 1 (0 + 1) |

This discussion proved to be a little more difficult for participants to come to solid conclusions on than other activities, perhaps because it covers such an unfamiliar situation with little firm detail – see section 1.1. for more detail on the open policy making context of this process.

2.4.2. Why withdraw?

A common area of conversation in both locations was ‘what might trigger a withdrawal?’. Several participants found it difficult to understand why a community would want to pull out so far down the line.

“What is going to happen in that time that makes them change their minds, and is it a good enough reason?”

Manchester, workshop 2

“One group alone can't affect the decision? Why does the Government feel this is necessary?”

Swindon, workshop 2

This led to discussions regarding the risk of communities entering into the process in order to benefit from the investment, risking a waste of public money. A couple of participants commented that communities should not be allowed to pull out so far down the line, while others were concerned that locking in a community would go against the spirit of democracy.

Many participants commented that there would have to be a “good” or “valid” reason in order for a withdrawal to be considered, although one group in Swindon agreed that an educated, cross-sectional representative group that has adhered to the process in good spirit should be able to withdraw for any reason.

“If you have collectively made a decision to go ahead, there has to be a strong reason, a valid reason to pull out – you can’t just pull out on a whim, a lot of time and money has been invested. It must be something serious.”

Manchester, workshop 2

Good reasons for withdrawal were felt to be changes in understanding of geology or safety, although it was pointed out that RWM would pull out themselves in such cases. One participant suggested the arrival of a better waste solution might also be a good reason. Deeper exploration suggested requests to withdraw might be more likely to be a result of less tangible issues, including:

- Uncertainty over the evidence (for example where there are conflicting views about issues such as safety).
- Degradation of trust in the process or between organisations (for example between the community and the CRG, or the CRG and RWM).
- Conflicting views within the CRG (e.g. based on politics).
- Changes in personnel within the CRG leading to the presence of new views, or perhaps less-well-informed opinions.

2.4.3. How many CRG members need to express dissatisfaction to trigger a decision?

There was some discussion over how many or what proportion of a CRG would need to express the desire to pull out in order to trigger withdrawal. Participants were clear that it could not just be based on one person’s say-so. Some suggested there would have to be a clear majority of CRG members on board, while others said if it was one person expressing concern they would have to explain why to enable other people (e.g. in the CRG or wider community) to gauge the validity of their reasoning.

“It’s OK for anyone to trigger it, but everyone should be involved in the final decision.”

Manchester, workshop 2

“I agree with majority rule, but there needs to be an odd number on the CRG.”

Swindon, workshop 2

A few participants discussed the fact that discussion of concerns within the CRG might be enough to allay concerns (for example in the case of changes of personnel within the CRG). The same participants highlighted a couple of principles as the basis for any such discussion: transparent documentation of discussions, and an equal say for everyone on the CRG – although a different selection of participants suggested some form of weighting depending on the breadth of representation offered by different CRG members might be appropriate. During a separate discussion, another participant mentioned the possibility of an independent adjudicator to oversee CRG deliberations.

2.4.5. Who decides?

Conversations about who should then make the decision about whether to withdraw or not tended to centre on the relationship between the CRG and the wider community. The council was pretty much discounted from being the sole decision maker on the basis that they would be likely to have a place on the CRG and should not make decisions on behalf of the community when the CRG had been set up to do just that, or because participants did not trust them to make decisions in the genuine best interests of the whole community. One participant commented that they felt the council represented the community and has access to information channels with higher levels of government, and they would therefore be comfortable with the council making the decision.

“The council you just don’t trust”

Manchester, workshop 2

“No the council cannot make that decision, what’s the point in having the partnership if it can be run roughshod over by the council?”

Swindon, workshop 2

Many participants were comfortable with the idea of the CRG taking the decision on the basis that they were the best informed, and had been selected to represent the community’s interests. However, the need to keep the wider community well informed was stressed by a number of participants. Some other participants wanted the decision to be made in consultation between the CRG and the wider community, stressing the importance of the decision. For example, it was suggested that the CRG could form an initial opinion and then test it with the wider community, or that the CRG could communicate the issues with the community, then use the same method to decide on withdrawal as is used for the test of public support.

“They are the ones that have been bringing the process along all the way through so are best informed. They are objective. And there is no point having them if they can’t make decisions.”

Manchester, workshop 2

“If the CRG can’t come to a decision, then it should be put to the wider community in a referendum. That would be the fairest way.”

Swindon, workshop 2

Some participants were not sure who should make the decision, commenting on the complexity of the situation or the vagueness of the scenario – see section 1.1. for more detail on the open policy making context of this process. Again this is something to potentially test again once firmer ideas are in place for implementing the policy.

Overarching comments. The question of “why withdraw at this stage?” underpinned several conversations. Specialists explained that new information coming to light regarding lack of geological suitability or unacceptable safety risks would be cause for RWM to withdraw and would not require a separate decision to withdraw from the CRG. Further exploration with participants suggested a desire to withdraw from within the CRG might be more likely to come from a lack of trust and presence of uncertainty (for example where evidence conflicted).

Participants tended to favour a CRG taking the final decision over withdrawal, or a CRG in close consultation with the community. Some participants were not sure. There seemed to be a lack of clarity in some participants' minds about the timing of a right of withdrawal compared to a test of public support, suggesting the need for clarity of communication when it comes to explaining this particular part of the process.

2.5 Community investment

2.5.1. Investment options

In the afternoon of Day 2, discussions moved on to community investment. Participants were reminded of the context and overall timescales, including plans to invest up to £1 million per year in communities entering into discussions with RWM, rising to £2.5 million if borehole drilling begins (see **Appendix 9** for the relevant slides).

Participants were asked to imagine that they were the funding panel whose job it is to decide how to invest the money. They were told they had a quarter of a year's funding (up to £250,000) to invest and a range of potential projects. These were fictional projects designed to cover a range of qualities and outcomes, including:

- A. New course on mechanical engineering at sixth form college.
- B. Local enterprise scheme for young people: expansion funding.
- C. Restoration of wildlife reserve in neighbouring county.
- D. Rebuilding of collapsed historic wall.
- E. Mini 'community project fund', managed by council in GDF area.

See **Appendix 10** for the detailed description of each project.

Discussing each project in turn, participants were asked to consider what they liked or disliked about it and why, as well as whether there were any types of projects missing, or that should not be allowed funding.

Table 15 shows the qualities of each project that participants liked or expressed concern about, as well as a sense of overall favourability across all groups based on these qualities.

Table 15 Community investment options

| Project | Favourable qualities | Less favourable qualities | Other funding considerations | Overall favourability |
|----------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| A. New course on mechanical engineering at sixth form college | <p>Prepares local young people for potential jobs at the GDF – relevant to local community and to the project</p> <p>Aligns with a national need (getting more people into engineering)</p> <p>It is focused on education (anything related to education is good)</p> | <p>A niche project that does not benefit large numbers or types of people</p> <p>Long-term relevance is questionable (given it is not necessary for university course and will be superseded by degree-level content)</p> <p>Might not be of as much use if the GDF does not go ahead</p> | <p>Would this need ongoing funding year on year?</p> <p>Option to extend to a broader focus? (e.g. more generic courses/education)</p> | Fairly high |
| B. Local enterprise scheme for young people: expansion funding | <p>Fills a definite need in the community (skills and support for new / small businesses)</p> <p>Benefits likely to remain in the community over time (economic development from local businesses)</p> <p>Aligns with a national need (developing entrepreneurs and innovation)</p> | <p>No guarantee benefits will stay in the area (e.g. if businesses move away once set up)</p> | <p>Opportunity to extend this to a wider demographic (older age groups) or offering (e.g. apprenticeships)</p> <p>The nature of the area might impact the sustainability of funded businesses (e.g. if very remote, less easy to sustain a business)</p> <p>There are other potential funding mechanisms (e.g. Princes Trust)</p> | High |
| C. Restoration of wildlife reserve in neighbouring county | <p>Investing in the wider environment (i.e. not just human focused)</p> <p>Investing in longer-term benefits</p> <p>Create opportunities to offset impacts from GDF development</p> <p>Not close, but might still provide benefit to the community (e.g. tourism revenue, family days away from the vicinity of the GDF)</p> | <p>The project is not close to the community (40 miles)</p> <p>Seems like a lot of money, which could be spent on other things of more direct benefit (value for money question)</p> | <p>Opportunity to fund similar projects closer to the community?</p> | Mixed |

| | | | | |
|------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| D. Rebuilding of collapsed historic wall | Some benefit to the wider community (heritage and amenity, also opportunity to engage the community in rebuilding) | Private gain, with limited wider value Could set a precedent for others to come forward with requests based on private property A lot of money for such narrow benefit | There are likely to be other funding sources (e.g. heritage or lottery funding) Others may be able to take responsibility for this (e.g. council) Could consider part funding or utilising volunteers | Low |
| E. Mini 'community project fund', managed by council in GDF area | Wide service benefit to whole community Contributes to community cohesion | | Replacing something lost as a result of council cuts – makes them look good if it gets re-funded Option to increase funding beyond what is asked for? Limited options for other funding sources | Very high |

Participants suggested a range of other types of projects that might benefit from funding. These were not always supported by underlying rationales regarding specific qualities, and tended to be more focused on areas where participants saw a local or national need would be fulfilled:

- Arts funding.
- Environmental funding, including open spaces, parks, allotments – perhaps combined with training or education.
- Supporting homeless people (fulfilling a national need and benefits local community e.g. employment, social morale).
- Funding mental health groups and the elderly.
- Career advice and adult learning.
- Building a space / hub where many of these projects could be delivered.
- Other community facilities such as sports hubs and libraries.
- Housing surgeries.
- Transport links.
- Community radio and media.
- Renewable energy.
- Community events e.g. festivals.
- Job creation.

Types of projects participants thought should *not* be funded included:

- Those for personal gain.
- Those that do not benefit the local people or place.
- Things the council should be paying for (e.g. not to fill shortfalls). However, one group in Swindon expressed a contrasting view. They suggested that if the community wanted to use the money to address a council shortfall, they should be able to i.e. that there should be no restrictions.

2.5.2. The funding panel

The second part of the community investment discussion focused on who should be on a funding panel. Participants were asked to consider two key questions:

- What skills/qualities are needed on a funding panel?
- What does the panel need to do to maintain the trust of the community?

Panel member qualities. Conversations about specific qualities focused firstly on the individuals involved in the funding panel, and secondly the panel itself. Suggested qualities of individual panel members included:

- Good listening skills.

*“Someone who’s got good listening skills.
The ability to adapt and listen to everyone’s opinion.”
Manchester, workshop 2*

- Communication skills.
- Ability to work in a team.

*“Being able to negotiate because the panel has got to work with each other.”
Manchester, workshop 2*

- Eloquence / charisma / confidence / passion.
- Time management.
- Impartiality / no interest in personal gain. There was particular disagreement within one table in Swindon regarding the value of including an objective outsider. Positive comments included the fact that this person would be neutral and thus help to avoid other panel members being influenced. Concerns were around a person from outside the community making decisions on their behalf.

*“Somebody neutral/independent that’s not from the community e.g. say you’ve got somebody from the community who really supports newts they might push it through, so somebody from outside who’s independent, who would prevent people being swayed.”
Swindon, workshop 2*

*“I don’t agree with that – I think it should be from people within Swindon – we shouldn’t have outside people deciding.”
Swindon, workshop 2*

- Influence in local community. Mixed views here, with one participant commenting this would engender respect in the decisions that are made, and another saying this individual might influence panel decisions.

- Empathy. In order to understand community needs.
- Knowledge or track record of funding. Mixed views on this, with many participants citing the advantage of previous experience, but one or two others suggesting previous experience might bring certain biases towards a particular funding model or priorities.

“Need to know about different aspects of what might come up with the funding, what problems might come up along the way.”

Manchester, workshop 2

- Business or accountancy experience.
- Independence. For example someone who is unaffiliated to any local interests and can provide an unbiased voice.
- Local experience. For example a member of the local community or a social worker. Others mentioned specific representation of parents or disability interests.

“People with good knowledge of the community – understanding of what the community wants, can speak on behalf of the community.”

Swindon, workshop 2

- Legal experience.
- Trusted individuals. For example someone from the medical profession, teaching profession / school board, or faith groups (with reference to upholding principles such as morality and equality).

“If you are looking for people that might be trusted you could look at the medical profession – someone who is a carer”

Manchester, workshop 2

- Health and safety knowledge.
- Interest in the natural environment.
- No political interest. Some disagreed with this, and others suggested council officers instead.
- Life experience.
- Youth. For example a local student representative.

Some of these qualities (e.g. ability to work in a team) were felt to be a general necessity, while others (e.g. finance knowledge) could apply to an individual rather than all panel members.

Panel qualities. Overall qualities for the panel were suggested as follows:

- Diversity: of background or interest (e.g. arts, environment), professional / life experience, temperament, skills, and demographics (e.g. age and gender).

“The eight people all need different skills and qualities.”

Manchester, workshop 2

- Presence of a secretariat or support function.

“Somebody from the council because they’ll be administering the fund.”

Swindon, workshop 2

- Links to CRG. Some participants debated the degree to which this should be the case, with views ranging from them being the same group of people (e.g. because they are already elected and trusted), to having some overlap (e.g. of communications or people, in order to ensure harmonisation), to being totally separate (e.g. to reduce the chance of conflicts of interest).

Some participants discussed the possibility of having a mix of community representatives on the panel, aided by those with legal experience – for example to help develop funding criteria. On the one hand, it was felt this would enable connectedness with the needs of the local community. On the other, there was concern that a funding panel needed appropriate hard skills (e.g. business knowledge, etc.) to be able to do its job.

One group discussed the possibility of RWM sitting on the panel, with the eventual agreement that they should be kept informed of funding decisions (e.g. via a quarterly update), but not actually attend, in order to retain independence of panel decisions.

At least one group discussed whether or not the panel should be paid, with a mix of opinions.

“They’re going to get backlash as well, so they should be rewarded for sitting, and researching and making those kinds of decisions.”

Swindon, workshop 2

“But you always get people who like making those kinds of decisions. I know people round my kind of area who love getting involved in these kinds of decisions.”

Swindon, workshop 2

Maintaining trust. One group at each workshop specifically discussed what the funding panel could or should do in order to maintain the trust of the community. These conversations focused strongly on two key principles:

- **Transparency.** Maintaining clarity and visibility of the funding process, including setting clear funding criteria, establishing timelines, publishing accounts, possibly open meetings, and reporting back on why specific projects were or were not funded.
- **Communications.** Regularly communicating with the local community (for example via a website, newsletters or public reports) and seeking views on the nature of funding decisions or criteria.

Participants felt that adhering to these principles would help to reduce the chance of corruption (this was a risk mentioned across a few discussions) and engender trust in the panel and its decisions.

“Avoid any accusation of corruption.”

Manchester, workshop 2

Overarching comments. In terms of specific types of project to fund, common qualities that participants tended to say they liked included projects that: were local to the area; had long-term benefits to the community; and that benefited a wide range of people in the community.

Overall, there was some suggestion from both locations that each community would need to decide on its own list of priorities or criteria against which to judge funding applications. One group went further, arguing that there should be no restrictions from the Government with respect to what the money is spent on. Another discussed the long-term nature of the project, highlighting the potential for new types of projects or additional needs to arise as the process progresses.

There was no clear consensus about the exact set of skills and qualities required for those sitting on a funding panel, although there were many suggestions for soft skills (e.g. communication, listening, team working and empathy), hard skills (e.g. funding or finance knowledge and legal skills) and qualities (e.g. life experience, youth, impartiality).

Diversity (of background or interest, professional / life experience, temperament, skills and demographics) was widely suggested as a desirable quality for the panel as a whole. Specific discussion of what the funding panel could or should do in order to maintain the trust of the community focused strongly on two key principles: transparency of process and communication with the local community.

2.6 Overall advice to DECC

Towards the end of Day 2, participants were asked to consider everything they had learned across the two days and formulate one piece of advice for DECC, responding to the question:

What main thing does DECC need to get right?

Each participant wrote one short piece of advice on a post-it note. These were then grouped into themes (see **Appendix 12** for a full list).

At the Swindon workshop, participants focused on four key areas: communication / engagement / education, honesty and community representation. Specific comments included the need to: listen to community input; engage widely and early; maintain two-way communication and transparency; be ethical and honest; educate people to demystify preconceptions; and recruit wisely to the CRG.

Participants in Manchester also highlighted the importance of communication / engagement / education and honesty. Specific comments included the need to educate and engage with the community and be upfront and honest. Other areas covered by these participants included: advice on the funding process (ensuring fair distribution and avoiding corruption); minimising disruption or impacts to communities – or ensuring maximum benefit; and staying aware of the long-term nature of the process in terms of impacts and evolution of the process.

PART THREE:

Overarching observations

3.1 Views and values

3.1.1. Knowledge base

It is clear from the baseline exercise (see section 2.1) that none of the participants came to this process with a high level of knowledge about radioactive waste. This was in line with the desired sample, so that conversations could be undertaken with a relatively “fresh” group of members of the public, without being unduly influenced by preconceived (positive or negative) ideas.

By the close of the second workshop, participants’ self-reported levels of knowledge about radioactive waste had increased noticeably – facilitated by the information received during the workshops and the presence of specialists able to answer questions and engage in conversations. A number of participants made comments during Day 2 related to increasing knowledge. These tended to focus on two areas:

- Comments implying that their increased knowledge made them less worried about the GDF process than they might otherwise have been.
- Multiple comments (during the test of public support discussions) stressing the need for members of the public to be able to make informed decisions when it came to a survey or referendum.

The process and materials had been designed to engage and sustain interest, while maintaining balance and accuracy of information. Several participants also commented that the dialogue process had been far more interesting than they had anticipated.

These observations indicate a clear capacity amongst participants to absorb, understand and apply new knowledge of a fairly complex subject in order to form views and debate key issues (although some conversations were noticeably more challenging, for example where the topic was difficult to connect to people’s lives and experience). Participants were clear that, for others being asked to form opinions on this subject, knowledge and understanding of the issues would be critical – for example to avoid on-the-spot reactions to words such as “nuclear”.

3.1.2. Trust base

The baseline exercise indicated low levels of overall trust in the ability of the Government to make the right decisions about nuclear waste. By the end of the two workshops there had been little change – suggesting a disconnect between increased knowledge and increased trust (although, as discussed above, potentially a link between increased knowledge and reduced concern).

Further exploration made it clear that most participants simply did not trust the Government in general, with several people referencing past experience of not being listened to or disagreeing with Government decisions. Others commented that as the GDF process was Government policy, it would inevitably go ahead anyway and it was just a question of where and when rather than if.

The distinction between DECC and the Government made by participants in the Day 2 workshops is interesting. More than half of the participants in Manchester indicated that they would have reported increased trust levels had the question been asked about DECC rather than the Government, citing positive experiences with the specialists in the room as a driver. Participants in Swindon also made positive comments about their experience with and trust in the specialists in the room.

This raises two points. Firstly, participants seemed to disconnect DECC from “the Government”. This may be because, as a result of the workshops, they could connect DECC with a human face, or because they were making a mental split between civil servants and politicians, or some other reason. Secondly, this finding emphasises the impact of positive interactions with organisational representatives – which has implications for the level of face to face engagement that might be desirable as the GDF process progresses.

3.1.3. Range and strength of views

Participants expressed a broad range of views both within and between locations. Findings indicate some clear areas of agreement, and other areas where participants expressed very different views (see 3.1.5. below). In some cases, by listening to the points of view of other participants, certain individuals clearly changed their mind on a specific topic. In many other cases, they were un-swayed. This suggests a balance between participants putting across their own viewpoints and listening to others.

It was evident that many participants had strong views, particularly on subjects they felt familiar with such as the role of councils in community representation. As is always the case in this type of process, some participants were naturally vocal and able to present their views more strongly than others. Facilitators made efforts to involve all participants in conversations and to actively engage those who were less forthright in expressing their views.

3.1.4. Underlying reasoning and values

It was noticeable that – particularly during conversations involving discussion of structures and representation – participants drew on their existing knowledge and experience, with many citing examples of previous local processes in support of their views. However, frequent references to the length of the process and questions about future considerations demonstrated that participants were also able to take themselves out of the present and extend their thinking to potentially unfamiliar territory (though note the point about less familiar topics presenting more of a challenge).

Given the nature of the sample, it is perhaps not surprising that there were no obviously strong pro- or anti-nuclear voices in the room, although some participants commented on underlying associations of the word “nuclear” with fear or negativity amongst the general public.

One thread underlying the whole process was that of trust. The baseline exercise shows that participants came into the room with a relatively low level of trust in the Government, and as conversations progressed, it was clear that, for some, this extended to local as well as central

Government. However, this did not seem to overshadow conversations, rather adding an air of “healthy scepticism” to many of the conversations and lines of questioning.

Across many conversations, participants frequently referenced the safeguarding of community interests, or specific parts of the community such as future generations. This is perhaps unsurprising given the subject for many of the discussions, but does suggest participants were working with the interests of “the group” rather than “the individual” in mind. Indeed, participants often referenced the need to avoid self-interest, corruption, or the undue influence of political or business interests – indicating a shared sense of ethical behaviour and social justice.

The extent to which this was influenced by the framing and set up of the workshops and discussion sessions is unclear. Another point to note is that participants were asked questions without reference to specific communities. Asking about “a hypothetical community” and “your own community” could potentially lead to different responses – indeed there were indications that this might be the case, for example based on some comments from the Swindon workshop.

“If it’s going to be miles away from your house in the middle of nowhere you’re not going to be so worried as if it’s right next to me.”

Swindon, workshop 1

3.1.5. Areas of agreement and divergence

There were a number of areas where participants appeared to express a strong level of consensus around particular issues. These included:

- Overall lack of trust in “the Government”.
- Involvement of community interests in a community representative group. Involvement of, or access to, independent specialists and regulators.
- The need for transparent processes and regular communication between all parties (e.g. RWM, DECC, community representative group, funding panel, local community) at every stage of the GDF process.
- Use of a mixed method approach for a test of public support – primarily an open consultation followed by a referendum, perhaps with involvement of a representative survey at certain stages to gauge local feeling.
- Avoiding personal interest/gain impacting decisions (e.g. around entering into discussions, funding decisions, etc.).
- The presence of diversity on a funding panel (skills, experience, interests, backgrounds).

There were other areas where views between participants tended to diverge or where messages were less clear, including:

- The degree to which local councils genuinely represent their communities.
- Involvement of certain organisations such as business interests, NGOs and councils in a community representative group.
- Coverage of a potential referendum or other test of public support.
- Who and how to decide to exercise a right of withdrawal.
- Precise criteria for allocating funding (although generally, maximising benefits to the local community was popular, as was the suggestion that each community should be able to set its own priorities).
- Precise skills and qualities desirable on a funding panel.

Some participants made comments that were clearly influenced by their personal situation e.g. age or location (e.g. rural). However, there appear to be no differences between participants' views at the Swindon and Manchester workshops that can be clearly attributed to their location (north versus south).

3.2. Areas of interest

3.2.1. Lines of questioning and discussion

Overall, participants tended to stay focused on the specific areas of discussion as defined by the workshop process – probably due to a combination of facilitators being present to keep the conversations on track, and the ability to ask questions early on in the process, as well as throughout the workshops via the graffiti wall.

Those earlier Q&A sessions covered a wide variety of topics. Although most were specific to radioactive waste and geological disposal, some participants asked contextual questions around energy policy and links to other issues such as fracking. See **Appendix 13** for a list of all questions raised across the four workshops, grouped by theme. The range of questions raised has implications for the nature of information-giving materials or processes within the GDF siting process – for example the need to provide clear context on issues such as energy policy and confirm exactly which decisions have already been made.

3.2.2. Points for further exploration

In any future similar public dialogue processes, it would be worth considering the following points for further exploration with other groups of members of the public:

- Testing the areas of broad agreement to see whether these hold true.
- Testing the areas of divergence to see if any firmer conclusions can be drawn, for example coverage of a referendum (and others listed above in section 3.1.5.)
- Extending some of the topics into further detail – for example the potential for observers and advisors to be involved in a community representative group.

Appendices

| | |
|----------------------------------------------------------------------------------------------------|-----|
| Appendix 1: Independent Oversight Group and Community Representation Working Group membership..... | 62 |
| Appendix 2: Recruitment questionnaire | 63 |
| Appendix 3: Participant demographics..... | 71 |
| Appendix 4: Workshop process..... | 72 |
| Appendix 5: List of materials by workshop..... | 81 |
| Appendix 6: Workshop 1 presentation: radioactive waste | 82 |
| Appendix 7: Workshop 1 presentation: a permanent solution / geological disposal..... | 85 |
| Appendix 8: Workshop 1 presentation: finding a site | 90 |
| Appendix 9: Workshop 2 presentations – key slides..... | 94 |
| Appendix 10: Handout materials and posters from all workshops | 96 |
| Appendix 11: Baseline exercise – what does community mean to you? | 113 |
| Appendix 12: Final exercise in workshop 2 – overall advice to DECC | 115 |
| Appendix 13: Participant questions across all workshops | 117 |

Appendix 1: Independent Oversight Group and Community Representation Working Group membership

Independent Oversight Group (IOG) members

- Brian Clark – Aberdeen University
- David Collier – White Ox Management Consultancy
- Susan Molyneux-Hodgson – Sheffield University
- Gerry Thomas – Imperial College

Community Representation Working Group (CRWG) members

- Natalyn Ala – Geological Disposal Facility Siting Director for Radioactive Waste Management.
- Judith Armit – Local Partnerships LLP
- Holmfridur Bjarnadottir – land-use planner
- Professor Andrew Blowers – Open University
- Kirsty Gogan – expert in climate and energy communications
- Lisa Levy – stakeholder engagement professional
- Phil Matthews – Nuclear Legacy Advisor Forum (NuLeAF)
- Professor Nick Pidgeon – Cardiff University
- Phil Richardson – Geological Society
- Phil Stride – head of the Thames Tideway Tunnel
- Cherry Tweed – Chief Scientific Advisor for Radioactive Waste Management.
- Julian Wain – consultant and advisor specialising in regeneration and housing
- HM Treasury official
- Department for Communities and Local Government – Deputy Director for Democracy

Appendix 2: Recruitment questionnaire

| | |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Name of survey | DECC / OND – GDF: Screener |
| Version | 1 |
| Author(s) | Cordes, Anna |
| Contact | 0044 (0)207 656 5756 |
| Panel | <p>T1: INTRODUCTION: Text</p> <p>"Good morning / afternoon, my name is X and I work for TNS BMRB, an independent research organisation.</p> <p>We have been asked to carry out some recruitment for some public dialogues about nuclear energy and related issues on behalf of the Department of Energy and Climate Change.</p> <p>A public dialogue is where we get groups of the public, and experts on a subject together to think about the best way forward around difficult issues – in this case around nuclear issues in the UK.</p> <p>We would like to know more about your views on and perceptions of nuclear issues in the UK to inform public policy on this subject. You are not expected to have any prior knowledge of the subject.</p> <p>There will be two sessions in an area that is local to you, [Swindon dates: Saturday 20th February and the 5th of March] / [Manchester dates: Saturday 27th February and the 5th of March]. We will offer £180 (in total over the course of the two events) as a thank you for your time, but you will need to attend both sessions. During the sessions you will be asked to review materials produced by DECC and their advisors, comment on them and to take part in small group activities.</p> <ul style="list-style-type: none"> • The research is completely voluntary, anonymous (nothing will be attributed to you as an individual) and confidential • TNS BMRB is completely independent • The information you give will be used for research purposes only • TNS BMRB will not give the clients any details of respondents that could be traced back to them – unless you give your permission to be re-contacted by them at the event itself. <p>We were wondering if you would be interested in taking part?"</p> <p>1. Yes – Proceed with screener 2. No – CLOSE</p> |

Sample frame

| | | Swindon | | Manchester | | |
|-----------------------|-----------------------------------------------------|------------|--------|-----------------------------------------------------------|-------------------------|----------------------------------------------------------------------------|
| | | Population | Quota | Population | Quota | |
| Gender | Female | 50% | 13 | 50% | 13 | |
| | Male | 50% | 12 | 50% | 12 | |
| Age | Swindon | Manchester | c. 20% | 8 | c. 19% | |
| | 18–34 | 16–24 | | | | |
| | 35–64 | 25–44 | c. 40% | 12 | c. 35% | |
| | 65+ | 45 + | c. 12% | 5 | c. 30% | |
| | | | | | 7 (maj. to be under 65) | |
| Highest qualification | No qualifications | | 21% | 5 | 17% | 5 |
| | Level 1–2 (inc. apprenticeships) | | 39% | 10 | 26% | 7 |
| | Level 3 | | 12% | 4 | 18% | 5 |
| | Level 4+ | | 23% | 6 | 31% | 9 |
| Ethnicity | White British (Swindon) / White Groups (Manchester) | | 85% | 20 | 67% | 16 |
| | Non-White British | | 15% | 5 (to include key groups in area – White Other; Asian) | 33% | 9 (to include key groups in area – Asian residents and black residents) |
| Location | Urban | | – | 7 | – | 7 |
| | Semi-rural / rural (areas surrounding Swindon town) | | – | 18 | – | 18 |

Index

- Q001 – Q019: Speaking in groups
- Q002 – Q008: Membership of a group which campaigns on nuclear issues
- Q003 – Q010: Current or former involvement with the nuclear industry
- Q004 – Q011: Employment
- Q005 – Q012: Involvement with nuclear issues
- Q006 – Q013: Involvement with local council
- Q007 – Q014: Nuclear part of portfolio
- Q008 – Q016: Media / Journalism
- Q009 – Q015: Market Research Participation
- Q010 – Q005: Home location
- Q011 – Q003: Highest level of education / qualification
- Q012 – Q004: Respondent Age
- Q013 – Q007: Children in household
- Q014 – Q002: Ethnicity
- Q015 – Q017: Dietary requirements

- Q016 – Q018: Access requirements?
- Q017 – Q006: Participant address
- Q018 – Q001: Gender
- Q019 – Q016_Copy_1: Recruitment method and location

Q001 – Q019: Speaking in groups**Single coded****Not back**

How comfortable do you feel contributing and speaking in group conversations among those you do not know?

Please code

Normal

- | | | |
|---|--------------------------|-----------------------------------------|
| 1 | <input type="checkbox"/> | Extremely comfortable |
| 2 | <input type="checkbox"/> | Moderately comfortable |
| 3 | <input type="checkbox"/> | Comfortable |
| 4 | <input type="checkbox"/> | Not comfortable, but I would contribute |
| 5 | <input type="checkbox"/> | Not at all comfortable – CLOSE |

Q002 – Q008: Membership of a group which campaigns on nuclear issues**Single coded****Not back**

Are you or any of your immediate family an employee (or a previous employee) or an active member of an environmental charity or pressure group who campaigns on nuclear issues?

Single code

Normal

- | | | |
|---|--------------------------|-------------|
| 1 | <input type="checkbox"/> | Yes – CLOSE |
| 2 | <input type="checkbox"/> | No |

Q003 – Q010: Current or former involvement with the nuclear industry**Single coded****Not back**

Are you or any of your immediate family, a current or former employee of or associated with organisations involved in **regulating or representing the nuclear industry**? This could be building, running or decommissioning nuclear power plants, any part of the nuclear supply chain or managing nuclear waste.

Single code

Normal

- | | | |
|---|--------------------------|-------------|
| 1 | <input type="checkbox"/> | Yes – CLOSE |
| 2 | <input type="checkbox"/> | No |

Q004 – Q011: Employment**Single coded****Not back**

Do you work for a local authority?

Single code

Normal

- 1 Yes
 GO TO **Q005 – Q012**
- 2 No
 GO TO **Q006 – Q013**

Q005 – Q012: Involvement with nuclear issues**Single coded****Not back**

[If employed at a local authority] are nuclear issues dealt with by your department?

CODE

Normal

- 1 Yes – CLOSE
- 2 No

Q006 – Q013: Involvement with local council**Single coded****Not back**

Are you an elected councillor?

Normal

- 1 Yes
 GO TO **Q007 – Q014**
- 2 No
 GO TO **Q008 – Q016**

Q007 – Q014: Nuclear part of portfolio**Single coded****Not back**

[If employed at a local authority] are nuclear issues in your portfolio?

Single code

Normal

- 1 Yes – CLOSE
- 2 No

Q008 – Q016: Media / Journalism**Single coded****Not back**

Do you work in environmental journalism / media?

Single code

Normal

- 1 Yes – CLOSE
- 2 No

Q009 – Q015: Market Research Participation**Single coded****Not back**

Have you taken part in market research in the last 6 months?

Single Code

Normal

- 1 Yes – CLOSE
- 2 No

Q010 – Q005: Home location**Single coded****Not back**

Which of the below best describes the area in which you live?

Single code

Normal

- 1 Urban (City centre / Large town / Suburb of a city/town (still urban))
- 2 Semi-rural (Out of town suburb/fringes of a town near to farming country/countryside / Smaller town surrounded by countryside / Large village surrounded by countryside)
- 3 Rural (Small village/Hamlet/Farm or isolated rural property)

Q011 – Q003: Highest level of education / qualification**Single coded****Not back**

What is the highest education qualification you have attained?

Single code

Normal

- 1 No qualifications
- 2 GCSEs or equivalent (Level 1 / 2 depending on grade)
- 3 GCE AS and A Level /National Vocational Qualification (NVQ) Level 3 / Vocational Qualifications Level 3 / Advanced Diploma Welsh Baccalaureate Advanced (Level 3)
- 4 Higher National Certificates / Certificates of Higher Education (Level 4)
- 5 NVQ Level 4 / Higher National Diplomas (HND) / Higher National Certificates (HNC) / Vocational Qualifications (Level 5)
- 6 Foundation Degree/Diplomas of Higher Education/Higher National Diplomas (Level 5)
- 7 Bachelors Degree (Level 6)
- 8 Masters Degree or higher (Level 7)

Q012 – Q004: Respondent Age**Single coded****Not back**

Which of the following age categories do you fall into?

Single code

Normal

- 1 Under 18 – CLOSE
- 2 18–24
- 3 25–34
- 4 35–44
- 5 45–64
- 6 65 +

Q013 – Q007: Children in household**Single coded****Not back**

How many children, if any, do you have living in your household?

| |
|------------------------------------------------------|
| Single code <i>In each location recruit a mix</i> |
|------------------------------------------------------|

Normal

- | | | |
|---|--------------------------|----|
| 1 | <input type="checkbox"/> | 0 |
| 2 | <input type="checkbox"/> | 1 |
| 3 | <input type="checkbox"/> | 2 |
| 4 | <input type="checkbox"/> | 3 |
| 5 | <input type="checkbox"/> | 4+ |

Q014 – Q002: Ethnicity**Single coded****Not back**

How would you describe your ethnicity?

| |
|-------------|
| Single code |
|-------------|

Normal

- | | | |
|----|--------------------------|-----------------------------------------------|
| 1 | <input type="checkbox"/> | White British |
| 2 | <input type="checkbox"/> | White Other |
| 3 | <input type="checkbox"/> | Asian or Asian British |
| 4 | <input type="checkbox"/> | Black or Black British |
| 5 | <input type="checkbox"/> | Mixed or Multiple |
| 96 | <input type="checkbox"/> | other, namely... <i>*Open *Position fixed</i> |

Q015 – Q017: Dietary requirements**Open****Not back**

Do you have any special dietary requirements? If yes, what are they?

| |
|------------------------------------------|
| CAPTURE ANY SPECIAL DIETARY REQUIREMENTS |
| |

Q016 – Q018: Access requirements?**Open****Not back**

Do you have any access requirements? e.g. visual/hearing impairment, disabilities, the need for a carer to attend with them. If yes, what are these requirements

PLEASE CAPTURE ANY SPECIAL ACCESS REQUIREMENTS

Q017 – Q006: Participant address**Open****Not back**

Please can you let me know your postal address?

CAPTURE RESPONDENT ADDRESS

Q018 – Q001: Gender**Single coded****Not back**

Is the respondent male or female

DO NOT ASK – code

Normal

- 1 Male
2 Female

Q019 – Q016_Copy_1: Recruitment method and location**Open****Not back**

How did you recruit this individual?

DO NOT ASK – Please capture method and location of recruitment

Appendix 3: Participant demographics

| | | Manchester | Swindon |
|------------------------------------------|--------------------------------------|------------|-----------|
| Gender | Female | 15 (56%) | 14 (52%) |
| | Male | 12 (44%) | 13 (48%) |
| Age | 18–24 (Manchester) / 18–34 (Swindon) | 6 (22%) | 7 (26%) |
| | 25–44 (Manchester) / 35–64 (Swindon) | 13 (48%) | 15 (56%) |
| | 45+ (Manchester) / 65+ (Swindon) | 8 (30%) | 5 (19%) |
| Location | Urban | 10 (37%) | 10 (37%) |
| | Semi-rural | 11 (41%) | 8 (30%) |
| | Rural | 6 (22%) | 9 (33%) |
| Ethnicity | Non-white British | 10 (37%) | 4 (15%) |
| | White British | 17 (63%) | 23 (85%) |
| Highest educational qualification | No qualifications | 5 (19%) | 4 (15%) |
| | Level 1–2 (incl. apprenticeships) | 7 (26%) | 10 (37%) |
| | Level 3 | 5 (19%) | 2 (7%) |
| | Level 4+ | 9 (33%) | 10 (37%) |
| | Unknown | 1 (4%) | 1 (4%) |
| Total participants | | 27 | 27 |

Appendix 4: Workshop process

Day 1

Aims:

- Enable participants to broadly understand the history and context to geological disposal
- Capture public views on community definition and representation, in direct relation to the choices facing DECC, namely:
 - Initial contact from a community
 - Forming a representative body
 - How the representative body could build and maintain trust of its community
- Enable participants to be motivated to complete 'homework' and return for Day 2

| | |
|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 0800 | Set up |
| 0915 | Specialist briefing |
| 0930 | <p>Arrivals, registration, tea/coffee Facilitation team meet, greet, and put people at ease. Distribute name badges and manage sign in.</p> <p>Arrivals exercise.</p> <p>1. Place a sticky dot on 2 scales (flips on the wall):</p> <ul style="list-style-type: none"> • “How much do you know about nuclear waste?” Scale from “nothing” to “lots” • “How much do you trust the government to take the right decisions about nuclear waste?” Scale from “not at all” to “completely” <p>2. <i>What does a community mean to you?</i> A couple of quick responses onto post-its then on to a blank flip</p> <p>Output: All participants orientated, comfortable, and ready for the day.</p> |
| 1000 | <p>Introductions and background</p> <ul style="list-style-type: none"> • What’s today about? • Who commissioned today’s workshop? • The aims of the workshops • The boundaries of the workshop • Agenda • Who is in the room? • Housekeeping, working agreements, etc. • Graffiti wall – to post thoughts that occur to you not covered in discussions. <p>Introductions. Quick round of introductions at tables.</p> <p>Facilitator reflects on the different interpretations of community with the group (see arrivals exercise above).</p> <p>Output: participants understand what the dialogue is about and why, informal and relaxed tone is set, and everyone knows at least one other person in the room. The difficulties of defining and understanding ‘community’ is acknowledged openly by the facilitator.</p> |

| | |
|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1025 | <p>What is radioactive waste?</p> <p>DECC Presentation 1 Covering:</p> <ul style="list-style-type: none"> – Nuclear history, sites in UK – What radioactivity is, half lives – What waste is, how much, where it is in UK <p>In pairs, briefly think of a question for the specialists based on the presentation: anything you want to know or don't understand?</p> <p>At tables, take each question in turn and invite the specialists to respond.</p> <p>Plenary. Briefly share couple of the key points that came up at tables, particularly helpful clarifications from specialists, surprising learning etc.</p> <p>Output: participants understand the basic context of radioactive waste management, as well as being reassured that they can ask questions openly and have them well answered.</p> |
| 1100 | <p>A permanent solution, and geological disposal.</p> <p>DECC presentation 2</p> <ul style="list-style-type: none"> – How waste is managed now – Needing a permanent solution – Seeking independent advice, CoRWM – Recommendation for geological disposal – What geological disposal is – Why it is preferred? – Multi-barrier concept – Safety – Overseas work <p>In pairs, briefly think of a question for the specialists based on the presentation: anything you want to know or don't understand?</p> <p>At tables, take each question in turn and invite the specialists to respond.</p> <p>Plenary. Briefly share couple of the key points that came up at tables: particularly helpful clarifications from specialists, surprising learning etc.</p> <p>Output: participants understand the rationale for the policy of geological disposal, including the basics of safety.</p> |
| 1130 | <p><i>Tea break</i></p> <p>Opportunity for conversation with specialists Sets of posters placed on walls Worksheets to places at tables</p> |
| 1150 | <p>Discovery session</p> <p>Brief: Everyone has a worksheet. Find someone on your table you haven't talked to yet, introduce yourself and then answer the questions on your worksheets by browsing round the posters in the room.</p> <p>All the answers are there on the posters – you have to find them! Write your answers to the questions on your worksheets, together with any thoughts.</p> |

| | |
|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | <p>Posters cover:</p> <ul style="list-style-type: none"> – Size of a GDF, what it looks like – Time: How long it takes to site and build, including timeline – Impacts – Benefits – Who is involved: DECC, RWM, regulators <p>Worksheets focus on key facts it will be useful for participants to know and remember before moving on to other discussion.</p> <p>In pairs – browse round the posters, fill in the worksheets</p> <p>At tables, discuss your answers to each question, allowing free conversation about e.g.:</p> <ul style="list-style-type: none"> – Anything you found surprising? – Anything you don't understand? and – What else do you want to know? <p>Plenary. Briefly share couple of the key points that came up at tables: particularly helpful clarifications from specialists, surprising learning etc.</p> <p>Output: participants understand additional key detail about a GDF that starts to move towards what is needed to inform a meaningful conversation about communities in the context of a GDF. The 'discovery' method simply gets people moving about, avoids another presentation, and appeals to people who prefer to learn by discussing information.</p> |
| 1225 | <p>Finding a site.</p> <p>DECC presentation 3</p> <ul style="list-style-type: none"> – History – Where we are now: current policy and key dilemmas/issues – Community representation: initial contact, representative group/body – Testing public support, including RoW – Community investment <p>In pairs, briefly think of a question for the specialists based on the presentation: anything you want to know or don't understand?</p> <p>At tables, take each question in turn and invite the specialists to respond.</p> <p>Plenary. Briefly share couple of the key points that came up at tables: particularly helpful clarifications from specialists, surprising learning etc.</p> <p>Output: participants understand the basics about previous experiences and the rationale for voluntarism, and why the concept of 'community' is so important in implementing this policy.</p> <p>Any final questions before lunch?</p> |
| 1300 | <p><i>Lunch</i></p> <p>Distribute hard copies of the quiz questions for all (including observers and specialists)</p> |
| 1345 | <p>Quiz</p> <p>Remix the tables: these become the 3 "teams" for the rapid quiz.</p> <p>Multiple choice questions asked in plenary by facilitator, participants liaise and note answers.</p> |

| | |
|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | <p>Results: swap for marking, then run through the answers on slides. Award 'prize' for winners (box of chocolates).</p> <p>Output: participants are confident on the key foundation facts to ensure a meaningful conversation later.</p> |
| 1400 | <p>Community representation</p> <p><i>Show the relevant slide on Community representation</i></p> <p>Initial contact with RWM: exercise</p> <p>Brief: At your tables, read out the six 'people portraits'. Imagine these people being the first to contact RWM to learn more about a GDF in your community.</p> <p>Discuss each of them in turn:</p> <ul style="list-style-type: none"> – How would you feel about each person/org contacting RWM? – Are you more/less comfortable with any of them? Why? – What are the qualities that make someone 'eligible' or not? – Is anyone excluded, and if so, on what grounds? – Is there anything else important to get right here? <p>People portraits include:</p> <ul style="list-style-type: none"> – Head of county council – Clerk of parish council – Farmer – Interested resident – Owner of four holiday homes – Leader of a business cluster on potential transport route <p>Plenary. Collect in views across the three tables:</p> <ul style="list-style-type: none"> – Where is there consensus on the qualities of eligibility and why? – Where is there divergence and why? – Anything else to get right here? (information, time etc). <p>Output: Views from the public about who should be eligible to contact RWM to learn more, and a list of the qualities of eligible people/organisations. List of other aspects to get right here.</p> |
| 1440 | <i>Tea break</i> |
| 1500 | <p>Forming a representative group: exercise</p> <p>Brief. Imagine that [one of the trusted people above] has contacted RWM, and discussions have begun regarding a GDF in <u>your</u> community/area. DECC is envisaging there coming a point where the discussion needs widening out to fully represent the community's interests. But what might this mean? Who might sit on this representative group, to talk to RWM and government and discuss in detail what a GDF might mean, where it might go, what the geology is like, and what the impacts and benefits might be?</p> <p>At tables, imagine yourself in your community. Each participant takes <i>three</i> post-its and writes two people/organisations you <i>would</i> want to be on the 'representative group' for your community, and one you <i>wouldn't</i> want on it. Stick the post-its on two blank flipcharts on the table: 'in' and 'out'. Ask for two volunteers to cluster them rapidly (at each table), where possible. Facilitator debrief the exercise by asking:</p> |

| | |
|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | <ul style="list-style-type: none"> – Tell me about X post-it: why are they in/out? – What is it about this person/organisation that makes you want them in/out? – Does everyone agree with X being in, for the same reasons? – Where differences of view exist, why is that, what underlies it? <p>Plenary. Collect views across the three tables:</p> <ul style="list-style-type: none"> – Where is there consensus on who should be included? – Where is there divergence and why? – What are the qualities of the people/organisations that make you want them on the group to represent you? – Anything else to get right in this here? <p>Output: Views from the public about who should be on a representative group, and a list of the qualities that these people/organisations need to demonstrate in order to create confidence. List of other aspects to get right here, as they arise.</p> |
| 1545 | <p>Representing the community – making sure it’s a two-way street</p> <p>Brief. Imagine the next part of the process (at tables). A representative group now exists, and it’s got all the people and organisations that you wanted on, and none of the people you didn’t want on i.e. ideal membership. But what obligation do they have to maintain a two-way street of communication with you as residents? Or do you trust them to manage it on your behalf?</p> <p>At tables, facilitators ask:</p> <ul style="list-style-type: none"> – How would you want them to keep you updated? How often? – How would you want to input views, if at all? How often? – How might the representative group make sure it’s in touch with what residents want? – Anything else to get right at this here? <p>Plenary. Collect in views across the three tables: rapid fire generating a list.</p> <p>Output: Views from the public about their expectation for how a ‘representative group’ might maintain public confidence that they are being adequately represented.</p> |
| 1610 | <p>Closing session</p> <p><i>Hand out homework sheets</i></p> <p>Homework brief. You have two options on your homework sheet:</p> <ol style="list-style-type: none"> 1. Find out about a big decision made in your area, either online or by asking around. Spend 30mins finding out about it and how the decision was made (online etc). What was the decision? Who took it? How did they inform residents before and after they had decided? How did they ask for residents’ views, if at all? Write down what you liked and didn’t about the decision making process. 2. Or: Talk to a friend or family member. Tell them about today’s workshop and what you’ve learnt about radioactive waste and the GDF. See what they think. Anything different or surprising come up? Write down notes of what they think. <p>Closing, to cover: evaluation; reminder on date/time of re-convened meeting; confirmation of process for incentives.</p> |
| 1630 | <p>Debrief – 3KQ, DECC and RWM to stay behind for a quick debrief; other observers if they wish.</p> |

Day 2

Aims:

- Capture public views on the testing of public support and community investment, in direct relation to the choices facing DECC, namely:
 - What method of testing public support to require or provide guidance on
 - How the public perceive the pros and cons of each method of testing support
 - How should the right of withdrawal be exercised?
 - The qualities that the public value in projects funded by community investment
 - The qualities that a funding award panel should have to maintain trust
- Participants who understand how the work will be carried forward and the results used

| | |
|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 0800 | Set up |
| 1000 | <p>Welcome Agenda, housekeeping, focus of the day.</p> <p>Homework: chat in pairs. Which homework task did you do? What did you find out? Does it change anything you said or thought on Day 1?</p> <p>Plenary: observations/questions on homework and/or Day 1</p> <p>Quick context/reminder: Show DECC timetable/process slide – DECC talks through it briefly, as context and reminder for the following sessions.</p> |
| 1030 | <p>The test of public support</p> <p><i>Reminder on the relevant slide on Test of Public Support</i></p> <p>Brief plenary Q&A</p> <p>Have you ever had your views tested for any local or national decision or heard of this happening elsewhere? How was this done?</p> <p>Discuss in pairs if useful first, then debrief in plenary. Encourage the capturing of additional ideas on the graffiti wall.</p> <p>Testing public support: exercise Brief: Imagine these three methods being used in your community (there are lots of options, but today we'll look at these three). For each, facilitator explores:</p> <ul style="list-style-type: none"> – How do you feel about this method? – What do you like/dislike about it? Why? – What would make you feel <i>more</i> comfortable with it? – When is best time to use this method? <p>Three method cards cover:</p> <ul style="list-style-type: none"> – Statistically representative public opinion survey – Local referendum – Open consultation and registration of views <p>Plenary: Collect in views across the three tables:</p> <ul style="list-style-type: none"> – Where is there consensus on the methods? – Where is there divergence and why? – Anything else to get right here? |

| | |
|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | <p>Output: Understanding of the qualities of the method chosen for testing public support that lead to public confidence and trust. Specific feedback and responses to the three main methods under consideration.</p> |
| 1130 | <i>Tea break</i> |
| 1150 | <p>The right of withdrawal <i>Show the relevant slide on the right of withdrawal (as a reminder of each bit of the process as we go).</i> Clarify the 2014 White Paper said that communities will have a right of withdrawal from discussions with the developer at any time in the siting process. DECC add in verbal explanation as needed.</p> <p>Right of withdrawal – exercise Brief: Continue the scenario we started last time. A community partnership is set up, and progressing well with RWM. Borehole investigations (to assess a potentially suitable site or sites) have started, and community investment has risen to £2.5m/yr, with some good projects being funded. However, a few of the organisations on the partnership now want to stop discussions: and they are calling for the right of withdrawal to be exercised.</p> <p>At your tables: Who is best to decide? How? When?</p> <ul style="list-style-type: none"> – The council? – The community representation group? – The wider community? – Other suggestions? – Not sure <p>At tables, use a grid on a blank flipchart with boxes titled with each of the bullets above. Place a pen/pencil/cup/whatever is handy in the box that best represents your view. (Have 2 minutes discussing with your neighbour first if desired).</p> <ul style="list-style-type: none"> – Why do choose the group you did? What is it that appeals? – How might the process in each case work, especially the ‘wider community’: same way as the test of public support? <p>Plenary – collect in views across the 3 tables, identifying consensus and divergence where possible.</p> <p>Output: Feedback on who should exercise the right of withdrawal in such a way that leads to public confidence and trust. Specific feedback and responses on the options raised.</p> |
| 1245 | <i>Lunch</i> |
| 1330 | <p>Community Investment <i>Reminder on the relevant slide on community investment</i></p> <p>Brief plenary Q&A</p> <p>Community investment: exercise Brief. Imagine each of your tables is the funding panel that has to decide – in the next 30 minutes – which projects can get funding from a fixed budget of £250K for this quarter. Your facilitator will show you 5 ‘potential projects’. Please read them out, discuss them, and try to decide which you want to fund the most and which the least (roughly rank in a line to structure the conversation), and most importantly please explain <i>why</i>. This exercise is based during the “£1m/yr part of the process” i.e. early days: not the bigger investment expected once a facility is built.</p> |

| | |
|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | <p>At tables, facilitator hands out the “project postcards” and gets participants to read them out one by one:</p> <ul style="list-style-type: none"> – New mechanical engineering course for sixth form college – Local enterprise scheme funding for young people – Restoration of wildlife reserve 40 miles away – Rebuilding of collapsed historic wall on private land – Mini-community project fund <p>Discuss each in turn:</p> <ul style="list-style-type: none"> – What do you like about it? Why? – What questions arise about it? Why? <p>More generally:</p> <ul style="list-style-type: none"> – Are there any types of project that seem to be missing? – Any projects that shouldn’t be allowed? – Why? <p>Plenary. Debrief and collect quick views on the projects, including what the qualities of the projects seemed to be that people liked.</p> <p>Output: A clear sense of what the public expect from community investment in this context (including the restrictions), and what qualities of investment projects tip their support one way or another.</p> |
| 1440 | <i>Tea break</i> |
| 1500 | <p>Community investment: exercise 2</p> <p>Brief: Before the tea break you pretended to be the funding panel. Now in reality:</p> <ol style="list-style-type: none"> 1. What skills/qualities are needed on a funding panel? Which people would you trust most to provide these? Why this person and not that? 2. What does the panel need to do to maintain the trust of the community? <p>Start in pairs to prompt discussion, then widen out to full table discussions.</p> <p>Plenary. Collect a few from each table.</p> <p>Output: Public views on who needs to be on a funding panel for them to trust it; views on other things a panel needs to do to maintain the trust of the panel on behalf of the community.</p> |
| 1540 | <p>Your final advice: What main thing does DECC need to get right?</p> <p>Brief. Given everything you’ve learnt in these two events, consider what key thing/s DECC need to get right and write the most important thing on a post-it. Come and stick up at the front on blank flipcharts.</p> <p>Discuss as time allows.</p> |

| | |
|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1600 | <p>Closing session</p> <p>Display the flipchart scales used at the start of the dialogue and the flip on communities:</p> <ul style="list-style-type: none"> • <i>“How much do you know about nuclear waste?”</i> • <i>“How much to do trust the government to take the right decisions about nuclear waste?”</i> • <i>“What does community mean to you?”</i> <p>Invite participants to place another dot on the scales to represent how they feel now, if any different from at the start. Two colours will allow discussion about the journey. For the ‘community’ flip, ask has anything changed in your views on this? Anything to add?</p> <p>In plenary, Facilitator draws out:</p> <ul style="list-style-type: none"> – What has the journey felt like? – How far have you come? What’s changed for you? – What helped? – What hindered? <p>Thank everyone for their participation. Invite DECC to say a few words reflecting on the workshops.</p> <p>Close workshop.</p> <p>Hand out evaluation forms.</p> <p>Issue incentives.</p> |
| 1630 | Debrief – 3KQ, DECC and RWM to stay behind for a quick debrief; other observers if they wish |

Appendix 5: List of materials by workshop

| Workshop 1 | Workshop 2 | Both workshops (materials contributed to / created by participants) |
|---------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------------------------|
| Presentation slides (see Appendices 6–8) | Presentation slides (see Appendix 9) | Sticky dot scales: knowledge and trust (see section 2.1 of main report) |
| Discovery posters (see Appendix 10) | Test of public support method cards (see Appendix 10) | Graffiti wall (see Appendix 13) |
| Discovery worksheet (see Appendix 10) | Community investment project cards (see Appendix 10) | “What does a community mean to you?” flipcharts (see Appendix 11) |
| Quiz (see Appendix 10) | | “Overall advice to DECC” flipcharts (see Appendix 12) |
| People portraits (see Appendix 10) | | |
| Homework sheet (see Appendix 10) | | |

Appendix 6: Workshop 1 presentation: radioactive waste

Department of Energy & Climate Change

What is radioactive waste?






Department of Energy & Climate Change

UK Nuclear History

In from the beginning

UK has been a "nuclear nation" since the late 1940s





- Early work in support of weapons programme
- World's first commercial nuclear power station
- Waste management and cleaning up sites were not priorities.



12

Department of Energy & Climate Change

Nuclear sites to manage



13

Department of Energy & Climate Change

Nuclear Fission

The basis of commercial reactors

Releases Energy
Heat
Sound
Light

Department of Energy & Climate Change

Radioactivity

Half-life is the time taken for radioactive nuclei to reduce to half that number:

- Uranium-238 = 4,468,000,000 years
- Caesium-137 = 30.3 years
- Plutonium-239 = 24,100 years
- Polonium-214 = 0.0001628 seconds

| Years | 1 year half-life | 0.5 year half-life | 5 year half-life |
|-------|------------------|--------------------|------------------|
| 0 | 1.0 | 1.0 | 1.0 |
| 1 | 0.5 | 0.707 | 0.871 |
| 2 | 0.25 | 0.5 | 0.707 |
| 3 | 0.125 | 0.354 | 0.596 |
| 4 | 0.0625 | 0.25 | 0.501 |
| 5 | 0.03125 | 0.177 | 0.422 |
| 6 | 0.015625 | 0.126 | 0.359 |
| 7 | 0.0078125 | 0.09 | 0.309 |
| 8 | 0.00390625 | 0.065 | 0.27 |
| 9 | 0.001953125 | 0.047 | 0.237 |
| 10 | 0.0009765625 | 0.034 | 0.21 |

Department of Energy & Climate Change

Waste for disposal

So what do we need to dispose of?

In total, the expected volume for disposal would fill the Albert Hall almost 8 times over, or 60% of Wembley stadium



Appendix 7: Workshop 1 presentation: a permanent solution / geological disposal

Department of Energy & Climate Change

A permanent solution: geological disposal

Department of Energy & Climate Change

So what do we do with all this?

Modern, safe and secure storage contains all this material in the short to medium term

But...

...this requires people to monitor and protect the materials being stored at the earth's surface

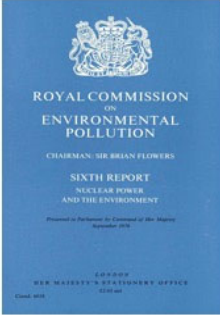


We would also need to constantly rebuild, repackage and monitor waste that will remain hazardous for hundreds of thousands of years at great risk and cost.

Department of Energy & Climate Change

The past... and moving forward

- Lower level waste disposal underway
- Sea dumping in the past
- Flowers Report 1976
- Nirex
- Independent advice sought



Department of Energy & Climate Change

Seeking independent advice

Committee on Radioactive Waste Management (CoRWM)
Independent committee considered all options for managing higher activity wastes.

Key recommendations:

- Geological Disposal is the best available approach
- Robust interim storage required
- Enhanced research and development programme on both storage and disposal
- Site selection must be based on engagement, partnership and willingness to participate

22

Department of Energy & Climate Change

Geological Disposal

The preferred solution

Drawing illustrative only, is not to scale and shows underground disposal tunnels and vaults

Department of Energy & Climate Change

Geological Disposal

What is it – big picture?

Geological Disposal Facility
 Surface facilities

0841-01-NDA

25

The Multi Barrier Concept
 Packaging barriers

| | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Waste Container/Canister • Provides physical containment during operations, and continues to contribute to containment after the facility is closed | Buffer/Backfill • Contributes to containment |
| Wasteform • Contributes to containment | Mass Backfill • Contributes to containment |
| Container • Additional overpack used for HLW/SF • Provides physical containment during operations, and continues to contribute to containment after the facility is closed | Geosphere • Geological disposal at depth in a suitable and stable environment provides isolation • Geological containment by preventing or delaying release |

ILW HLW

0842-01-NDA

26

Intermediate Level Waste Disposal Design Concept

0842-01-NDA

27

Department of Energy & Climate Change

High Level Waste / Spent Fuel Disposal Concept

28

Department of Energy & Climate Change

Why Geological Disposal?

CoRWM: Geological disposal is the best approach to deal with timescales of over thousands of years

Isolation from the surface environment protects the waste from:

- Climate change
- Sea Level changes
- Ice Ages
- Human intrusion
- Societal breakdown

International consensus on geological disposal

29

Department of Energy & Climate Change

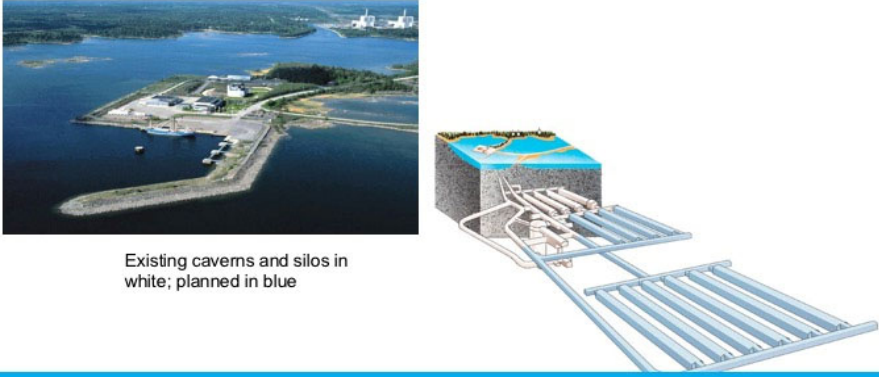
Safety

- Strict controls from 2 independent regulators
- Package design and facility design
- Multiple barrier approach
- Understanding the geology / hydrogeology
- Monitoring and potential retrievability
- Natural decay

30

Department of Energy & Climate Change

Sweden



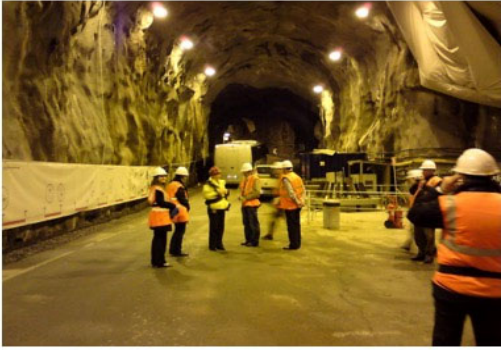
Existing caverns and silos in white; planned in blue

31

Department of Energy & Climate Change

Overseas Work

These things are a reality



32

Appendix 8: Workshop 1 presentation: finding a site

Department of Energy & Climate Change

Finding a site for a GDF

Department of Energy & Climate Change

Waste: what's happened so far?

- Recognised since 1970s that a long term plan is needed to manage our waste.
- Nirex work in 1980s-90s
- Then an independent body "CoRWM" considered every possible option including firing into space, under icecaps and simply continuing to store at the surface.
- Geological disposal seen as best approach.
- Led to 2008 White Paper.
- Initial interest from Shepway and Cumbria, but this siting process stopped in 2013.

38 Finding a site for a GDF

Department of Energy & Climate Change

Learning lessons

- Government remains committed to geological disposal
- Confident that overarching programme is sound and new nuclear build can continue
- Reflected on experience of the process to date
- Held a Call for Evidence in May/June 2013
- Consultation on revised siting process launched 12 September 2013

39 Finding a site for a GDF

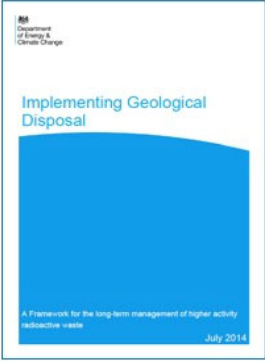
Department of Energy & Climate Change

New approach

New policy that:

- Provides more information about geology
- Clarifies the planning process for a geological disposal facility
- Answers important questions of detail about community representation and investment


All of this will happen before formal discussions between interested communities and the developer begin.



40 Finding a site for a GDF

Department of Energy & Climate Change

Geological disposal: making it happen




41 Finding a site for a GDF

Department of Energy & Climate Change

Community Representation

- 2014 White Paper: based on working with communities that are **willing to participate**
- Did not prescribe the detail

42 Finding a site for a GDF



Community Representation (2)

We currently envisage:

- 1 Geological screening, plus communication campaign
- 2 Invitation to communities
- 3 Initial contact from community/ies, to RWM
- 4 Early discussions
- 5 Form a representative group
- 6 Group handles discussions with RWM on behalf of the community, and communicates/engages appropriately


[We'll discuss this afternoon...](#)

43 Finding a site for a GDF


Test of Public Support

- In the 2014 White Paper, we:
 - committed to providing further information on a test of public support
 - emphasised that no one tier of local government should be able to stop members of the community from
- The test is intended to be a **one-off test of public acceptability**
- There has been no decision on **what the mechanism** would be for the test, **who should be involved**
- Communities will have a **right of withdrawal**
- [We'll discuss these on Day 2...](#)


7 Finding a site for a GDF


Community Investment

- The 2014 White Paper committed to providing early investment funding to communities engaging in the siting process
 - Up to £1 million per community/yr in the early stages
 - Up to £2.5 million per community/yr during borehole investigations
 - Significant investment once a community is committed to a GDF
- We need to define:
 - How funding should be routed to a community
 - Who should hold the investment funding
 - Examples of the types of project it could support

[\(we will discuss this on Day 2...\)](#)

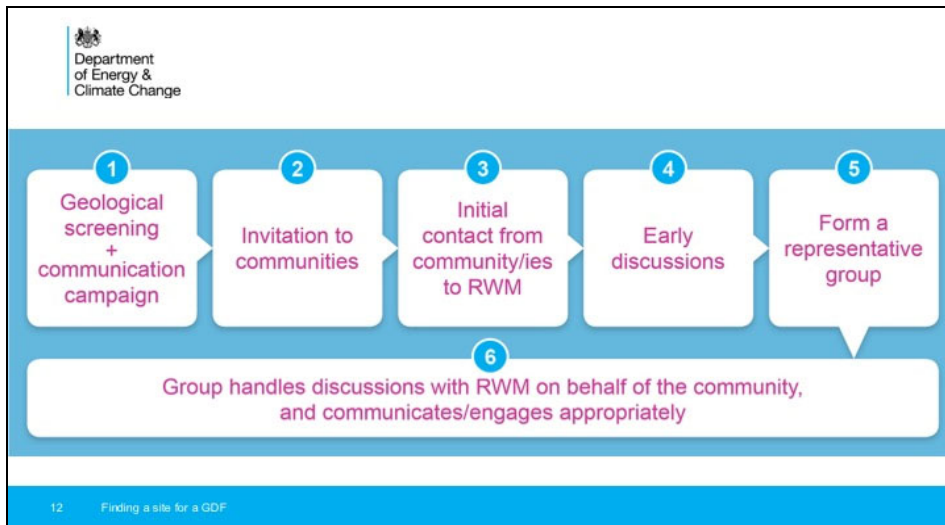
45 Finding a site for a GDF

 **Timescales – how long will it take**

| | | |
|--------------------|--------------------------------------------------------------------------------------------------|-----------|
| US WIPP | - operational since 2001 work commenced 1974 | |
| Finland | - siting began in 1983 facility to be operational ~ 2020 | |
| Sweden | - expression of interest in 1992, facility by ~ 2023 | |
| France | - siting began 1993 facility to be operational ~ 2025 | |
| Belgium | - facility planned to be operational in ~ 2040 | |
| Switzerland | - facility planned to be operational in ~ 2040 | |
| China | - facility anticipated ~ 2050 | |
| South Korea | - recommended schedule - underground lab site by operating by 2030, GDF operating by 2051 | 2020, lab |

46 Finding a site for a GDF

Appendix 9: Workshop 2 presentations – key slides




Department of Energy & Climate Change

Test of Public Support


- In the 2014 Government White Paper, we:
 - committed to providing further information on a test of public support
 - emphasised that no one tier of local government should be able to stop members of the community from participating in the process
- The test is intended to be a **one-off test of public acceptability** to be able to move forward with the siting process.
- There has been no decision on **what the mechanism** would be for the test, **who should be involved**, and **when** it should take place.

7 Finding a site for a GDF

 **Right of withdrawal**

- In the 2014 White Paper, we confirmed that :
 - Communities will also have a **right of withdrawal** from discussions with the developer at any stage in the siting process leading up to the test of public support.
 - If the community withdraws from discussions with the developer before the test of public support, the siting process in that community will stop.
- How the right of withdrawal happens and who has a say has not been decided upon.

7 Finding a site for a GDF

 **Community Investment**

The 2014 White Paper committed to providing early investment funding to communities engaging in the siting process

- Up to **£1 million** per community/year in the early stages
- Up to **£2.5 million** per community/year during borehole investigations
- **Significant investment** once a community is committed to a GDF

We need to define:

- The mechanisms by which funding should be routed to a community
- Who should hold the investment funding provided by UK Government
- **Examples of the types of project it could support**

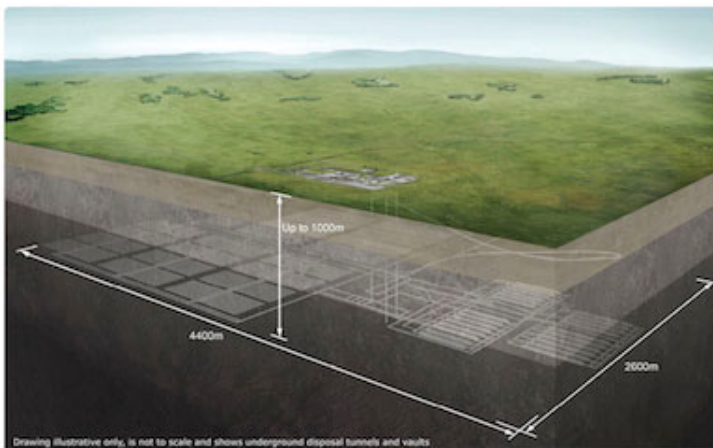
27 Finding a site for a GDF

Appendix 10: Handout materials and posters from all workshops

Workshop 1

Discovery posters

Likely size of a geological disposal facility



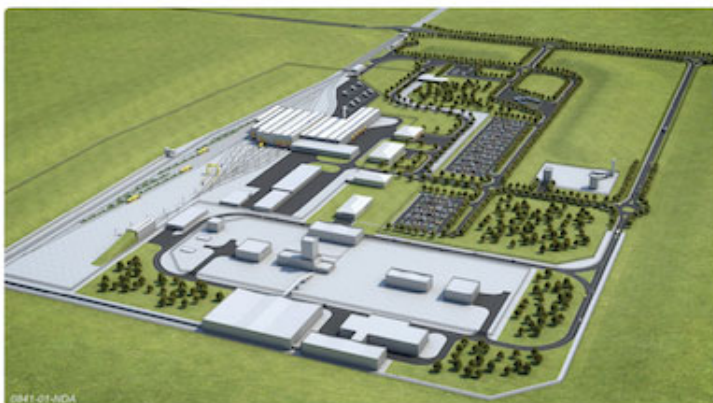
Depth beneath surface:
200–1000 m

Eiffel Tower:
324 m high

London Underground:
50–100 m deep

Underground facility:
15 km²

Equivalent of:
800 football pitches



Surface facility:
About 1 km²

Tallest building:
About 30 m

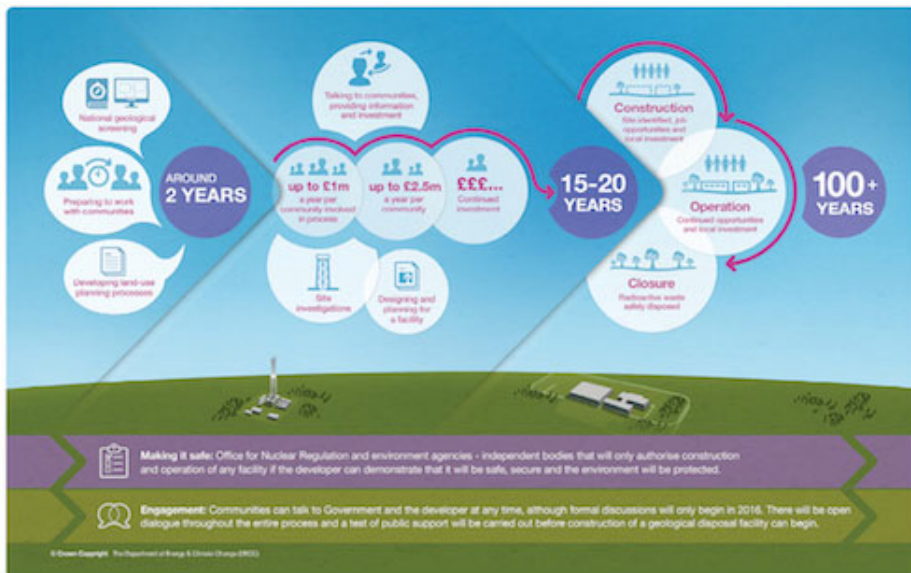
Time

How long will it take to site and build?

We can't be exactly sure how long it will take to site and construct a geological disposal facility, but we estimate about 25–30 years until it's ready to take waste.

This is based on everything needed to find a suitable safe site, and to design and build the facility safely. This roughly matches international experience from America, Sweden and Finland.

Below is a [timeline](#) showing the stages to site and build a GDF:



Benefits

What can local communities expect?

As construction is continuous through the facility's operation, it is estimated that there will be an average of 550 jobs each year that need to be filled, with peaks of 1,000 vacancies.

On top of this, it is expected that there will be a further 231 jobs* available in companies supplying goods and services to the facility. For instance, companies involved in the transport or packaging of waste to be disposed of in the facility.

There are also the secondary jobs that are created in the local area to consider too, as a result of there being more people employed on site. For instance: local garages, nurseries, local pubs, cafes and restaurants and so on.

Government has also said that it will invest in the local community, as they are fulfilling a national service. This investment will help to maximise the economic benefits of hosting a GDF. It might include improved local education and skills investment, improved transport infrastructure, and improved recreational facilities. Use of the investment will be tailored to specific localities, and managed locally in order to bring long-term, meaningful benefits focused on ensuring a positive economic and social legacy arising from the development. The levels of investment are suggested as:

- ▶ **£1 million/yr** per community, during **early discussions** (about 2 years)
- ▶ **£2.5 million/yr** per community, once an area moves to **borehole investigations** (10–15 years)
- ▶ **Significant investment** to the **eventual host community**, capable of generating benefits over many generations (to be negotiated between a community and government).



550 jobs available
each year



Plus 231 jobs in
related activities

*Source: NDA, Geological Disposal – Manpower and skills requirements 2012 Update

Impacts

What might these be?

► Disruption

As with any major construction project, there will be **noise, dust and dirt** generated. While much of this will be contained within the construction site, some will be visible from the surrounding area, depending on the site chosen. This is likely to continue throughout the excavation work, which will be at least several decades long.

► Transport

There is also likely to be **increased traffic** on road and rail as a result of the construction and maintenance of the facility. This means it is likely that roads or rail links will be upgraded or newly built as part of the construction. Traffic levels will depend on the stage of excavation, building and waste disposal, but is likely to rise over the whole life of the project.

► Physical landscape

The building of the surface facilities will inevitably have some impact on the local environment. This will be most noticeable when excavation takes place, due to the sheer amount of rock that is excavated. This rock may be: used to help screen the surface facilities from view, used in other construction projects, or kept on site to be used for infill for the facility when it is being closed.

► Providing reassurance & potentially compensation

It is difficult to know whether a GDF would alter **house prices**, either down or up: much depends on where it is in the country and the details of the site. However, we do know from previous consultation that stability of house prices is important to people.

'Property value protection' plans are schemes underwritten by the Government whereby homeowners receive compensation if, on trying to sell, they find that the value of their house has dropped significantly. Such schemes have been used in England (e.g. High Speed 2 rail link) and overseas and provided reassurance and confidence to the affected communities. Such protection schemes are usually developed when a specific site is found, so that geographic boundaries can be drawn and rules for applying for compensation can be agreed.

In summary:

- Some noise, dust and dirt
- Increased traffic but likely to be accompanied by better road or rail
- Excavation of large amount of rock: could be used for different purposes
- Compensation schemes could be put in place if there is an impact on property values when trying to sell the property

Source: Orlin Assessment Report (October 2012)

Which official bodies are involved?

► Communities

Sit at the heart of this process – they can talk to Government and the developer throughout. A geological disposal facility (GDF) cannot proceed without community support.

► Government

Owens the policy, sponsors the project and provides funding.

► Regulators

Independent bodies will only authorise construction and operation of a facility if the developer can demonstrate that it will be safe, secure and the environment will be protected.

► Developer

Responsible for designing, building, operating and closing a facility safely.

► Committee on Radioactive Waste Management (CoRWM)

Provides independent advice to Government and scrutiny on radioactive waste management.



Discovery worksheet



Discovery worksheet

In your pair, read the posters around the room and answer the questions below – all the answers are there, you just have to find them!

1. Roughly how big would the surface facility be?

2. How deep underground would a GDF be? (shallowest and deepest)

3. How long is it expected to take to site and build a GDF?

4. What are the main impacts expected?

5. What is a property value protection plan? (in less than 10 words!)

6. How many jobs will be created by a GDF?


7. What other benefits might arise from a GDF?

8. Whose job is it to ensure safety of a GDF?


Any questions you have?

Write them on the graffiti wall and we'll do our best to answer them 😊

Quiz


Department
of Energy &
Climate Change


Post-lunch quiz!


Department
of Energy &
Climate Change

Instructions

- ▶ It's multi-choice...and there's a prize!
- ▶ Form your teams
- ▶ One volunteer to jot answer choices
- ▶ Let's go...

Public dialogue on geological disposal and working with communities: February-March 2016


Department
of Energy &
Climate Change

Q1 When did the UK's nuclear history start?

- a. 1900s
- b. 1940s
- c. 1960s
- d. 1980s
- e. 2000s

Public dialogue on geological disposal and working with communities: February-March 2016



Q2 Why was the first nuclear reactor in the UK built?

- a. Because it allows you to do scientific research
- b. Because we really like big expensive buildings
- c. Because we needed the electricity
- d. Because we needed to dispose of waste
- e. Because we needed nuclear material for weapons

Public dialogue on geological disposal and working with communities: February-March 2016



Q3 How deep would a geological disposal facility be?

- a. As deep as possible
- b. More than 200m
- c. About a mile deep
- d. Less than 1000m deep
- e. About 5km deep

Public dialogue on geological disposal and working with communities: February-March 2016



Q4 What does 'half-life' of a radioactive material mean?

- a. The amount of time for the radioactivity to decay to half
- b. The amount of time to reduce the waste volume by half
- c. The amount of radioactivity needed to reduce life around the facility to half
- d. All of the above, combined and averaged

Public dialogue on geological disposal and working with communities: February-March 2016



Department
of Energy &
Climate Change

Q5 What is the main way in which geological disposal is considered safe?

- a. The multi-barrier approach
- b. The rock that isolates the waste below-ground
- c. It does not require any human intervention in future, once closed and backfilled
- d. Independent regulators check RWM's work
- e. All of the above

Public dialogue on geological disposal and working with communities: February-March 2016



Department
of Energy &
Climate Change

Q6 How many other countries have chosen geological disposal?

- a. None yet
- b. Just the one – Sweden
- c. Three
- d. Every country that's decided a permanent solution: over 6

Public dialogue on geological disposal and working with communities: February-March 2016



Department
of Energy &
Climate Change

Q7 How long will it be before a GDF is ready to take waste?

- a. No idea
- b. At least a year or two
- c. Probably a couple of decades or more
- d. 25-30 years
- e. As long as it takes

Public dialogue on geological disposal and working with communities: February-March 2016



Department
of Energy &
Climate Change

Q8 How much community investment will a community get during early discussions?

- a. None until they are committed to a GDF
- b. Up to £50,000/project they apply for
- c. Up to £1m/year
- d. Up to £2.5m/year
- e. It's up to them to negotiate

Public dialogue on geological disposal and working with communities: February-March 2016



Department
of Energy &
Climate Change

Q9 The definition of 'community' has been decided.

- ▶ True
- ▶ False

**Swap answers &
let's get marking!**

Public dialogue on geological disposal and working with communities: February-March 2016

People portraits

I am... > The head of the County Council

It's our job to represent residents in this county that is 40 miles wide, and I want to understand what we might gain, or lose, from a GDF.

There hasn't been any formal debate in our council yet, but I have asked the main councillors and they want me to find out more from RWM first.

Public dialogue on geological disposal and working with communities
February–March 2016 • Stimulus material to prompt public discussion

I am... > The clerk of a Parish Council near a nuclear site

Our councillors are interested in most things nuclear given we have a power station on our doorstep. They have asked me to find out more from RWM.

Our councillors are usually elected (unless there aren't enough candidates), to represent residents at the most local level of government. Our parish is 5–6 miles wide and borders the nuclear power station.

Public dialogue on geological disposal and working with communities
February–March 2016 • Stimulus material to prompt public discussion

I am... > A farmer with about 50 hectares of land

My farm currently is a mix of dairy cows, and mainly barley and potatoes.

I want to contact RWM because farming is getting harder each year and I am planning to sell and retire in 5 years. I want to find out what might be on offer for me, as I hear from others that the geology round here is good for a GDF.

Public dialogue on geological disposal and working with communities
February–March 2016 • Stimulus material to prompt public discussion

I am... > An interested resident

I have no role to represent the community, and I'm quite new to the area.

I'm just fascinated by such a massive project that has ethical implications for the nation's past and future. I want to know if our community could have a role in resolving such a difficult issue nationally.

Public dialogue on geological disposal and working with communities
February–March 2016 • Stimulus material to prompt public discussion

I am... > The owner of 4 successful holiday homes

I want to contact RWM because I'm nervous about our area being proposed in case people stop renting my homes. I am generally anti-nuclear.

I'm not definitely against a GDF, but I do want to know how this might work. I want to know how I can support it (if it looks like it's a good idea) and how I can stop it if I think it's a bad idea.

Public dialogue on geological disposal and working with communities
February–March 2016 • Stimulus material to prompt public discussion

I am... > The leader of a business cluster on a potential transport route

Our cluster meets every month to share learning across 45 local businesses.

Whilst I believe it's unlikely our geology is good for a GDF, there are key transport routes that go through our area. I want to contact RWM so we're involved from the start: it's important we get a share of the investment if a neighbouring area wants to host a GDF.

Public dialogue on geological disposal and working with communities
February–March 2016 • Stimulus material to prompt public discussion

Homework sheet



Homework

Please choose one of the following tasks to do. They should take 30–60 minutes, and be interesting and thought-provoking.

Please make notes, as we'll ask you about how you got on next time!

Task 1: Decisions in **your** community

- ▶ Find out about a big decision made in your area, either online or by asking around.
- ▶ Spend 30 minutes finding out about it and how the decision was made.

What was the decision?

Who took it?

How did they inform residents before and after?

How did they ask for residents' views, if at all?

What do you **like** about the decision-making process?

What do you **dislike** about the decision-making process?

Task 2: Interview a family member or friend

- ▶ Tell a friend or family member about today's workshop and what you've learnt about radioactive waste and the GDF. Make sure you have the poster-pack with you to show them. Ask them the following:

What do they think about how communities should be represented?

What do they think about testing public support, before a GDF is built?

What do they think about community investment: what should it be spent on, and who should decide?

Does anything different or surprising come up? Have your views changed at all?

Workshop 2

Test of public support method cards

1 Statistically representative opinion survey

This method could involve:

- ▶ A telephone opinion survey of residents at different distances from the proposed GDF site
- ▶ Survey enough residents to ensure a *statistically reliable* result
- ▶ Everyone has equal chance of being surveyed
- ▶ Have to be on electoral roll: 18+, British resident, registered
- ▶ Choose a specific level of 'support' to warrant continuing, such as "more people supporting than opposing"
- ▶ Publishing the results to allow all to see them

- ▶ What do you like/dislike about this method?
- ▶ How could you improve it?
- ▶ When is the best time to do it?

Public dialogue on geological disposal and working with communities
 February–March 2016 • Stimulus material to prompt public discussion

2 Referendum

This method could involve:

- ▶ An opportunity for residents at different distances from the proposed GDF site to vote
- ▶ Have to be on electoral roll: 18+, British resident, registered
- ▶ Choose a specific level of 'support' to warrant continuing, such as "more people supporting than opposing"
- ▶ Publishing the results to allow everyone to see them

- ▶ What do you like/dislike about this method?
- ▶ How could you improve it?
- ▶ When is the best time to do it?

Public dialogue on geological disposal and working with communities
 February–March 2016 • Stimulus material to prompt public discussion

3 Open consultation and registering of views

This method could involve:

- ▶ Partnership announces a 3 month consultation window
- ▶ A written document explaining the work done, and the pros and cons
- ▶ A questionnaire asking what people like and dislike about the GDF, and why
- ▶ Final question is "Do you wish to continue?"
- ▶ Open to **anyone** who wants to fill in the answer questionnaire
- ▶ Parallel series of consultation events

- ▶ What do you like/dislike about this method?
- ▶ How could you improve it?
- ▶ When is the best time to do it?

Public dialogue on geological disposal and working with communities
 February–March 2016 • Stimulus material to prompt public discussion

Community investment project cards

A **New course on mechanical engineering at sixth form college**

- ▶ College in town for people over 16
- ▶ Currently doesn't have a higher-level engineering course
- ▶ Want to design and offer a Level 4 HND (diploma)
- ▶ Allows students to continue to university to do engineering, even if they finished school at 16
- ▶ Increases likelihood of getting future employment at the GDF

College asking for £75,000 to develop Level 4 engineering course, and offer it for one year

Public dialogue on geological disposal and working with communities
February–March 2016 • Stimulus material to prompt public discussion

B **Local enterprise scheme for young people: expansion funding**

- ▶ Scheme for young people to start a business already exists
- ▶ Offers a 4-day training course, then support writing a business plan
- ▶ Grants of £5,000 can be applied for, with help from a business mentor
- ▶ People between 18–30 can apply
- ▶ Covers any business the young person wants to set up

Charity asking for £80,000 to increase the number of young people they can help (extra 10–15 people per year)

Public dialogue on geological disposal and working with communities
February–March 2016 • Stimulus material to prompt public discussion

C **Restoration of wildlife reserve in neighbouring county**

- ▶ Amazing wildlife reserve in neighbouring county (40 miles away)
- ▶ Charity looks after the reserve but has very little money
- ▶ Wants to restore the wetland and woodlands to introduce new species
- ▶ Wants to make a proper, safer, car parking area for 20 visitor cars
- ▶ Reserve is popular locally and it is expected to be well-visited

Charity asking for £60,000 for restoration and new car parking

Public dialogue on geological disposal and working with communities
February–March 2016 • Stimulus material to prompt public discussion

D Rebuilding of collapsed historic wall

- ▶ Private home owner/resident has a large garden, in GDF search area
- ▶ Very old wall runs round half the garden, facing a public footpath
- ▶ Wall dates from the origin of the town, as well as being pretty
- ▶ Wall has partially collapsed on to the public footpath
- ▶ Resident says they cannot afford to repair it, and is likely to replace with a wooden fence instead

Resident asking for £40,000 to rebuild collapsed wall

Public dialogue on geological disposal and working with communities
February–March 2016 • Stimulus material to prompt public discussion

E Mini 'community project fund', managed by council in GDF area

- ▶ District council had a fund for community projects up to £1,000
- ▶ Scout groups, toddler groups, yoga classes, local sports tournaments etc. applied
- ▶ This was **not required** work for the council, was discretionary
- ▶ Due to budget cuts they stopped the fund last year
- ▶ They want to re-start the fund: council will administrate for free

Council asking for £20,000 to offer up to 20 grants per year

Public dialogue on geological disposal and working with communities
February–March 2016 • Stimulus material to prompt public discussion

Appendix 11: Baseline exercise – what does community mean to you?

Arrivals activity – defining community:

Swindon

What does community mean to you?

- Group of people, businesses, establishments in close distance of each other form a community. All have shared interest.
- People in the area I live in
- Area where I live
- People that live by me
- My neighbourhood
- The area in which I work
- Friendly area
- My neighbourhood
- My immediate area
- People in area in which I live
- Friends and family in my area
- Where I live and work
- Nothing
- No community, now gone
- Family
- Family
- Family and neighbours supporting each other
- Sports clubs
- Group with common interest
- Safe environment to raise my family
- Local support – friends, family, colleagues
- Small groups of people who are inter-dependent
- Somewhere you feel safe and part of
- Coming together – great spirit
- Community spirit
- “Togetherness”
- Think global act local
- Coming together for a better life for all
- Helping each other

Additional post-its from workshop 2:

- Global communication has impact on local and vice versa – community = both local and global
- Togetherness as a whole

Manchester

What does a community mean to you?

- People coming together and making life better for others in the area. For example, volunteering, youth groups etc. In short, being helpful to your fellow man.
- Community is sharing, looking after each other/your neighbours, supporting one another, combining skills.
- Being part of a neighbourhood team and a group of people who have similar interests.
- People coming together for mutual benefit in your local area.
- A group of people helping each other out.
- As I live on my own, community is very important to me. I have good neighbours. I live at the side of a park and I am a part of the dog walkers' community.
- Being neighbourly – old-fashioned, helping each other.
- Having a safe environment for children and elderly.
- Having a clean area, make community look after the area.
- All people working together.
- Member of a group i.e. church.
- Work together to improve things.
- People coming together and help each other.
- Community is when a group of people can come together and help each other.
- Working together.
- People helping each other.
- Looking after your environment.
- People working together.
- Volunteers.
- "Community spirit".
- A togetherness as one working together.
- A community means a group of people to me.
- People living and working together to help their environment.
- To bond and work together regardless of the situation.
- Group = people forming together to make society great.
- Everyone in a locality.
- Looking out for each other – keeping the community happy to be in.
- The area where I live and the people who live in that area.
- Working together as a team, within the area you are from.
- Being part of a social/human collective shared.
- Working together.
- Looking after each other.
- Area
- Community spirit/togetherness.
- Environment – clean area.
- People working together and wanting to improve and nourish their lives and social environment.

Appendix 12: Final exercise in workshop 2 – overall advice to DECC

Manchester post-its

- Need to stay dedicated
- Marketing right target audience
- Ensure they (DECC) have sufficient information to make the right decision
- Don't disrupt community too much
- Community to feel secure despite potential government change
- Impact on the community
- Evolving idea / path
- How will this benefit the community in the long run – making the community clear on what is happening
- Make sure you pick an area that will really benefit from the GDF i.e. an area with high unemployment – and provide lots of information to make sure people understand
- Correct information
- Factual and realistic information about a GDF
- Community views to be considered are written into the process
- Engage the community in a positive manner showing an [?]
- Ensure people know what they are voting for – education / publicity
- Educate + engage the community
- Good communication with the local community
- Engage + educate the community as a whole + needs to be considered
- Engagement with the local community
- It's engagement with the community
- Transparency from start to finish
- Complete honesty & transparency
- Being upfront and honest
- Not to fill panels with fatcats (corporate / political)
- The funding system avoid corruption
- Make sure funding is fairly distributed to community projects
- Make sure the funding is spent wisely
- Make sure the money is spent on community

Swindon post-its

- Listen to community input
- Communicate communicate
- Communication
- Listen to the community, their concerns, what they want etc.
- Engage widely, early and in depth
- Two-way communication and transparency
- Be honest and truthful
- Open – Transparent – Truthful
- Truth
- Truth
- Truth
- Honesty
- Being honest e.g. things that can go wrong
- Be ethical and honest
- Honesty and information
- Understanding the process
- Education and honesty
- Educate and inform communities
- Informing/educating
- Public backing
- Education
- Educating them young
- Education and public support
- Educate people on GDF to demystify preconceptions and help them make an informed decision
- Upskilling
- No spin
- Recruit wisely to CRG
- Pick the right CRG!
- Fair community representation
- Fair ratio of representation in the community rep group
- Not to waste funding

Appendix 13: Participant questions across all workshops

This appendix contains all questions raised by participants during workshops discussions across all activities, grouped by theme. It includes questions from the graffiti walls at both locations.

Communications and engagement with communities

- Why is it not publicised where the nuclear sites are? Sellafield is the only one I've heard of.
- Can it not have the word nuclear in it? Maybe not call it nuclear disposal. People don't understand it. And it's scary – makes you think of bombs etc.
- I've got one [a question], the statement about the planning process going to national decision rather than local. It kind of sounds like 'we are going to bypass you'. I know it says there about the local community, the line at the end makes you feel better but it does sound like you stopped it so we are going to bypass you.
- Will communities have a say as to whether this is brought to their area?
- We've all learned a lot today. You'll need to engage people who haven't had access to this. How's the education going to work?
- Could you not educate the public more broadly about nuclear?
- How is the council going to know about who to contact?
- The whole point is to consult people from the get-go isn't it?
- Regarding the decision process, it seems like there will always be people who will say no, so you have to have a majority who say yes. It sounds like that is how this decisions will work?

Community benefits and investment

- Do they pay them extra for it? [Re communities hosting sites]
- But some communities prospering, will that have a negative effect on other areas? If people are leaving what about the places left behind?
- Did you say it's the Government that's investing in this – where does the £1 or £2.5m comes from?
- Is the money guaranteed, what if there is a change of Government?
- What should the community be asking for? Is it enough that there will be a few digging jobs for a few years? Should they be asking for more?
- Are there any benefits to having it nearby?
- Where does that get spent, by who, and on what. Who qualifies? And also at how many places? This is a lot of money if lots of communities enter into talks.
- That £1m, who gets it?
- I live in Oldham [borough] but [specifically in] Shaw, Royton – I see myself as living in Shaw. Would the money go to Oldham or Shaw?
- Talking about allocating the funds, how do you make it fair? The people nearer the site will be impacted more, but where do you stop it, do you go 10 mile out, or 15 mile out?
- Why is it *up to* £1 million?
- Is there separate funding for the communications around the project?

Community reaction / interest

- Do you find that a lot of communities complain about this and say no we don't want it?
- What is the contingency if all the communities say no?
- What happens if they [community] don't want it?
- If the community says no will they move on to another community?
- Is it assumed that you'll hedge your bets and find 3 or 4 communities who are interested?
- What happens if all communities say no? What's the time limit you've been given to find a community?
- But realistically what can they [the community] do? [re siting process]
- What reaction have you had from councils?
- What happens if 60 communities come forward?
- You see if it takes 20 years until they set it all up but they pulled out after 10 years, would you then have to start the process up all over again somewhere else?
- What happens if everyone everywhere says no?

Community representative group / community representation

- Once you've set up your community group do you then go to the local government?
- And who takes the initiative to form this [community representative] group in the first place?
- What would happen if you [member of the public] didn't agree what was going on in the meetings, how does it go then?
- But who is 'you'[re making decisions]? It won't be us in the room. Is it a committee?
- How long will this community group need to be around?
- Who is going to register that interest on behalf of the community? We need to decide that?
- Is there a judge at the top of the group [CRG]? Someone in charge?
- Would these representative group [CRG] meetings would be open to the community?

Cost / funding

- How does it get paid for?
- How will it all be paid for?
- I have another question then. If EDF and private companies are going to build more nuclear power stations and they have to pay for this then why are we paying billions of pounds to pay for one?
- What is the cost of storing all this stuff, per year?
- How much does it cost to build an underground facility in England?
- How much money would France want to take it from us?
- As a geologist you have to look at groundwater and everything, monitoring it. How do we know the money will always be available to monitor if for evermore?

Defining communities

- Where is the boundary of who's impacted? How do you determine that?
- You need to try to define the community – where is the boundary for a community? That'll be dictated to an extent by the size of the site. But what if it borders 2 parishes, for example?
- You know when it says different distances [re referendum] how far are you talking about?
- What is a community? How do I represent people?
- Whoever it affects. What if it leaked? Everyone would want to know how far away they would have to be from that site before it affected them, so that would be the radius [e.g. for referendum].

Disposal methods

- Can it not be sent up to space where it's not doing any harm?
- Why did they stop disposing of radioactive waste at sea?
- Did it actually do any harm [disposal at sea]?
- Is this really the only option to get rid of this waste?
- Why can't we just blast it into space?
- Why can't it be blasted into space?
- So the end goal is to put it somewhere and forget about it?
- Why can't they dump it where they're already dumping it now – [i.e. the 30 locations marked on the map]?
- What are the chances of dumping it in one place rather than spread across the country?
- Why can't the waste be stored in the sea? Then it's kept cool.
- I'm still confused by why they can't use the sites they're already using? Because surely that's where the risk has been for the last x years so why move it round?
- What was the shortlist of options which included GDF?

Energy policy

- In terms of what the plans are next it sounds suspiciously like you are trying to build new disposal sites or new nuclear sites – are you?
- Do you not feel these sort of outcomes make it not worthwhile? Maybe we should consider a different approach [to energy]. If the waste can't be destroyed and it's always going to be there then how far are we willing to go with it?
- We've done it with everything else, we filled up all the land fill now we are recycling. How far does it go with this before we decide we should take a different line?
- What about the current plans for new nuclear? Will that not just generate more waste? And can we deal with that extra waste?
- Do we still need nuclear power?
- You know how they said they're [nuclear power station developers] going to be privatised and there's a big contingency for paying for disposal of waste, would that effect prices of energy even though they've got a contingency?
- So why aren't we building more of them (nuclear stations)?
- Why do you need to build another if the existing sites are already doing the job? Would it not be easier to use the sites that have already been shut down and use those sites for storing the waste?
- Is there a substitute for using nuclear? If it's only generating heat are there not other things you could do e.g. coal, gas?
- Are the new [power generation] sites all doing the same thing?
- Where are the potential new nuclear sites? Why don't they build on the existing ones?
- Is there a limit on how many nuclear power stations you could have going? Is there a limit on e.g. how many per country?
- Has there been any links made between building these underground things and the proposal/continuing work being done to change the underground geology of the country with fracking? There's a lot of crap happening underground. Are there regulations in place – we're pumping mercury in the ground over here and then putting nuclear waste underground there – how will it work?
- If we are going to have more nuclear energy do we need to pollute the land with fracking as well?
- Surely it doesn't matter where we put them [power stations] – they can generate electricity and

pylons can take it round the country?

- Is it worth carrying on producing it? When you work out how much it's costing to carry on looking after it, is it viable? Because we're paying for it. If we'll have to look after it for thousands of years, on 30 sites, and you're paying those people, is it viable to carry on with new nuclear power? If there's no new nuclear there'll be no new waste. I just see danger.
- I see swathes of solar panels appearing in the countryside, are we moving away from nuclear power?
- What about new technologies for [energy] storage – is it nearly there?
- How much electricity is stored?
- Is this something that will happen [to specialist]? From what you have seen and what you know do you personally think this is a good idea?
- So that implies that there is a national debate going on?
- Will nuclear waste production increase? Compared with demand and generation. Will waste production increase over time?
- Would the next government have to carry on with this? This could be halfway through and get scrapped – it is a lot of money.
- How likely are we to build more nuclear sites?
- What are you planning to do with the Wylfa site?
- What happens in Scotland?
- What are Scotland planning to do with their nuclear waste?
- Craig Lucas, Director of Science and Innovation: plans/money put away £250 million for small nuclear reactors (SMR). Where is the money coming from?
- What [are] the three major parties actually saying – supporting quotes.
- Why do we continue in an area where we don't know all the answers?

GDF design / operation

- You were saying that is surrounded by natural things but what about the spiral with the bus going down?
- How deep? [Would it need to go]
- Is it above or below ground?
- And it'd be below the water level? [the GDF]
- Who designs these facilities?
- When it says 200–1000m, why the range?
- Does it get full up?
- What else is going on at the surface? You said it arrives by train but does anything else happen at the surface?

GDF jobs

- How many jobs?
- But would people in the area be willing to work there?
- How many of those jobs are permanent for a long time? How many are for construction and then they're finished and gone?
- Why on earth would anybody go and work on this?
- Do they have any tests for employees, you know checks for whether they're part of an organisation? [i.e. how are employees vetted]
- How many people would be involved? [re jobs]

GDF monitoring / future considerations

- Our question is if so many rockets blow up when they are launched into space how many accidents happen on rail and road which is how this waste is transported? [Specialist] is obviously interested in the timescale and millions of years and that, but in no time we can go down and destroy what's been created [rock] to put some waste in there.
- This one is a little bit related to new sites. Are the new sites being built like this (disposal) or new sites which will generate more stuff to put in them. Obviously we've got this stuff and it needs to be managed in some way. This does seem like sweeping it under the carpet but if it's less management and we can forget about it then there might be a point or are we still having to be doing the re-packaging thing? Like if we came up with a new solution would we dig it up again? Will it still be on on-going process?
- I appreciate that [re backfilling and being able to walk away] but picking up on the fact that what you said about eventually it will break down but by the time it comes to the surface it will be finished. But how do we know it won't go through into the rock and the water?
- It sounds like it will need re-packaging if it does break down?
- What about the long-term solution? We understand they'll bury these containers, but is that it? Are there no plans to dig them up when the half-life has gone down?
- So you'll always be able to get at it?
- Have they ever found anything wrong when they check them? [Re ability to check waste once placed underground]
- So when you pull it out and find a problem, what do you do?
- But surely it's written down somewhere? [Re: people coming back in 1,000 years and needing to know what it is.]
- Will the heat come up to the surface?
- The slide that you showed was no-man's land, but then you said that it's still generating heat. Is that heat radioactive, how safe is it and is anybody checking it?
- Our question is about when it's buried underground how is it checked for leaking and things like that?
- What about climate change, say if the ice melts, and with all the water that we've had recently in Cumbria?
- Facilities go out of date surely?
- What about if things get out of date again?
- How often are checks carried out?
- With the containers holding the high level stuff, do these need to be changed in time, these don't look like the best disposal solution?
- When you bury it will there be signage, so people won't be able to go down there by accident? There will be testing to make sure it doesn't leak won't there?
- Will there be signals / bleeps / readings that show it is getting more radioactive so we can go and get it out again?
- But if it's buried on land, and there was a leakage, how would we know?
- Retrieval – why do we need to be able to retrieve the old waste if we're continuously producing it? We'll always produce it, so if we've got rid of the old stuff we can just use the new stuff.
- With all the floods that are happening now, does that effect it?
- Monitoring – how and for how long? What would be important do you think? How long would be good?

GDF numbers

- If there are 30 different sites around the country now is that going to increase and increase. Will we need to find sites near every town? How will that affect us?
- Is it likely that we'll need another facility?

GDF siting

- Is it planned for an area that is built up? Not going to be in a field in the middle of nowhere is it?
- If they have a plan to build a waste facility in the future, do they just decide not to ever have a community there again?
- Why can't they use existing mines?
- Are there proposed areas already as to where these things [waste sites] will be?
- Would you be quite happy if they suggested building one near you? [to specialist]
- I was wondering what does [observer] think about it? Would you be happy for your house to be under it?
- Have you already identified prospective areas? Because surely only certain parts of the country will be suitable?
- Is there anywhere else on the planet that is as anywhere near as radioactive as that, naturally? Can we just put it all there?
- How do they decide on the location on where to dispose of waste and power stations?
- So why ask the community? Why not move toxic waste away from where it can be harmful? Surely it's better off in isolation?
- Would this GDF site work in a highly populated area or does it need to be in a wide-open space?
- If storage facilities similar to Sweden are built in this country what sort of site would be considered?
- Who's to say that it's a good rock to store it in? All the countries are using a different kind of rock. Who's to say that you'll find in 100 years that it's not suitable.
- But out of the 30 sites you already have surely one might be suitable?
- Aren't there about 4 about to be closed down? Couldn't we pile all the waste in there?
- You'd think you'd want to keep it away from people?
- What about making them offshore like rigs?
- What about on an island?
- Or going out to under the sea?
- Is chalk any good?
- Are you going to pick the sites or will it come from the communities?
- Is it that they know how they want to do it, they're just looking for a site now, are they at the point that this is what we're going to do it we just need to know where?
- How many sites are on the table?
- What are main criteria to select the site? Is cost ultimately going to trump safety? Or community acceptability?
- Money doesn't play a factor then [in finding a site]?
- Wouldn't it be easier and cheaper to just find an area that's suitable and get on with it?
- But you could pick the site first then make sure it really is viable after you've drilled the boreholes?
- Have you any idea at all on which community you would approach?
- I can't understand how you're going to go out to a whole country – I just don't understand that?
- Why can't we put this under the palace – why does it have to be in the community? The Queen should host it. She has plenty of land.
- Of all the places that you are potentially going to do the boreholes, how many sites?

- So how many places would you consider before getting to boreholes
- Does it have to be near the coast?
- Can you build a GDF in chalk rock?
- Out of all the sites found, what are the main factors in [deciding] which is chosen, if there are multiple available.

Historical context

- Has there been a previous policy on long-term disposal or is this a brand new discussion about what we're going to do?
- So this stuff has never been disposed of, have there been any ideas or attempts in the past to deal with all this waste that has been sitting here?
- We haven't got a long term solution? We're 70 years in!
- Given that we started nuclear development in the 1940s and we were first, why are we so far behind other countries?
- How much money did they waste? [Nirex]
- Was that public money? [Nirex]
- Presumably that knowledge has not been lost? [Nirex]
- How long it takes was surprising. Have we not even started yet? So we've got 70 years of waste and we've not got anywhere to put it yet?

Impacts – environment

- How is it going to affect the environment (thinking about waste disposal)?
- What about nature and animals?
- Pollution – could it affect the water table if it leaked? What if it hit the water supply?
- Are there any environmentally harmful wildlife impacts?
- We are assuming there has been loads of research into this kind of facility and its environmental impact?
- Would it affect the water table? Could it affect the water supply because that could have a knock-on effect on a wider area, could affect the food chain etc.

Impacts – health

- Have there been any historic health impacts from nuclear sites, for example from Sellafield?
- The health issues around it concern me a little bit. People who've lived near these places, higher cancer rates etc. Who would ensure our safety health wise?
- The danger of it – were quite surprised by how little there is considering, but what is the danger to your health. If it leaks what is the vicinity for potential for danger?
- What are the cancer / illness rates around these sites, have these been researched?

Impacts – house prices and PVP

- Does that property protection go on to the next person who might buy the house?
- We don't live near one, so we don't know, but is that the sort of thing that does really happen [reference to householders getting compensation]?
- The compensation, it says the Government will have a PVP if your house value drops significantly, lawyers have a way of interpreting that, how do you define significant, and how do

you protect homeowners?

- I want some research on this property values programme, what other schemes is it relevant to and how does it all work?

Impacts – safety

- How dangerous are the current sites / future sites?
- [What is] the danger of it?
- How safe are the containers? There have been near misses, e.g. train crashes involving the containers.
- And it's safe there? [Current waste being stored at nuclear sites]
- I am still shocked at the amount of storage at sites all through the country – the mid-level stuff is all around us, how safe is it?
- Is there science to say that it will be safe down there and won't destroy the earth from the inside out?
- If I took one of those glass rods on the surface, how far away would I need to be to be safe? I want to know how dangerous it is? How close do I have to be to be killed by it?
- But they won't know for sure [re safety] before they do it will they?
- Regarding safety and what's happening overseas, I assume it's safe to live next to it, so we don't have to worry about that side of it?
- So the question should be what are the risks?
- What if, worst case scenario, if it should blow up, what is the distance that it would effect? When is it going to start killing people? What is the implication of the worst case scenario?
- So what exactly are the risks?
- Safety of the ground/area around? Know they are chosen carefully and to protect us but at what cost to the underground areas?
- If it is safe, why dig so deep? Is it because of possible leakage or other reasons?
- Is dry cast storage safer than pool storage?

Impacts – security

- I was wondering about security – how accessible are they once they've been put underground?
- What about a terrorist dropping a bomb on it?
- What about security, the potential for sabotage, terrorism? In this day and age, with terrorists all over the world, you wonder how protected we are as a nation against things like that.
- What about security – dirty bombs, risks of fracking, the heat generated from the waste...how is it handled?
- Are they protected by the military for terrorism?
- So there's no worries about people mucking about with it on the surface [at GDF surface facilities]?
- What about safety and security of the sites? What prevention will be in place around existing/'new' sites with regards to terrorism threats?

Impacts – economic

- What is the impact of the GDF on electricity bills?
- Never mind the transport of waste etc., what happens to the area once the site has moved on/shut down? Economic effects to the area?

International experience and involvement

- If other countries are doing it in such a good way, why don't we just copy them?
- If Sweden got their facility in 1988, why are we just getting there in finding a more permanent solution? Why are we so far behind?
- Have we approached Sweden to take our waste?
- That picture [one of the slides of the Swedish facility] had the British and US flags on it. Does that mean we're in on it? Is it a joint thing?
- What learning is there from other countries [re community involvement]?
- Where is the waste actually going to go? Can we send to France if they have their facility ready? How would that work if we left the EU?
- So even though these places [other countries] are coming along well with their facilities we can't send it there?
- Are we quite far behind compared to other countries?
- I've seen stuff about Hinkley – will it be us or China who are responsible for managing the waste?
- Will we lose control of the operation? Are we looking for foreign investment? Does financing the station bring with it an obligation to clean up the waste?
- All the historical pictures we saw on the slide were of the UK leading the way, but it looks like we're being taken over by foreign investment?
- Who actually governs and makes sure procedures are followed internationally – who regulates the world? Who's stopping America shooting it up into space?
- Are the laws all the same in every country?
- We were talking about why if they have a facility in Sweden and France why are we spending billions building it here when we could send one there?
- What countries have nuclear power? Do we have to worry about countries who aren't so good with the way they do things, safety and stuff?
- Do we need to worry about these countries who might not manage it as well?
- The leak in Chernobyl – has that been buried? Can you send robots in to sort it out?
- Is there anything to be learned from those countries that have already started the process in the way they involve communities? How did they address community problems?
- Have heard that in Japan they are working with waste to make it usable for something else?
- Why did so many communities come forward in Canada?
- Why not just copy exactly what those who have done it already have done?
- So why not just do what they've done?

Methods for testing public support

- If we agree with this method [opinion survey], would that be the only way they'd get the opinion?
- Would cost come into it [opinion survey]?
- Who actually runs this [referendum]? Is it RWM?
- Who will be managing it [referendum]?
- But what about the logistics of it [referendum], how are they physically going to get that vote? Surely they have to go via the government systems?
- How can you check that people know and are happy? Sounds like you are making assumptions, if the council seem to agree that is one thing, but until you get there [to the referendum] you don't actually know what people want.
- What is the purpose of it [consultation]?
- Does it have to be done in a physical document, could it be done online [consultation]?

- I like the idea of it, but I want to know how are they going to announce it and where [consultation]?
- So when would you do all this [test of public support]?
- Would that [ongoing checks of public support] be publicised as much as the referendum?
- Is there any mechanism built in for staged voting? Or is that too difficult to do?
- Survey sample: what is “statistically” representative?

Nuclear energy

- Taking us back to basics. What is nuclear?
- What’s the difference between nuclear energy and fracking?
- How environmentally friendly is nuclear energy?

Radioactive waste – science and current arrangements

- The HLW still generates an amount of heat, is that heat used to generate power?
- Talking about high level waste and plugs in grounds which generate heat, why aren’t we piping that out and using it?
- The waste in long term containers, in terms of half-lives going down, at what point can it be destroyed? [i.e. at the end of the half-lives]
- You mentioned low level waste (LLW) being stored. Is that it? Does it not get got rid of?
- But even LLW is still in landfill, not in special buildings?
- How much more waste will be generated in the future?
- What actual material is the waste in – is it barrels, what does it look like?
- The re-packaging, how necessary is it, what cost is incurred?
- Are we still making radioactive waste?
- Where is the waste now? How is it being stored?
- Out of all the nuclear waste produced each year, what is the % of high level waste produced each year compared to medium and low? I want to know the exact volumes of high level waste.
- Why is the waste managed where it is?
- What’s being done to eliminate the radioactivity, i.e. to clean it up, so there’s less waste? So it doesn’t reach dangerous levels?
- Do we re-use the waste? Have people come up with ideas as to how to re-use it/make the most of it?
- Have you looked into re-using it instead of disposing of it?
- You said that it generates heat, are we going to use the heat that it generates?
- Is there potential for use of the material in the future?
- Do we [currently] have any kind of underground facility? Is it all above ground?

Regulation

- How often do the regulators go in?
- Do they have to go through regular checks? [Nuclear sites]
- Where do the regulators get their money from?
- What’s the penalty if they don’t follow these safety standards?

Right of withdrawal

- Do you have to pay money back?
- What stops a community saying “we’ll allow people in for the next 10 years, earn ourselves £10 million, then withdraw”?
- So it’s been 5–10 years, and now these people are saying we want to withdraw – it’s a bit of a waste of time. Do we need it all to happen quicker – that much money is a lot of money to waste?
- What is going to happen in that time that makes them change their minds, and is it a good enough reason?
- One group alone can’t affect the decision? Why does the government feel this is necessary [right of withdrawal]?
- So when you start building it, can they still pull out?
- What’s the cut-off point? Point of no return.
- Does RWM’s right of withdrawal include if it thinks a community is not serious and just after the money?

Roles and responsibilities

- Who decides where the nuclear waste goes to i.e. what part of the country it goes to?
- Are you going to get NGOs that will test/challenge etc.? What’s the role of the NGOs?
- I’d like to know more about your role in this and your actual opinion on it – there are lots of people involved, but you can’t have your own opinion, if a colleague doesn’t agree, are there people in these organisations that are anti this idea?
- Who governs this, who comes up with the cautions/controls?
- Who runs the nuclear power plants?

Transport

- And I guess it’s difficult to transport it?
- The LLW – you say it’s low level but when it’s in big bulk and all being transported how dangerous is that?
- The ILW in particular being transported all over the country, should there not be more facilities to keep it on site?
- Would waste be transported by train or by car if it needed to be moved to a new disposal facility?

Timing and timescale

- From the planning stage to the opening stage, how long is planning and building?
- Is there going to be a timeline, so we can see when the committee [CRG] is going to be making decisions?
- At what moment do RWM know whether it’s a goer? What’s your cut-off [timewise]?
- How long does it take for you to get to that point [potential withdrawal following initial discussions]?

Other questions

- Why are we here? Are they planning a site near here?
- Why here in Swindon, what kind of site are you looking for?
- With the naturally radioactive places, what’s the difference between that, and one [a GDF] being

under a town here. Why is it scary here but why is it not scary there?

- Can you grow food above the GDF?
- I'd be a bit nervous about back door nuclear development. You say "I'll go along with this"; does it then become the place where they'll add other things? I wouldn't want the nuclear creep/domino effect.
- Was the film Erin Brockovich about nuclear waste?

Additional comments from the graffiti walls

- Wider research into awareness & knowledge & beliefs re nuclear energy on global scale would help.
- Informed anti-nuclear internet group about this discussion and dialogue: it was perceived as a positive thing that people are being consulted.
- More education in schools if having vote from age 16.



3KQ Ltd, Pantiles Chambers, 85 High Street, Tunbridge Wells, Kent TN1 1XP

T. 01892 506909

E. info@3kq.co.uk

www.3kq.co.uk