

Nuclear Decommissioning Authority's
8th National Stakeholder Group

MEETING REPORT

Document Reference: NSG83

Manchester, 17-18 June 2009

212 High Holborn
London WC1V 7VW

tel 020 7836 2626

fax 020 7242 1180

email info@envcouncil.org.uk

www www.the-environment-council.org.uk

This meeting was facilitated and its report produced by The Environment Council.

The Environment Council is a UK registered charity of nearly 40 years standing. It works to put sustainability at the heart of people's choices, decisions and aspirations. Its goal is to transform conventional decision-making by including best practice engagement in realising sustainability aims. It has long-standing experience of raising awareness, training, facilitation and providing a forum for dialogue. The Environment Council helps all kinds of organisations make the difficult and complex decisions needed for a sustainable future. www.the-environment-council.org.uk

If you have any comments or queries regarding this report please contact:

Name: Erica Sutton
Direct line: 020 7632 0117
Email: ericas@envcouncil.org.uk

Contents

SECTION 1: INTRODUCTION	1
SECTION 2: DAY 1, 17 JUNE.....	1
1. Scene Setting.....	1
2. Opening Remarks from the NDA Chairman.....	1
3. NDA Chief Executive Officer's Update.....	2
4. Strategy Management System (SMS) Update.....	5
5. Site Stakeholder Groups: Chairs' Forum Report.....	7
6. Breakout Sessions	7
6.1 Annual Report and Accounts	7
6.2 Geological Disposal Facility	10
6.3 Oxide Fuels Management Strategy.....	16
6.4 Plutonium Management Options.....	18
6.5 Socio-Economic Policy.....	21
6.6 Strategy Management System.....	24
7. Sellafield Programme Presentation.....	29
8. Questions for the NDA	31
9. Closing Remarks from the NDA Chairman.....	32
SECTION 3: DAY 2, 18 JUNE.....	33
10. Waste Strategy Theme Introduction.....	33
11. Developing and Implementing UK LLW Strategy.....	34
12. Interim Storage of HAW	42
13. Waste Treatment Optimisation.....	53
14. Waste Discussions: Concluding Remarks	62
15. Questions for the Executive Team	62
16. Actions from the Meeting	65
17. Evaluation	65
18. Close	65
19. Acronyms	67
APPENDICES.....	68
Appendix 1 National Stakeholder Group Attendees.....	68

SECTION 1: INTRODUCTION

This was the eighth meeting of the Nuclear Decommissioning Authority's (NDA's) National Stakeholder Group (NSG) to take place, and was held over two days, 17-18 June 2009 at the Hilton Deansgate Hotel in Manchester. A list of NSG 8 attendees may be found at Appendix 1. A number of briefing papers were circulated in advance of the meeting. These, along with copies of the presentations given at the event, may be viewed on the NDA website at www.nda.gov.uk

Operating under the sponsorship of the NDA, the NSG meetings are independently convened and facilitated. At NSG 8, this role was undertaken by The Environment Council.

For further information about the NDA and its stakeholders please refer to the NDA website.

SECTION 2: DAY 1, 17 JUNE

1. Scene Setting

The lead facilitator for the meeting, Mike King, explained that this NSG had been set up with the following objectives:

- To provide stakeholders with information and updates since the last National Stakeholder Group
- To give stakeholders the opportunity to raise and discuss wider issues of concern
- Regarding the development of the NDA's Strategy:
 - To provide NDA with the opportunity to explain their progress and the anticipated next steps
 - To enable Stakeholders to engage with the Strategy development process through questions and discussion
 - To provide Stakeholders with the opportunity to input on developing Topic Strategies to inform the NDA's decision-making
- To provide Stakeholders with opportunities to network with each other and with the NDA.

The meeting comprised of a number of different sessions. The presentations and discussions were held in a plenary setting, that is, with all participants involved at the same time and in the same meeting space, unless otherwise described.

2. Opening Remarks from the NDA Chairman

Stephen Henwood, the NDA's Chairman advised that Richard Waite, the NDA's Acting Chief Executive Officer (CEO), was unwell and sent his apologies. William Roberts, the NDA's Chief Financial Officer, would lead the Chief Executive Officer's update to the NSG.

The Chairman then announced that Tony Fountain would be joining the NDA as the new Chief Executive Officer from the beginning of October 2009. On behalf of everyone at the NDA, he expressed thanks and appreciation for all the good work that Richard Waite had done over the last year and stressed that Richard would continue to be a very important part of NDA going forward.

3. NDA Chief Executive Officer's Update

William Roberts, the NDA's Chief Financial Officer welcomed participants to NSG8 and thanked them for attending. Before taking questions, he made the following key points to the meeting:

- As a result of feedback from participants, the NSG had undergone some changes since the previous meeting. These included aspects such as the NDA doing the practical arrangements, the inclusion of a session on Sellafield and providing participants with information on decommissioning progress at NDA sites.
- The NDA was keen that the NSG play an important role in the development of the NDA's next Strategy and the agenda for this meeting had been designed accordingly with a number of topics including waste being reviewed across the two days.
- The review of the NDA's local arrangements for engagement had been completed and new guidance had now been published (1 April 2009) for Site Stakeholder Groups (SSGs). The SSGs were thanked for their involvement and input to this exercise.
- The fourth anniversary of the NDA had taken place on 1 April 2009 and the following areas of progress were highlighted:
 - Substantial progress had been made in tackling the estate the NDA had inherited. At £8.44 billion (over the three years 2008/09-2010/11), the NDA budget includes the highest ever level of Government spend on nuclear decommissioning.
 - The Government strategic objective for hazard reduction is on target.
 - The NDA had achieved cumulative savings of £500 million, which would be ploughed back into the decommissioning programme and had generated over £5.3 billion of commercial income over the past four years with a further £1.2 billion expected to be added in this financial year.
 - The NDA has increased pressure on its own costs in the context of the current economic climate and has reduced its running costs budget for this year by £7 million.
- The NDA ran a Technology Demonstration competition with the aspiration that any proposals could ultimately be inserted into a Site Licence Company's (SLCs) technical baseline and secure additional value. Eighteen high quality proposals had been received. The winning proposal will show how contaminated concrete and pipework may be cut up using high-powered laser technology.
- The NDA has recently been asked by the Ministry of Defence (MoD) to carry out a study to determine if it is technically possible to store Intermediate Level Waste arising from the dismantling of nuclear-powered submarines, at one or more of the NDA's sites. Technical options studies have been started to investigate which site, or sites, may be suitable and it will then be for the MoD to decide whether it wishes to include any NDA sites among its possible storage options.
- The current consultation on a UK wide strategy for the management of nuclear industry Low Level Waste (LLW), which is running until September 2009 was highlighted. Hard copies of the consultation, which is live on the NDA website were available on request at the meeting.
- Energus, which is a state of the art skills training and education facility based in West Cumbria, is being officially opened by the Secretary of State for Energy and Climate Change on 19 June. This is one of the major projects highlighted in the NDA Skills Strategy. It will be the northwest flagship of the Cumbria National Skills Academy for Nuclear.
- Participants were advised that the Annual Report and Accounts (ARAC) would go before Parliament before the summer recess. For the first time, a summary version of the report and accounts containing the key highlights will also be published.
- In closing, William Roberts encouraged attendees to take advantage of the NDA staff in attendance at the NSG - get to know them, share your ideas and perspectives and ask questions!

3.1 Question and Answer: NDA Chief Executive Officer's Update

There was then an opportunity for stakeholders to ask questions:

Q: A participant gave recognition, which was stated to be on behalf of all stakeholders in the room, to the role Richard Waite had played, and gave tribute to way he had led the NDA team over the last year. The values and behaviours exhibited by Richard were considered to have been crucial in helping the NDA to get things done. Hopes were expressed that Richard Waite would continue with the NDA and that an appropriate role would be found for him. The NDA was reminded that it should not underestimate the value of the approach taken by Richard Waite.

The above comment was met with applause from the meeting.

A: This comment met with agreement from the NDA who said it would be passed on to others within the Authority, including Richard himself.

Q: Reference was made to the January 2009 NDA Board minutes which noted the abandonment of 25 year site clearance target for Magnox sites. How could the NDA declare a commitment to decommissioning if this target was not now going to be met?

A: The NDA thanked the participant for their question. The commitment given in the NDA Strategy was to look at the business case for accelerated decommissioning. At the current time, the business case for a 25 year site clearance programme cannot be made due to the lack of available waste routes and the impact that Government discounting rules have on costs – basically, these currently result in deferral being the cheaper option. However, the NDA's aspiration for acceleration remains and discussions will continue with Government and SLCs on ways of achieving it.

Q: A further question in relation to the above was about the £380 million raised from land sales, which has gone to a contingency reserve. The participant asked whether this could not be used to meet the 25 year strategy.

A: In terms of the 25 year site clearance aspiration, the issue is value for money more than the availability of money. The business case is simply not viable at the current time, but as previously mentioned, we will keep it under review. As for the money raised through the land sales, this will not be wasted and we will update you on how we plan to spend it at future NSGs.

Q: A participant reflected on a conversation that they had participated in recently with a senior NDA person. During the conversation a reflection was made that the current NDA administration was top-heavy: there were too many staff in NDA Headquarters compared with the site facing teams?

A: After four years in existence, the NDA is clearer about its mission and the resources needed to deliver it. As a result, there is some rebalancing of resources underway, hence the earlier reference to a reduction in NDA running costs

Q: A point was raised regarding value for money. Magnox South had achieved several million pounds in savings: the question was raised whether these savings would not be better spent at Magnox South in the pursuit of decommissioning.

- A: It was acknowledged that Magnox South in conjunction with Energy Solutions had been very successful in delivering efficiency savings, with more work being achieved for less money. However, the NDA had to balance spend across its entire portfolio and while savings were being made at some sites, there remain huge challenges at others, particularly Sellafield and Dounreay. The NDA acknowledged that at Magnox South acceleration is wanted and gave an assurance that it would do what it could when it could.
- Q: Assurance was requested from the NDA that capital money would be used for such and not for commercial or reprocessing uses.
- A: The NDA confirmed that such money would be used for capital projects. It might be necessary to use capital money for repairs to existing commercial plant, but it would not be used for new commercial facilities.
- Q: A question was asked about recent land nominations for new build by NDA and whether this indicated that the NDA was endorsing new build?
- A: The NDA explained that the reason for the nominations is to enhance the value of assets. This is part of the NDA's obligations under the Energy Act. The NDA needs to maximise the value of the land, hence the offer of the land for new build. The decision whether or not to go ahead with any new nuclear build will not be the NDA's.
- Q: It was commented that there was a dearth of representation of Non Government Organisations (NGOs) groups at the NSG. It was asked what the NDA could do to improve this?
- A: The NDA confirmed that it understood the concern. The NDA pointed out that it cannot force people to come and advised that this question had arisen before. The Authority advised that it has invited both individuals and groups that are NGOs but that take up is low. It was suggested that this may be because NGO priorities are focused elsewhere or that they do not have the resources to attend. It was confirmed that this situation has not arisen through lack of effort on the NDA's part and that the Authority would continue to try to encourage people to attend the NSG.
- Q: A question was raised in relation to the NDA's spending of about £4 million on bonuses for staff this year. The point was made that there is an issue about public sector workers getting bonuses especially in a time of economic recession. The participants asked if the NDA would publish their principles around the payment of bonuses?
- A: The NDA advised that it was undertaking a "reward" review this year, the outcome of which will be implemented next year. The NDA gave assurance that it recognised the sensitivity associated with the issue and agreed that there is a need to make clear what people are expected to achieve to earn their bonus and to make the principles that govern this public.
- Q: There was a plea on behalf of the Magnox North sites. While it was accepted that most of the NDA resource had to go to high hazard sites, there was a desire to see money from land sales going back into Magnox sites. It was emphasised that two of the Magnox sites are in socio-economic priority areas. In addition, Wylfa and other sites have extended generation, which was another opportunity to generate further funding to be fed back into the decommissioning of the Magnox sites.
- A: The plea was noted, but NDA reiterated that it had to balance spend across its entire portfolio and while money was being saved at some sites and generated by operating stations or through the sale of land, there remain huge challenges at Sellafield and Dounreay and that had to be the focus for NDA resource.

Q: A participant stated that they had no expectation of being listened to by the NDA at the meeting. The absence of NGOs was considered to be because of a lack of commitment from the NDA. The NSG meeting was viewed as a box ticking exercise and the participant asserted that their presence should not be taken as endorsement of the process.

A: The NDA responded that it did not share this view and emphasised that all input from stakeholders was valuable and appreciated. Any specific thoughts on how the NDA might better engage NGOs would be welcome.

Q: A participant, with reference to the previous question, asked the stakeholder concerned to bear in mind that some attendees, as elected members, represented a diverse range of views and proposed that there was no pro or con nuclear bias in the room and that the stakeholder was not necessarily in the minority.

The participant added that the decision to not back 25-year decommissioning was hugely disappointing.

Finally a question was raised about the breakout group topics to be discussed during the meeting: These were all important and there was a request for participants to be able to attend three if they wanted?

A: The meeting facilitator advised that the topics on the agenda were chosen on the basis of input from the NDA and participants. The hour allocated to each breakout session allows for better depth of topic discussion and the logistical challenge of getting the right size room for right size group depending on sign up. Individuals were welcome to move themselves round during sessions, but it would be difficult to move the sessions themselves.

Q: There was a further proposal from the previous questioner that the Chair's address be done over the buffet dinner. The stakeholder also highlighted that they had missed the fact that the evening dinner was not going to be formal and that this had previously been a good opportunity for further discussion.

A: The facilitator advised that the NDA Chairman would address the meeting at the close of the day rather than over dinner as he had previously.

4. Strategy Management System (SMS) Update

Richard Mrowicki, the NDA's Head of Strategy and Business Planning, provided a presentation on the Strategy Management System (SMS). There were also breakout sessions to be run later in the day to give an opportunity for stakeholders to have more detailed discussions.

Richard began the presentation with some background information: The NDA has an existing Strategy (published in 2006) in accordance with Energy Act. This is still live and going forward. The NDA are required to update it at least every 5 years, so this means that a revised Strategy will have to be published by 31 March 2011. To support this process, the NDA created the SMS. Composed of 27 topics, the SMS brings together the various elements of the Strategy in a single management system. There are various levels of maturity and development across the 27 topics. Individuals within the NDA are nominated as Strategic Authorities to take responsibility and ownership of the individual topics. Richard encouraged stakeholders to advise the NDA if they wanted to meet or to hear from any of the Strategic Authorities.

The SMS provides instruction and specification to SLCs so that site licence and decommissioning plans can match the NDA's strategic position. So far Site Strategic Specifications have been provided to Sellafeld and, in draft, to the Magnox sites and to Dounreay. Richard affirmed that the NDA is continuing to explore options for the SMS and that the development and review of strategies is a continuing process.

Richard advised that NDA was aiming to have the draft strategy document ready for consultation in July 2010 and that pre-engagement on the strategy would be undertaken through topic strategy documents so that stakeholder could understand what the progress of the NDA was for each and decide where/how they would like to be involved. Topic strategy summaries would be available on the NDA website during the summer as a way of engaging prior to the draft document next year. The next NSG would also be covering the SMS and Richard encouraged participants to sign up for the topic breakout sessions on the agenda to find out more.

4.1 Question and Answer: Strategy Management System

- Q: A question was raised in relation to one of the topic strategies, the 'critical enabler' International Relations and what the NDA was doing in terms of influencing internationally.
- A: The NDA responded that International Relations is a statement of principle and policy in relation to other countries. These are covered by formal agreements with the NDA and other operating bodies in other parts of the world, for example the US and French Departments of Energy, regarding Magnox. It lists a general approach and lists the agreement that we have in place.
- Q: The stakeholder then further asked whether the NDA could publish a list of what agreements exist, with whom and what treaties cover them?
- A: The NDA confirmed that they would list the agreements and took an action to provide this information (*Note: this information is now on the NDA website*).
- Q: A stakeholder raised the timing of the NDA consultation on the strategy being in July 2010 coinciding with the general election. The stakeholder considered that three months was not enough time and in addition was concerned that this was the same time as the summer holidays and asked whether this period could be extended.
- A: The NDA confirmed that the three-month statutory period would apply, but would look at the timing to try to avoid summer months. The NDA advised that the pre-engagement (for example the sessions at the NSG) and the summary documents being made available would mean that the draft strategy document should contain no surprises. It was therefore anticipated that the three-month period would be adequate.
- Q: A stakeholder noted that the topic of transport had been omitted previously from the strategy and thanked the NDA for incorporating it. The participant asserted that transport would cut across all topic strategies. A concern was also raised that transport would be an afterthought and looked at only at the end of the review process, but emphasised that it was integral to most of the other strategies. Finally the stakeholder stated that they would like to see how the NDA would deal with the transport issue.
- A: The NDA confirmed that 'critical enablers' such as transport would affect other topics and that they recognised it to be very important. The NDA advised that the topic entitled Transport and Logistics is at an early stage of development. Steve Dutton was identified as the Strategic Authority for the topic and present at the meeting. Stakeholders were invited to share their ideas with Steve and advised that he would be happy to receive suggestions and guidance.
- Q: A point was raised by a stakeholder who asserted that based on their own involvement with Magnox and Advanced Gas Cooled Reactors (AGR), much of the cost associated with decommissioning is because early stations were not designed with decommissioning in mind. The stakeholder asked how decommissioning of new designs was being taken account of particularly since an era of new build was now approaching.

A: The NDA advised that it is not responsible for decommissioning associated with new build, only civil nuclear public sector liabilities. The new utilities will be taking decommissioning and the associated costs into account, but new reactors will be easier and cheaper to decommission due to their modular design.

Note: Since the meeting, the schedule for producing the Strategic Plan has been revised. The consultation period will now commence in September 2010.

5. Site Stakeholder Groups: Chairs' Forum Report

The Chair of the Chairs' Forum, David Moore, gave a report on the meeting, which had taken place the previous day. He advised that it was now eighteen months since the Chairs' Forum had been set up. One of the key aims of the Forum had been to gain a level playing field for all the sites and this had now been achieved. David also confirmed that all the SSGs were receiving a good service from their secretariats.

The discussion had concluded that it was time for the Forum to regroup: Having a meeting the day before the NSG was not necessarily appropriate and they could, for example, meet a couple months beforehand in future. Previously, the Forum had undertaken a visit to Sellafield to generate better understanding and a visit to Dounreay was planned. This visit could be linked to a future meeting.

Finally David thanked the meeting for the opportunity to give the Forum update and encouraged participants to speak with him directly if they had any questions.

6. Breakout Sessions

Participants were asked to sign up to participate in two smaller group 'breakout' sessions of their choice from a selection that were being run. These were:

- Annual Report and Accounts (ARAC)
- Geological Disposal Facility (GDF)
- Oxide Fuels Management Strategy
- Plutonium Management Strategy
- Socio-Economic Policy
- Strategy Management System (SMS)

Most of the breakout sessions were run twice during the meeting to enable involvement for participants in at least two topic sessions.

The report of the breakout sessions is set out below. Where the timescale for delivering this report has allowed, the NDA has also provided some preliminary feedback on the input received from stakeholders. This is an indication of the Authority's initial thoughts on the key messages that it is taking away from the sessions and what it intends to do with that information.

6.1 Annual Report and Accounts

Note: This breakout topic was run only once during the day 1 breakout sessions as only a small number of participants signed up to it.

Purpose

The purpose of the session was to understand how the NDA's Annual Report and Accounts is put together, and what it will look like.

Feedback on the Annual Report and Accounts Information

The session was started with an introduction to the NDA's Annual Report and Accounts from William Roberts, the NDA's Chief Financial Officer. Comments made included the following points:

- People are not sure how to get hold of the ARAC.
- The ARAC is difficult to read on the website and many people experience problems downloading and printing out such large documents.
- There are easier ways to find information about the NDA than reading the ARAC.
- The summary report is a good idea, although full accounts must also be available on request.
- It is difficult to understand for those without the relevant expertise.

Suggestions for Future Report and Accounts Information

Stakeholders were asked for suggestions for how information could be best presented in future. In particular, feedback was sought on the idea of producing a summary version of the ARAC.

Suggestions put forward included the following:

- Include a summary breakdown of how the money was spent, and a commentary that tells the story and second-guesses the likely questions.
- Provide information on sites to show where the money has been spent.
- Describe the opportunity for future investment.
- Collect questions from stakeholders in order to identify the information that they particularly need.
- A plain English summary would be useful, but note that you are less likely to get specific answers in a summary.
- The number of pages required for a summary is around ten: a page per subject.
- Include tags such as: "For more information contact..."
- Use the NSG to brief stakeholders once you have published the ARAC.
- The approach of providing a highlights document and a participants' presentation this time round would have been helpful.
- The profile of the NDA needs to be improved. Better communication is needed with people on site.
- Provide a targeted paper for SSGs as briefing material.
- Provide a briefing for site programme managers to enable them to answer questions.
- Introduce a cascade briefing via the site programme manager.
- Communication should be carried out with the Boards of SLCs.
- In respect to Cumbria, West Cumbria SSG commercial sub-committee could receive an ARAC briefing.
- A question was raised as to whether the ARAC should be updated quarterly. This was considered unnecessary.
- More proactive media briefing would create a better understanding of the NDA.
- In developing the report, the NDA should consider what the real messages are that it wants to convey. These messages were considered to be: that decommissioning is being taken very seriously and an exposition of the Authority's positive achievements.
- The content needs to be consistent with the strategy and business plan.
- The content should be defined by subject, rather than by site.
- Use additional media to support the ARAC highlights, the website should use interactive elements, for example, video clips or provide a web cast.

Summary Report for the Report and Accounts

With regard to the summary report version of the ARAC, participants were asked to consider specifically what the content of this should be. Current ideas for the summary's contents were presented as:

- Economic Pressure
- Delivery of programme (management cost)
- Income (value for money)
- Nuclear liability estimate
- Efficiency
- Asset use.

Participants then suggested the following new ideas for the summary contents:

- Safety and security
- Changes in baseline
- Achievement of targets
- A forward look at the NDA's strategy and objectives
- Infrastructure.

Some initial feedback from the NDA on this session is provided below.

Response from the NDA

A most useful session: The points made need to be analysed in much closer detail, however, some of the key messages we are taking from this session include:

- *The report needs to be smaller – around 10 pages.*
- *The information should be localised to sites and include the use of cascaded briefings*
- *There should be greater use of interactive media to help communicate the ARAC.*
- *Content should be defined by subject, rather than by site*
- *SLCs should be more involved in facilitating the communication of the ARAC and the more site specific information to local stakeholders.*

Stakeholders also considered the content to the Highlights Report and suggested ideas such as:

- *Safety and Security*
- *Changes in baseline*
- *Achievement of targets*
- *Infrastructure.*

Many of these ideas have been included in this year's Highlight Report.

What we are going to do with this information:

- *We have already acted on some of the feedback for this year's ARAC Highlights*
- *We will accompany this year's ARAC with a DVD and video introduction by the Chief Executive Officer, making more use of interactive communications.*
- *A 'key messages' Power Point presentation has also been produced for this year's ARAC to support wider communications needs*
- *The website will feature the DVD and video of the ARAC*
- *Media briefings will take place this year: selected one to ones with national journalists*
- *Next year we would plan to report our progress through our key strategic themes*
- *We are looking at how we can better involve Site Programme Managers (SPMs) in the process and will provide access to these additional communications tools listed above to SPMs*
- *We will consider further some of the new ideas for content*
- *This year's Chairman's report will consider the wider context in which NDA operates, for example Economic Pressures et cetera.*

6.2 Geological Disposal Facility

Purpose of the sessions

The purpose of the sessions was to update stakeholders on progress with the implementation of the Geological Disposal Facility (GDF) project.

Alun Ellis, Geological Disposal Facility Project Director, provided an update on:

- Progress with the voluntarism approach to site assessment and selection;
- Update on the outcome of recent consultations relating to the GDF project;
 - Public/Stakeholder Engagement and Communications Strategy
 - Sustainability Appraisal/Environmental Assessment Strategy
 - Research and Development Strategy
 - Commercial strategy for surface based investigations
- Progress with the development of Radioactive Waste Management Directorate as NDA's delivery organisation for the GDF.

Outline of the Session Content

- Three Expressions of Interest have been received covering West Cumbria. The opportunity remains available for other communities to come forward.
- The GDF Public/Stakeholder Engagement and Communications Strategy had been agreed by government and would be published soon together with documents regarding the consultation on the draft.
- The Sustainability Appraisal/Environmental Assessment Strategy was also ready for publication together with the associated documents regarding the consultation on the draft
- The Research & Development (R&D) Strategy for the project had been published and work on a supporting programme document was in hand.
- Following a successful suppliers' workshop in January a Commercial Strategy for the site characterisation phase was being drafted.

Discussions following the Presentation

Questions of Clarification

Session 1:

Q: Are there only three communities who have submitted an Expression of Interest?

A: Yes, all from Cumbria, but others have considered doing so. The door is still open.

Q: Is there a cut off date?

A: No, but that will not delay the process in Cumbria. The door will be kept open to new communities as there is no guarantee that the process will succeed in Cumbria. We need to bear in mind that the community has the right of withdrawal at any time and they do not need to justify their decision.

Q: Is there a 'Plan B'?

A: No. The only plan is voluntarism.

Q: Would some areas be immediately ruled out?

A: The earliest time that a community can be ruled out is at Stage 2 - the British Geological Survey assessment. The process starts with communities volunteering.

- Q: Would being a high-density population area rule a site out?
- A: This is not one of the criteria set down in the White Paper. The effects on people will be considered during the site selection process. The surface facilities are actually quite small.
- Q: The American experience for site selection has higher success over a longer time. It is a kind of 'Auction' position. "Slaying the Not In My Back Yard (NIMBY) dragon".
- A: There are two necessary conditions: Community acceptance and suitable geology. If there is more than one site, they choose between. This process is better even if it is slower.
- Q: Is that not a dangerous approach? Is it not like running a one horse race? Would it not be better to run two potential sites in parallel?
- A: The international experience shows that you cannot succeed without the community support.
- Q: There is a risk in not putting down the 'Building blocks' of an alternative plan.
- A: Finland and Sweden prove that this approach can work.
- Q: It seems to be a very purist approach. We must find a solution; find suitable communities and go to ask them.
- A: This is the only way that will work.
- Q: What about Wales and Scotland?
- A: The position regarding Wales and Scotland is set down in the White Paper: Any potential Expressions of Interest will need to be considered by the devolved administrations.
- Q: Is that not high risk?
- A: There are two approaches:
- Approach communities who may have the right geology to ask them to be involved: this was tried and failed.
 - Or invite all communities and then of those that ask to participate, screen out those with no suitable geology.
- Q: Is there a right of withdrawal? When does the time expire?
- A: Once you get to the construction stage, communities are expected to have strong reasons to withdraw. But the intention is to make sure this is unlikely to happen by securing community support. The benefits are substantial and the communities are empowered to work in partnership with NDA/Government.
- Q: Why is Cornwall not coming forward?
- A: That is a matter for the community in Cornwall.
- Q: There is a risk that Local Council Chief Executive Officers can sit on the invitation to volunteer. Should you be trying direct approaches to elected members?

- A: The feedback from the Committee on Radioactive Waste Management (CoRWM) is that the message might not have reached everyone so there is a need to reach more elected members. The NDA will have a stall at the Local Government Association conference to support this process.
- Q: Is there any socio-economic package? Some deprived areas in Wales could be interested.
- A: There are many direct benefits for the host community (for example, jobs from big projects) and the White Paper recognises that there may be a need for additional benefits to ensure that, overall, the host community benefits from the project. Benefits need to be developed and discussed with government for each stage (for example, the project might need a freight line only, but it might benefit the community if a passenger service were provided as well). It needs to be tailored to what makes a difference for the community concerned.
- Q: Early engagement with rail regulators would be beneficial.
- A: The NDA already engages with the Department for Transport (DfT) and this engagement will intensify as the process develops.
- Q: Is there an education programme in place for Local Authorities to support late entrants?
- A: It is community led. The NDA wants to let them set the pace. In 2006, there was the CoRWM; in 2007 there was the Government White Paper. The first stage of engagement could still be education/discussion, but NDA will wait to be invited by communities.
- Q: What does community mean? It seems that the word 'Council' is being used as the same term?
- A: Elected Councils have an important role. Establishing a credible decision to participate is important, and this requires wide community involvement. In West Cumbria, there is a Public and Stakeholder Engagement Plan, which is led by the Partnership. The Partnership meetings involve community groups, and have independent facilitators. The process leads to credible community support and the challenge is to be sure that the community has really engaged.
- Q: What happens if the District disagrees with the County?
- A: It would need to be resolved. For example in West Cumbria, it would need discussion between Government, District and County.
- Q: Can landowners express interest?
- A: Yes, but it needs to be credible (that is, the Landowner must consult the Council).
- Q: What about unitary councils? Could parish councils apply?
- A: The NDA and Government are happy to talk to parish councils and discuss the way forward. Any Expression of Interest needs to be credible and demonstrate community support.
- Q: If Plan A fails what will happen: Plan Z; that in 4 years time the Government compulsory purchases a site?

A: There is only Plan A, voluntarism.

Q: What about the Scottish case? There is no policy in place. Policy decision is different.

A: The Scottish Government will consult on the development of its policy on higher activity wastes.

Q: What is the role of the NDA versus Government's role in site selection?

A: In the early stages, it is the Government's responsibility. The ultimate decision belongs to the Government. The NDA is involved in carrying out the desk-based studies after the decision to participate has been made.

Q: Would there be any policy change if the government changes?

A: No, it is not expected.

Session 2:

Q: Have you screened for sites, which are not suitable? It would save costs for communities in getting involved if their geology is clearly not suitable.

A: The first stage is for communities to express interest. The second stage is for the British Geological Survey to do the assessment and identify at an early stage if a site is not suitable.

Q: Would deep mines be suitable?

A: Mines are not always suitable. There are issues with rock and water flow. But we are likely to have a good understanding of the geology in these areas. In many areas, there is less information. British Geological Survey will do screening on existing information.

Q: What does 'Initial' mean? Does it mean 'only one'?

A: There have been three Expressions of Interest so far: Copeland, Allerdale and Cumbria County Council. The door is still open. The NDA will be using the Local Government Association conference to promote the opportunity. There is still a long way to go in securing and maintaining community support and identifying suitable geology.

Q: Information from Nirex boreholes is still available. The main criteria of the British Geological Survey are to identify sites, which are unsuitable (for example in proximity to an aquifer). The criteria are listed in the White Paper. The British Geological Survey use existing knowledge versus criteria. The estimate is that 30% of West Cumbria would be excluded.

Q: Plutonium has a half-life that will continue a long time into future, even beyond humans. Sea level rise, ice age, and protection of the site need to be taken into account. The facility must be extremely robust.

A: The site must be suitable: this needs to be defined in the safety case (for example to show how risks from human intrusion will be mitigated). The safety case must demonstrate that residual risk is acceptable. We cannot say absolutely that some things will not happen (for example disposal would be deep, up to 200m plus, to protect against postglacial erosion). If it is done to best minimise the risk and if a GDF remains the best option in terms of risk, this will still be the best solution.

- Q: The inventory doesn't include plutonium and spent fuel.
- A: Spent fuel or high-level waste from reprocessing makes very little difference to the radionuclide inventory. The GDF could engineer barriers to make the risk from spent fuel the same as from High Level Waste.
- Q: Are the relative risks fully understood? It seems perverse not to reprocess fuel.
Retrievability: can waste be repackaged?
- A: 'Disposal' is different from 'store' where the ability to repackage is needed. The White Paper has moved away from CoRWM's view on retrievability. In response to the consultation feedback, the position on retrievability has been left flexible for discussion with communities.
- Q: There are different terms: Retrievable? Reversible? What exactly does it mean?
- A: Retrievability may decrease over time, as, for example, moving gear may wear out, or vaults may be sealed.
- Q: The Environment Agency (EA) wants a high level of confidence. There are technical issues about keeping it open but the Agency recognises the societal issue, that people want retrievability.
- A: The White Paper sets out the position on retrievability. Potential host communities will be involved in discussions as the design is developed.
- Q: In the waste hierarchy, disposal is the route of last resort. What needs to be considered to reduce waste?
- A: The NDA is working to identify the right strategy for dealing with some wastes (for example graphite).
- Q: What are the practicalities of moving forward? For example, if West Cumbria goes to Stage 4 of the process. How do you get from a swathe of West Cumbria to individual sites?
- A: The NDA recognises the need to have a process to identify potential locations within a large community area. The British Geological Survey screening will identify a wide area. The community and its local planning authority need to be involved. There are questions around when to apply. Is it once the decision to participate has been made? It may be that communities need to know the potential sites before the decision can be made.
- Q: Will the GDF be for solid waste?
- A: Yes.
- Q: What about experiences from other countries?
- A: Most countries are adopting the GDF. Sweden has selected the Forsmark site for its GDF. Finland is making good progress. The countries making most progress are those using voluntarism approaches.
- Q: Having the shortest distance of travel would be an advantage for Cumbria as a location.
- A: Transport is a factor, but it is not an overwhelming one in itself.

Q: How far progressed is the GDF detailed design?

A: The detailed design assumes specific geology, but waste is already being recovered and packaged. It is best if it does not have to be re-worked. So, the NDA have a conceptual design to support waste handling and demonstrate the viability. The NDA is working up generic design and disposal safety cases.

Q: The waste at Dungeness is owned by EDF Energy. Does the NDA have the power to decide what happens to it?

A: British Energy (BE) owns the waste from before 2005; and the NDA owns the waste generated after 2005. A Letter of compliance is needed for the encapsulation and these are issued by the NDA; therefore the NDA does have some control.

Key Messages

Session 1

- Every elected member should be informed directly. Secretary of State should invite ALL to express interest as the message is not getting through via the Chief Executive Officers of Councils.
- There is no Plan B, as it will not work (Plan B: Approach communities who may have the right geology to ask them to be involved: this was tried and failed). The NDA supports Plan A (Plan A: Voluntarism: Invite all communities and then from those who ask to participate, screen out those with unsuitable geology).
- There are possible socio-economic benefits for economically deprived areas.
- There is a driver for some areas, as they already have the waste on their doorsteps.

Session 2

There are a very small number of volunteers so far, which is an issue of concern, but there is also a lot of goodwill from a wide range of communities in West Cumbria.

- There are issues around the definition of the term “retrievable”. What does it mean precisely?
- If the government were to offer support to communities to cover the costs of initial engagement, this may lead to more volunteers, and the White Paper does set out that the costs of engagement will be covered.
- There is an issue about communication. More clarity is needed on what the term ‘communities’ means and the decision making processes.

Some initial feedback from the NDA on this session is provided below.

Response from the NDA

The key messages that the NDA are taking away are as follows:

- *The importance of retrievability is recognised. At the right time this will be discussed with communities so that they can influence the design of the facility.*
- *The NDA recognises the need to remind communities that the invitation to engage in the process remains open.*

The NDA will use this information as follows:

- *The NDA’s work on strategies may affect the inventory of waste for disposal. These changes will be discussed with potential host communities.*
- *The NDA needs to show that it is fully committed to the voluntarism approach.*

6.3 Oxide Fuels Management Strategy

Purpose of the Session

To share with stakeholders the emerging thinking on oxide fuel strategy and to better understand how the NDA might respond.

To have identified key issues of concern to stakeholders and have an understanding of the most significant issues in order to help further define/refine credible options development.

Outline of the Session Content

The breakout session consisted of a presentation by Paul Gilchrist, the NDA's Head of Fuel Cycle Technology and then a discussion focusing on clarifications of the presentation material and development of issues that stakeholders thought were important for consideration by the NDA.

The presentation put the topic of oxide fuels in the context of the SMS overall. It outlined the types of spent oxide fuel and the current reference strategy before outlining the high level options for consideration as part of this review. Finally the presentation described the AGR dry storage and Light Water Reactors (LWR) dry storage options and the way forward for the development of the Oxide Fuels Strategy.

Questions of Clarification

Session 1:

- It was clarified that Sizewell B fuel is BE fuel and therefore not NDA liability, but it could be a future business consideration.
- The NDA clarified that transporting Japanese fuel to France is not currently being pursued as an option.
- OSPAR as an international treaty obligation was highlighted as being of importance, and the issue was raised about the situation if OSPAR commitments were not met. The NDA clarified that by raising it with Government the NDA kept them abreast of the situation.
- The NDA confirmed that the Thermal Oxide Reprocessing Plant (THORP) has been reprocessing materials recently, but is shortly due to enter a scheduled outage.
- The NDA confirmed a suspected leak was investigated in evaporator B, but it was subsequently found there was not a leak. The NDA confirmed that both THORP and the evaporators are shortly due to enter a scheduled outage until January 2010.
- A point was raised about the option to reprocess abroad if the plant peters out, and that this would require transport. It was confirmed that the NDA consider the issue of transport important and that the DfT are in the group advising on the issue.
- The NDA clarified that there is a crossover into other strategies e.g. plutonium and High Level Waste (HLW).
- It was asked if a possible change of uranium price is built into the models? The NDA confirmed that this was the case, and that a buffer was also built in.
- It was asked whether there is space for a THORP2. The NDA clarified that this is considered in the credible options paper.
- It was asked whether a review timeline would be built into the strategy review process. The NDA confirmed that the credible options paper will be available by the end of this year. This will include a discussion of the relevant points, in order to understand what the community views as important.
- The NDA clarified that the government has not classified spent fuels, uranium and plutonium as 'waste'.
- A point was raised about the potential of improved reprocessing to which the NDA clarified there is currently little, if any, focus on improved reprocessing by the NDA.

Session 2:

- In terms of compatibility with geological disposal, the NDA confirmed that there is co-ordination between this and the other waste strategies and GDF.
- The NDA confirmed that the final credible options study draft will ideally be ready at the end of this year.
- A comment was made that the current reprocessing technologies are over 30 years old and need improvements.

Issues Raised

Session 1:

- It was elaborated that costs include economic but also socio-economic costs, environmental costs etc.
- Transport is an issue since if reprocessing were to stop, fuel from the reactors would have to go somewhere.
- There is a risk of contamination of the environment. Every stage (in the management of Oxide Fuels) has the potential for this.
- The long-term security of energy supplies was raised as an issue of importance.
- The speed of producing the credible options, back up and contingencies is an issue of importance.
- The issue of dry storage and its relation to the GDF was raised as an issue for consideration.

Session 2:

- It was commented that what communities may be willing to accept in terms of wastes in GDF is an important aspect for community acceptability - this also links into the socio-economics of an area.
- It was commented that the track record of THORP needs to be reflected in relation to developing contingency plans.
- It was commented that contingency options development is vital to understand the cost implications.
- It was asked how stakeholders could get involved in influencing decisions. The NDA responded that communities are to discuss the draft credible options paper for comment. The NDA clarified they will listen to comments, as it is an excellent opportunity for the NDA to get those views. Where an issue is relevant to a specific site the NDA is prepared to be flexible in engaging with the community. It was commented that West Cumbria would want to have input into this.
- It was commented that no one was speaking up for the point of view of environmental impacts. It was stated that in the plutonium breakout session the primary issue raised was the environment, as in the earlier oxide fuel's strategy session. The NDA clarified that the paper has a very strong component of environmental impact, which is important for public acceptance and tolerance.
- If fuels are not reprocessed, where they are to be stored is a key issue.
- The issue of technical implementability is important.

Additional Options

A number of the comments were made explicitly about the high level options or detail under the options presented for the oxide fuel strategy. These have been pulled out from the comments made and set out below:

Session 1:

- It was suggested that another option could be to stop reprocessing and store fuel, pending a decision on reprocessing. The NDA confirmed that this is part of Option 5 of the Oxide Fuels Strategy.
- The NDA confirmed that any THORP2 would be under Option 4 – 'replace plant'.

- The NDA clarified that in dry storage the fuel does not necessarily have to be casks, that this is just one of the options. The NDA need to consider what form the fuel will be in after that.
- It was raised that there could be the possibility of building a reactor next to the Sellafield site.

Session 2:

- It was asked how private money might be invested. The NDA responded that in Option 4 there would be a need to explore what funding options would make it a reality. The NDA would need to get some market advice were that to come to pass. It was also asked whether it was a business opportunity to facilitate one of the options.
- For the options analysis of the immobilisation of dry store waste, the NDA are working with the Radioactive Waste Management Directorate (RWMD) to look at disposability of spent fuels and implications for the geological disposal facility. The NDA will see what is most appropriate and keep an open mind.
- There are variations on the options but the main ones are there already.
- One option is to use the reactors as storage.

Main headlines from the Sessions

The main themes emerging from the two sessions can be summarised as follows:

- It is important that stakeholders know how they can be engaged around the development and review of options;
- There was generally a welcoming of the range of options under consideration – that it was across the broad spectrum of options;
- There is a need to show and consider the interrelation of oxide fuel strategy management to other topics in the SMS - e.g. Plutonium.

It is intended that feedback from the NDA on this session will be provided at a future update.

6.4 Plutonium Management Options

Presentation on Plutonium Management (Department of Energy and Climate Change)

Dean Gallacher from the Office for Nuclear Development (OND), the Department of Energy and Climate Change (DECC), gave a presentation at the beginning of each of the two sessions to provide background information and inform the discussion.

NDA and DECC Roles in Relation to the Options for Plutonium Management

The roles of the NDA and DECC in relation to the management of plutonium were described as part of the context setting, as follows:

- NDA provide advice and recommendations to Government: in this respect it was strategy advice, in the form of an options paper.
- The options paper raised policy questions, which it is Government's role to address.
- It is Government's role to set policy.
- It is NDA's role to do strategy.
- Government will have the final governance role in approval of a revised strategy.

Additional Factors for DECC to Consider Regarding Options

One of the aims of the breakout session was for DECC to gain an understanding of what stakeholders considered to be the relevant factors that should be used to assess the options and for what reasons. Some examples were offered as a starting point for the discussion. These included factors proposed by participants at a previous DECC workshop on the long-term management of the UK's separated civil plutonium that had taken place on 21 May 2009. A summary report on this workshop can be viewed at <http://www.berr.gov.uk/files/file52080.pdf>

Session 1

Clarifications on the DECC Presentation on Plutonium Management:

Following the presentation by DECC there was an opportunity for participants to ask questions of clarification. These are set out below.

- Any decision that would lead to plutonium handling needs to go through a (European Community) justification process for every practice involving handling radioactive materials; that is, there needs to be justification for anything requiring plutonium handling, describing the benefits and detriments.

Additional Factors:

The factors identified by participants for DECC to consider regarding management options in the breakout session are set out below:

- In the context of international events, the option needs to safeguard plutonium in a way that assumes irrationality.
- Solutions should be robust to any economic climate.
- Intergenerational equity: We, the present generation, have taken the benefit from plutonium and so we should not leave the issue of its management to future generations.
- Health impacts.
- Community acceptance of the disposal route.
- At some point we need to decide whether plutonium is an asset or a liability.
- Minimisation of transport of plutonium (i.e. plutonium owned by UK).
- Political factors, for example, potential international drivers.

Discussion:

Further points raised during the session are set out below:

- It was clarified that storage of plutonium is set up such that amounts do not reach critical mass.
- There are both benefits and risks to having all plutonium stored at one site (the vast majority is already at Sellafield).
- The timescale related to concerns on proliferation should be noted: There is a trade off between doing something now with known technology and managing it later potentially with new technology.
- A decision on plutonium management will not be reached in time for the NDA's revised, 'Strategy 2' (2011), so a default position will be adopted.

Next Steps:

Stakeholders then commented on what they would like to see DECC do next on Plutonium:

- Certainty and clarity is needed for communities in order to plan for the future.
- A pre-consultation discussion paper is desired from DECC:
 - To get input on how to conduct the consultation.
 - To capture all key stakeholders and allow them to raise concerns.
- Talk to the Department of Health, particularly about front line staff training (a nuclear planning issue, not specifically a plutonium issue).

Session 2

Discussion:

Points raised in response to the information presented during the session are set out below:

- DECC's involvement with the NDA began in 2005, the responsibility was then held under the Department of Trade and Industry (DTI)
 - Developed into the Options Paper now on the NDA website.
 - It has always been clear that it is Government's role to set policy. What was unclear was when DECC might do this.
 - Has come as surprise to those that were on the NDA special interest group.
- The draft flow diagram should be amended to look at options first.

- One of the complicating factors is that different options for immobilisation and disposal are at different levels of maturity. Some are well developed, others, if they are to be taken forward, involve more work. If there are certain options, which are unacceptable from a government policy perspective, it would not represent value for money to develop them further.
- A preliminary view could be to recycle or immobilise and dispose. DECC need to set a direction for travel.
- It needs to be made clear whether consultation is on a preliminary view of an option or on a direction of travel.
- At the 21 May 2009 DECC workshop on plutonium management, Greenpeace and Nuclear Free Local Authorities (NFLA) put down a clear view on no reuse.
- It is too soon to lay down credible options.
- There needs to be an information paper outlining government thinking.
- It seems obvious what should be done: the councils will not want it to be disposed of, so reuse is the only option.

Additional Factors:

The additional factors for DECC to consider regarding options identified by participants in the breakout session are set out below:

- There are practical and policy options of reuse. What is the potential impact globally if others follow suit?
 - Broad impact
 - Reuse of what exists is more proliferation-proof because the plutonium would be in use
 - There is also the issue of setting a precedent.
- Skills and skills retention.
- Cost of prevarication (in all terms, safety as well as financial).
- This specifies civil plutonium but if we took MoD plutonium and blended it; it could be used.
- Are we thinking too parochially? Are there international options?

A final question was raised as to whether DECC could unilaterally take the decision to sell it internationally. The advice in response was that there would be international protocols to consider.

Response from DECC

Plutonium strategy is a difficult and emotive issue. There are many diverse views on what to do ranging from, "it's too soon to lay down realistic options" to "it's obvious that re-use is the only sensible way forward".

DECC found the breakout session to be worthwhile and can honestly say that it has helped considerably with our thinking

As a result of the feedback from the meeting that DECC held with invited stakeholders on the 21st May and taking into consideration views expressed at the NSG in June, the Government decided that, because of the many differing views, some of the key issues should be worked through in more detail and set out in publicly available discussion papers so that a wider audience can contribute to the development of Government thinking in this area, prior to the Government launching a public consultation in the autumn.

Two discussion papers will be published; the first will consider the factors which could be important when judging one potential option for long term plutonium management against another. The second paper will consider the decision-making methodology and issues around when is the right time to make a decision on selecting a preferred option.

The need to consult and take views on board make it unlikely that a final decision will be made in time for the next NDA strategy. It is therefore likely that the NDA will have to set out a default position with respect to the time that plutonium is stored before disposal in order that costs can be included. This will reflect a non-optimised position which would then be changed once final decisions have been made.

6.5 Socio-Economic Policy

Purpose of the session

- Provide an update on the recent socio-economic activities of the NDA in the areas of Employment, Education/Skills, Economic and social infrastructure and Economic diversification.
- Provide an overview of the Priority Area Plans, including the proposed actions which are planned to improve the alignment and targeting of funds in support of the priorities of Authorities and Agencies.
- Provide an opportunity to discuss the merits/requirements for Area Plans for those areas which are not identified as priority areas in the NDA Socio-Economic Policy.
- Discuss the measurement of outcomes from the NDA socio-economic activities which are key to stakeholders and how these should be reported.
- Understand opportunities (as they arise) for NDA “strategic interventions” activities.

Outline of the Session Content

- An update of the NDA’s recent socio-economic activities was presented to participants by Bob Churchill, Head of Corporate Responsibility and Socio-Economic Development.
- An opportunity for participants to ask questions of clarification.
- Discussion about the four Priority Area Plans and whether other areas might benefit from an Area Plan.
- Discussion about reporting on the application process.
- Discussion about reporting on the measures of outcomes delivered by Socio-Economic Policy.
- Identification of any other ideas and opportunities for strategic interventions.

Questions of Clarification and Comments on the Socio-Economic Policy and Priority Area Plans

Session 1:

- Priority areas and other areas
 - There are four priority areas identified within the Socio-Economic Policy. However, this does not prevent areas outside of the priority areas from submitting applications for funding. Indeed some applications received from outside the priority areas have been successful and have already received funding.
 - The priority areas were identified by a thorough process that is set out in the Socio-Economic Policy document.
 - There was a suggestion to increase the amount of publicity about the funding available to all areas, not just the priority areas.
 - The idea of creating an action plan for non-priority areas was raised, but no specific areas were mentioned or put forward.
 - All ideas and issues received from stakeholders are gathered and captured into a strategic document that informs the policy.
 - Any prospective new build will not necessarily affect any index of deprivation used within the Socio-Economic Policy, and therefore the possibility of any funding should remain unchanged.

- The application process
 - Any application for funding from a priority area needs to demonstrate alignment with the action plan to be successful.
 - The NDA provides support with the application process to all stakeholders and groups from all areas.
 - There was a suggestion that applicants should research previous successful applications, as ideas may then be used in their own area or application.
- Match funding
 - The NDA has proven success with match funding for activities.
 - Both public and private funding sources of match funding are available e.g. match-funding from SLC that targets specific needs.
- Evolving the process
 - The entire application and funding process is constantly being developed and improved.
 - There was a suggestion that a forum could be created that would help to identify changes that would impact on the policy or the application process.
 - There was a comment that the NDA is seen as being reactive to certain situations and a request was made for it to become more proactive.
- Website
 - Details of the NDA's socio-economic activities are now available on the website.

Session 2:

- Priority areas and other areas
 - Priority areas are defined by several factors (e.g. employment in the area) as detailed in the Socio-Economic Policy document.
 - Applications for funding have been received and approved from other areas, not just from priority areas.
 - At present, there is no current plan to revisit or amend the Socio-Economic Policy. However, stakeholders' views on the policy, priority areas and other areas are welcomed by NDA.
 - Unemployment is also an important factor. In the past, jobs were lost due to decommissioning (e.g. at Sellafield). Potential job loss has also been identified as an important factor in a study by ERM during the BNFL Stakeholder Dialogue.
 - Bradwell and Sizewell were identified as areas where an action plan, similar to that of the priority areas, could be useful.
 - There was a request for the NDA to review priority areas in the light of recent economic developments.
 - There was a comment that there was no opportunity to review the needs of each area and a suggestion was made to look at the wider needs of each site, through the policy.
 - There was a comment that there might be a correlation between nuclear areas and social deprivation. This may be because a dependency culture has been created over time between the community and the nuclear industry.
 - In the policy the NDA recognises that economic footprints differ from one area to another.
- Match funding
 - The opportunity to leverage funds from the NDA with match funding is important. Match funding has already proven to be a success with a current rate of 1:6 to 1:7 NDA socio-economic funding to match funding.
 - There was a suggestion that a mechanism to direct applicants to other potential funding bodies should be developed. A request to share any suggestions of mechanisms or other funding bodies was made, so that a model could be devised for future stakeholder agreement.
 - It was felt that it would be useful for the NDA to signpost potential applicants to other possible sources of funding (e.g. from other government agencies).

- The application process
 - It is essential that all applications consider long-term projections. Not all have done this, and they have therefore been unsuccessful.
 - Any funding approval would ideally need buy-in from the local SSG. There have been occasions where funding was granted, without the knowledge of the SSG. This can lead to a doubling up of similar activities. There is a need to disclose who is supporting and who has been involved in the application process.
 - There was a thought that the NDA and stakeholders could work in partnership in the application process.
 - There was a request to look at future projections because it was felt that smaller needs are not catered for in the current application process.

Reporting on the Application Process

- The number of applications that were successful, as well as the number of those that were not successful and the reasons why they were or were not successful.
- Details of funding achieved from all areas.
- Evidence of early engagement with the NDA.
- Not just feedback on actual applications. It would also be useful to have a forum where ideas and dialogue from stakeholders who have contacted NDA in relation to the Socio-Economic Policy could be shared.
- How the application process has been refined and amended, based on applications received to date.
- A system that allows applications to be tracked throughout the process (e.g. status, progress, etc.) – the NDA responded that this is already happening.

Reporting on the Measures of Outcomes Delivered

- Funds committed to activities and funds actually spent.
- Number of people re-employed from a particular site (not just employment/unemployment figures for the area).
- Possible involvement of the National Audit Office (NAO).
- Possibilities for match funding and leverage.
- Photos of areas and activities in the annual report.
- Measures of plans and activities against their key performance indicators (KPIs).
- Publication of an annual report including success stories, amount paid out, etc.
- Details of leverage from the community be it with time, money or other resources.
- Details of how coalitions with leaders of the community and local organisations were formed, with photos where possible.

Opportunities for Strategic Interventions

Session 1:

- Ideas for strategic interventions could come from existing asset management plans e.g. the use of old diesel vehicles as generators run on bio fuel.
- There was a request to let NDA know about any opportunities and ideas for possible 'strategic interventions' between stakeholders, groups and the NDA.

Session 2:

- It was felt that partners and stakeholders could work together to create regeneration plans

Actions

Session 1:

- The NDA should add 'Thurso & Wick Trade Union Council' in the Caithness and North Sutherland priority area plan summary document, as they have done a great deal of work and were not mentioned in the summary that was displayed during the breakout session.

Session 2:

- No additional actions were raised.

It is intended that feedback from the NDA on this session will be provided as a future update.

6.6 Strategy Management System

Purpose of the session

- To share the current position and latest thinking on SMS development
- To seek stakeholder views about NDA strategy development
- To further help NDA understand stakeholder priorities.

Outline of the session content

- An overview of the SMS was presented to participants by Richard Mrowicki, Head of Strategy and Business Planning. This covered the status of the development and implementation for each topic strategy.
- An opportunity for participants to ask questions of clarification.
- Checking with stakeholders to confirm that their areas of interest are covered within the SMS.
- Some topic strategies are still in the early stages of development (e.g. Land Quality Management; Plutonium; Uranium; Exotic Fuel; Non-Radioactive and Hazardous Wastes, Asset Optimisation). With this context in mind, stakeholders were asked to consider:
 - What are your key areas of interest in the SMS?
 - How would you like to input?

Questions of Clarification and Comments on the SMS Topics Overview

Session 1:

- Site End States:
 - A question was asked about what the nature of the agreed timescale for site end states was. A comment was made that to describe a timescale as "agreed" was too absolute; and that "preferred" would be a more appropriate description.
- Decommissioning and Clean-Up:
 - There was a request that it would be useful to hear more about what decommissioning and clean-up had not been done and to gain an understanding of the rationale for this.
- Higher Activity Waste:
 - Assurance was requested that the Scottish dimension had been taken account of in this strategy. The NDA confirmed that this was the case.
 - A comment was raised about the status of this topic being described as "developed": A view was put forward that this was not appropriate as there were too many unknowns associated with the HAW strategy.

- Low Activity Waste (LAW):
 - A question was asked about the decision to make the LAW facilities available for wider use beyond the NDA's legacy waste. It was clarified that this was a commercially driven decision (the NDA having a responsibility to maximise resources to cover clean-up and decommissioning costs) and that this was applicable only to low-level waste.
 - Non-Radioactive and Hazardous Waste:
 - A question was asked relating to whether the public sector had opportunities to contract as a provider for Non-Radioactive and Hazardous Waste services. The NDA confirmed that this was the case.
- Asset Optimisation:
 - A question was raised about whether the assets included contaminated arisings from decommissioning. The NDA advised that assets included plant equipment and buildings used to manage the arisings.
 - The NDA also confirmed that the arisings, if recycled would be managed under a different topic area depending on the type of waste involved (e.g. Higher Activity, Non-Radioactive and Hazardous, Plutonium, etc.).
 - A comment was made about using the term "asset" and the different perspectives on this. The view was put forward that this implied a positive connotation when in effect this might not be the case.
- Funding:
 - A request was made for the NDA to share the business cases written for Government to get funding so that stakeholders had a better understanding of this.
 - A question was asked about what is done with revenue generated from asset and land sales. The NDA confirmed that the revenue is for particular use by the NDA and that any additional income or capital can be drawn down. The NDA further explained that the Government is committed to providing the money generated for NDA to use. This commitment is set in a Statement of Interest. Asked if there were any circumstances where this would not be upheld, the NDA clarified that, there cannot be an absolute guarantee, but the commitment from Government was a strong one.
- Health, Safety, Security, Environment, Quality (HSSEQ):
 - A suggestion was made about whether there was an opportunity for joined-up thinking between security issues at site level and wider security issues.
 - The issue was raised that on-site visits for the public to aid better understanding of nuclear activities and risks had stopped because of the perception of security risks.
 - A question was asked about whether carbon reduction was an aspect of HSSEQ. The NDA confirmed that it was and that through this topic they aim to set the standards for carbon reduction that they will abide by.
 - A question was asked about how the SMS topics linked with regulators and whether this aspect was under Information and Knowledge Management; and whether technical information was part of HSSEQ. The NDA confirmed that this was correct.
 - A suggestion was made that the R&D topic could look at how security should be integrated in the future.
- Suggestions were also made about the general presentation and clarity of the SMS content during this session:
 - There were suggestions made that it would be useful to include:
 - A definition of "assets" under the Asset Optimisation topic
 - Definitions for all topics so that it is clearer what areas are covered under each topic
 - A glossary of acronyms.
 - There was also a request that the SMS should be clearer on what was available for review. The NDA clarified that the summary table stated whether a topic was "developed" or not. This indicated whether the topic was in a state of advancement or whether it was undergoing review.

Session 2:

- Land Quality Management (LQM):
 - A question was asked about where contaminated land was covered in the SMS and the NDA confirmed that this was under the LQM topic.
- Magnox Fuel:
 - A question was asked about the contingency for Magnox fuel processing and the NDA advised that this was likely to be drying the fuel for interim storage prior to disposal.
- Oxide Fuel:
 - The NDA clarified that the LWR referenced under the topic was a generic class of reactor, which encompassed other reactor types Pressurised Water Reactors (PWR) and Boiling Water Reactors (BWR).
- Site End States:
 - A question was asked about the Site End State review and how further input could be made. The NDA explained that feedback already received from stakeholders was being taken into account but that did not exclude an opportunity to reflect on it and review it. The NDA advised that this was reflected in the End State summary document.
- Land Quality Management:
 - A question was asked about whether it is feasible to set a standard for land quality management that can then be applied to all sites.
 - The NDA clarified that there are interactions between LQM and the decommissioning and clean-up prioritisation as well as the Site End State.
- Funding and Revenue Optimisation:
 - Clarity was requested on why there are both Funding (which is outside of NDA's control) and Revenue Optimisation topics. The NDA advised that it needed to include information on how it obtained funding since this interacts with everything, and is therefore one of the topic strategies that are critical enablers of the SMS.
 - A question was asked about what room there is for negotiation between the NDA and the Government on timelines for funding. The NDA advised that it has agreed Medium Term Targets (15-20 year targets) as Strategic Objectives rather than the end date, to define funding requirements.
- Higher Activity Waste:
 - A question was asked about how higher activity waste applied to new build. The NDA was asked how it managed the circumstance that waste from new build was not within the Authority's remit but that it should in any case keep abreast of the situation. The NDA advised that companies building new nuclear power stations will have to decide how to manage their waste.
 - Clarification was requested on the relationship between Parent Body Organisations (PBOs) of SLCs and development of the NDA's SMS. The NDA confirmed that it works in partnership with SLCs and that the strategy is communicated to these SLCs. The NDA also works with PBO representatives. A comment was made that the interaction was working quite well.
- Decommissioning and Clean up:
 - A question was asked whether there is a relationship between the prioritisation under this topic and the decision taken on the twenty projects that get funding. The NDA confirmed that there is a definite link and that the NDA takes into account all the particular circumstances of a site in the decision.
 - There was a request that the decision making process on prioritisation and funding projects should be shared and that this should be an agenda item for the next NSG.

- SMS General:
 - Clarity was requested on the summary table's yellow colour code. The NDA advised that it refers to items for which NDA does not have full control or responsibility. For example under Non-NDA Liability Management, the strategy is referenced in yellow because it relates to MoD and BE liabilities for which NDA does not have responsibility, but they might impact on the programme for delivery of the Authority's mission.
 - A question was asked about how the interrelationships between different topic strategy items were managed, for example with Transport. The NDA advised that there was a Strategic Authorities Forum within the organisation that brought together those responsible for the range of topics within the SMS and which looked at the interfaces and alignment needed across the topic areas.
 - A suggestion was made that the NDA should projectise funding so that it is on a multi-year rather than an annual basis.
 - A question was raised that if circumstances changed, was it possible to change the value framework? The NDA confirmed that this was possible, as it was not fixed absolutely.
 - The comment was made that the NDA's priorities need to take into account external changes.

Checking the Coverage of the SMS

- A question was asked about how radiation risk was recognised within the SMS: Whether information on industry and knowledge on radiation risks fit into Information and Knowledge Management. The NDA confirmed that the HSSEQ topic would cover radiation risk. The NDA also advised that it cannot manage a change of perception on risks of radiation as this matter sits with the regulatory bodies.
- A concern was raised that radiation risk was not addressed by the strategy and that there was no opportunity to discuss radiation risk within the NSG agenda.
- There was a request for further discussion on where radiation risk would be covered in the SMS. It was agreed that the NDA would discuss the issue in more detail directly with the participant who raised it and that the outcome of the discussion would be shared.

Topics for Future Engagement

Session 1:

- A discussion on the opportunity for stakeholders to input took place and the following points were raised:
 - The NDA clarified that a position statement for those topic strategies that are already developed is on the website.
 - The NDA also clarified that there is always opportunity for stakeholders to give feedback on all of the 27 topics.
 - A request was made that in addition to the website information, the SSGs would need updates on this information and on the consultation plans. In addition it was requested that hard copies of the documents would also be useful.
 - A point was raised that there should also be an opportunity to input into the topics that are already developed, not only in the ones that are in early states of development. The NDA clarified that it was interested in stakeholders' views on more developed topics.

- The following suggestions were made by participants in the group regarding topic areas that would be of interest:
 - Transport and Logistics (and that stakeholders might best contribute through dedicated workshops).
 - R&D and Information and Knowledge Management.
 - With regard to this suggestion, a point was made that there is a mismatch between areas of scientific uncertainty and areas that are excluded from the SMS. A further point was made that criteria for inclusion in the SMS need to be clarified, for example, radiation risks.
- When asked which topics within the SMS participants in the group would like to see included on the agenda for the next NSG, the following were indicated:
 - An update on land sales.
 - A progress report on radiation risks and the risk register.
 - Waste.

Session 2:

- Participants in the group suggested the following topic areas would be of interest:
 - Asset Optimisation was proposed as a topic of interest. In particular the need to cover the re-use of assets as an opportunity for revenue generation.
 - Transport was proposed as an area of concern for local authorities, and that it would be appropriate to have more time dedicated to discuss it, especially given its early stage of development in the SMS.
 - Waste and local authority involvement. In particular what impacts or effects might there be on the community.
- The following suggestions arose with regard to enabling stakeholders to better input to the SMS:
 - There was a proposal that topics could be split down by site and their significance shown relative to the site. It was noted however that not all topics apply to all sites.
 - There was a comment that a dedicated workshop (rather than a breakout session) on the SMS as a whole might aid better understanding.
 - A request was made that it would be useful to have easily accessible documents on the SMS to share. The NDA advised that individual topic strategy summaries are available on the website and would be updated by the end of July.
 - There was a reflection that the response to the request made to stakeholders in the breakout session for their topics of interest had been limited. The NDA were requested to define an engagement plan for each topic in the early stage of strategy development so that stakeholders could decide on the basis of information provided by NDA. It was proposed that such a plan should have clarity on what aspects of the topic could be informed or influenced by stakeholders and also identify what and when the opportunities to review and input would be. There was some general agreement in the group to this point.

Other Matters Raised

The following matters arose during the breakout session, which were not focused specifically on the SMS, and are recorded below.

- Questions were raised during the session with regard to the NDA's remit in relation to nuclear new build, including that initiated by international companies.
 - The NDA confirmed that they had no interest in new nuclear build.
 - The above matter was identified as being a major stakeholder concern and the NDA suggested that the OND (part of DECC) would be the body that stakeholders could refer to on new build. It was further advised that an e-mail contact and an electronic subscription newsletter were available to be kept updated on the latest developments.

- The point was put forward that the situation with new build raised questions and expectations with regard to the NDA and that there needed to be more clarity on NDA's role in this respect.
- Comments were also made on the process for the session:
 - This was marred by problems with the acoustics in the room, which was shared with another breakout group.
 - Participants in the session raised concerns about this affecting the quality of the discussion and requested that two sessions should not be run in the same room in future.

Some initial feedback from the NDA on this session is provided below.

Response from the NDA

The SMS team has considered the feedback collected from stakeholders during the session and some key messages that the team are taking away include the following:

- *The NDA needs to continue highlighting how and where information on the SMS is available, for example:*
 - *Continuing updates*
 - *Information on opportunities for engagement*
 - *Availability of paper copies of information.*
- *Topics of particular interest for stakeholder input include:*
 - *Asset Optimisation (including the re-use of assets as an opportunity for revenue generation)*
 - *R&D and Information and Knowledge Management (including scientific uncertainty and inclusiveness of the SMS).*
 - *Transport (including issues affection local authorities) and Logistics*
 - *Waste and local authority involvement (including what impacts or effects might be on the community).*
- *Topics of particular interest for the next NSG:*
 - *An update on land sales*
 - *The decision making process on prioritisation and funding of projects*
 - *A progress report on radiation risks and the risk register.*
 - *Transport and Logistics*

The SMS team, in conjunction with relevant colleagues at the NDA, intends to:

- *Highlight suggestions regarding particular topics to the relevant topic leads.*
- *Update the Topic Strategy Summaries and consider how the further information requested could best be provided.*
- *Consider whether and how the topics of interest for the next NSG agenda can be accommodated.*

7. Sellafeld Programme Presentation

A presentation on the Sellafeld programme was then given by Ian Hudson, the NDA's Sellafeld Programme Director, and George Beveridge of Sellafeld Limited. This presentation was arranged in response to stakeholder feedback that further information on Sellafeld was required.

7.1 Question and Answer: Sellafeld Programme Presentation

- Q: The first question raised was whether the site currently had funding for all the work described or whether it would be seeking additional funding.

- A: The Sellafield team explained that in the last year the funding for Sellafield was over-pressurised and they had more scope than budget. The forward scope had been developed with high hazard being done first and then other activities. There was affirmation that there was funding for Sellafield and that where there was a need to increase budget with regard to high hazard there was the potential to take this from year-end flexibility. The year-end flexibility would be allowable provided it is only for high hazard and that the site has shown efficiency throughout the year.
- Q: A stakeholder raised the issue of other sites being deprived of funding due to the needs of Sellafield. While there was acknowledgement that high hazard needed to be a priority there was a question whether relief for other sites was on the horizon and whether in future there would be less demand at Sellafield.
- A: The Sellafield team explained that there was a five-year baseline at Sellafield and that the site needed to be brought on to the right track in terms of predictability.
- There was a further explanation that site licence managers have duties with regard to health and safety. Plans put forward receive commensurate funding so it was not necessarily the case that other sites were deprived.
- Q: The point was raised that the situation did not offer much hope to sites that had been deprived of funding. Clarity was requested about the timescales involved and whether it was five or ten years before the situation improved.
- Q: A further question was asked about the meaning of the graph indicating 90% of Magnox fuel on the slide headed Lifetime Quantities and whether this included Magnox fuel yet to be produced.
- A: The Sellafield team confirmed that this showed the total lifecycle arising.
- Q: A questions was asked regarding the meaning of the Sellafield Ltd logo.
- A: The Sellafield team advised that the meaning was unknown.
- Q: A request was made for further information about the messages coming through from the Integrated Change Programme.
- A: The Sellafield team advised that a number of pockets of good practice were identified on the site but were only happening in a narrow area rather than across the site. A consistent approach to business was needed across Sellafield and best practice should be transmitted across the site. There was currently a lack of consistency.
- The team also identified that the condition of the assets and ageing infrastructure were also issues to be tackled. Asset care programmes were needed.
- Finally the Sellafield team noted that improvements on site would translate into fee earning performance, which was very significant.
- Q: A question was raised regarding the lifetime plan: how it was developing and interacting with existing plans including existing plant and closure dates.
- A: The Sellafield team reflected that the baseline written in 2007 was too pressurised and its scope inappropriate. Sellafield Ltd was therefore building a lifetime plan: the scope and priority would be reviewed and all aspects examined including technical maturity. All these points would then be mapped into NDA requirements. It would involve over 200 projects and teams drawn from many different areas and include external experts. The role of independence was highlighted as very important. The ongoing process was described as a monumental effort that would result in a robust baseline.

- Q: An issue of concern for local people was raised regarding nuclear new build near the Sellafield site as some farmers and asset holders were selling up near to Sellafield. The stakeholder asked at what range of proximity would it be safe to put new build in relation to any of the legacy areas, including the ponds and other hazards.
- A: The Sellafield team advised that there were no plans to clear space on the Sellafield site for new build. Any new build would have to be far away from hazard and from areas of contamination. The land mentioned by the stakeholder was not part of the licensed site but separate land that would require a licence.
- A: The team further advised that there was no reason why new build could not go there, but it was a decision for the regulatory authorities and dependent upon application.
- Q: A point was raised regarding the Sellafield Mixed Oxide (MOX) Plant. The stakeholder noted that there had been a suggestion that NDA will make a decision on the Plant and wanted to know what the cost of the Plant has been to the taxpayer.
- A: The NDA confirmed that the Sellafield MOX Plant had been under review for some time and that the process going forward was for the NDA to make recommendations to Government who would ultimately make any decision. There was no fixed timescale for this process. The NDA agreed to provide the figures - *now reproduced below*:

The net cash flow figures for each year of operation are:

Year	Cash flow (£ millions)
2002-03	-78.6
2003-04	-83.3
2004-05	-110.1
2005-06	-79.9
2006-07	-92.1
2007-08	-92.1
2008-09	-89.9 (estimate)
Totals	-626.0

Net cash flow is arrived at by deducting operating costs, overheads and subcontracts from sales. £498 million of capital costs and £139.4 million of commissioning costs were incurred prior to the production phase of commissioning.

8. Questions for the NDA

There was then an opportunity for stakeholders to raise any other questions with the NDA. These questions were addressed by William Roberts, the NDA's Chief Financial Officer.

- Q: A question was raised regarding money from land sales. A stakeholder asked how much money was currently in the bank, whether it would come in stages and whether it was dependent on permission for new build.
- A: William advised that £160 million had been received, mainly during the current year with some in the following year. There were no conditions associated with receipt of the money. There are some conditions in relation to designation of sites. Sites were sold on an: 'as you see' basis.

9. Closing Remarks from the NDA Chairman

The NDA Chairman addressed the NSG again at the end of Day 1. He spoke about three things – the development of the NDA Board, performance and delivery, and funding.

9.1 NDA Board

In addition to the appointment of a new CEO, the NDA Board has changed quite significantly this year. Three of the original Non-Executive Directors came to the end of their term and stood down and four new ones with a pretty wide background in relevant industry have been appointed. Stephen believed that these changes had brought a new energy to the Board and the fact NDA was able to attract pretty heavyweight Non-Executive Directors was very encouraging. He also explained that the NDA Board travelled around the sites. It met ten times a year, with half of the meetings in London and the rest around the estate - with at least half of those in Cumbria and one in Scotland. Stephen believed it was hugely important for the Non-Executives in particular to understand what was going on at the different sites and to get a real feel for what was actually going on and what the tasks were.

9.2 Performance and Delivery

The Chairman underlined the message that the NDA was here to clean up and decommission and that the NDA needed to start describing what it does in terms of delivering streams of work rather than the more traditional approach of how many sites we have and the size of the budget. The more the NDA describes progress in terms of what it is doing – taking down buildings, hazard reduction and so on, the easier it will be for people to understand what the NDA is all about.

The current NDA Strategy talks a lot about strategic priorities, but it tends to talk more about the direction of travel as opposed to where the NDA is going to be and when. It is therefore very difficult for stakeholders to relate to, particularly when the programme goes out a hundred and twenty-five years. The NDA needs to bring the horizon forward, to ten to fifteen years, and describe in it what is going to be done in that time. This would make the NDA work programme much more real and tangible.

9.3 Funding

Finally, Stephen addressed the issue of funding. While it was true to say that more is currently being spent on the NDA core mission than has ever been spent before, with such a long programme, it was necessary to look to the future. He identified a key task for the NDA as being about prioritising and allocating resources and making sure that the funds available go to the right sites. This is a difficult, but necessary task.

On income, Stephen was keen to make clear that the proceeds from the land sale and the proceeds from power generation were not windfalls, they were managed processes that secured the maximum value out of those two opportunities. This additional income is very important for the NDA as it offsets the shortfall in income from reprocessing activities and allows NDA to handle the additional costs that have arisen around the estate. So, NDA does have a juggling act to do every year to balance the commercial income with the grant that it receives from the Government and manage a UK wide programme of work. Stephen emphasised that while this additional income was a positive thing, it was not the case that the land sales had resulted in a great pot of funds that can now be spread around the NDA estate. He reiterated the importance of making robust business cases and reaffirmed the NDA's commitment to bringing forward decommissioning.

Stephen then turned to the future and the challenge that the current economic climate presents for the NDA going forward. The pressure on public funds will continue to be huge in the immediate future and the NDA will not be immune from that. It will be important when making the case to Government for funding that the NDA is viewed as a delivery department and not a spending department. If the NDA is viewed as the former, then people understand that if you spend less, you deliver less.

In closing, Stephen commented that we had an interesting year ahead with a general election as well as discussions on the next spending round. He thanked participants for giving up their time to come to the NSG and support the NDA in delivering its work programme. He was convinced that the NDA was all the better for the robust exchanges that take place here and in the other stakeholder forums around the estate.

9.4 Dinner and Networking

A buffet dinner was held for stakeholders at the conclusion of the first day of the meeting as a further opportunity to meet and talk with the NDA team one to one and as an informal networking occasion.

SECTION 3: DAY 2, 18 JUNE

10. Waste Strategy Theme Introduction

The Waste Strategy Theme session was an opportunity to explore three different waste topics in more detail and in particular, specific aspects of them where the NDA were looking to move forward with input from stakeholders. To this end the NDA presented some specific questions to stakeholders to gain their views.

Phil Davies, Head of Waste and Nuclear Materials gave an introduction to the waste strategy theme. Phil opened the presentation by affirming that the Waste and Nuclear Materials (W&NM) team would keenly review the responses from stakeholders to the questions posed in the session, and that the team would feed back on what they had drawn from it. An outline of some of the main points covered in the presentation is set out below.

Phil put forward the perspective of the NDA being a waste management organisation and a key component of this was the responsibility for reducing hazard. Clean up is dependent on Waste routes so these are a high priority for the team. Under the Energy Act, the NDA has responsibilities for waste management. This includes the geological disposal programme, the LLW strategy (which is under consultation) the protection of waste infrastructure and planning for the future. It is very likely that new waste treatment facilities may be needed around the country and the NDA is aware that this can raise concern for local groups. Incineration in particular raises concern even though it is the best route for some wastes. Transport is also understood by the NDA to be another waste-associated issue that causes concerns for some stakeholders. Phil emphasised that without implementing change nothing will happen to the waste and the NDA will fail in its duty. This is why stakeholder feedback was considered to be so important to the team and why the responses to questions presented to stakeholders in the subsequent sessions would help the NDA in moving forward. Finally Phil reminded participants that the principles to underpin the waste strategy paper had been supplied in delegate packs at the meeting.

A series of three presentations followed on the three different waste topics. After each presentation, participants were asked by the meeting facilitator to have a discussion around their tables, responding to specific questions put forward by the presenter. For each topic, participants changed tables in order to have a new conversation with a different set of stakeholders. The topics were:

- Developing and Implementing UK LLW Strategy
- Interim Storage of HAW
- Waste Treatment Optimisation (WTO)

The key points from each of the rounds of discussion were noted at the tables and have been transcribed below. Please note that the discussion tables were numbered 2-12 for the participants' reference. The presenters sat at the table numbered as 1, thus there are no stakeholder comments provided for Table 1.

The NDA has provided some preliminary feedback on the input received from stakeholders. This is an indication of the Authority's initial thoughts on the key messages that it is taking away from the sessions and what it intends to do with that information.

11. Developing and Implementing UK LLW Strategy

11.1 LLW Strategy Introduction

Tim Hedahl, Head of National Low Level Waste Strategy, LLW Repository Ltd (LLWR), delivered a presentation on developing and implementing a LLW Strategy for the UK. He described how LLW Repository Ltd work in close partnership with the NDA and are focused on the strategy mandate from government (March 2007) to publish an integrated UK Strategy and Management Plan for LLW.

Tim then explained that a significant innovation in the work is a national LLW Strategy Group. This group involves those who will undertake implementation at local level in the development of strategy at the national level. This ensures that there is no duplication or lack of suitability at local level. Implementation of strategic objectives comes next, also benefiting from the factor of the LLW Strategy Group involvement. The group makes recommendations for NDA decision-making.

Tim highlighted the fact that three million cubic metres of LLW are projected for the next 100 yrs. This needs to be reduced. This can be done through collective implementation. The aim is to use existing assets within the NDA to achieve this. Waste volume reduction and treatment may have significant impact on whether a new LLW repository is needed. The current situation is that capacity of LLW Vault 8 will be full by September 2009. Vault 9 is on track to accept waste at that point.

Tim went on to outline the environmental and strategic principles that were being followed, these were:

- Health, safety, security, and environment
- Waste characterisation and segregation
- Effective risk-based and proportionate regulation
- Flexibility and fit-for-purpose solutions
- Sound business cases and robust decision making
- Availability of waste routes critical
- Stakeholder and community engagement vital to new routes
- NDA waste management facilities available on suitable commercial terms
- Integrated waste management – important strategic interfaces

He then identified some of the important requirements for delivery: The need to know upfront costs of sites and facilities and the need to maximise the ability to reduce waste volumes at sites immediately. Faster methods of waste disposal and alternative treatment were needed. There was a need to develop how waste could be decontaminated and enabled for other routes.

Tim then outlined the three main strategic themes for the plan: That the waste hierarchy would be applied. Not all activities could be done concurrently and there was a need to prioritise where money was spent. There was also a need to make best use of existing assets, whether existing or potential including the reconditioning of those currently out of commission.

The presentation highlighted the key strategic aims of the company. These included the need for excellence, provision of capacity without gaps, facilitation of the reduction of hazard and decommissioning, making best use of the UK LLW repository and value for money for the government and the taxpayer.

Tim then explained the opportunities for commenting on the LLW Strategy. The consultation began on 5 June and will conclude on 11 September. The contact address for this is either www.llwstrategy@nda.gov.uk

or,

LLW Strategy Consultation, Nuclear Decommissioning Authority, Herdus House, Westlakes Science and Technology Park, Moor Row, Cumbria, CA24 3HU.

Tim noted that when stakeholders are engaged they know about the issues and understand the options. He encouraged stakeholders to propose other solutions, if they did not like what was being suggested.

To conclude the presentation, the following questions were put to the NSG:

1. Waste incineration is often controversial. What should be the key considerations if the LLW strategy were to actively promote this technology?
2. To what extent does the transport of waste from road to rail represent a significant improvement? Do you see disadvantages to this approach?

Question 1: Waste incineration is often controversial. What should be the key considerations if the Low Level Waste (LLW) strategy were to actively promote this technology?

Table 2:

- This is not a 'technical' question – it's an 'emotional' issue.
- There are other technologies we need to consider.
- How has it been tackled before – [by] local authority?
- It should be presented as part of a range of options.
- It can depend on the reputation of the 'operator.' People will trust a reputable operator.
- Free flow of 'open and honest' communication is important.
- We need to consider how effective it is against other options (residue?).
- Is there a case study that has been successful? International? Or other industries e.g. NHS?

Table 3:

- Local (site) or regional/national approach? – minimise the number of sites.
- Transportation issues.
- Need to deal with the "perception" that it is dangerous/bad – a communications challenge.
- Does not seem to be a technical challenge, but cannot underestimate the "political"/public acceptance issues.
- Industry has made mistakes; it's a huge challenge to reassure people.
- It depends what is being incinerated.
- Incineration not "popular," when you add 'nuclear'/'radioactive' to the equation, things become harder from an acceptance perspective.
- Need to consider if there are any energy benefits from "larger" facilities.

Table 4:

- Waste will have to be transported to incinerators, there is also a perception it will release radiation to the environment.
- There are existing incinerators that could be brought out of moth ball status.
- Abatement is the big issue, proving gaseous releases are 'clean'.
- Incinerators raise issues whatever waste they are used for.
- There may be a carbon issue that would need to be addressed.
- Would need to show that it would be carbon neutral.
- Some of the radioactive gases would go up the stack, but it would be very small.
- Key consideration would be who is down-wind.
- 70% of waste for incinerator is at Sellafield.
- May be a volunteerism approach could be used to identify a site for an incinerator.

- Clearly explaining what is coming out of the stack will be key.
- Need to show what impact of emissions will be.
- Be good to consult Integrated Pollution Prevention and Control (IPPC).
- Could compare the impact to natural sources.
- Need more information on possible impacts.

Table 5:

- That it doesn't pollute.
- What do you create? Intermediate Level Waste (ILW)?
- Is energy lost/recoverable?
- More acceptable with energy recovery!
- Why don't we use existing incineration supply chain (Springfields and Capenhurst have mothballed incinerators)? Avoids planning hold up.
- What about packing at 30% efficiency – most volume is concrete?
- Are other nations doing this – yes! US/Belgium

Table 6:

- If there are alternative solutions, concern about what happens to the discharges that result (does it lead to more dispersal)?
 - Dilute and disperse not acceptable, but potentially, concentrate and contain may be acceptable.
- Any commercial solutions need to tie in to the Environmental Health regulatory principles (reference and hyperlink in the strategy).
- EU policy on incineration?
- Incineration is emotive because it has been done badly before (in other industries).
- Still issues around principles to be addressed.
- Consultation still an issue; if Best Practical Environmental Option (BPEO) isn't acceptable how do you move forward?
- Incineration only one small part – recycle/segregation etc. Important, incineration would take a lot of convincing (seems to be acceptable at Wylfa for LLW).

Table 7:

- Alignment with government policy (Scotland and UK).
 - Hazardous waste solution? Oils and liquids.
- Learning from Experience [look at where it happens] - International Best Practice. Environmental Benefits (carbon emissions).
- Fits in with waste hierarchy – application is massively important. Value for money - only part of the equation.
- Clean disposal route of final waste product
- Location of incinerators - environmental benefits (carbon emissions) – planning process.
 - Local/National/Regional solutions – avoid transportation where possible.
- Dual-purpose incinerators – other hazardous materials.
- Early stakeholder engagement.
- Right solution for particular sites/wastes – Very Low Level Waste (VLLW)/LLW
- Reuse of ash.

Table 8:

- Main barrier is planning when talking about waste.
 - The question when defining waste management strategy is to know whether you'll get the planning permission.
 - Need to think about the impact on the community.
 - Need to demonstrate waste minimisation.
 - Need to demonstrate cost-efficiency to government.

- There are existing incinerators that are not used – look at using them better
- Fundamental in this respect should be to make sure there is energy recovery in the incinerator process.
- Section 106 planning gain; “benefits to community of a new development”.
- Relative agreement that there is a public perception issue as barrier to move forward broadly with waste incineration.
- We need public debate on what the actual alternatives are.
- Nobody argues against waste hierarchy but there are conflicts with hazard management – might stop you from progressing.
- Political issue – they know there is a risk.
- What is the carbon attitude of the NDA?
- Perspective on the volume:
 - The volume is “minuscule”
 - 100,000 tonnes of ashes.
- Apart from the waste, the radioactive part of it, does it need a special treatment to be transported?
- Segregation is key, including the existing materials at LLWR.
- Are there any other technologies (e.g. pyrolysis)?
- There is an issue in the use of terms
 - Negative connotation in linking “radioactive” and “incinerator”.

Table 9:

- Providing information/education (NDA) is critical. Accurate information early enough to communities is essential. To prevent misinformation from media. Positive pre-empting campaign. Have to get in first.
- LLW technically defined. Very large spectrum within LLW.
- Incineration: we are talking about shrinking volumes. Same amount of radioactivity. Smaller volumes.
- Terminology. Don't use incineration; use “thermal recycling.” Positive connotation of thermal recycling. Incineration triggers the wrong kind of vibes. Need words that have a benign connotation.
- Consider sites where incineration has already taken place.
- Mobile incineration plants.

Table 10:

- Consultation by Dounreay SSG showed that the incineration option is not popular.
- Need to focus on waste reduction to reduce the bulk of the material
 - Need to separate out the material that does not need to be there
 - Will require more acute monitoring.
- Even civil waste incineration is not popular, even with technology that removes particles from the air.
- The mistakes of the past affect the confidence levels of the present
 - E.g. the uncovering of radioactive materials in landfill sites - would affect public view of sending LLW to landfill.
- What are the other choices?
- Renaming/rebranding will not work, as the public will see through it.
- Perception that consultation provides the answer and consults on the questions.
- Bristol Hospital Incinerator dominates the skyline... would this be the case for a LLWR incinerator?
 - Likely to only be another building on the site and will not be easily distinguished from other buildings on site.
- Suggestion to work with other agencies and organisations that incinerate and/or handle LLW.
- Could be seen as dispersal, as emissions will move away from site
- Relies on goodwill from other sites if LLWR near Sellafield accepts waste for incineration from other sites.

Table 11:

- Challenge to waste hierarchy e.g. energy recovery should be nearer the top of the list.
- Agreement that the issue on incineration is public perception (that the issue is not technical). So NDA action is on engagement. Differing views on how successful engagement can be from:
 - “Share the knowledge and explain and stakeholders will eventually believe what you believe”; to:
 - “It doesn’t matter what you do, the public will never understand things they don’t want to understand”
 - Both underpinned by examples.
- Non-radioactive issues associated with incineration e.g. dioxins also need to be addressed in engagement.
- Community benefit packages should be offered to host communities.
- Learn from others putting incinerators in place (e.g. Sutton Courtney, Oxfordshire) who are going through engagement now.
- Need to engage with the Planning System as the framework.
- “Media can be best friend or worst enemy,” ensure you start off on the right foot.
 - “Get someone on side who is a recognised expert – someone who most people have heard of and respect.” “Able to use the language of the people” e.g. David Bellamy.
 - Lead on the good news aspects – avoiding transport etc. – rather than start apologetically - good news splash to start the debate off.
- Ensure infrastructure (roads), light pollution, impact on agriculture are considered up front.
- Industrial area for development.
- Agreement that a facility per site is not credible – just a few so transport will be necessary.
- Make sure there is a target for incineration against which we measure performance e.g. “90% volume reduction”.

Table 12:

- EA recommended use of incinerators.
- Difficult for communities to accept importation of other sites’ waste.
- Possibility to use “community fund” – national, regional, local.
- Refurbish/upgrade existing facilities.
- Potential benefits to local communities – rail/road improvements.
- Synergy between existing site and new build.
- Possibility for sea transport.
- Based on volume – after oils do we really need incineration?
- Is cost of incinerator new build prohibitive?

Question 2: To what extent does the transport of waste from road to rail represent a significant improvement? Do you see disadvantages to this approach?

Table 2:

- Advantages:
 - CO₂ savings.
 - PR issues – reducing congestion or accidents.
 - Economic argument – costs less?
 - More invisible.
 - Working in partnership with road hauliers.
 - “You only pay for what you use”.
 - It needs to be an option though.

- Disadvantages:
 - Getting local communities to face the issue.
 - Maintenance of track. Cost and influence on network rail - sound economic case.
 - Local solutions: sea?

Table 3:

- Rail more than road is generally accepted as the best form of transport if you have to move it at all
- Not sure of the respective costs – not all sites have rail heads (e.g. Capenhurst) – do you install one?
- There could be other public benefits from rail use e.g. Tesco's and Direct Rail Services (DRS)
- Public perception is that rail is safer
- The only issue (disadvantage) is cost!
- Waste hierarchy is universally supported.
- Note: VLLW to landfill is a much trickier issue.

Table 4:

- Rail safety is excellent therefore rail is a much better option than road.
- Stakeholder perception will depend on whether there is existing rail or need for new routes. Some people don't want new infrastructure, some do.
- People generally do not like movement of waste. The better option is not to move it, if you have to move it, use rail.
- There is sometimes a perception that LLW is more dangerous than it is.
- For some wastes it may be better to go by road, it depends what is fit for purpose.
- Stakeholders have raised concerns about contaminating new sites, rather than managing waste on existing or next to existing sites that are already 'contaminated'.
- Perception matters will be key to understand and to address.

Table 5:

- Seascale/Drigg don't like wagons.
- Rail: Perception that security may be an issue.
- Rail is used for fuel – why not LLW.
- Is it more expensive – economic?
- Rail – could dislocate the transport disruption to a community who don't benefit from LLWR in socio-economic terms.
- Is rail safer than road?

Table 6:

- Principle of dispersal (particularly to landfill is a concern), prefer to keep on [sites].
- Starting point one repository – how do you minimise use/open up new routes?
- Contaminated land 18m³ at Sellafield needs to be included (LLW strategy only deals with a fraction of the waste).
- Local versus regional versus national solutions.
- Most sites (except Sellafield) are happy to look after their own waste but don't want waste from other sites. Also there is the perception that there is no room for anything else.
- Funding is a concern.

Table 7:

- In principle good timing.
- Logistics/costs – value for money.
- Advantages of rail infrastructure improvements (socio-economic advantage).
- Huge volumes – do we move at all? On-Site Disposal may be better.
- Regional depots/holding areas to keep cost effective.

Table 8:

- Road to rail: surprised it would be controversial.
- But there are issues:
 - Limited capacity for passengers
 - Might lead to rail functioning at night.
- Question over total capacity.
- The question is broader than LLW.
- Sea transport option?

Table 9:

- Strong support for rail transport.
- Costs of providing a near rail route could be prohibitive.
- Water transport/sea is a good option.
- How secure are the containers going to be?
- Parallel discussion: new build. Shipping could be considered for transport of waste and components/parts for new sites.
- Disadvantages:
 - Costs of providing a rail head
 - Transfer from road to rail
 - Timetable (with transport taking place during the night)
- Publicity of the advantages of using the rail heads is essential.

Table 10:

- What about shipping?
 - Other stakeholder groups would react to this e.g. Orkneys and Shetland.
- Evaporator D (at Sellafield) does use ships.
- It would require huge investment if for example you were to put a railway in Dounreay:
 - Should be done if it's proved to be worth it
 - Benefits versus costs, including socio-economic
 - Railway at Dounreay was mooted years ago.
- Rail to, for example, Dounreay would not be likely to be of any use after works completed on the site.
- The way that waste is transported is actually positive in some ways e.g. safety
- Transport has to happen: need to have a mature debate on what is most useful and acceptable.
 - Should open it out to all forms of waste, not just LLW.
- Speak to supply chain and Direct Rail Services to help build confidence that it is safe and being managed.
 - Concerns raised over protestors and terrorists.
- Waste is waste therefore radio-nucleotides being transported for medical usage and health has to be labelled as radioactive when being transported
 - Pacemakers are radioactive.
- Cannot say that it is 100% safe, as there are no absolutes
 - Need to present the facts of all transport and the amount of accidents etc.
- "Leaky canister" stories and other "nuclear incidents" raise profile of issue, even if the hazards are no worse than the "grandfather's watch" presents.
- Social and acceptability issues need to be introduced and discussed with the regulators.
- Concerns already over shipping as oil tankers have crashed and leaked.
- Third party and regulatory bodies are key
- NFLA can create.

Table 11:

- Transport by rail is best (good agreement).
- Transport by rail or sea (cited Government policy)
- Sorting of waste on site.
- Rail heads are expensive and infrastructure needs to be considered
- Rail network is congested and this might limit use. Fortunately, short delays for rail transport wouldn't be serious.
- Some sites have rail links, which are not being used and are falling into disrepair (e.g. Trawsfynydd). There are opportunities to make a case for (re-)opening lines based on NDA use and other use e.g. tourism.
- Many of our sites are close to water (cooling) can we use the sea?
- Double handling issues for waste being moved from sites that don't have rail heads.
- As a matter of principle where we have railheads/track assets these should be maintained to keep the opportunity open pending full debate on transport policy, carbon pricing and business cases.

Table 12:

- Based on where in programmes: day-to-day versus major decommissioning or demolition.
- Dealing with local wastes not major transport issue. Should waste be dealt with on site – challenge the need to transport to other locations.

Other Issues Raised: LLW Strategy Question 2

Table 5:

- Question: Is enough effort put into avoiding creation in the first place (precautionary approach by SLCs, segregation at source, no incentive as it's cost reimbursable)? Are processes adequately considered in terms of LLW generation? Is there any incentive for avoidance of LLW creation?
 - Contract control (fiscal incentivisation) – could an LLW allowance for SLCs be done (fee hit)?
 - Characterisation and baseline.
 - Nothing in induction for workers that's meaningful (education).
 - Better use of industry code of practice on characterisation and segregation.
 - Rolling back radiological area (avoids conservative approach).

A third 'question' was recorded in the following table groups:

Table 9:

- Combining the treatment facilities and transport issues for adjacent sites (e.g. barging containers).

Table 12:

- Location of facilities – should they be at or near existing sites?

Some initial feedback from the NDA on this session is provided below.

Response from the NDA

The waste team has undertaken an early review of the above key points collected from stakeholders during the session and would like to present some initial feedback as follows: The key messages that the Waste Team is taking away from this discussion include:

For considerations relating to incineration of LLW (105 comments received):

- *The need to be able to show balanced consideration of all potential treatment options. Stakeholders need to be equally well informed about all options. Use good communicators, even independent media figures with environmental credibility.*

- *The importance of prior reputation (trust), transparency and early engagement. Be ready to discuss discharges. Reference to UK and international precedents might reassure stakeholders.*
- *The desire to see energy recovery as a positive attribute (and note the carbon footprint). Consider the position of incineration in the toolkit of waste treatment solutions.*
- *General concerns about transferring waste from A to B, and community benefit/planning gain at the receiving site.*
- *Use existing infrastructure where possible; note the planning challenges for new developments. Consider visual impact from stacks and flues.*

For considerations relating to road/rail transport of LLW (88 comments received):

- *General support for using rail as expected; but cost, impacts from new construction, and need for maintenance are noted.*
- *Maintain rail infrastructure to support future waste movements.*
- *'Double handling' is a concern*
- *Pragmatically, a proportion of LLW must be transferred by road.*
- *Don't forget sea transport*

For other issues raised at some Tables (8 comments received):

- *The view that LLW should be disposed of at licensed/contaminated sites. Try not to move the material at all.*
- *Emphasise waste avoidance.*
- *Educate site workers in the waste hierarchy.*
- *Combine treatment and transport sites for adjacent sites*

The Waste Team intends to use the above points and the detailed comments to inform the development of the NDA LLW topic strategy for monitoring and tracking by NDA. They will also be considered to constitute a response to the current UK Nuclear Industry LLW Strategy consultation. The comments will be provided to LLWR Ltd to inform and implement UK-wide optimisation of LLW management.

12. Interim Storage of HAW

12.1 Interim Storage of HAW Introduction

A presentation was delivered by James McKinney, the NDA's Intermediate Level Waste and High Level Waste National Strategy Manager. An outline of the main themes covered in the presentation is set out below.

James began the presentation by giving some background information about the waste types concerned: HAW is made of IILW and High Level Waste (HLW) including vitrified product (only found at Sellafield). ILW is not suitable for disposal at a LLW repository.

ILW has no upper boundary. It is separated from HLW by the factor that it does not have the potential to rise in temperature significantly. HLW covers a multitude of waste types and is not well defined in terms of volume. HAW cannot be time bound. It includes many kinds such as effluent, fuel and reactor waste.

James then outlined the location of current waste storage at UK sites. There is a range of volumes found at the various sites. Three quarters of ILW is expected at Sellafield by 2039. This takes into consideration Scottish policy.

The presentation then described the role of interim storage: This will be a key enabler in reducing risk and hazard. It will allow retrieval, conditioning, packaging and storage of waste before geological disposal becomes available in 2040 (based on current assumptions). The Interim Stores will have a design life of 100 years or more.

James explained that conditioning referred to putting the waste into a suitable condition for storage. This procedure can involve decontamination. There are also a number of pre-Nirex wastes that require re-packaging. There are also wastes in situ that will have to be dealt with, for example from final site clearance activities, which includes graphite from the Magnox sites.

There are fifteen ILW stores across the NDA estate and one HLW store. This will increase to 34 stores for ILW (with 18 of these at Sellafield).

James then went on to outline the HAW storage review: Its conclusions were that the 100 year design life provision target for Interim Storage is attainable. A new storage strategy will need to be available if the geological disposal facility does not come on line. The stores will be reviewed periodically regarding their safety case. A single storage regime is not being sought by NDA.

The presentation then covered the Review of Storage Optimisation: This included waste minimisation and decay storage (also a safety management feature) being considered as opportunities to achieve this. Other possibilities were the inclusion of other waste owners and local site-to-site storage initiatives and the NDA were interested to understand stakeholder views on these. There were two stakeholder workshops on waste optimisation and transport was raised as an issue at both.

To conclude the presentation James highlighted the following questions on which the NDA were seeking stakeholder input, in the discussion session to follow:

In current plans, a waste store at a given NDA site is intended only for waste produced at that site.

1. Should NDA consider all storage infrastructure across the NDA estate as an integrated NDA asset, which would operate a flexible approach to the movement of wastes between sites?
2. Under what circumstances could this be extended to other waste producers in the UK, e.g. BE, MoD?
3. What are the benefits and disadvantages to more flexible waste storage and transfer arrangements?
4. How could the NDA begin to address any barriers?

12.2 Stakeholder Comments on the Opening Statement to the Questions

One of the table groups also provided comment on the opening statement to the questions as follows:

Statement: In current plans, a waste store at a given NDA site is intended only for waste produced at that site.

Table 5:

- Assumption on waste stores – assumption too far! Will we realise 34? Is this a planning assumption only!?
- May not be that simple.

Question 1: Should NDA consider all storage infrastructure across the NDA estate as an integrated NDA asset, which would operate a flexible approach to the movement of wastes between sites?

Table 2:

- Yes, it has distinct advantages. The public are more willing to accept this.
- Transportation issues – distinct advantages relating to rail.
 - Rail: ability to take greater volumes more safely.
- Getting the balance right – where sites are geographically close it will have benefits. Public must understand it's the best overall approach – “give the rationale”.
- It's “joined up” thinking that gives public reassurance: we need to ask, what are the perceived benefits?
- Cost minimisation is the key benefit. Being “ahead of the game”: proactive communications. Clear common sense, logical benefits.

Table 3:

Participants at Table 3 in this session focused on responding to questions 2 and 4.

Table 4:

- Integrated infrastructure would be more sensible. Could integrate, could practice across sites. Some sites don't have enough waste to justify a store.
- Concern to minimise transport between sites – need to keep it near to existing sites – don't want to distribute problem.
- Expertise can be moved between sites. Need to think about use of resources (e.g. oil) and climate change affecting routes.
- Safety to communities on transport route.
- Safety and environmental impact is key – need to understand how changes affect this and transport impact.
- Need to consider low probability high impact risks from transport.
- Don't want excessive transport.
- Need to keep pressure on waste producers to minimise waste production.
- Need to look at optimising transport.
- Centralising expertise and better logistics control would help.
- Disagree with centralised store – need to keep waste close to where it is.
- New build and its additional waste will have an impact on perception and also the size of the issue then needs to be addressed.
- Local knowledge and ownership is key at sites – polluters need to have responsibility and relationship with local community – need local expertise, especially given the timescale.
- Need to be clear whether stores are local/regional.
- Need to integrate store and central expertise, but not necessarily central stores. Develop economies of scale but locate stores strategically.
- Need to recognise intergenerational aspects and need to maintain expertise over time.
- Need to consider social, economic and environmental impacts.
- Need to develop local pride and ownership of the work on sites – need to develop traditions and heritage in the industry to work on these issues.
- Need to think of community perception of facilities.
- Security is an issue that needs to be taken into account.
- The problem is bigger than the experts able to deal with it.
- People know about little bits of the system, but not the whole picture.
- Culture of continuous improvement is very important and should be encouraged.
- Safety and environmental protection should drive decisions.
- Improving efficiencies doesn't mean one central store; need to look at integrated approach across sites.
- May be better to move people rather than the waste.
- Maybe more encapsulation units rather than the waste.

Table 5:

Simple answer – yes – material exists. Not unreasonable.

Table 6:

Participants at Table 6 focused on responding to question 2 in this session.

Table 7:

- NDA has UK wide remit - so overall, yes.
- Management of transfers would be key.
- Substitution/trade-offs could be a workable solution – enabler.
- Volunteerism – compensation – through planning process.
- Early stakeholder engagement – pre-solution stage. Technical; cost; political.
- National/regional/local debates.
- Mindful of new build programme.
- NDA to clarify their role as strategic authority.

Table 8:

- HAW and HLW [what is the] difference? Definition?
- Rationale for not moving waste:
 - You've spent time cleaning your site
 - Acceptance of keeping the waste on-site but not bringing others' waste.
 - Why moving it twice? Once to interim storage? Second time to geological disposal facility.
- Very different views depending on type of waste we're talking about (HLW or LLW).
- Benefit side: we would have totally cleaned sites.
- Should there be a single place for HLW, which would enable a number of sites to be cleaned-up in advance to a geological disposal facility?
 - You would need an incentive for community or benefit for community.
- The NDA should see whether there would be any volunteers before going forward
- Alternative view is to keep it on-site where it is generated, mostly because of transport and security issues
- There are two clear points of view on the first question.

Table 9:

- General feeling; should treat all stores as a single integrated asset.
- Would not be an integrated waste management strategy.
- Incremental capacity is relatively cheap.
- Scottish near surface – near site approach should be more flexible.
- Generally, NDA should be looking more proactively at a national approach.

Table 10:

- Point of interest: Trawsfynydd store opens on 12 August 2009 when the packages will be moved in.
 - Wylfa packages could be accommodated at new Trawsfynydd store; but there was a rule from public enquiry that waste from other sites could not go to Trawsfynydd.
- Barrier is clause in planning from Snowdonia National Park and possibly from the public views.
 - Maybe the cost of building new store on Wylfa could be saved and used on socio-economic benefits and projects if waste went to Trawsfynydd facility instead.
- ILW store complete in Hunterston, planning permission granted around 11 years ago on the basis that no material from other sites would go there.
- Hinkley and Berkley have similar restrictions in their planning permissions.
- Need to consider what is in it for the local population e.g. trade-offs, funding, less traffic to accept waste from other sites.

- Some local authorities will not allow transport within their boundaries.
- Hope expressed that there will be some 'give' in the system somewhere and discussions and negotiations need to happen to explore this.
- Electricity generated by stations is distributed everywhere, but waste has to stay on site.
- Stores have to be emptied within a set period of time after GDF opens.

Table 11:

- Yes! This is happening already e.g. at Capenhurst.
- Caveats: stores may have planning conditions limiting use e.g. to site waste only
- "Planning gain" may be necessary to support applications for "change of use" to overcome local plan.
- Security of transport.

Table 12:

- Sellafield is not national dump for ILW. Planning authorities do not accept waste from other sites.
- Sites accept storage of own waste.
- Areas with nuclear history more accepting.
- What benefit to local community.
- Acceptance of principles for treating as one estate.

Question 2: Under what circumstances would this be extended to other waste producers in the UK, e.g. BE, MoD?

Table 2:

- Is it cost-effective? The option should not be ruled out! Repeating point about "explaining the benefits." Do you need to consider 'social cost' compensation to local communities – acknowledgement is key – not compensation in terms of money – social investment. Nature of 'product' is key: "What is it?" Rather than "Where is it coming from?" It needs to be locally targeted – jobs/security/safety.
- Proactive communication is key.
- Barriers are "hearts and minds" – planning considerations are key.
- Question raised about 'classification' – this occurs before treatment.

Table 3:

- Shared sites are possibilities for integrated approach (NDA [to] BE [to] new build?)
- Do not be put off by "NIMBYism"
- What about focussing on new build sites as they are going to be licensed/operational for longer?

Table 4:

Participants at Table 4 in this session focused on responding to questions 1 and 3.

Table 5:

- BE/MoD– makes sense, but for a fee.
- MoD – traditionally separately stored – a stigma? Would need full inventory?
- As long as transparent – might be ok.
- People think 'bomb'?
- Hostility and resistance or Campaign for Nuclear Disarmament (CND)/non-proliferation.

Table 6:

- Would like to see all ILW (stuff post 40) plus the delta for BE or MoD.
- Put together a pack that shows in summary the current position; how much waste (on our sites) plus non MoD sites and current plans for stores on sites.
- BE or EDF Energy – may have views – what are they; their focus is commercial energy production.
- May be economies of scale by looking at for example BE and NDA wastes together (this isn't so obvious for MoD wastes - different sites, different agenda).
- Benefits in public assurance that common standards are applied.
- New build wastes have different issues to legacy wastes in terms of public acceptance.
- Risk communication difficult and not well done across the industry
- By taking on other issues (BE or MoD etc.) may lead to loss of confidence in NDA.
- Putting MoD wastes on NDA sites is contentious because of different agendas.
- Transport may be acceptable; but needs to be considered on a case-by-case basis, with the detail that underpins decision-making.
- Rail preferred to road transport.
- Stores seen as dumping grounds as moving waste from one home to another.
- Waste trading? Could be potentially acceptable but need to consider the equity of the hazard being transferred.
- If MoD/BE/EDF Energy included, the debate should be held by government – risk to NDA in opening this up themselves (not in their remit).
- Transport:
 - Advantages of transport: minimise number of stores, co-treatment for small producers.
 - Disadvantages: Discourages mobile plant. Risk – real or perceived.
- Co-treatment or co-disposal needs to be considered on a case-by-case basis – may be acceptable for small quantities.
- Benefits packages may be an important consideration (relates to hazard equity point).

Table 7:

- Demonstrable value for money.
- Where it 'ticks' the regional socio-economic box – community benefits.
- Stakeholder engagement programme (early) – technology, cost, political
- Selection of site could be decided e.g. naval community for MoD waste.
- NDA to present viable options to gain community confidence (pre-solution stage).

Table 8:

- Two arguments here:
 1. MoD HAW are on three sites with very small quantities (compared to NDA's volumes)
[NB: Dounreay is actually dealing with MoD waste so there is already a precedent]
 2. BE volumes – we don't know.
- Question is: what would DECC say about this in the context of NDA's current remit?
- It's worth considering MoD and BE waste in the strategy.
- The question is: who is taking the lead? Government would need to take a stance on that.
- MoD and BE waste could be considered for inclusion on the basis that they apply the waste hierarchy.

Table 9:

- Should be extended to other organisations/other producers.
- All circumstances.
- Will help transparency – important for communities.
- Some of the waste is not relevant.

Table 10:

- MoD is a small producer of waste but synergy with the NDA of possible storage options are being explored.
- What about 'B' sites? If there is a facility being built for the 'A' sites, could it be built to accommodate waste from 'B' sites as well?
- Submarine waste from Rosyth may be exported to Sweden to help reduce the amount of waste.
- Could there be differential charges for public and private waste that could go into the NDA facilities.
- Planning consent and two different owners of material are main barriers – may be a military implication for MoD waste – possibly.
- Hospital waste and oil drilling cores may need storage options too.

Table 11:

- Technically and financially “yes” – a natural follow on from “yes” to Q1 or we could put our waste in somebody else’s store - if it were an MoD site we need to consider standards (licensed versus authorised).
- Finance opportunities for managing third party wastes e.g. upfront payments.

Table 12:

- Integrated solution where BEi s joined to NDA sites.
- Already in practice: MoD Vulcan/ Dounreay Site Restoration Ltd (DSRL)

Question 3: What are the benefits and disadvantages to more flexible waste storage and transfer arrangements?

Table 2:

Participants at Table 2 in this session focused on responding to questions 1 and 2.

Table 3:

Participants at Table 3 in this session focused on responding to questions 2 and 4.

Table 4:

- Benefit to industry, but not necessarily to the communities that the waste passes en route to facilities.

Table 5:

- Design – a standard design.
- Equity, quid pro-quo.
- May not be interim if geological disposal facility doesn't happen.
- Community will only accept retrievable wastes and interim storage.
- Support for storage but not for disposal.
- What is benefit of flexibility – why would we do it?
- A central facility? Incentivisation – a microcosm of volunteerism.
- Regional stores make some sense

Of the above points:

- Yes but – why? (Cheapness?)
- Helps out sites with very little HAW e.g. Springfields.
- Treatment (pre) value-for-money.

Table 6:

Participants at Table 6 in this session focused on responding to question 2.

Table 7:

- Stakeholder engagement
- NIMBY – need to change to positive:
 - Yes In My Back Yard (YIMBY) – via community package.
- Planning regime – barrier and solution.
- National planning policy alignment.
- Present facts – can do approach, working together.
- Learning from Experience from others worldwide.

Table 8:

- Benefits and disadvantages: previously mentioned (community gain and total clean-up....)
- Need to factor in public/community benefit, not only the benefit to the NDA.

Table 9:

- More flexible regime – transportation option.
- Benefits: more cost-effective
- Disadvantages: stakeholder's reactions and transportation issues (higher level of movements).
- Not building a store somewhere - might be economically a disadvantage: Socio-economics.
- Reduced planning delays and public enquiry are benefits.
- Common sense is a benefit as long as you can overcome the fears from stakeholders.

Table 10:

- Savings to the tax-payer.
- Possible funding of other initiatives with savings.
- What does flexible mean?
 - Transport from one site to another?
 - Waste control and rigorous segregation of waste from non-radioactive waste management.
- What about the 'yellow boxes'? External packaging without a store e.g. in Germany (shielded boxes with grouted waste material and impervious plastic outer layer then stacked up and left outside).
 - Needs a change in regulatory and planning policies and are not licensed, so not being considered as an alternative to geological disposal facility.
 - Being discussed with stakeholders for some Magnox sites.

Table 11:

- One larger, "better designed plant" may be more efficient and environmentally [beneficial].
- Advantages [of the above point]:
 - Coherence of security.
 - Ability to completely clear some sites.
 - Concentrate legacy management at sites which have a nuclear future so sites which have no nuclear future could be cleared
 - May be more palatable to stakeholders
 - Take advantage of "centres of excellence".
 - Opportunity for disposal now (near surface) at appropriate sites.
 - Disadvantages [of the above point]:

- Transport need is a disadvantage (proximity principle) e.g. risk, carbon, security, etc
- Delays through planning process
 - Great reluctance generally to the import of waste – deeply embedded in policies etc
 - Planning gain is loosening this position somewhat.
- Will need to clearly articulate benefits in the public debate.
- Distinguish interim storage and disposal
 - Scotland local administrations already taking “collective responsibility” on interim storage (disposal more difficult).
- Transport infrastructure is a key enabler.
- Unless co-location is final disposal site this is double handling, brings forward transport risk.
- May alienate entire communities if not properly handled.

Table 12:

Participants at Table 12 for this session focused on questions 1, 2 and 4.

Question 4: How could the NDA begin to address any barriers?

Table 2:

Participants at Table 2 for this session focused on responding to questions 1 and 2.

Table 3:

- NIMBY: Happy to keep our own (although happier if it went elsewhere), but...
- ‘Ethical’ issue for Harwell in terms of attracting other customers to the campus. Would help longer term commercial viability of business/science park, so from UK plc perspective...
- Barriers are huge, but there is a trade-off that might allow flexibility – still very difficult.
- Already have two host communities – around LLWR and Sellafield
- Should start with Integrated Waste Strategy approach and then drill down to site specific concerns; maybe GDF volunteerism approach could be followed?
- Use ‘interim’ storage as lever to move geologic disposal facility process forward – if we know where GDF will be, we could site the ‘interim’ stores near/adjacent to it?
- Need to use ‘open questions’ – “under what circumstances would a community be prepared...”
- Planning process takes time!
- Need to slay the NIMBY dragon!
- May all come down to the “community package”
- What about other approaches? – Transportable yellow boxes are less ‘permanent’ looking than a large store – being tested at Magnox South sites – Dungeness (used in Germany) and has, so far, been received well.

Table 4:

Participants at Table 4 in this session focused on responding to questions 1 and 3.

Table 5:

- Education.
- Reward/benefit – make it sufficiently attractive.
 - Volunteerism.
- Realism – ‘force majeure’ – economic position.
- Regulatory credibility
- Transparency and use of layman’s non-threatening terminology.

- Legislation
- Emphasis – interim!! Compare/refer to site end-state expectations!! What are they? (Space for new build.)
- Type of waste-ground contamination – how does this fit in?

Table 6:

Participants at Table 6 in this session focused on responding to question 2.

Table 7:

Responses are as for question 3:

- Stakeholder engagement
- NIMBY – need to change to positive:
 - YIMBY – via community package.
- Planning regime – barrier and solution.
- National planning policy alignment.
- Present facts – can do approach, working together.
- Learning from Experience from others worldwide.

Table 8:

- The NDA tends to work as a top-down organisation.
- Needs to educate the public about “what is radioactivity”; “where is the risk”.
- There is a great misunderstanding about radiations.
- The NDA needs to improve their communication – nuclear industry has been bad at explaining issues, risks and technical aspects.
- DVD from Health Protection Agency was good in terms of public education – could be looked at for inspiration.
- Difficult because it is invisible.
- Level of stakeholder understanding needs to be significantly improved within NDA.
- Communication in NDA is not great because not centralised/unified enough.
 - Not enough “corporate” communication/unified messaging.
 - They’ve got to promote the Group.

Table 9:

- Policy – influencing Scottish Policy in respect to siting movements (24th June: stakeholder workshop in Scotland).
- Finding out approaches used elsewhere. Benchmark.
- Debate with stakeholders – giving people the opportunity to talk. Fact-based discussions. Shift from consultation to participation.
- Emotional barrier – fear in England/Wales.
- Test could be done in Berkeley. Regional pilot project.

Table 10:

- Areas where another station is unlikely to be built.
- Are large grey buildings more visually acceptable than a stack of yellow boxes.
- Education and publicity of public and local authorities on low hazard of transient materials.
- If some local authorities can operate with a working nuclear power station, maybe they can help to communicate with other local authorities to help facilitate safe and efficient transport of materials to storage facilities.

Table 11:

- Need to position this as a “good news story”.
- Don’t talk in terms of “ILW” talk about what it is – graphite, metals.
- Early consultation with stakeholders (e.g. Scottish Government did 2 years of engagement before writing anything).

- We are “the good guys” cleaning up, putting the legacy to bed, help us deliver.
- Don’t engage by telling people what you intend to do – describe the problem not the solution.
- Earliest possible engagement with planning officers with waste responsibility. Facilities shouldn’t become regional facilities by default.

Table 12:

- More information on what is waste/fuel etc.
- Education of public on nuclear industry.
- Moving burden from one community to another should transfer benefit to receiving community.
- New build should build in storage.
- Should government reconsider exploration of waste mobile conditioning/storage on sites.
- Process issues – options should be future considered when Best Practical Environmental Option [assessments] are carried out.
- Waste planning authorities should develop policy, which includes radiological waste.
- Under the government, new planning framework conditions could be packaged which allow for waste storage community benefit fund.
- Be open and upfront.
- Make use of site stakeholder groups to educate their local communities.
- Documents to be written in “plain” English.

Some initial feedback from the NDA on this session is provided below.

Response from the NDA

The waste team has undertaken an early review of the above key points collected from stakeholders during the session and would like to present some initial feedback as follows:

The key messages that the Waste Team is taking away from this discussion include:

For looking at storage infrastructure as an integrated asset and thus the flexibility of moving waste between sites (79 comments received):

- *Recognition that joined up/shared waste storage infrastructure is sensible. Key concern is about transport of waste.*
- *Also the counter-position that waste should be held at source.*
- *Centralised/shared skills versus local knowledge.*
- *Consider all impacts.*
- *Consider substitution/trade-offs.*
- *Community benefit issue (as for LLW). Any volunteers?*
- *Remove waste so some sites can be cleared.*
- *Note the Scottish policy position for near surface near site storage.*
- *Existing planning policies and consents might block sharing of stores.*

For the possibility of sharing storage with non-NDA waste producers (55 comments received):

- *Opportunities should be examined. Share investment?*
- *Community benefit? Charging non-NDA waste producers.*
- *Communications issues, specifically explaining the nature of MoD waste.*
- *Government would need to lead or authorise – not in NDA vires.*
- *Planning consents might constrain the opportunity.*
- *There is some limited storage sharing already.*

Considering benefits and disadvantages of more flexible waste storage and transfer arrangements (43 comments received):

- *Economies of scale.*
- *Impact on communities affected: and local socio-economics.*
- *Fewer stores = fewer planning applications (but may be more complicated).*
- *Pursue innovative waste packaging to enable a different storage scenario.*
- *Opportunity to clear some sites.*
- *'Double handling' is likely.*

Considering how NDA could address barriers (60 comments received):

- *Look for trade-offs; use existing' host communities'; seek volunteers.*
- *Education; transparency; honest communications.*
- *Convert NIMBY to YIMBY via community package.*
- *Consider force majeure/economic imperative argument.*
- *Draw on experience from elsewhere.*
- *Don't use categories, describe the actual materials. Plain English.*
- *Use the SSGs.*

The Waste Team intends to use the above points and the detailed comments to inform the development of the NDA ILW topic strategy. They will also share them with NDA and non-NDA site managements to help inform their operational strategies and pursuit of opportunities to optimise waste management.

13. Waste Treatment Optimisation

13.1 Waste Treatment Optimisation Introduction

A presentation was delivered by Graham Jonsson, the NDA's Head of Higher Activity Waste Strategy

Graham explained that the presentation would cover how to optimise current waste treatments: What is being done regarding waste treatment and why. Three main topics would be covered: reactor decommissioning wastes, thermal treatment, and low volume waste arising on multiple sites. Graham affirmed that the NDA are seeking stakeholder views on waste treatment: The NDA wanted a strategy that people buy into and that it can deliver.

The presentation then outlined the situation regarding the UK ILW inventory: The inventory can be presented as a three-way cut. 35% is volume that would be generated if all reactors were decommissioned and put in GDF. 58% is the volume that NDA are looking to optimise. 7% of the volume is within Scotland, which is not destined for GDF but rather near surface long-term storage disposal.

Graham then described the meaning of optimisation: This involved challenging existing assumptions, for example: "if in doubt, grout." It involved looking at international experience and bringing this in. He then posed the question that if the strategy of having one particular approach rather than multiple site solutions were taken, would it be viable to have a central treatment plant? This, it was noted, would have to have the appropriate business case.

Graham emphasised the importance of best practice: This entailed understanding what others have done; undertaking research to achieve this, and had the benefit of accelerating thinking time. Best practice means costs benefits: using money effectively.

Graham set out the current baseline approach taken: That reactors are pulled down, encapsulated in grout and then taken on to a repository. Other waste, specifically from reactors: graphite, steel and concrete, is split and treated separately. Volume reduction, decontamination and decay storage were among the treatments deployed.

The presentation then went on to consider thermal treatments. The deployability of thermal treatments has increased. The technology has developed and matured and is actively being considered across a number of sites. Graham explained that thermal treatment is now being considered for higher volumes of ILW. It has potential application for problematic waste streams for example, sludge and organics.

Thermal treatment is regarded as commercially viable and could have large benefits at Sellafield in view of the aspiration for acceleration. Sellafield is working with Hinkley Point to share understanding of how the technology is developing. BE, MoD and the Scottish Government are also involved.

Graham then went on to describe the option of multi site treatment centres. Forty different sites across the UK have volumes of Ion exchanges resins. These create issues on sites needing waste management plans. Small volumes on multiple sites are involved. A multi site treatment option could be a better option, though this would involve moving waste. International waste treatment options routes were also described with the example of that taking place for resins in the US.

To conclude the presentation Graham presented the following questions on which the NDA were seeking stakeholder input. These questions were for response in the discussion session to follow and related to new approaches being considered as part of waste treatment optimisation:

1. What issues would “multi site” waste treatment centres present and how could they be addressed?
2. What issues would thermal waste treatment of ILW present and how could they be addressed?

Additional Questions from Participants

Further questions were posed by one of the table groups as follows:

Table 12:

- Has the NDA considered transportable treatment plants?
- Why is NDA worrying now about graphite when Magnox is applying decay periods in excess of 70 years?
- New build to plan treatment and storage of waste.
- Report on GDF at each NSG
- Why no cut-off date for volunteerism on GDF?

Question1: What issues would “multi-site” waste treatment centres present and how could they be addressed?

Table 2:

- ‘Economy of scale’ benefit. Issue of having ‘wastes’ imported for public – need education programme – what are the “trade-offs.” (Educational consensus.)
- Have independent ‘expert’ available? To support NDA view.
- Have the “theme” sessions replicated at local level: set out the NDA “stall” and get views.
- Advocates from the local community are key: Does this help speed-up the process of clean-up?
- Image of clean-up is important.
- Cost and security issues/transport

Table 3:

- Would need a volunteer community.
- What is Government's position/policy? They are pushing new build, but these issues are all linked.
- Ultimately a local issue, so decisions (at national level) are taken in that context – should use the SSGs as 'message bearers'
- Might be opportunities to "piggy-back" on new build sites/communities – they are going to host a new nuclear site for decades, why not two?
- Transport.
- 'Treatment' rather than 'storage' – the latter is interpreted as permanent and therefore not as attractive.
- Support for 'holistic'/national approach.
- The NDA is encouraged to convince DECC to actively participate in the "national" debate.
- Timescales are unhelpful. Dealing with reactor decommissioning waste is decades away under current plans. Anything that can help bring that forward should be considered.
- NDA needs to start being (and acting like) an expert on nuclear issues (particularly on decommissioning and clean-up). If this means having a more active involvement in new build debate, then so be it. Support/push Government to clarify policy and buy-in to a strategic vision for the UK.
- Fundamentally, it could boil down to the size of the community package.
- Jargon warning! HLW versus ILW versus HAW versus... It can be confusing.

Table 4:

- The US isn't a good comparison because of low-density population and also long distances of treatment.
- Transport of waste through communities is a big issue – including how you transport it. Need to look at all options: road, rail, sea.
- Can you take treatment facility to waste, rather than waste to treatment facility? But need to think of transport of contaminated plant.
- Need to think carefully regarding location of 'central' waste treatment and community issues of bringing other people's waste in. Would be easier to site in nuclear communities.
- Need to think carefully about number of facilities needed and optimising this and not having lots of planning inquiries.
- Need to think about developing skills in the area around treatment facilities to build local expertise and benefits.
- Need to work with people who do not work in the industry to get wide community support.
- Need to ensure waste is dealt with properly – have skills, process, competence, governance and accountability.
- Need to build general public's confidence in nuclear industry.
- Need communication and engagement that respects the public and recognises that we need to deal with it.
- Sellafield has packaged and stored waste safely for 60 years.
- The NDA needs to build infrastructure for waste treatment.
- Need to think about costs of different options.

Table 5:

- The issue for stakeholders is 'NIMBY' this could be resolved by education.
- If we can understand how it works in the USA, what barriers did they have to overcome and how did they do it?
- Should be presented as an economic opportunity.
- Intrusive impact of facilities in areas of natural beauty needs to be considered.

- Parts of existing sites could be re-used for new facilities.
- Transport waste by sea to get over the transport issues.
- Consider using US transport containers as this is proven.
- How does it work in Japan – education is key.
- This isn't a stand-alone problem: it affects LLW through the waste hierarchy.

Table 6:

- Could mobile plant be considered instead of moving the waste (possibly with 1x resins)
 - Availability and logistical issue associated with issue.
- Needs proper communication of risk associated with moving (raw) waste.
- US practice not necessarily international practice. What do France do?
- What does it mean in terms of carbon impact?
- If things are scope and time bounded, potentially acceptably indefinite and unbounded materials less acceptable.
- Benefits in treating close to GDF because that is where it will end up (potential mismatch of timescales between needing to do something to meet regulatory requirements and GDF siting timing).
- Analogies with spent fuel routes
- Close sites easier (e.g. Oldbury/Berkeley) – 4 miles versus 3000 in US applications
- Timing of end-states may impact (if need to clear site before GDF available).
- Higher hazard and therefore different issues to ILW.
- Some people want new build, but not 100-year stores (even though safety will have to be the same for both).
- Opportunity to redefine how waste from new build is managed but potential conflict with NDA role/Nirex.
- Stakeholder knowledge and understanding of underpinning issues is key to all the waste management questions – very different levels of understanding.
- New build experience/technology could be applied to legacy materials.
- Industry doesn't communicate risk/hazard well – they don't get it; who; how; patronising attitude. Complicated by security restrictions.
- CoRWM recommendations were to share what sort of things are done in terms of security.
- How do these proposals and transport impact on security.
- Local stakeholders like having armed police.

Table 7:

- Location: new (no) or existing (yes)? Numbers required.
 - Use of supply chain
 - National/regional/local.
 - Value for money: Planning considerations/conditions e.g. local infrastructure (Section 106).
- Volunteerism would be key enabler
- Clearly defined national approach:
 - Cross waste category solutions.
 - Holistic approach.
- Trade-off issues for different locations
- Conventional landfill sites impact.
- Stakeholder (early engagement).
- Storage is a separate question.

Table 8:

- Resins: what kind of volume are we talking about?
- Problem to discuss is that we have too big an expertise/knowledge gap in terms of what resins are?
- “Business case” it should not be only the money factor but a more holistic approach that drives the business case assessment.
- Same issues as in previous discussion on ‘regional storage’ in terms of transport and community impact issues.
- Do you factor in the “new build” and the ‘multi-site’ waste treatment locations?
 - Cost savings would be enabled?
- Early consultation with stakeholders needed.
- Would the waste go from these ‘multi-site’ treatment centres to the regional storage?

Table 9:

- Moving it twice equals doubling costs/transport issues.
- Costs of double transport/security and safety.
- Volume issue. How much can be moved in one go?
- Sea transport means international issues. Type of ship.
- Community views. What are the benefits/disbenefits for the host communities?
- Issues need to be discussed together (e.g. regional approach to storage/in parallel to discussions on ILW treatment facilities). An integrated approach.
- Take into account a broader perspective (e.g. future of a site).
- Investment, centralised facility: minimise costs of treatment by having one site.
- Specific community benefits are needed.
- Mechanisms for engagement on issues: efficient engagement rather than multiple engagement. Joined-up process for these discussions to take place (e.g. new build and waste treatment facility – balancing difficult to find).
- Form of conditioning. Different views on the conditioning proposed. (e.g. encapsulation/compaction – shred in ...).

Table 10:

- Issues: community acceptance:
 - Changes in practice, new developments and possible changes in burdens from one community to another.
 - How has it been communicated?
 - How has the new community been incentivised?
 - The way in which the local community is asked can open up debate. For example rather than “do you want...?” Ask: “Under what circumstances would you...?”
- Make links to benefits for local employment levels.
- Local benefit must be LOCAL.
 - Bus lane analogy (people travelling from 10 miles away love it, but people living next to it see it as an obstacle).
- What benefits are local communities getting (other than their lights are on) e.g. the local village rather than a town 40 miles away.
- Are we talking about a mass influx of waste or of smaller amounts?
 - Should form part of business case.
- Transport enables things to take place:
 - The ‘how to’ is relatively straightforward
 - Needs a more strategic and national approach.
- If it’s safe, why does it need to get ‘treated’?
 - Need to be clear of the benefits of treatment.
- Planning blight: people are not keen on living next to local authority landfill sites, especially if it affects house prices.
 - Need to consider that proposed developments could be perceived as having an impact on property prices. Surveyors include proximity to power stations in their reports.

- If people feel their way of life may be impacted by a development, then perceptions of the changes might affect the planning
- It may be more palatable if there is a clear 'end in sight' that could be communicated e.g. it will take 10 – 11 years to clean up this site.
- There is a perception that if activities occur within the fence of the licensed site, then it's okay.
 - Could be more difficult to create new licensed sites for treatment centres.
- Easier or even essential to address perception issues if any treatment centres are created on existing licensed sites.
- Feeling that licensed sites have good relationships with local communities, which is a strength that could be built on.
- If community is engaged in decision, it could be more useful to help with treatment centre decision.
- Level of employment is key.

Table 11:

- Transport issues: risk, carbon footprint.
- Waste packages for transport of raw waste - do we have them? Can we make safety cases?
- What quantity of waste justifies the construction of a plant?
- Balance between volume minimisation and transport. Treatment before transport reduces volumes of transport. Transport before treatment allows optimisation.
- Need to build a UK competence with redundancy – a single plant would pose significant risks of failure. Avoid common mode failure.
- Challenge to “centre of excellence” concept. Fewer sites is less robust too.
- Intergovernmental Panel on Climate Change (IPCC) 50 years before significant changes in for example sea level – make sure our plans are robust to this.
- Treatment centres at sites with a potential nuclear future – nuclear infrastructure.
- Treatment centres next to stores.
- Ensure knowledge management and “cultural history” of radioactive wastes is preserved.
- Need to put scale into context – volumes are very small compared to...
- Need to have the debate in terms of what the waste is – graphite.
- Issues associated with policy, for example, can't send HAW overseas (Command 2919).
- Need to consider isotopics as well as materials
- Take advantage of existing structures (reactors) for storage (example of Berkeley)
- Portable waste or portable plants
 - Mobile thermal treatment (geomelt, portable incinerators)
 - Mobile sludge/IX treatment (TILWSP).

Table 12:

- Issue round volume of transport required.
- Debate required on transport due to controversial position.
- How do we “sell”/inform/educate to local communities.
- Put waste to existing infrastructure/expertise.
- Cumbrian position is getting to “enough is enough” – have done our share.
- Voluntarism – is probably way forward for treatment centre.
- Sea transport: Barge to central treatment works.

Question 2: What issues would thermal waste treatment of ILW present and how could they be addressed?

Table 2:

- What does this mean? What do the various elements of “thermal treatment” mean and, importantly, what are the impacts of each element. Public need to understand this better.
- Be ‘braver’ about talking about ‘cost reduction’ in the context of “working smarter” innovation etc.

Table 3:

- Must be clear – what does “thermal treatment” mean to the man in the street?
- “Incineration” is ok (for hospitals) until you add the word “nuclear” and then perception changes dramatically.
- Public needs to understand the whole lifecycle.
- What happens to whatever is left after any thermal treatment?

Table 4:

- People do not know what thermal treatment is, there needs to be communication of what it is to help stakeholders to have an informed discussion of the issues e.g. presentations as SSGs.
- Issues – secondary waste, discharges, environmental impact, aerial discharges of Carbon-14.
- Need to distinguish thermal treatment from incineration.

Table 5:

- Same set of answers [as for Question 1]. The same questions would arise and same barriers. [These are:]
 - The issue for stakeholders is ‘NIMBY’ this could be resolved by education.
 - If we can understand how it works in the USA, what barriers did they have to overcome and how did they do it?
 - Should be presented as an economic opportunity.
 - Intrusive impact of facilities in areas of natural beauty needs to be considered.
 - Parts of existing sites could be re-used for new facilities.
 - Transport waste by sea to get over the transport issues.
 - Consider using US transport containers as this is proven.
 - How does it work in Japan – education is key.
 - This isn’t a stand-alone problem: it effects LLW through the waste hierarchy.
- The word incineration should never be used.
- Education should be at a local level.
- The NDA needs to consider which sites are most suitable before embarking on an education programme.
- Reward needs to be considered – in some areas reward may not be an incentive (i.e. affluent areas).
- All early answers and observations to previous questions apply, it is just that the hazard is greater.
- Existing sites should be recycled – change of use from generation to storage.
- Need to understand what employment there would be.
- It could be that deprived areas end up taking the waste because they have no other opportunities.

Table 6:

- Thermal treatment: perception poor; need to get best information out to public before debate starts (don’t debate through the media).

Table 7:

- Selling the concept to communities: explaining the science – ‘thermal treatment’ versus ‘incineration’.
- Education programme – proven technologies.
- Learning from Experience from other nations – best practice.
- Stakeholder engagement programme – regulators support.

Table 8:

- We need more background details to be able to discuss the details of the option.
- Same CO2 emissions and energy recovery issues as in previous discussions and higher concern because it is ILW and not LLW
- Concern over back-door approach for GDF in 30–40 years time
 - If you go down that route, it might become an argument for GDF or permanent disposal in the same location.
- Therefore early engagement with the community at an understandable level is critical.
- Important to give public more information about what ILW is?
- Better definitions (for example call it “contaminated’ steel” and not “ILW”).
- Can’t really understand what the effect of the ‘by-product’ would be and we don’t have any information on that.
- Not enough clarification on what the gas is: is it radioactive, what are worker safety implications?
- Is it another step in the process we are talking about?
- What’s the connection between radioactive decay and the need to treat the graphite and the Magnox decommissioning programme duration.
- Multi-sites: how do you incentivise the PBOs to use a shared service:
 - Part of the business case agreement.

Table 9:

- Thermal treatment is any process that introduces heat into the system. Broad range of outcomes/ environmental impacts.
- Hard to address as a monolithic theme.
- Are there options for mobile treatment? Is it feasible?
- Are there synergies with Local Authorities?
- Issues to address:
 - Public opposition
 - Environmental impacts
 - Nature of the waste (for example liquid oils/solvents /solid).
 - What do we mean by thermal? Not hiding.
 - Nature of the thermal treatment process is critical (for example vitrification is very positive on a safety level).
 - How to address exploration of options?
- Communication – must communicate the problem.
- Clarity on the detailed process proposed. Specific. Not general.
- Thermal treatment is one option. Need to be clear on that.
- List of options - benefits/disbenefits - for the communities.
- Criteria for decision-making need to be clearly understood. Opportunity to input into the decision-making process. From communities.

Table 10:

- Concentrate and contain is good.
- Going up a chimney and dispersing is less good? Perception issues.
 - Is all radioactivity captured in the ash?
 - Good for volume reduction
- Need to avoid the term ‘incineration’.
- Vitrification is more likely to be acceptable to communities.

- HLW is tolerant to heat.
 - Concern that ILW may not be, so why would we subject it to temperatures of 1000°C+
 - Need to explain benefits very clearly, for example, reduction, alkalinity levels etc.
- What is local?
 - 2.5km near Capenhurst
 - Moving away from immediate vicinity and the knowledge levels of population decreases dramatically and negative perceptions increase.

Table 11:

- Energy use and thermal treatment – for example, carbon footprint.
- See issues on incineration – public resistance
 - Non-radioactive – hard
 - Low level radioactive – very hard
 - Higher level radioactive – impossible!
- Public resistance: example: bringing journalist into the investigation/decision-making process – “media your best friend or worst enemy”.
- Excellence in conduct of operations is essential – and continued public demonstration of this (for example, website dashboard of stack monitors)

Table 12:

- Explain difference between incineration and thermal treatment.
- Planning authorities against incineration.
- Local authorities need to listen to communities; NDA may need to work top-down.
- Possibility to make use of European waste centres.

Some initial feedback from the NDA on this session is provided below.

Response from the NDA

The waste team has undertaken an early review of the above key points collected from stakeholders during the session and would like to present some initial feedback as set out below. Points similar to those collected from earlier questions are not repeated in this summary.

The key messages that the Waste Team is taking away from this discussion include:

Considering multi-site treatment centres (82 comments received):

- *Tie in ‘new build’ waste management.*
- *Set in the national context*
- *Take the treatment capability to the waste, not vice versa.*
- *Use transport technology from USA.*
- *Treat close to disposal point.*
- *Provide more specific proposals. Analyse waste quantities to enable justification to be considered.*
- *‘Business case’ suggests ‘money case’ – be holistic.*
- *Planning blight needs to be considered.*
- *Having multiple options reduces programme risk.*

Considering how to address issues raised by thermal treatment of ILW (80 comments received):

- *Be clearer about definitions of thermal treatment, incineration, etc.*
- *Be more forthright about the benefits sought.*
- *Take a lifecycle view.*
- *Concerns about secondary wastes and discharges (see also incineration).*
- *Develop specific proposals.*
- *Explain how reactor graphite fits in.*

- *Synergies with local authorities (= ie other waste treatment opportunities?).*
- *Energy use – holistic view of environmental impact.*
- *(The wider issue of security of waste was also brought up).*

What are you going to do with this information?

The Waste Team intends to use the above points and the detailed comments to inform the development of the NDA HAW topic strategy. They will also be provided to the thermal treatment Integrated Project Team (IPT) that is being set up to examine the opportunity for thermal treatment.

14. Waste Discussions: Concluding Remarks

In response to some uncertainty, Graham Jonsson provided stakeholders with a clarification on incineration and thermal treatment, which had both been referred to in the preceding presentations. The first presentation from Tim Hedahl referred to incineration, which applies to LLW and in the third presentation, on waste treatment options, thermal treatment was referred to, which applies to ILW. These were clarified to be different things. Incineration is a form of thermal treatment. Thermal treatment for ILW covers the other emerging technologies.

14.1 Comments on the Waste Theme Session

The meeting facilitator invited stakeholders' comments on the Waste discussions that had taken place:

- Q: A stakeholder commented that they found the waste session more enjoyable and involving than the breakout sessions that had taken place on day one of the meeting.
- Q: Another stakeholder raised a concern that over the course of the meeting in a number of sessions there has been the notion of selling ideas and concepts to communities, which was a cause of concern. The stakeholder considered that the aim should be to inform and educate instead.
- A: The NDA responded that this was is a good comment and showed that the NDA must get its thinking right. There was agreement that the meeting should be about sharing with honest disclosure about direction of travel and should not be selling ideas.

Phil Davies concluded the session by confirming that the NDA had been listening. There had been lots of interesting comments, particularly about transport (e.g. by sea) and use of international precedents. The NDA would pick up the point raised about informing stakeholders and not selling to them. With regard to storage issues, the idea of community benefit had arisen, which was realistically presented, and at an appropriate level. The NDA looked forward to seeing the detail from the discussions when this was written up. This would then be reviewed by the Waste team and there would be feedback to stakeholders. Stakeholders were thanked for their patience with the long session.

15. Questions for the Executive Team

The next session was an opportunity for stakeholders to ask the executive team questions. These were taken chiefly by William Roberts, the NDA's Chief Financial Officer.

- Q: A stakeholder commented that they endorsed previous comments and considered that the day's meeting has been beneficial and worked well. A request was also put forward with regard to the location of the meeting: whether it could be moved southwards for example to Cardiff or Bristol.

- Q: There was a reflection that, three meetings ago, the NDA would not talk about new build. Two meetings ago there was talk about new build, that the NDA would offer technical advice. At the last meeting the message was that new build is government policy and that the NDA have to take advantage of policy where possible.
- A: The sale of NDA-owned land to new nuclear developers has been based on our responsibility to seek the maximum value for assets we no longer require to fulfil our core function of decommissioning. In order to protect the value of land being sold we nominated four sites into the Government's Strategic Siting Assessment process which will lead to a list of sites deemed suitable for new nuclear build being announced by the Government this Autumn. This draft Nuclear Planning Policy Statement will then be subject to public consultation. The NDA will have no role in taking these sites through the planning and construction phases as this will be the responsibility of the new owners of the land.
- Q: A stakeholder raised a concern about the fact that a Japanese television company had approached the NDA to film the NSG and that the NDA, without consulting stakeholders, had turned them down. The stakeholder considered that this was not the right signal to send to Japan, particularly since the programme being made was a serious documentary. There was a concern that the refusal will have presented an image of a secret meeting and that participants should have been involved in the decision.
- A: The NDA confirmed that it had considered this situation very carefully. The Authority had been working with the Japanese film crew for several weeks: they had visited Sellafield and were planning a visit to Trawsfynydd. They had met the local community and the NDA had worked very closely with the film crew to enable them to create their programme. The programme makers had also asked about the NSG but the NDA thought carefully about it and declined since it is not a public meeting.
- The NDA further explained that if a discussion was to take place, a point of view could not be presumed from anyone. It would only take one person to object in order to require the film crew to leave. It would also take much time to have that debate. Considering time at these meetings is limited it appeared inappropriate.
- Q: A stakeholder reflected that Channel 4 news had been invited to a recent SSG meeting and members had taken the opportunity to grandstand.
- The stakeholder then raised a point about progress towards GDF: All the discussions on the Waste theme had been dependent on it. A request was made for a brief update to plenary on six-month progress at future NSG meetings.
- A: The NDA agreed to ensure that future NSGs include an update on the GDF project.
- Q: A question was raised with regard to how the NSG meetings were operated. A stakeholder asserted that the meetings were not supposed to be under Chatham House Rules and attribution should be allowed for who has said what: It was very important that people know what NDA and government officials have said.
- A: The NDA clarified the precise rule is that we only attribute the NDA, unless someone else particularly asks to be attributed themselves. However, the NDA was willing to take this matter away and look at it.

- Q: A further point was raised that stakeholders had previously warned about the NDA morphing into BNFL. The stakeholder raised the issue that there needs to be a line drawn between legacy and new build. Where funding comes from is another aspect. These were important issues for everyone to talk about. What do stakeholders expect the NDA to deliver on: Is it decommissioning and clean up or is it these other areas? The NDA could be drawn away from its original mission and there are risks around public confidence and integrity. Support for NDA could be lost as a result. There is a need to think about the NDA's role.
- Q: Another stakeholder stated that they wished to support the previous point raised: It is worth having this issue as a future agenda item. Most people have a view of what the NDA is for. It may be different for different people. It would be good to have a discussion to have clarity around this.
- A: The NDA agreed to consider how best to include a discussion on this issue at a future NSG.
- Q: As a final comment on this issue a participant requested that people remember that the Energy Act 2004 is very clear about what the NDA can and cannot do and these have a legal and legislative boundary. It was acknowledged that it was useful to revisit why the NDA was set up but it should be noted that the Energy Act remains clear on this issue.
- Q: A stakeholder raised a new topic about the two 'elephants' in the room: climate change and recession. The point was made that recession could have an immediate impact on public sector spending, so that conversations on options need to factor this in. The stakeholder also referred to the Intergovernmental Panel on Climate Change (IPCC) which includes experts who could be a source of advice on the climate change implications of some of the waste treatment options being considered. The stakeholder went on to state that a holistic view of the carbon life cycle impact was needed. It is not just about CO2 impact, an option might have benefits, but the true impact should be properly assessed in order to determine this.
- Q: A question was raised about the NSG meeting itself: Whether, based on the successful experience of these two days, the NDA would be willing to have a further NSG where day 1 is focused on updates and day 2 is more project based and the other two per year are more a choice on the 27 themes and optional.
- A: The NDA responded that there was clearly a value for money issue. These two days of meetings cost money. But the NDA was very clear that the remaining three NSG meetings, between now and the Strategy Document's publication, would provide a primary focus for examining the topic strategies. Some topic strategies have not yet been fully developed and the NDA needed to ensure that these have effective engagement. This was continually being looked at with Strategic Authorities: how to match the time available with the work that needs to be done. It might not necessarily be done via events of the scale of the NSG, but the NDA had to be imaginative about how it got stakeholder input for example the combination of online communication and dedicated workshops as an alternative.

A further response was that some of the solutions may be regional meetings or where people are particularly interested in a particular theme might be a way to use resources more effectively.

16. Actions from the Meeting

Actions that had been generated during the plenary sessions of the meeting were displayed at the close of the meeting for the information of stakeholders as follows:

	Action	Who	By When
1.	Publish details of who NDA has international agreements with and what they cover – <i>now on the website.</i>	NDA	26 June
2.	Check whether the figures on cost to taxpayer of Sellafield MOX Plant are available and if not make them so – <i>included in this report.</i>	NDA	26 June
3.	Produce meeting report for circulation.	TEC	16 July
4.	Review and report back to next NSG the working agreement on non-attribution as raised in final plenary.	NDA	Next NSG

17. Evaluation

The Environment Council is assessing the effectiveness of the NSG as part of good practice of engagement. The evaluation seeks to feed into and influence the engagement process as well as measure its success. An evaluation questionnaire was circulated to stakeholders at the NSG for this purpose. An evaluation report of the 8th NSG, which will include the feedback received through this questionnaire, is to be produced by The Environment Council and published.

18. Close

To close the meeting, William Roberts the NDA's Chief Financial Officer reflected on the two days of the NSG with its participants:

He began by commenting that it was wonderful that so many people were still coming to these events at the 8th meeting of the Group. There had been a full agenda with lots of networking and the NDA was impressed with the standard of the stakeholders' endurance.

William went on to say that the agenda and sessions taking place had been shaped by stakeholders' input and this has been an improvement: the meeting had provided a much better balance between what the NDA want to cover and draw from these events and what the stakeholders want to focus on. In particular the roundtable Waste session's had been very enjoyable.

William went on to say that the NDA needed to get as great a range of perspectives as possible into its thinking and decision-making and the NSG helps to achieve this. The NDA has to take decisions to progress its decommissioning and clean-up mission. These will not necessarily satisfy everyone, so it is important that the NDA is held to account by the NSG and others beyond the NDA. Where the NDA had taken decisions it was important that the Authority fully understood the consequences and impacts of the decisions. There is a need to show progress and performance to demonstrate that there has been value from the decisions taken. He then illustrated this point with the example of the Sellafield presentation at the meeting showing how the resource applied to Sellafield had been used.

William Roberts reflected that the NDA needed to ensure that its mission was properly understood so that this could be communicated properly and fed more widely out from the NSG and to other stakeholders.

William asserted that the meeting had been effective in getting feedback. There was the knowledge, experience and intellect in the room to help the NDA solve the problems it faced. These were shared problems and the Authority appreciated the participants' help in dealing with them.

William then reflected that there were now only three NSG meetings left before the next Strategy, after that there would be a review, in which stakeholders would be involved, of how the NDA took forward national engagement. Until then the NDA needed stakeholders to focus on input to the revised Strategy as part of the decision-making process for it.

He then closed the meeting by thanking The Environment Council for facilitating the meeting. He also thanked the NDA's Stakeholder Relations team for internalising the responsibility for the functional aspects and administration of the meeting and for taking on board all the feedback about the NSG. William also thanked Richard Waite who has been acting CEO for over a year, commenting that he had done a fantastic job in taking the NDA forward to a place where it could have a positive and constructive debate to take forward the Strategy. Finally, William again thanked the participants for their constructive input and looked forward to seeing them at the next NSG.

19. Acronyms

AGR	Advanced Gas-Cooled Reactor
ARAC	Annual Report and Accounts
BE	British Energy
BPEO	Best Practical Environmental Option
BWR	Boiling Water Reactor
CEO	Chief Executive Officer
CND	Campaign for Nuclear Disarmament
CoRWM	Committee on Radioactive Waste Management
DECC	Department for Energy and Climate Change
DfT	Department for Transport
DRS	Direct Rail Services
DSRL	Dounreay Site Restoration Limited
DTI	Department of Trade and Industry
EA	Environment Agency
GDF	Geological Disposal Facility
HLW	High Level Waste
HAW	High Activity Waste
HSSEQ	Health, Safety, Security, Environment, Quality
ILW	Intermediate Level Waste
IPCC	Intergovernmental Panel on Climate Change
IPPC	Integrated Pollution Prevention and Control
IPT	Integrated Project Team
LAW	Low Activity Waste
LLW	Low Level Waste
LLWR	Low Level Waste Repository
LQM	Land Quality Management
LWR	Light Water Reactor
MoD	Ministry of Defence
MOX	Mixed Oxide
NDA	Nuclear Decommissioning Authority
NFLA	Nuclear Free Local Authorities
NGO	Non Government Organisation
NIMBY	Not In My Back Yard
NSG	National Stakeholder Group
OND	Office for Nuclear Development
OSPAR	The Oslo-Paris Convention
PBO	Parent Body Organisation
PWR	Pressurised Water Reactor
R&D	Research & Development
RWMD	Radioactive Waste Management Directorate
SLC	Site Licence Company
SMS	Strategy Management System
SPM	Site Programme Manager
SSG	Site Stakeholder Group
THORP	Thermal Oxide Reprocessing Plant
VLLW	Very Low Level Waste
W&NM	Waste & Nuclear Materials
YIMBY	Yes In My Back Yard

APPENDICES

Appendix 1 National Stakeholder Group Attendees

Name	Organisation
Steven Payne	Berkeley Site Stakeholder Group
Cllr Penny Wride	Berkeley Site Stakeholder Group
Cllr Brian Main	Bradwell Local Community Liaison Council
Cllr John White	Bradwell Local Community Liaison Council
Julie Bennett	British Energy
Raj Jassal	British Energy
John Tripp	Campaign for Protection of Rural Wales
David Challen	Capenhurst Site Stakeholder Group
Cllr Ian Lindsay	Chapelcross Site Stakeholder Group
Cllr Sean Marshall	Chapelcross Site Stakeholder Group
Martin Root	Civil Nuclear Constabulary
Chief Inspector Jim Weeden	Civil Nuclear Constabulary
Tony Regan	Civil Nuclear Police Authority
Adam Scott	Committee on Radioactive Waste Management (CoRWM)
Gemma Samlal	Construction Industry Research & Information Association (CIRIA)
Bruce Cairns	Department of Energy and Climate Change (DECC)
Dean Gallacher	Department of Energy and Climate Change (DECC)
Una Ni Dhubhghaill	Department of the Environment, Heritage & Local Gov, Ireland
Alan Ryan	Department of the Environment, Heritage & Local Gov, Ireland
Eva Foran	Direct Rail Services Ltd (DRS)
Andrew Sumner	Direct Rail Services Ltd (DRS)
Simon Middlemas	Dounreay Site Restoration Ltd (DSRL)
Bob Earnshaw	Dounreay Site Stakeholder Group
June Love	Dounreay Site Stakeholder Group
Colonel George Smythe OBE	Dungeness Site Stakeholder Group
Louisa Whenday	Dungeness Site Stakeholder Group
Doug Ilett	Environment Agency (EA)
Dr Clive Williams	Environment Agency (EA)
Stuart Conney	Food Standards Agency
Peter Kane	General & Municipal Boiler Makers Union (GMB)
Jean McSorley	Greenpeace UK
Terry Fraser	Harwell-Chilton Campus Local Stakeholder Group
Cllr Terry Joslin	Harwell-Chilton Campus Local Stakeholder Group
Michael Caswell	Hinkley Point Site Stakeholder Group
Rita Holmes	Hunterston Site Stakeholder Group
John Lamb	Hunterston Site Stakeholder Group
Dr John Roberts	Immobilisation Science Laboratory
Stephen Dutton	International Nuclear Services Ltd (INS)
Dan Robson	International Nuclear Services Ltd (INS)
Dr Paul Lenartowicz	Isle of Man Government
Richard Bramhall	Low Level Radiation Campaign
Mrs Cath Giel	Low Level Waste Repository Ltd (LLWR)
Tim Hedahl	Low Level Waste Repository Ltd (LLWR)
Dick Raaz	Low Level Waste Repository Ltd (LLWR)
Neil Baldwin	Magnox North Ltd
Mark Drulia	Magnox North Ltd
Tim Jones	Magnox South Ltd
Mark Lesiniski	Magnox South Ltd

Name	Organisation
Alan Parker	Magnox South Ltd
Charlie Kinnell	Ministry of Defence (MoD)
Roger Anderson	National Nuclear Laboratory (NNL)
Kelly Anderson	Nuclear Decommissioning Authority (NDA)
Dr Elizabeth Atherton	Nuclear Decommissioning Authority (NDA)
Randall Bargelt	Nuclear Decommissioning Authority (NDA)
Stuart Chalmers	Nuclear Decommissioning Authority (NDA)
Bob Churchill	Nuclear Decommissioning Authority (NDA)
John Clarke	Nuclear Decommissioning Authority (NDA)
John Dalton	Nuclear Decommissioning Authority (NDA)
Phil Davies	Nuclear Decommissioning Authority (NDA)
Alun Ellis	Nuclear Decommissioning Authority (NDA)
Paul Gilchrist	Nuclear Decommissioning Authority (NDA)
Richard Griffin	Nuclear Decommissioning Authority (NDA)
Bill Hamilton	Nuclear Decommissioning Authority (NDA)
Stephen Henwood	Nuclear Decommissioning Authority (NDA)
Nicole Hough	Nuclear Decommissioning Authority (NDA)
Janice Houghton	Nuclear Decommissioning Authority (NDA)
Dr Ian Hudson	Nuclear Decommissioning Authority (NDA)
Jonathan Jenkin	Nuclear Decommissioning Authority (NDA)
Dr Sara Johnston	Nuclear Decommissioning Authority (NDA)
Graham Jonsson	Nuclear Decommissioning Authority (NDA)
James McKinney	Nuclear Decommissioning Authority (NDA)
Jim McLaughlin	Nuclear Decommissioning Authority (NDA)
Jim Morse	Nuclear Decommissioning Authority (NDA)
Richard Mrowicki	Nuclear Decommissioning Authority (NDA)
Jon Phillips	Nuclear Decommissioning Authority (NDA)
William Roberts	Nuclear Decommissioning Authority (NDA)
Dr Adrian Simper	Nuclear Decommissioning Authority (NDA)
Donald Urquhart	Nuclear Decommissioning Authority (NDA)
David Wallace	Nuclear Decommissioning Authority (NDA)
Dave Weatherburn	Nuclear Decommissioning Authority (NDA)
Dr Christine Snaith	Nuclear Directorate - HSE
Mike Warnes	Nuclear Directorate - HSE
Sean Morris	Nuclear Free Local Authorities
Cllr Rick Nickerson	Nuclear Free Local Authorities
Amanda MacMillan	Nuclear Industry Association (NIA)
Bob Skelton	Nuclear Institute
Fred Barker	Nuclear Legacy Advisory Forum (NuLeAF)
Stewart Kemp	Nuclear Legacy Advisory Forum (NuLeAF)
Cllr Tim Knowles	Nuclear Legacy Advisory Forum (NuLeAF)
Craig Dobson	nUKclear21
Michael Hawkins	Oldbury Site Stakeholder Group
Malcolm Lynden	Oldbury Site Stakeholder Group
Ray Pascoe	Prospect Union
Emma Burwood	Research Sites Restoration Ltd (RSRL)
Angela Vincent	Research Sites Restoration Ltd (RSRL)
Derek Miller	Scottish Councils Committee on Radioactive Substances (SCCORS)
Bill Shepherd	Scottish Enterprise
Jim Cochrane	Scottish Environment Protection Agency (SEPA)
Elizabeth Gray	Scottish Government

Name	Organisation
Ewan Young	Scottish Government
George Beveridge	Sellafield Ltd
Iain Irving	Sellafield Ltd
Mike Baily	Sellafield Ltd - Capenhurst Site
Phil Malem	Sellafield Ltd - Capenhurst Site
Nigel Leese	Shareholder Executive - BERR
Cllr Marianne Fellowes MBE	Sizewell Site Stakeholder Group
Richard Smith MVO	Sizewell Site Stakeholder Group
Lydia Meryll	Socialist Environment and Resources Association (SERA)
Jenny Leybourne	Springfields Fuels Ltd
Peter Richards	Springfields Fuels Ltd
Jayne Ashley	Springfields Site Stakeholder Group
Cllr Bernard Whittle OBE	Springfields Site Stakeholder Group
Idwal Williams	Trawsfynydd Site Stakeholder Group
Cllr Isgoed Williams	Trawsfynydd Site Stakeholder Group
David Alexander	Unite
John Deighan	Unite
Charlie Thomson	Unite
David Whitnall	Unite
Dafydd Hughes	Welsh Assembly Government
Cllr Mike Davidson	West Cumbria Site Stakeholder Group
Cllr David Moore	West Cumbria Site Stakeholder Group
Ranald Stewart	West Cumbria Site Stakeholder Group
Sandra Ellis	Winfrith Site Stakeholder Group
Cllr Aled Morris Jones	Wylfa Site Stakeholder Group
Cllr Jac Jones	Wylfa Site Stakeholder Group