

## Nuclear Decommissioning Authority's **10th National Stakeholder Group**

### **MEETING REPORT**

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## **SECTION 1: INTRODUCTION**

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This was the tenth meeting of the Nuclear Decommissioning Authority's (NDA's) National Stakeholder Group (NSG) and was held over two days, 17-18 March 2010 at the Lowry Hotel in Manchester. A list of attendees can be viewed at Appendix 1. A number of briefing papers were circulated in advance of the meeting. These papers can be viewed on the NDA website at <http://www.nda.gov.uk/news/events/nsg-mar-10.cfm>

The NSG is a forum set up by the NDA to discuss and receive stakeholder input on strategic issues at the national level. The NSG is open to national and international organisations that have a declared interest in the work of the NDA. Operating under the sponsorship of the NDA, the NSG meetings are independently convened and facilitated. The role of the facilitation team is to guide the meeting process and enable stakeholders to get the most from it. At the tenth NSG meeting (NSG10), this role was undertaken by The Environment Council (TEC). For further information about the NDA and its stakeholders please refer to the NDA website.

The meeting was introduced by Mike King, TEC's lead facilitator. Stakeholders were welcomed to the event and Mike introduced its purpose and objectives. The programme for the two days was set out and is captured within the content of this report. Mike advised that, in response to previous stakeholder feedback, the design of the meeting aimed to enable stakeholders to attend all the available sessions during the event, including all breakouts. Finally there was a reminder of the ground rules for the meeting.

## **SECTION 2: DAY 1, 17 MARCH**

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### **1. Scene Setting**

Mike King outlined that, for more than a year, the stakeholders at the NSG had been helping the NDA develop the next version of its Strategy. NSG10 had been scheduled at a critical point in this process, giving stakeholders a final chance to input into the NDA's thinking before the Draft Strategy II document is prepared for public consultation. Most of the agenda time would therefore be focused on the key strategic themes that provide the NDA with its biggest challenges. The meeting programme was designed to ensure that while most time would be spent on these key issues there would still be opportunities to review and feedback on all aspects of the emerging strategy. The NDA's intention is that there should be no surprises to stakeholders when the draft Strategy II is published.

The specific objectives for NSG10 were:

- Updating stakeholders on the development of Strategy II
- Sharing the strategic challenges and ensuring stakeholders understand the Strategy at a theme level
- Providing stakeholders with a 'pre consultation' opportunity to provide feedback on the Strategic Theme strategies.
- Giving stakeholders the opportunity to help the NDA refine the consultation.

### **2. NDA Chief Executive Officer's Opening Remarks and Update**

The meeting was formally opened by the NDA's Chief Executive Officer (CEO), Tony Fountain. Tony began the meeting by thanking stakeholders for taking the time to join the NSG and acknowledged that the NDA was very privileged to have them present.

Tony Fountain affirmed that the key topics to go under discussion at the tenth NSG were three of the strategic themes: Integrated Waste Management, Site Restoration and Spent Fuel. The CEO noted that the NDA had been working on the Strategy for a number of years alongside input from stakeholders and he urged stakeholders to fully participate during the sessions and to express exactly what was on their minds to make the most of the NSG.

Tony proposed to cover three topics in his opening address and to pick out some highlights from activities across the estate, observing that this by its nature would be partial to some degree. Tony also proposed to update stakeholders on the Public Value Programme (PVP) on which there had been a presentation at the previous NSG. The CEO also intended to talk about his intentions for the NDA's future direction in being more effective and driving performance and delivery.

Performance and highlights were covered first, starting with safety: Tony thanked Mark Lesinski, Managing Director at Magnox South for his leadership in achieving a million man hours without incident through engagement of the unions and workforce. This was a remarkable track record. The Hinkley and Bradwell sites, while working on their storage ponds, had conducted three million man hours without a single contamination issue. This was by no means unique. Wylfa had achieved its British Safety Council five star safety rating for the third year in a row and Trawsfynydd had accomplished three and a half years without having a day away from work case. Dounreay had achieved four million man hours without a lost time incident. Sellafield, through the engagement work of Nuclear Management Partners Limited (NMP), had achieved some real improvements to its safety record: two periods of over a million man hours without having an incident.

Tony then explained that while the generally accepted notion was that having zero accidents is impossible, he believed the opposite, since every accident he had ever investigated was avoidable. The CEO emphasised that he believed that his was the right aspiration to hold. Tony underlined that it had been a tough winter in which to operate, especially with regard to ice and slip hazards. He identified that the incidents he would most like to get rid of were those affecting critical operating process areas.

Tony then moved on to activities across the estate. Tony first highlighted something new: Chapelcross had finished dealing with its Magnox Depleted Uranium (MDU) stores. The final package had been put together and was ready to go to Capenhurst. The stores accounted for the sixth highest hazard across the estate and so this was a great achievement. At Dounreay the removal of buildings had continued. The estate's second highest hazard is metal liquid coolant (sodium-potassium (NaK)) for the Dounreay Fast Reactor (DFR). With technological advancement this was the first year that fifteen tonnes of the fifty-seven had been removed. Calder Hall had completely removed its asbestos. Dungeness has also accomplished removal of asbestos from its water storage tanks which was a considerable advance.

Tony then described how leadership at Sellafield was making a difference, including activities such as undertaking sludge removal from the B29 pond; the Windscale Advance Gas Cooler Reactor (WAGR) completion and the commencement of a new building for a dry silo required for clearing the B41 pond.

As regards estate operations, the CEO highlighted an important landmark: the very last Magnox fuel element from Springfields had been produced for Wylfa and Oldbury. Magnox fuel had been produced at Springfields for over fifty-three years so it was a great achievement to see the last one finished.

Tony expressed his thanks to sites that have plants still producing electricity; which was a considerable help to NDA finances at over £300 million this year. A total generation of eight terawatt hours had been achieved compared to the five planned. This level had been supported by the Oldbury licence extension. There is an aspiration for a further extension for Oldbury to 2011 and work was also being done with the Nuclear Installations Inspectorate (NII) for an extension for Wylfa.

The CEO then went on to reflect on other areas of activity: The Magnox Operating Programme (MOP) had experienced delays with the loss of flask capability and not being able to move fuel rods. Ten flasks are now operating and critical spare parts are available. This was not yet to the level wanted by the NDA, but huge progress towards full operational support had been achieved. The driving aspiration was not just to get back to earlier levels but to achieve much higher, historical levels to regain lost time.

The Thermal Oxide Reprocessing Plant (THORP) has managed to complete shearing well ahead of time and the operational performance at Sellafield is nudging towards its historical best.

There is the good news that Evaporators A and B are up and running, and Evaporator C is on schedule to join them. Evaporator D is due to be ready a year ahead of schedule.

The Sellafield Mixed Oxide Fuel Plant (SMP) has achieved its eight assemblies on time and is into its next campaign of a further eight: so momentum is being maintained on both the operations as well as the project side.

Tony noted that Vault 9 at the Low Level Waste Repository (LLWR) site is on track for completion. The CEO remarked that it is so expensive to use the vault that as little waste as possible will be put in there through good application of the waste hierarchy! Another good news story for waste management was that ninety-five percent of metal that had gone to the Studsvik recycling facility was able to be recycled for commercial use. Other points highlighted by Tony Fountain were that at Trawsfynydd, the Intermediate Level Waste (ILW) store is being used. Six containers of Fuel Element Debris (FED) have gone in. The NDA has now received approval from the regulator for the Geological Disposal Facility (GDF) to run as a shadow Site Licence Company (SLC) from the regulator. Another achievement to note was the return to Japan of a 113 tonne flask of Vitrified Residue Returns (VRR) waste from spent fuel as per commercial contract and government policy requirements.

The Dounreay Competition was ongoing and two successful industry days had now been held.

Another commercial opportunity was with regard to the Springfields facilities which would be a key future manufacturer of fuel, especially for new build reactors. Fuel manufacture for new generation allows the NDA and the workforce to have a better outcome. The deal was not yet signed but this was expected soon. The NDA is also trying to work out new commercial arrangements for Capenhurst and Tony hoped to be able to tell stakeholders more at the next meeting.

Tony then covered socio-economics: noting that when the NDA had last met in November 2009, rain and flooding in Cockerthorpe and West Cumbria, had resulted in infrastructure damage with twelve bridges closed and an enormous impact on people's lives. The NDA helped to initiate support by putting a fund of £50,000 together which then became a more widely contributed support fund. The NDA was now aiming to contribute a further £200,000. The NDA helped provide staff support and advice for crisis management to the local authorities.

On PVP Tony reflected that the work in the context of the current economic climate that the NDA were carrying out was more and more relevant. The NDA's approach has been to be proactive and create a good set of options that would be helpful and valuable to the Treasury that would be appealing to the next budget. Tony offered his thanks to Elisabeth Cuthbertson of the NDA Shareholder Executive who chaired the PVP process and also noted the valuable input received from Mike Weightman of the NII. Tony acknowledged Tim Stone from the Department of Energy & Climate Change (DECC) and Chris Martin from the Treasury for their contribution, and from the NDA, Tony credited Richard Waite's, Executive Director and Martin Liefieith, Head of Programme Finance for their contribution to this work. Finally the CEO thanked the NDA's Chairman Stephen Henwood who had been communicating the NDA's mission to Whitehall to ensure that those making decisions did so with full knowledge.

Tony reflected that the outcome of the PVP was that the NDA had created programmes with both deletions and accelerations, but that much of the core activity remained intact. The NDA had consulted and focused estate-wide and there was a thrust on efficiency and productivity for less. This, he outlined is the proposition of the PVP. The NDA were now waiting for government's decision to see if these approaches will be adopted. Having the right dialogues locally with unions, workforce and the SLCs would be the next step after that.

More specifically, the NDA had been public about the approach for Dounreay: £150 million per year of assured funding will exist to go out to competition. Some big capital programmes have been delayed (with approval of the regulator) with the benefit of encouraging innovation on efficiency from the competition. The reduction of key hazards continued.

Sellafield was seeing a step up of the site's work but with more efficiency. With the Magnox sites, the history had been of broad scope acceleration followed by a slowdown. The NDA were now trying to be clear that while it could not do broad scope advancement with the funds available, the aim was to pick a couple of lead sites to make progress with; to learn from them, and to work in sequence.

The thrust of what the NDA is doing in this direction, of getting activity done better, faster, and more efficiently, is captured in Business Plan. Tony thanked stakeholders for their comments on the Plan. The NDA is also taking a lead regarding its own financial picture: of a £63 million budget, the Authority's spend had been £56 million. In the three year period that figure was projected to fall to £46 million. Tony emphasised that the NDA needed to demonstrate this kind of action itself, if it was asking it of others.

The NDA had received lots of comments from stakeholders regarding the socio-economic fund, saying that this should not be cut and this section of the Business Plan had been amended to reflect these views.

Tony then went on to describe the forward direction of the NDA and his view of the way ahead. Tony reflected that the nature of the work was important, that it really made a difference; it really mattered, and this was a great test for any type of work. The CEO emphasised that it was a fantastic industry and a fantastic organisation. Tony highlighted that an enormous amount had been achieved in terms of restructuring, of transferring the workforce into the private sector, the greatest names in the industry across the globe being involved, that plans were established and that all the foundations for delivering the mission had been put in place. The emphasis now is on performance and that is what he is trying to drive as CEO. Delivery and performance had not been outstanding across the estate and performance needed to improve. The NDA is spending £2.8 billion of taxpayers' money and they needed to get more back for this.

Tony then identified three areas of change: First, clarity of accountability, that is, what it is that the SLCs, Parent Body Organisations (PBOs) and the NDA do. The SLCs do the work, they are the delivery companies and their role is very clear and the NDA need to enable them to get on with the work. The alignment of the PBOs and the NDA needs further working. The PBOs are the beneficiaries of the contracts and in return they provide staff, resources and processes. The NDA needs to be aligned as to what it expects and is trying to achieve from the SLCs so that the PBO resource is matched to that. The NDA's job is to clear up the legacy and, in the meantime, continue ongoing operations. Everything the Authority does it does through others; it undertakes no operations itself so the NDA needs to be very good at the management of others: through appointments, contracts, expectations and accountability.

Another dimension of clarity of accountability is making sure that people understand their roles and are empowered to get on with them. Individuals should make decisions and be accountable for them. There has been a tendency to do this through a committee process in the past. This is a key difference in direction which will create more efficiency and speed.

The NDA is looking in general at core processes as part of efficiency. This includes sanctioning and budgetary processes. There is enormous scope to make this more efficient: holding people to account but also enabling them to get on and do it. This will enable better productivity.

Another area set out by the CEO was capability: how the NDA manages people effectively. Changes had been instigated at executive level. Tony noted that it was good to recognise that Jim Morse, the NDA's Divisional Director of Assurance and Bill Roberts the NDA's Chief Financial Officer, have done tremendous things for the Authority and are now moving on to new opportunities. Jim Morse has created an important foundation for the NDA; Richard Waite, the NDA's Executive Director is now taking over the accountability for performance and delivery of operations and site licence teams will report to him. Bill Roberts is a great character and founding team member, who recruited many capable individuals in the finance team and is highly respected for his work. Andrew Oldham is holding the post until the new Chief Financial Officer comes online and is doing a fantastic job. Thank you to him.

In terms of the organisational effectiveness project, this started in January 2010 and will be completed in April. Implementation will roll out through the rest of the year.

Tony concluded his address by covering what is coming up for the NDA: The Authority is looking forward to a new Strategy within the next twelve months; to be endorsed by government. There is also an expectation of real advance on the Dounreay competition. Who the NDA appoints is one of the most important things it does and this will be an important step for the site. Tony emphasised that he would like to increase the list of the estate's achievements and make fundamental progress on activities. The CEO outlined his aspiration for the next twelve months: that he wanted people to be able to recognise a difference. He wanted the Authority to be less bureaucratic, for people to feel more empowered to make a greater difference and to find that the NDA is an easier place to get activities achieved.

Tony then invited questions from stakeholders:

**Q:** You touched on what happened regarding the floods and it is important for me to recognise the response from you, your team and the whole nuclear family. We could not have achieved the improvements to the infrastructure without the input of the parties involved, and your leadership in giving that message to the rest of the nuclear family.

**A:** Thank you, that's much appreciated.

**Q:** I am interested to hear about the outcomes and proposals for the PVP regarding acceleration of a couple of the Magnox sites. What will happen to the other eight? Will there be a slow down? The dry storage option is not welcomed by stakeholders. Chapelcross is an example: it is delivering well on key projects, has undertaken the largest asbestos strip and so on. This question is of key interest to stakeholders from the Magnox fleet.

**A:** This is probably not the best forum to provide detail on the individual sites; we can do that in a better way, and only once we have certainty of budget. Given the economic environment there are choices to be made. The idea is to advance a couple of the sites. It means that critical work maintenance and projects will still be done on the other sites. It is not about doing nothing; it is about not going as fast on the other sites. We will be able to learn lessons from the ones done first and add value and money savings on the others as a result.

Regarding the work at Chapelcross there are other things that can be deferred safely, but hazard reduction will be maintained.

**Q:** This is a financial question. Firstly, thanks to Bill Roberts for the straightforward answers he has provided in the past. We have been told that there is around £300 million plus from land sales. Is the Treasury letting you keep this money?

**A:** My perspective is that revenue from land sales accrues in a surplus fund; the End Year Fund (EYF). From living within our means and through commercial deals, we have accrued a surplus. The fund is available in certain circumstances with very specific limitations to be used against certain high hazard conditions. The NDA does not have the freedom from Treasury to spend this money on the sites. However, the Authority is in dialogue with the Treasury about how the EYF might be used more broadly across the estate.

Expenditure for the year is £2.8 billion pounds. From the income coming in during the year the NDA has been able to keep expenditure up without going back to government for further funds. The challenge in future is to sustain the level of expenditure and maximise income. Revenue from generation will go down, so anything we can get from land and asset sales is a key part of keeping spend in the coming year at the same level as for the current year.

That money is in a ring-fenced budget for the NDA, but budgetary conditions mean that we have to be careful with it. The NDA is engaging with Whitehall to establish a sensible level of budget. As part of the PVP the NDA has been asked to come forward with ideas, including acceleration proposals that could potentially access the EYF. However, we still need to account for the fact that the EYF is used to manage unexpected in-year pressures that come up, that is; contingencies. Through the PVP we have been building the evidence base so that government understands what the NDA needs and why.

**Q:** With regard to deficit repair on pensions funding, £86 million has been put into the Electricity Supply Pension Scheme (ESPS) Pension Fund and £84 million more is to be allocated over three years. What is the situation for the other two schemes: Combined Nuclear Pension Plan (CNPP) and Group Pension Scheme (GPS)? Have you the same commitment for future repair and where does this money come from?

**A:** We will fully meet our requirements with regard to pension funding. The pension fund is government backed so there is security there. We are involved in a full evaluation programme of the deficits and debates on the discount rates to assess deficits are going on. We will use these evaluations as the basis for funding allotted. Pension funding is an independent, separate area and will not affect the rest of funding for the estate.

There will be requirements for repair depending on evaluations and the NDA will work with the Trustees to deal with that.

**Q:** You have raised the issue about the MOP. This is a totemic issue and revolves around confidence. Given that the programme was almost stopped, it has now got twenty-five percent of original capacity. What makes you confident that you will deliver by 2016 when this timescale has already been extended from 2011; and do you have a Plan B?

**A:** It is actually being properly addressed from a leadership perspective and fully integrated across Magnox and Sellafield. We are working with Neil Baldwin, Managing Director of Magnox North, who has accountability across the group. In a way the problem that the MOP faced was that it was divided and there was no collective approach. Now interdependencies are taken account of, with clear leadership at the top.

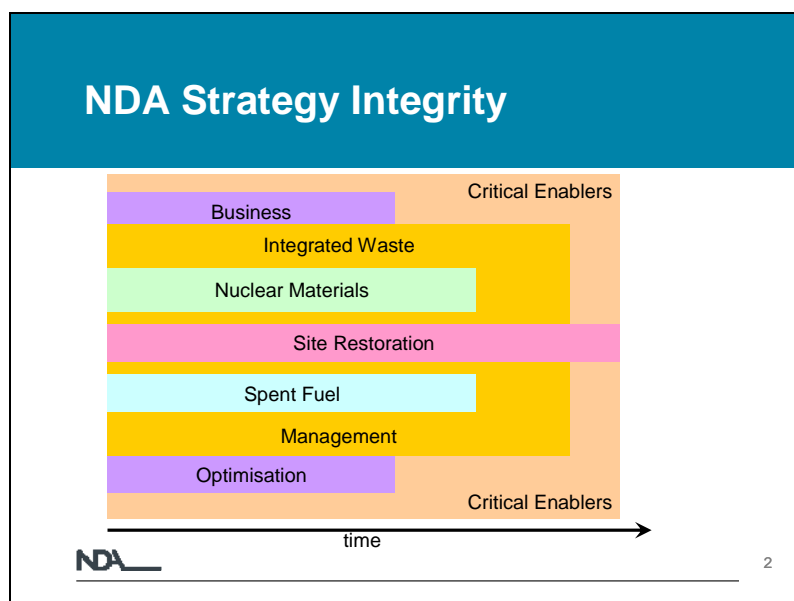
The response from a technical perspective is that yes in 2006/7 we went away from a timescale of 2012, because the contractors did not think it was credible. We think we are holding to the 2016 forecast. This year we have not done well in terms of fuel delivery due to flask problems and problems on reprocessing rates. We still have a long way to go. The NDA inherited a position of 7.5 thousand tonnes of fuel to be reprocessed which has been reduced to 4.5 thousand tonnes so progress has been made. The NDA's role is about improvements and management of contractors. All the information and skills are in place. We need to recover flasking. We have 10 flasks in traffic, we need 20 flasks to maintain Sellafield and 30 are needed to recover. We believe the contractor will achieve this. With regard to reprocessing, the new contractor at Sellafield believes we can do better and the NDA will target and incentivise for this.

If in the end we do not achieve the 2016 target, plans are being developed to address these issues. There will be an opportunity for more information and discussion later in the meeting on this.

### 3. Key Strategic Issues for the NDA

Adrian Simper, Director of Strategy & Technology, gave a presentation on the NDA's strategic challenges. The key points made by Adrian during his presentation are set out below.

The first point addressed by Adrian was the NDA's strategic integrity. One of the challenges is that it is monolithic; yet split up; there is a risk of loss of the integrity of the strategy.



The NDA's purpose in life is restoration, to return sites to societal use and one of the meeting breakouts will be on Site Restoration. There is also Integrated Waste Management (IWM) and Nuclear Materials and Spent Fuel themes to support this and there are many big strategic issues associated with them. The funding model has the NDA net funded from grant-in-aid and commercial activities. Business Optimisation is about ensuring that the Authority does the best it can with the money it has and is key to reducing the burden to the tax payer. However, that fades away since the NDA is not a going concern; it is not building sustainability to its business; its role is to restore the sites and manage the legacy away. The strategy also needs the Critical Enablers in place. During the NSG there will be sessions on the IWM, Spent Fuel and Site Restoration themes.

The NDA has the Strategy I 'Blue Book'. The Authority keeps it under review constantly for example at the NDA's Board Strategy days. Tony's reflections which cover many points to be raised today show that Strategy and Business Plan are aligned which is a good sign. The Authority has purposeful decision-making through the Strategy and also output: for example, the Low Level Waste (LLW) Strategy, Plutonium credible options and the Oxide Fuel Strategy document. There is a new and much better future for Springfields and Capenhurst. Extended generation is also an improvement. The industry restructure has been put in place ready for delivery under Strategy II. Lifetime plans allow the NDA to calculate the nuclear liability estimate.

There are three areas for improvement: There has not been as much progress in risk reduction as is desired. The NDA has not been able to deliver on accelerating Magnox decommissioning, though there is still an aspiration to do this. Reprocessing dates have moved to the right for Magnox and THORP.

On the whole looking back it is surprising how well the NDA did. Strategy I has served its purpose in guiding the Authority.

Adrian then outlined a number of Issues for Strategy II:

- The NDA has to get the right interaction with new build: it is not deviating from the clean up strategy. Skills need to be aligned and end states need to be revisited.
- There are changing policy positions, for example Scottish policy on Higher Activity Waste (HAW), which will be covered later. The Plutonium strategy will need to be taken into account and Managing Radioactive Waste Safely (MRWS) outcome has a significant impact on the Authority's business.
- The NDA has aging plant and asset issues. Whatever we do the risk profile needs to head downwards which is challenging in the current funding environment.
- The NDA is not making best use of estate assets: it needs to do a better job of recognising workforce and plant assets. Co-location: DFR fuel going from Dounreay to Sellafield is an example of this. The Authority must not miss opportunities.
- The NDA needs to become more sophisticated in terms of moving sites to societal use. It needs to think about and do more work on interim states and how it uses those.
- Information and knowledge management is part of the NDA's Strategy but it has not yet consolidated its position and it needs to do more work on this.
- Third party liabilities on NDA sites: The arrangements for those are not end of life, but for up to a period of time with assumptions about what may happen. The Authority needs to get better clarity on these.

Adrian concluded these points by noting that there are many other examples of strategic issues and that he would be pleased to talk to stakeholders about these during the meeting.

Adrian then went on to provide some detail on the Strategic Environmental Assessment (SEA) which will be published alongside Strategy II and which is of interest to stakeholders: It is a requirement under regulation to ensure that any large, strategic activities are considered for their environmental and sustainability aspects. The products of the SEA are a Scoping Report, which is consulted on, and which says how the assessment of sustainability and environmental impacts will be conducted. Along with the Strategy an Environmental Report is produced that says how sustainability and environmental aspects will be considered. After the consultation and publication of the strategy a Post Adoption Statement is published, to say how consultation feedback has been taken into account. An SEA was carried out on Strategy I and will also be carried out for Strategy II. This SEA does not replace specific SEAs on particular detailed areas that are conducted, for example, as on the LLW Strategy.

Many participants will have seen the scoping report completed in 2008 and stakeholders will also see the SEA when available (to be sent out with the consultation draft strategy). It has fifteen questions addressing sustainability and environmental impact over three timescales with assessment scores. Many activities may be disadvantageous in the short term but advantageous in the medium to long term.

With regard to the approach being taken to strategy development, the forthcoming consultation is an opportunity for the NDA to get input and the next NSG in September 2010 is a further opportunity to get views from stakeholders during the consultation. The NDA listens very carefully to stakeholder views. For example, at NSG8, transport and logistics was highlighted by stakeholders as an area where strategy was needed and this was taken up by the NDA. The Authority anticipates that the consultation will start on 1 September 2010, ending 24 November 2010 and that the Strategy will be published following approval by the UK and Scottish Ministers on 31 March 2011.

There was then an opportunity for stakeholders to put questions to Adrian Simper:

- Q:** What is in a word? Public! I spend most of my life involved in consultations! The word public is a problem. Ninety nine percent of people would not know what you were talking about.
- A:** Anyone is welcome to respond to what we say. You are right that there is a lot of consultation going on. There has to be some discrimination. Anyone is invited to, and we draw people's attention to the fact, that there is consultation running through the website, via Site Stakeholder Groups (SSGs) and so on. What we get back in responses are from a small sub-section of the public because they live next to sites or they have some tie to the sector.
- Q:** You cannot please all the people all the time. You are giving people an aspiration that they can be of influence but with so many different views this is not achievable. It would be better if we were told more than consulted.
- A:** You are right that we have been appointed as responsible, and know how to go about our tasks, but there are areas where fine tuning is required and my experience is that responses from stakeholders signpost that. There are quite a lot of areas where we need to adjust or explain our thinking.
- Q:** What are you envisaging regarding the review of Site End States (SES)? Are you having an add-on or starting from the beginning, given that some sites will be slowing down? What are you asking or looking for?
- A:** We are not going back to the beginning. We have established a valuable reference point with the SES consultation. Some sites are decades or centuries away from their end state so the concept of the SES is not always helpful. It does give strategic direction and an indicative timeline but over the next few decades we need to identify what is the interim end state, no matter what the end state, that is, what is the immediate programme of work?

**Q:** You have a SES which will take decades to get to. The aspirations are a bit fanciful. Hopefully we are now looking at proper strategy. You cannot park the SES in a corner though as you cannot go back to it. It has to be an integral part of the strategy as that will help with the strategy and in achieving the aspiration.

**A:** The SES remain an important reference for us. New opportunities may mean, in agreement with the community, that there may be a change to that. We have to recognise that they are a long way off and the accuracy of planning needs to be addressed. We have a session on this later to develop these ideas.

**Q:** Presumably the new business plans will operate under the Strategy as it evolves. How does the PBO fit in? For example, how does the evaluation by NMP of its plan for Sellafield / Capenhurst fit with that?

**A:** There is no tension between those. The Strategy says "this is our approach" and what we are seeking to achieve as the NDA. Over the life period it is entirely appropriate that the PBO comes to take ownership of the delivery and of site activities and needs to look at how its plans will meet the requirements of the NDA as the customer. They are aligned in this way. The delivery plans are consistent with the Strategy. It is appropriate that the PBO, having taken ownership of the SLC, are checking that these are the most efficient plans to achieve the delivery of site activities.

#### **4. Strategic Challenges, Breakout Sessions**

Breakout sessions were run on the three most pressing areas of strategic challenge for the NDA and where there was most opportunity for stakeholders to input. These strategic themes were: Integrated Waste Management (IWM), Site Restoration and Spent Fuel Management.

Stakeholders divided into three smaller groups to undertake discussions on these themes in order to enable a more detailed discussion and with more opportunity for individual input. The breakout sessions were run three times altogether across the duration of the meeting, so that every stakeholder could attend each one of them.

##### **4.1 Integrated Waste Management**

The **purpose of this session** was:

- To provide stakeholders with a 'pre-consultation' opportunity to provide feedback on the IWM strategic theme strategy.
- To give stakeholders the opportunity to help the NDA refine the consultation document.

Outline of the **session content**: The NDA sought to ask stakeholders high-level strategic questions on the theme of IWM. The session consisted of an introductory presentation by Richard Waite, Executive Director on waste management followed by a more in-depth presentation by Phil Davies, Head of Waste & Nuclear Materials.

This was followed by an opportunity for question and answers of clarification before the stakeholders divided into three groups to address some specific questions.

The key points from Richard Waite's presentation are summarised below:

- The NDA is seeking stakeholders' guidance as to how it can express some of these things, some of which could be quite contentious. Waste management is absolutely fundamental to what the NDA is seeking to do; it is at the core of its mission. Joined up thinking is absolutely crucial, throughout the waste management process. This is at the heart of the NDA's mission in the decommissioning theme. Joined up and flexible solutions.

- A key theme here is one of capacity and protection. The key thing for the NDA is protecting the capacity and this is what the UK's LLW is all about. The strategy is really important to the NDA because the strategy space for LLW is running out.
- The idea of IWM is that the NDA can look at this as a system, an integrated solution.
- The key challenge is waste that is inadequately housed at the moment. Legacy waste retrieval is what it is all about for the NDA, it is paramount. Instead of going for a single solution, we are introducing split solutions in some cases, where the priority is getting the waste out and putting it in safe conditions, considering what we do with it later. The one-stop-shop solution was slowing us down. We are introducing a two-step process – get the waste out of those conditions and then packaging it and storing it suitably and safely.
- The NDA wants cheaper, faster solutions out there and are relentlessly encouraging the marketplace to come forward and it is responding. The NDA is aiming to make market-driven solutions come forward in providing facilities and technologies, which they know is contentious in some areas, but it is something they have to do in terms of decommissioning.

Key points from Phil Davies's presentation are summarised below:

Richard has registered the key strategic points. I am now going to cover four areas of the strategy:

1. Diversified waste disposal – will affect LLW and ILW
  2. Other ILW opportunities
  3. Scottish policy for HAW
  4. Solid LLW strategy – hoping to launch this if not this week then by the end of March
- Most of these issues should be familiar to most people here. At NSG9 the NDA had a list of top ten issues and top three issues. NSG8 was key for the NDA waste team, with the café technique the team had about 600 responses, not all going in the same direction, which provided some interesting challenges. Thanks to all participants for their contribution there.
  - The UK's two options at the moment are HAW goes to GDF, ILW goes to the facility at Drigg (LLWR), which the NDA knows has capacity issues. Implications of this strategy are that the NDA has to open up more locations. There are transport implications as covered at previous NSGs. Since Strategy I the NDA has been given the challenge of addressing GDF; Alun Ellis, the NDA's GDF Project Director, will be talking about GDF at this NSG.
  - The NDA are challenging the old ideas, the present concept for LLW is cementing it in concrete in drums and keeping it there, this concept is 20 years old. The NDA are looking at being a bit smarter about storage. The NDA are very interested in large-scale thermal treatment of waste and could save hundreds of millions of pounds by introducing thermal waste technology. This is early notification, not to say the NDA will definitely do it but it is firmly on their agenda. Waste transport infrastructure is the catalyst.
  - Scottish policy is unfolding as we speak and the NDA are playing a part in it, supporting the policy. We will hear more about this from Elizabeth Gray, Head of Radioactive Waste, Scottish Government, at this NSG.
  - Solid LLW strategy: the NDA produced a Solid LLW strategy for the UK and received about 80 responses generally endorsing the key things in the strategy.

- The NDA is aiming to publish the strategy at the end of March 2010.
- Key theme: the NDA needs good information to make good decisions. It is improving waste information right across the estate. Interestingly, the higher activity the waste, the better the estimate gets about the quantities of waste.
- Key theme: extending LLWR by only putting waste there that really needs to be there.
- Key theme: implementation of the waste hierarchy. The NDA really does not want to include metals in the waste disposal; they would rather do something smarter with it than just filling up vaults. They are avoiding 98% of metal going into the vaults now, which is great environmentally; instead it is been cleaned up and put into small drums.

**Richard Waite provided a concluding summary**, which is set out below:

If the NDA can divert waste away from LLWR they can save a massive amount of money. If they can find different ways of dealing with this waste instead of sending it to LLWR, there are great rewards to be had, and the NDA wants to explore some of the issues. Transporting more waste earlier is a tricky thing for stakeholders to get their head around. Moving waste around the country to allow the NDA to get a better solution is going to be tough, but they are going to try and that's the main thing.

There was then an opportunity for participants to ask **questions of clarification**:

#### **Questions and Answers (Q&A) from Session 1:**

**Q:** Does your pie chart include nuclear submarine waste?

**A:** No, the pie chart is the whole of the UK and any incidental Ministry of Defence (MoD) waste is definitely not in there.

**Q:** What does the NDA know about the MoD having a list of where they can put their waste at NDA sites?

**A:** The MoD has been looking at this issue for quite a long time, that's with them and the NDA haven't been given an agenda to take this waste off their hands.

**Q:** Now that Babcock has access to NDA sites, will they be able to dispose of waste on them?

**A:** If you have heard anything about an alternative agenda for Babcock's acquisition of NDA sites, this is not the case at all. If it involved an NDA site it would involve a full public consultation. Getting rid of submarine waste is a problem, but it is not the NDA's problem.

**Q:** I was contacted and told to expect a phone call regarding this matter, but the call never came. There's a need for no secrecy on what is being planned. It's a big issue.

**A:** The NDA will take an action to clarify on that.

**Q:** Under current planning regulations the waste for our sites is waste for our sites. Under the new planning strategy is it likely that it won't come to local councils to make the decision, could we be bypassed?

**A:** Are you talking about IPC? The NDA will clarify the IPC position.

**Q:** Yes, you need to as that could have a big impact on a number of sites.

**Q:** This was raised yesterday at the SSG Chairs Forum, I spoke to the MoD representative today and in fairness he said exactly what the NDA just said. But I agree with my colleagues that this could change in the future, in five to ten years.

**Q:** On the website the MoD have identified twelve sites that could accommodate their waste, five of which are NDA's.

**A:** The NDA will clarify this.

### **Questions and Answers (Q&A) from Session 2:**

**Q:** Is the transport of waste from Scotland to England in the policy?

**A:** Normal ILW will still be moved from Chapelcross to Sellafield.

### **Questions and Answers (Q&A) from Session 3:**

**Q:** Can you define what you mean by 'near' site? Do you consider ten miles away from a nuclear site as 'near'?

**A:** The consultation could feature a question on this, which could help us define it.

**Q:** 'Near', for example, could be the facility at Dounreay; outside the boundary but still near. If you say 'near' to the site as opposed to 'near site' it is different.

**Q:** Slide 7, first bullet: Could you expand on this a little bit? It was a sticking point for us; do you have anything else to say on it?

**A:** It is not just about sending everything to Sellafield. We should be able to share stories; we should not have to spend 30 million pounds on it. It is all about treatment and storage as well. Storage is just half of it and we have not got the answers here. For treatment, Sellafield would be the answer here but do we move this kind of waste around the country for treatment at Sellafield? It's a difficult subject.

**Q:** For Sellafield it would be difficult for us to treat and store it there without a good heads-up. It would also impact on our end state. We would need a really good heads-up to get our local communities on side.

**A:** Our challenge is to talk to local councils about where this might happen at the right pace and manner so we do not alert everyone around the UK that this might happen; we need to get the balance right.

**Q:** Very Low Level Waste (VLLW) scenario – think about the implications for the rest of the country, raising doubt in everyone's mind, in everyone's local authority. Why not use the sites you have got? Do not go down the avenue of going down blockages, use your sites to reduce the footprint and use the sites to deal with the contaminated waste you have got. If you start spreading it around the country you have got a lot of sites against you.

**A:** We need to get into those discussions.

**Q:** The formance of the NDA IWM – how will it be measured? How well are they doing compared to how they said they were going to do?

**A:** NDA set up 21 strategic objectives – and the waste ones focus on performance and tell us how we are performing. So we are setting up our infrastructure to do exactly what you have asked.

Stakeholders were asked to respond to a number of prompting questions in order to gain some specific **feedback for the NDA**. These questions (highlighted in bold text) and the responses made by stakeholders to them are set out below:

**Is the information provided during the presentations for this session a fair reflection of your previous feedback to NDA? Do you have anything to add?**

Feedback from session 1:

- The word 'safety' is not mentioned here.
- We want to see the best solution.
- Needs something in there about engaging with key players.
  - The NDA have learnt a lesson from the LLW consultation.
- There's nothing in there on minimisation or volume reduction of waste.
  - This is in there in the detail.
- Socio-economic benefit tied to waste development.
- The NDA needs to recognise government volunteerism of GDF.
- The IPC is in some ways a safety structure and isn't entirely bad.
- Consultation done in the right way is a fundamental process.
- Approaches to the media – educating them, courting them etc.
  - It is concerning that haven't captured here the diversity of the challenge regarding the media.
- The NDA needs to recognise the challenge of dealing with non-nuclear local communities, with LLW in particular.
- Timeframe - matching local time policy to NDA planning.
- Determining NDA's role.
- Clarification of 'fit for purpose', not cheap and cheerful.
- Good to see emphasis on waste management hierarchy and could be promoted more.
- Case of NIMBY in the strategy and NDA need to face up to it more explicitly.
- The NDA should reflect the costs of decisions.
- Waste quantities the NDA needs to cover the timing aspect of this.
- Emphasis on the importance of community support.
- Need for visible best possible practice at NDA sites.
- More upfront recognition of GDF in relation to new build.
- Importance of community views on inventory to GDF.

Feedback from session 2:

- Needs to be clearer about who the NDA engages with, not just Scotland.
- It could say the NDA will explore the new build synergies, discretely.
- Statement seems to be a fair reflection.
- What if there is a change in Scottish government?
- Diversified disposal yes, but not just anywhere – discuss with local planning authorities.
- Should the NDA put radioactive waste in the context of all waste?
- Hazard waste and how that fits into the strategy.
- Waste inventory needs to include non-radiological hazard.
- How do you translate in the strategy what happens practically i.e. how many lorry loads? What would it look like?
- There is a transport risk in delivering some of this stuff, net risk.
- Sellafield risk reduction – in-situ solutions?

Feedback from session 3:

- Needs to address the issue of leaving LLW around the UK.
- Include some good case histories as examples.
- Better explanation of how the NDA is working behind government and with local partnerships with GDF.
- The NDA needs to explain it is not just chasing the cheapest option.
- Needs to be clearer about waste transportation.
- Needs to include various scenarios including new build, integrated infrastructure.
- Explain the difference between legacy waste and new build waste – quantities, similarities and differences.
- The definition of 'near' site – proximity, interactions with local authorities.
- Explain the scope of the NDA strategy for HAW in Scotland.

- Local community benefit or all these waste innovations.
- Careful use of incineration.
- Makes councils aware of radioactive waste on their patch.
- Do not underestimate the time required for local developments.
- Communication of risk and radiation context.
- Major on working with communities familiar with nuclear sites.
- Learns from asbestos history / clean-up / standards / public perception.

### **Are the messages clear? Are we missing anything?**

#### Feedback from session 1:

- Question of Scotland.
  - Joined up strategy, clarity on how non-NDA (not MoD) waste will be managed in the rest of the UK. Is it joined up?
- Clarify duration of the strategy (especially in relation to new build). Higher level of emissions from new waste.
- Clarity on thermal treatment technology. Will it only be market lead approaches? Will the NDA intervene?
- Clarity on volume reduction and landfill (public concern). Consult with regional waste disposal authorities. Talk to Waste & Minerals Authorities and communities. How it fits in with local Mineral's and Waste Development Framework (MWDF). Note: there is a great pressure on local authorities to decrease landfill, public reaction is totally against.
- Clarity on what is VLLW and volumes. (*linked to above point*)
- Clarity on role and decision-making power of local authorities in relation to transport and intermediate solutions.
- Clarity on planning regime (IPC).
- What should sites do with 'normal' (non-radioactive) waste?
- How the NDA is influencing policy for existing waste (e.g. Clifton Marsh).
- The NDA state what is best practice for transportation routes and modes (are there preferences?) Routes into sites (roads).
- NB: ensure the NDA takes account of previous work and consultation (e.g. British Nuclear Fuels Ltd (BNFL)). (*linked to above point*)
- Clarity on where we are with graphite - can it be burnt? (Position statement?)

#### Feedback from session 2:

- When talking about ILW 'opportunities', what exactly do we mean? Is it the way of treating it? Reduction in waste? Reduction in cost? Opportunity for hospital waste?
- What are implications of Scottish policy and movement of waste across borders? Next couple of years Scottish policy could change, need to be aware (context).
- Local Press 'disinformation' about storage on site means that clear messages are not clear (local talk about importing waste). The NDA could help SLCs address this. May actually be correct, as movement of waste is happening.
- Local press and community concern and safety implications for the issue of transport needs more detail.
- Statement that ongoing identification of options will inform GDF design.
- More information (in supply chain) to build a business case for innovation and how NDA supports them:
  1. Enough information to identify when there is an issue that requires a solution.
  2. How to support finding the solution. Implementation and regulation.
- People of west Cumbria may not appreciate additional waste.
- Seems a one-way bargain in terms of transfer of waste across borders.
- BPEO can be a powerful tool to deliver risk-reduction.
- Complex issues are not able to be conveyed through the press; hence other forms of messaging (e.g. engagement) are used regularly.
- Legacy ponds and silos. Stronger and clearer on interim solutions.
- ILW implementation not clear, helps to understand whether options are feasible. Steps to go forward. Clarity on maturity of elements of strategy.

### Feedback from session 3:

- Clarity on the waste inventory.
- Issue of transport needs to be clearer - what are specifically, the transport issues? Frequency, mode (rail or sea)?
- Integration with new build cannot go on being ignored. Especially where 2 different companies are operating adjacent sites - old and new build.
- Clarity on whether / how these approaches have been tested against environmental legislation e.g. landfill. Storage of waste for reuse.
- Clarify 'near-site' in terms of implications for all sites.
- Clarify / emphasise the NDA approach on avoiding disposal.
- Clarify near site, near surface
- More information around it.
- Scottish policy fundamentally different - clarify implications, possible opportunities for England and Wales (implicit in existing policy, formalise them).
- Clarify NDA's role in dealing with new as well as old waste, across the UK e.g. research, hospital waste.
- Appendix describing different processes, e.g. thermal treatment. Plain English, high level.
- Acronyms / jargon buster.
- MoD would like guidance on how best to fit in with NDA strategy (further discussion). (Already happening). Propulsion fuel - MoD needs to be talking to everyone and be clearer.
- The strategy needs to recognise the importance of local communities and also local planning systems.
- Possibly have local sub-strategies with site-specific policies. Site Integrated Waste Strategies need to be acknowledged.
- Committee on Radioactive Waste Management (CoRWM) made 15 recommendations, look at others and at options.
  - Refer to CoRWM.

### **What does it mean for you in your area of interest? What are the opportunities and the blockers?**

#### Feedback from session 1:

- Planning structure at the moment means that some decisions may not go through local authority routes.
- Existing UK British Energy (BE) stations are covered in the current strategy (fuel).
  - The NDA is acting as a waste receiver.
- The possible impact of climate change on NDA activity.
  - The NDA to check what is included in the strategy.
- Position of Naturally Occurring Radioactive Material (NORM) within Scottish HA level priority.
- Public opinion and reaction to burying VLLW in public sites is a blocker.
- Possibly asking for volunteer areas for GDF was the right way round.
- Rail transport.
  - No infrastructure at the moment so has to be transported by road.
    - Less comfortable for communities.
- Big elephant in the room is new nuclear build.
  - Is this an opportunity or a blocker?
  - Should influence highly the IWM strategy.
    - Need to be more upfront about this in terms of waste management.
- BE and the NDA need to continue communicating and map out clearly the responsibilities.
- The NDA already searching for synergistic activities with partners by being as open as possible e.g. Bradwell FED ideas are now included within the strategy at other Magnox sites.
- DECC has the funding.
  - Could be an opportunity or a blocker.

- Intellectual property generated by a particular SLC could act as a blocker.
  - NDA working with US companies.
- Plant-to-site or site-to-plant transport.
  - Which is best.
- DECC will be funding the Scottish option.
  - NDA will respond formally to Scottish Government and go through in great detail on the plans.
- Opportunities e.g. for a central store in Scotland, amongst other near surface near site initiatives.
  - Storage consolidation could be considered.
- Some lack of engagement from local authorities can act as a blocker.
- An area should benefit socio-economically if there is waste management in the area.
- Climate change and oil availability / prices are two other elephants that need to be considered.
  - Will need to readjust the plans as we go as the data comes through.
- Thermal treatments could produce a waste product where energy can be created as a by-product.
  - There are other thermal treatments other than incineration that produce vitreous waste rather than ash.
- Buildings may be reused or replaced to enable treatment.

#### Feedback from session 2:

- Where is the funding coming from and how much to support the infrastructure required?
  - The money available is proportionate to the amount of decommissioning carried out.
    - There is no waste until decommissioning is carried out.
- Flexibility and diversified solutions can be problematic.
  - For example siting of locations and liaison with local authorities.
- It is not an NDA strategy, it is a national strategy that the Government has asked NDA to create and implement for LLW.
- Does "near surface" include "on the surface" in the Scottish plans?
- Currently no information on non-radioactive hazards of waste materials.
  - For example chemical toxicity.
  - Should be collecting details of other disposal factors for the inventory.
    - Toxicity
    - Leachability
    - Chemical
- Acceptance of local community – NIMBY.
- Public acceptability outside of those areas with existing nuclear sites needs to be improved before waste could be moved / stored there e.g. when introducing a practice into a community that they are not used to e.g. VLLW.
- Reduce the graphite and you reduce the storage.
  - How do we do this?
  - Should we just leave it there from an environmental point of view?
  - Burn the graphite and sequester the CO<sub>2</sub>.
- In 40-50 years time could we be in a position where we have disposed of materials we could have used? (And the point was made that this should not be used as an excuse not to start dealing with waste now).
- The NDA checking for clarification with Scotland e.g. NDA role in implementing policy
  - Until policy finally published (Autumn 2010).
  - NDA and SLCs work with Scottish Government to find a way forward.
- Although things can technically be done e.g. reuse of FED, economically and practically they are not currently realistic.
- Recycling of metals to create new storage containers is possible.
  - Some material to do this is available today and more will be available in time.

- Metal has been sent from Dungeness and has been recycled into a Yellow Box (from Germany).
- Use in-situ buildings for storage.
  - Old reactor buildings are very stable and could be used to store materials.
- Ideas have moved on from returning site to green field to re-use of current infrastructure.
- Import / export of waste.
  - Similar principles used in reprocessing of fuels could be rolled out wider.
  - Could also be used between sites.
- How do we make the innovation in waste management more visible to the supply chain?
  - Official Journal of the European Union (OJEU) tender from Sellafield responses have proved that there is a range of possible technologies available.
    - Geomeld in Warrington.
- Upfront costs of implementing new technology rise exponentially as you move up the waste hierarchy.
  - May need support from regulators.

#### Feedback from session 3:

- Need to move to proper optioneering whilst appreciating that moving waste around is contentious.
  - Already in place e.g. desiccants had a thorough optioneering process.
- Expenditure Review Panel (ERP) has endorsed the use of yellow boxes for the right type of waste.
  - One size does not fit all.
  - Have now moved on from "if in doubt grout" and other processes and technologies are being explored.
- Mixing ILW with hazardous waste materials could increase volumes and cost of dealing with waste of a higher category.
- Must start the dialogue for IWM strategy.
  - As happened in Scotland already.
- Currently each site is developing individual responses to dealing with Ion Exchange Resin.
  - Now working to share ideas and ways of working.
  - Same with FED.
- Moved on from the times where Sellafield could have been seen as a dumping ground for all.
  - Need to think wider than this and consider other ways to handle it.
  - Whilst exploring the options it may show that there are better locations.
- Green field site end states have been mentioned and now there are other options being mentioned using sites for storage.
  - Maybe site end states work happened too early and was too idealistic – need more realism.
- 98% reduction is quite exciting!
  - Different treatments will create different results.
- Community confidence could be a blocker.
  - Balance of activities on a site is key.
- Rubble conversation may be similar to site end state conversation.
  - Are we being realistic?
- Integration of decommissioning and new build needs addressing.
  - Building on one side of fence and taking down on the other.
    - Need to integrate more.
- Regulators need to engage.
  - Planning authorities as well.
- Reluctance to address new build could prevent useful integration of e.g. security, management, facilities etc.
  - Conversations already underway with BE, EDF and Horizons.
- Yellow boxes are too expensive – need to explore other methods of storage.

- The NDA is five years old now; time to look more across sites for ideas of working together e.g. resins and FED.
- Need more accurate estimates of the amount of waste.
  - Possibility to advance one site to discover more and then be able to accelerate whole programme with the learnings from the advanced site.
- Error bands are there as it is impossible to tell how much waste you will actually have until decommissioning is underway.
- Time is a blocker.
  - Technology is changing so need to speed up, make decisions and get on with it.
- Possibility for new build companies to undertake PBO role should be explored.
- Need to work locally to appreciate how the site came about in the first place and how it should be left.
  - Could go back and renegotiate the original planning consents.
- The last 5% of returning the site to green field is so expensive that American sites have engaged with community and agreed to create a science park on the site.

**What are the kinds of questions you think the NDA needs to be asking the broader public of IWM strategy?**

Feedback from session 2:

Stakeholder feedback: It needs to be in plain English, layman's terms. Suitable for the general public. Clarity.

NDA response: We do have an external editor to help us get this in the correct language, but do let us know if we're being too presumptuous about the language we're using. A point very well made.

Stakeholder feedback: It would be useful to gauge if the proximity issue is overriding, so might get an idea of people's feelings on moving waste forms around. Testing the public's knee-jerk response.

NDA response: A good question, need to go back a bit, need to be able to position it and clarify the question asking. It opens up the issue of how do we explain precisely what we're talking about here, which is fundamental to how we word the questions in the consultation.

Stakeholder feedback: If we put the last two points together, if you are trying to get the background information together it is going to be a huge size. Maybe the answer is public documents that explain these things in a very simple way so those who want to be can be very well equipped to understand the issues. And put this out there before the strategy, and not in one big chunk, but in a series. This could help get a better outcome by putting some fundamental information out there.

NDA response: If people really want to go deeper we've got the tools for that.

Stakeholder feedback: Is there a case for being open and transparent about what the NDA already sees as challenges and hurdles and asking for information and feedback on how to address those in terms of implementation?

NDA response: NDA stating how they could be addressed and asking for views on that.

Stakeholder feedback: The scale of the challenge, implementation of waste management techniques in the entire industry, does this strategy capture all you have learnt or are learning so this is not a standalone and very tiny piece of the puzzle? Joining up with other sectors so this is not stand alone. Could get some very interesting answers.

NDA response: Some feedback in the session was very informative and NDA may follow up with some individuals outside of this session. Thanks you for your feedback.

Feedback from session 3:

Stakeholder feedback: In discussing radioactive waste do you consider that the proximity principle should be paramount?

Stakeholder feedback: We would like to see in the strategy document a reason for having the waste facility in your area and why you might benefit, a question – do you feel if you had this in your area that you would benefit? NDA should be clear about the benefit. Testing the public about how they would feel having the facility in their back yard.

Stakeholder feedback: There has to be some understanding of the process – a national document, a question like that would derail the whole process. Thought needs to go in about different areas within the document. Safest way would be to ask for general comments on the document. One really general question about general comments would be safest.

Stakeholder feedback: Do you favour a local or national solution to the waste storage problem?

Stakeholder feedback: Disagree; look at basic principles of waste management it is on looking at what you have got and the best way to manage it. If you start saying national versus local, what is national? Scotland, England and Wales? And you start getting into the wrong kind of issue for what you're trying to do. It negates the opportunities you'd have for dealing with ILW.

The session was rounded off with some closing remarks by Richard Waite, which are set out below:

Thanks for getting stuck in and it is a great benefit for the NDA how you see these things playing out. Thanks for contributions and we'll reflect back results from all the groups in the final doc.

## 4.2 Site Restoration

The **purpose of this session** was to:

- Provide stakeholders with a 'pre consultation' opportunity to give feedback on the Site Restoration theme strategies.
- Give stakeholders the opportunity to help the NDA refine the consultation document.

The **outline of the session** content is as follows: The NDA sought to ask stakeholders high-level strategic questions on the theme of Site Restoration. The session consisted of an introductory presentation by Adrian Simper. This was followed by some questions and answers for clarification. The stakeholders then divided into two groups to address some specific questions related to two statements regarding site restoration: (1) regarding the role of risk and (2) regarding the role of Interim States (IS) and their relationship with SES. The two groups participated in facilitated sessions attended respectively by the NDA team of John Inkester, Head of Group Engineering Strategy and Anna Clark, Land Quality Manager who were on hand to answer stakeholder questions. Following the facilitated sessions, the two groups came back to plenary, shared key points in their discussions and were able to comment or ask further questions.

Key points from Adrian Simper's presentation are summarised here.

The objective of Site Restoration is to return NDA designated societal use

- Site restoration covers three key activities required to deliver a site or facility through to a planned SES (1) Decommissioning and Clean-up: Cleaning out, dismantling and demolishing redundant facilities (from cessation of operation to demolition) (2) Land Quality Management: Managing contaminated ground and groundwater (3) SES: Providing credible objectives for the restoration of each site; defining the physical condition of a site when NDA has completed its mission.
- Site restoration is the driving strategy that other strategies (including IWM) support.
- In 2006 the strategy attempted to identify the main elements in the lifecycle scope. Strategy II tries to focus more on the near term and saturates those projects with resource where the risks are high. The context for setting out strategy II is one of constrained resources.
- Restoration of the UK's nuclear legacy presents a major time critical challenge; in 2009/10 the discounted future cost estimate amounts to £40.8 billion including:
  - Legacy plants dating from late 1940's and 1950's
  - Large quantities of old, corroding radioactive waste
  - Degrading infrastructure
  - Contaminated ground and / or groundwater at every NDA site as a result of various land uses (not all nuclear)
  - Volume of ground estimated to be radioactively contaminated exceeds (~x4) current UK LLW disposal capacity.
- Key message: Ensure site restoration encourages the highest standards in health, safety, security and environmental performance, offers value for money and employs good practice. In sequence, the process to achieving this will include:
  - Undertake Site Restoration as soon as reasonably practicable, taking account of all relevant factors
  - Focus resources on reducing high risks to people and the environment
  - Utilise IS for timely achievement of objectives
  - Employ fit-for-purpose restoration objectives.

Statements for discussion:

At the end of the presentation, the two related statements with questions that stakeholders would be asked to discuss in two separate groups were displayed.

Statement 1: The NDA believes that when risk is intolerable, this is the overriding factor in decision-making, but as risk reduces, other factors come into play (e.g. ensuring worker and public safety, maintaining site security, and using resources effectively, efficiently and economically).

Q1: What are your views on the NDA's position?

Q2: Which factors are particularly important to you and why?

Statement 2: The NDA believes that our focus should be on IS and our decision on site end states should be made closer to the time when the next planned use is apparent.

Q1: What are your views on the NDA's position?

Q2: Which attributes of an interim state would be particularly important to you and why?

There was then an opportunity for **questions of clarification** on the presentation:

### Questions and Answers (Q&A) from Session 1:

**C:** Suggestion was made to use the term 'beneficial societal use'.

**Q:** With reference to a diagram in the presentation, could you put all your money into top area (high risk)?

**A:** NDA will put as much money is useful in to this area to saturate intolerable risks, but it will have to be applied appropriately. The NDA is not a risk management organisation; it is a decommissioning organisation.

**Q:** Can you provide examples of IS?

**A:** The obvious example of an IS is Magnox entering into the Care & Maintenance (C&M) period of deferred decommissioning. As well as operational ISs, an IS may also be contractual; the NDA can say "get it to this state", allowing contractors to deliver this objective in an innovative way. By focusing on the SES, you do not get the most of innovation.

**Q:** SSGs have put in a lot of effort in to working on defining SES. How much involvement will they have in defining IS?

**A:** This depends, for example, where an IS explores an opportunity to re-use parts of the site then greater involvement will be required than if the IS purely operational. Defining IS gives people confidence in what NDA is doing by declaring clearly defined deliverables.

**Q:** Clarification: Idea of returning to 'Greenfield' should actually be called returning to original condition. 'Greenfield site' is a specific term.

**A:** Agreed. The point we are trying to make is that rather than being retrospective and looking back at the way the land used to be we should be forward looking as to how we want to use the land in the future.

**Q:** In consultation on the issue of 'states' there is confusion between SES and use. When carrying out site restoration, creating on-site storage could have a severe impact on SES.

**A:** The confusion is recognised and the difference between end 'use' and end 'state' was discussed at the last NSG. In the breakout session, we also explored the types of event that might trigger the review of a SES, and the impact of on-site storage was raised.

### Questions and Answers (Q&A) from Session 2:

Note that at the end of the presentation for the second session, statement 1 had been altered to the following in response to feedback in session 1 (alterations are shown in bold, italic):

When risk is intolerable, this is the overriding factor in decision-making. The NDA believes that as risk reduces, other factors come **more** into play (e.g. using resources effectively, efficiently and economically, **skyline change, keeping open future opportunities** etc.).

Statement 2 and related questions remained unchanged.

**Q:** SES: how much diversity is envisioned?

**A:** Quite a lot, though not as much as the diversity that will be seen during the implementation phase. There are lots of sites where the end state will involve the site being delicensed and therefore being restored to a condition suitable for any foreseeable future use.

- Q:** Has there been no interest shown in a middle ground? For example asbestos factory as an SES?
- A:** The issue has come up. During the SES consultation, preferences were expressed in some cases for continued industrial use, but on the whole, clean-up has to be to a standard that allows any foreseeable future use.
- Q:** 'Fit for purpose'; does this mean for industrial use or just space left after clean-up?
- A:** We are moving away from an assumption of restoring sites to a condition suitable for any future use (delicensing) as this is expensive and may not be a good use of money. For example a site might be restored to a better condition than the planned use requires. This is a site-specific matter.
- Q:** The majority of sites have been through a process to decide on site end options. Is this strategy using different options than those already provided by sites and that have been subject to past review?
- A:** Purpose in previous SES consultations was to scope out what you would like site to end up as. The NDA is not moving from that, bank and rely on that. Now, the NDA needs to move back and realise difficulty of focusing so far in to the future and think about what helps drive current focus and allow a realistic view on society changing. All previous input has been part of the development process for Strategy II.
- Q:** The presentation indicated a move away from time as a factor; processes seem to be ongoing. Any time factors in mind?
- A:** (The relevant slide was shown). The diagram indicates time as being as soon as reasonable practicable. This will vary site-by-site depending on various factors. It is very difficult to make commitment about final states, easier to do so for IS.
- Q:** People are searching for information regarding timings. How will this information be developed?
- A:** Dates by site will vary according to enablers and resources.
- Q:** How do you envision stakeholders re-addressing and adding to this approach? There seem to be fundamental flaws in what was being done in the past. What is the NDA trying to convey? Is it changing approach according to policy? Is the NDA asking sites to make changes or will the NDA do this?
- A:** Not going to ask people to re-visit the SES exercise. As time goes on, and decommissioning progresses, events might necessitate a review of the SES. If and when this occurs, opportunities will arise for engagement. Potential triggers of a SES review were listed at the last NSG.
- Q:** Are triggers re-evaluated to suit you?
- A:** Some triggers may come out of community activity.
- Q:** A 'Step Wise' process seems to be being used. This needs to take societal changes into account. Any development process needs to allow stopping for reviewing changes.
- A:** Agree. We have to decide collectively if we are doing the right thing.

### Questions and Answers (Q&A) from Session 3:

Note that at the end of the presentation for the second session, statement 1 had been altered to the following in response to feedback in sessions 1 and 2 (alterations shown in bold, italic):

Where risk is at its highest ***across the NDA estate***, this is the overriding factor in decision-making. The NDA believes that as risk reduces, other factors come into play ***(are in play all the time, but do not predominate)*** (e.g. ***availability of waste routes***, skyline change, ***keeping open future opportunities*** etc.).

Statement 2 and related questions remained unchanged.

**Q:** Please could you clarify fit for purpose use? Are risk and responsibility shared at a site?

**A:** Conceptual practice (1) De-license (2) Designate. In this concept, before a site can be removed from NDA's books, the site should pose no danger under any foreseeable future use of the site. This can involve restoring the site to the condition similar to that which existed before nuclear use. An alternative is to ensure that restoration is "fit for purpose" meaning that the level of remediation is appropriate for the next use of the site.

**Q:** Does an end state represent best value? Not all sites will have clear SES. Some facilities will be in operation. Not all sites will have a clear, ongoing societal use.

**A:** For some sites this will be true. SES is a long way off. This is one advantage of also defining ISs.

**Q:** We have made ground in SES, a vision to drive. If we set another interim level, does that become focus, what is driver to achieve complete SES? End states may change. Once IS is set that will be focus.

**Q:** Are the NDA asking people to settle for second best and saying that SES is not achievable?

**Q:** Is SES only achievable if money is there?

**A:** IS will not replace the SES. The SES definition is banked and provides the overall context for site restoration. ISs typically mark a stepped reduction in risk along the route to achieving the SES. There is always potential for the government cutting funding. An IS approach helps delivery of value to society.

**Q:** Is C&M a status of risk?

**A:** Yes. Lowering risk and hazard will occur pre-C&M.

**Q:** Levels of risk have to be determined to prioritise. Such a judgement therefore depends on who decided levels of risk.

**A:** When specific arrangements come into it, society leaves it to regulators to decide level of risk. NDA have an effect on decision-making and resource management.

**Q:** Is the NDA managing risk in step-wise way for all the estate, bring down average risk rather than site by site?

**A:** There is a limit on budget for legacy, the NDA must not become a risk reduction organisation, the level of funding will reduce as risk decreases. If risk becomes acceptable, the NDA does not stop working. Clean up is invaluable to society irrespective of levels of risk.

- NDA is a programme management organisation.
- The NDA advises government.
- It would be wrong to decide on money allocation.

The NDA gave participants the opportunity to give feedback on two statements (as outlined above), each with questions, related to Site Restoration. The stakeholders in each session split into two subgroups, each of the groups working on one statement each.

### **Stakeholder Discussion of Statement One**

#### **Statement 1, Question 1, Session 1:**

The NDA believes that when risk is intolerable, this is the overriding factor in decision-making, but as risk reduces, other factors come into play (e.g. ensuring worker and public safety, maintaining site security, and using resources effectively, efficiently and economically).

**Q1: What are your views on the NDA's position?**

**Q:** This statement is confusing. If risk is intolerable, it means it is high, but then what about hazard? If it is high risk, you should not underline hazard.

**Q:** Does that include the risk of doing something? By doing something, you increase the risk.

**A:** According to the standard definition from the Health and Safety Executive (HSE), Risk = Hazard x Probability of occurrence. Hazard is taken into account.

**A:** Yes, risk needs to be taken into account when retrieving materials. Risk might have to go up slightly in the first instance when retrieving. This is recognised.

**C:** I have concerns about the wording. Worker and public safety is intrinsic to everything.

**A:** NDA of course takes into account safety.

**Q:** Is risk only taking into account radiological aspects, or more?

**Q:** Need to understand how risk is measured to be happy with this statement. What is the definition of intolerable?

**A:** The word 'Intolerable' has a definition. It comes from the HSE tolerability of risk guidance. Tolerable and intolerable are related to risk of death

**C:** Death by radiation can be seen as worse than dying by other means, but 'death is death'!

**C:** Death is not the only outcome that needs to be considered (e.g. quality of life).

**C:** What is tolerable depends on the circumstances, the context. There is no firm definition, as it does vary. This is a separate debate.

**C:** There are lots of methodologies on definitions. Prioritisation is the central question.

**Q:** Does this statement only relate to Site Restoration or the whole strategy?

**A:** This is valid for the whole strategy.

**Q:** If you do not fully understand what tolerable means, how do you prioritise?

**A:** We have a set of tools that help us in the prioritisation (e.g. the Safety and Environmental Detriment (SED) - score)

**Q:** NDA need to be as clear as possible. There is a perceived risk. The NDA needs to take a position and be prepared to change, depending on which factors come into play.

**A:** We use 'tolerable' in a 'normal' language fashion. There is far too much guidance available already. We do not want to be going into an academic exercise.

**Q:** Might be better to ask: what is achievable?

**C:** Reprocessing (where you have a site with low level of contamination), it is not just about risk management, when you are out of the intolerable area, there are other things to take into account.

**Q:** 'Overriding factor' means that legacy ponds and silos should get all the money if we apply this principle

**A:** Resources will be saturated where the risk is intolerable

### Statement 1 (amended), Question 1, Session 2:

When risk is intolerable, this is the overriding factor in decision-making. The NDA believes that as risk reduces, other factors come *more* into play (e.g. using resources effectively, efficiently and economically, *skyline change, keeping open future opportunities* etc.).

Q1: What are your views on the NDA's position?

**Q:** Risks in terms of what? Safety of people / contamination?

**A:** Risk = hazard x probability of occurrence. For all risks.

**Q:** Examples: Are we talking about Sellafield?

**A:** Silos and legacy ponds are high risk

**Q:** Who set the level of intolerability?

**A:** Publication from the HSE "Probability of risk" can be used as a definition. Higher level risk items are in an area that is intolerable

**Q:** What about skyline, visual impact?

**Q:** What is the public interpretation of high risk?

**A:** NDA believes that there are some areas that need to be saturated in terms of minimising risk.

**C:** Dounreay, second highest hazard is on this site.

**Q:** If you start using the language of "It is intolerable", it is dangerous.

**A:** Need to adopt a "Triage" approach. Some areas need maximum effort

**Q:** The issue is about the use of language. Need to be very clear on what we mean by 'intolerable'.

**A:** Perception of tolerability needs to be considered.

**Q:** You need to convince the layman. In a public arena, they won't go beyond the 1<sup>st</sup> question. People need clear information on timelines etc. Use plain language!!!

### Statement 1 (amended), Question 1, Session 3:

Where risk is at its highest *across the NDA estate*, this is the overriding factor in decision-making. The NDA believes that as risk reduces, other factors come into play (*are in play all the time, but do not predominate*) (e.g. *availability of waste routes, skyline change, keeping open future opportunities* etc.).

Q1: What are your views on the NDA's position?

During the third discussion on statement 1, to prompt discussion, the NDA team provided a list of International Atomic Energy Agency (IAEA) suggested factors. This was as follows:

- Minimising waste generation
- Minimising environmental impact
- Asset management – Ageing of facilities
- Adequate funding
- Availability of skills
- Adopting international good practice
- Radionuclide decay or in-growth
- Corporate memory and records
- Skyline reduction
- Future uncertainties – climate change

- Site infrastructure
- Glad to see that the initial statement put in the initial attendees pack has been revised. Had issues with the initial phrasing.
- This is not a clear statement “At its highest”, what does that mean? (e.g. legacy ponds and silos)
- At the end of the spectrum, we’ve got the “intolerable” risks.

**A:** This is a spectrum. That is why the diagram is shaded.

- Need to remove ‘etc.’ in the statement. It is not appropriate.
- “At its highest”. If the legacy disappeared, would that statement have to change?

**A:** In previous groups, we discussed ‘tolerability’ but people felt the word was not appropriate. But now, because you are a group of experts, the word tolerability would make sense. Here, risk is risk to a person, to the environment. Here we are using it in a way that is understandable for the general public.

- Have difficulties with the 1<sup>st</sup> sentence.
- The premise is that the legacy ponds and silos will be saturated.
- Consider that all risks are intolerable, and then we assess things according to value. People have different perceptions of value (e.g. environmental impacts, skyline).
- From a policy perspective, it is important to show visible progress.

#### **Statement 1, Question 2, Session 1:**

The NDA believes that when risk is intolerable, this is the overriding factor in decision-making, but as risk reduces, other factors come into play (e.g. ensuring worker and public safety, maintaining site security, and using resources effectively, efficiently and economically).

#### **Q2: Which factors are particularly important to you and why?**

**Q:** Regulatory requirements. NDA is not simply driven by high risks, but also there are regulatory requirements NDA needs to comply with. Whilst this statement might be an aspiration, it has to take account of other things. It is not just about risks.

**A:** NDA is now moving towards clearer stages. There are a lot of factors. NDA is providing a long list. One factor could be ‘skyline changes’.

#### **Statement 1 (amended), Question 2, Session 2:**

When risk is intolerable, this is the overriding factor in decision-making. The NDA believes that as risk reduces, other factors come *more* into play (e.g. using resources effectively, efficiently and economically, *skyline change, keeping open future opportunities* etc.).

#### **Q2: Which factors are particularly important to you and why?**

- You should always use resources efficiently. By saturating the risks, you will need to prioritise money. People, money, attitudes are all factors to take into account. It is about the way you deploy your resources.
- By demonstrating how you would deploy resources to fix the problem, you would gain confidence / credibility.
- NDA need to demonstrate some progress.
- This kind of statement is not expected from a responsible organisation. That is what they ought to do.
- Yes, risk is intolerable. Factors: are these the right ones? It is about how you deal with them.

- Difficult to visualise how to address this. Very difficult to quantify.
- NDA is asking a very subjective question. Does not ask to quantify. It is more like a wish list.
- These are going to be very site specific.
- List of factors is infinite. Difficult to prioritise the factors, it depends on timing etc.
- Intolerable risk: most people would say 'Sellafield', and all the money goes there.
- The potential pitfall is to focus too much on 'intolerable risk'.

**A:** NDA's intention is to present things clearly. NDA is not a risk management company; it is an environmental / decommissioning company.

- This is not all going to Sellafield. What is important is the direction of travel of the plans. People will accept what NDA is saying.

**A:** If you look at the outturn figures for big projects, it is not a happy story. It is a journey of discovery, culture change.

Suggested factors:

- Zero environmental escape within the confines of the boundaries of the place / containment
- No activity that has an adverse effect on the surrounding areas (e.g. under the sea / under the ground).

### **Statement 1 (amended), Question 2, Session 3:**

Where risk is at its highest ***across the NDA estate***, this is the overriding factor in decision-making. The NDA believes that as risk reduces, other factors come into play (***are in play all the time, but do not predominate***) (e.g. ***availability of waste routes***, skyline change, ***keeping open future opportunities*** etc.).

#### **Q2: Which factors are particularly important to you and why?**

- IAEA suggested factors. What about the factors used in government business case, the value framework?
- These factors are going to be a case by case approach
- Projects have to produce Best Practice Environmental (BPE)
- Through the SEA, you do an overarching analysis
- Where do you put the resources? The public will want decommissioning without any impacts
- Key question is about next societal use. The next societal use may not require total decommissioning and clean up.
- IAEA would require for instance, availability of skills to be taken into account in the first place, not just after.
- What is the value in weighting factors in an uninformed way? You need to establish a weighting mechanism
- Flood risk is another factor (especially for sites near the coast). There are established methodologies for flood risk assessment.
- Affordability: You should not start a decommissioning process without having the resources available to deliver
- Local vs. global factors
- NDA needs to avoid becoming a risk management organisation
- NDA is here to advise government, to 'influence policy'
- The statement, the way it is phrased now, does not tackle the aspect of 'tolerability'
- By adding B39 etc. in the statement, it won't inform the layman
- We (NDA) want to address the things that are really dangerous, once we've tackled that, there are other factors that come into play.
- The example given by Adrian of taking sludge out of B30 was very helpful (regardless of whether there is a waste route or not, the sludge has to be taken out)

## **Key Points from the Sessions on Statement One**

Following discussion of the statement and questions, there was an opportunity for each session to develop key points. These were as follows:

### **Session1 key points:**

- What we mean by 'risk' and 'tolerable' needs to be made very clear.

## **Stakeholder Discussion of Statement Two**

### **Statement 2, Question 1, Session 1:**

Statement 2: The NDA believes that our focus should be on ISs and our decision on SES should be made closer to the time when the next planned use is apparent.

#### **Q1: What are your views on the NDA's position?**

- When the SES consultation was done, many people said they did not know what they wanted in 150 years
- Too far in advance
- Should be focussing on what it is now and going in stages
- The SES position attempt was a waste of money
- Should find out what people want at different stages
- This is resource limited, do not want to have to review in terms of strategy
- What is the funding and what is it going to get you?
- The priority should be on what can and should be achieved
- Expectations should be realistic
- 10 years is manageable
- Job profiles need to be built into it. Timescale could lose workers
- No disagreement with the statement
- How much emphasis should NDA put on definition of SES?
- Should be an aspiration, open to change in the future, and it should give you a guideline on how to approach a particular site issue
- Conditions can change dramatically in a few years, but the site end exercises can still be useful
- Have to accommodate new understanding.

### **Statement 2, Question 1, Session 2:**

Statement 2: The NDA believes that our focus should be on IS and our decision on site end states should be made closer to the time when the next planned use is apparent.

#### **Q1: What are your views on the NDA's position?**

- Hinkley: fought hard to not put time and money into deciding SES- waste of time and money, 75 years ahead, how were we to know what will happen?
- As time goes on if there is an IS that is suitable, go for it.
- How will you know what the next planned use is going to be?
- It is developers who will decide what end use.
- But you have to decide when still in C&M. Who's going to want to buy ex-nuclear site, only new builds surely?
- As we go through the decommissioning and clean-up and closer to green / brownfield, more interest will arise in taking over site so there needs to be convergence on how to mediate future use and between how society will use site.
- Difficult; all sites are so different, e.g. Sellafield is the biggest employer in the area so it is not suitable for an economic park for example. SES envisioned for Sellafield are limited.
- Looking at current infrastructure now is important and is why engagement is beneficial.

- Various factors can be decided in IS e.g. managing and releasing part of a site.
- Still limited in what you use site for,
- Worrying about NDA having one statement.
- Definition of IS - what does it mean?
- When will other decision-making cycles come into being?
- Three different IS:
  - Contractual IS, restoring site within contracts
  - Operational e.g. Magnox C&M.
  - Level of clean-up required regardless of next use- decision point.
- Physical example - fuel gone, buildings gone?
- Site by site, Magnox is classic example.
- Risk reduction IS, risk drastically reduced.
- IS - marked place with reduced risk.
- Essence of focus: lots to worry about how to get to place without actually getting to that place and beyond. So many changes.
- We'd like to spend energy trying to get to that place.
- Agree with Mike and NDA. End state document is fluid. Existing infrastructure is very important and needs to be fluid.
- Understand logic of short-term view, but what are the drivers for choosing Bradwell and Trawsfynydd?
- With Magnox leadership team, explored what technologies can be demonstrated at different sites.
- Criteria, what can be done to spread learning across the estate.

### **Statement 2, Question 1, Session 3:**

Statement 2: The NDA believes that our focus should be on IS and our decision on SES should be made closer to the time when the next planned use is apparent.

#### Q1: What are your views on the NDA's position?

- Would clarification of IS be helpful?
- Natural breaking points in programme to SES.
  - Contractual
  - Operational- step to reduce risk e.g. Magnox C&M.
  - Level of site restoration required regardless of future use, decision point.
  - Opportunities for release points of site.
- Some of IS are boxed in by what you are trying to do e.g. Magnox.
- Those strategies driven by time-scale could be brought forward.
- Site restoration is what you want to achieve.
- Concerns about group, some represent sites lots known about. Nothing new being heard from NDA. Is this a good use of time?
- Contrarily, depends on what circumstances are. Some sites welcome this hugely as they need to re-visit SES.
- Can now see clear objectives set out.
- Can clearly focus on something realistic, practical and relevant.
- Employ fit for purpose restoration objectives, not always going to be original state. Take away risk, but not something that can be useful in future.
- Originally this was 120 years away, now timeline is punctuated.
- Schizophrenic: inside and outside the wire. Have to think in two sets of risk.
- All different, need split way of thinking.
- SES accepted and published, is it all changing?
- Some sites virtually finished, have to hold on for other sites?
- Not getting rid of SES.
- Not changing states or dates as aspirations of stakeholders. Ability to achieve states / dates affected by so many factors.
- Because of nature of various states, dates are going to right.
- What they can do is try to articulate what they can do.

- Timeline shifting, land lying idle= waste.
- One aspect is to recover lost ground and become more sophisticated in mission.
- Extent to which articulation of strategy will open a tap with pouring money is up to you.
- IS valuable in addition to SES because circumstances have changed e.g., new build.
- Individual sites will have individual responses.
- Risks are clearer and objectives are realised.
- Continuous, appropriate graded approach.
- Are at different stages with different sites.
- Can move the wire.
- Beginning to manifest in stakeholder thinking.
- Stakeholders sometimes partnered with others outside wire-two mentalities.
- Need for clarity.
- Some confined.
- Concern, some sites that are nearer completion had clearer vision about what to expect from clean-up. This is now changing. Asked to now look at IS leaving useless real estate. Had communities buy in to facilitate budget to achieve SES.
- Communities were consulted widely, hard work.
- Agreed SES with them, clear vision of time-line.
- Will IS be a stopping point?
- SES is there, banked. Triggers thought about.
- Saying it is flexible is not helpful.
- IS is as well as SES, not instead of.
- Should not make a difference to funding, it is about articulating progress.
- If Greenfield is unachievable, Brownfield.
- Interim situation means waste might be left.
- Interim becomes SES with more waste.
- Fit for purpose restoration objectives: yes we have thought about. Not always valuable to do total clean-up e.g. Sellafield.
- SES may involve leaving waste in site.
- More waste in Sellafield from another site?
- Case specific, depends on risk, value of land, desire for re-use of land, free access, planning regimes.
- We are not charged with decommissioning and clean-up of government liabilities, privately owned.
- Three breakout sessions are all linked, isolation does not work.
- That is why government decided that new builds have to deal with back end.
- Land is government's liability, if land is passed to another body, liabilities are theirs.
- Change of liabilities: IS will help this as long as SES not forgotten as there'll be tangible information.
- Community can be consulted on IS as they will have effect.
- Handing over something more tangible.
- Best financial use, should have clear structures on how to manage money.
- Want to see something being useful.
- Will IS be discussed with communities?
- How will it be decided?
- Do people want to be engaged again?
- Yes, where it was impacting next societal use.
- Will be trying to define IS for all sites and bringing them to SSGs.
- Could not do it without engagement, otherwise it is just NDA setting milestones.
- Engagement will happen, maybe on a different scale.
- Proportion.
- How do lifetime plans fit in with IS?
- Balance.
- Local Authority plans.

## **Statement 2, Question 2, Session 1:**

Statement 2: The NDA believes that our focus should be on IS and our decision on SES should be made closer to the time when the next planned use is apparent.

Q2: Which attributes of an IS would be particularly important to you and why?

- Does this question presuppose different options and ways of assessing the SES options?
- To what extent should the industry engage about interim state? Has it been decided?
- Looking at a step to reduce risk. Where these are opportunities to release part of a site. That is where there should be engagement
- Should engagement be discussed on a site-by-site basis?
- (Hunterston) as land is released, has to be offered back to original landowner
- Where decommissioning and site restoration may be increasing the end state date because of site storage and disposal. Ball park changing. Different scenario.
- Need to tell the public there is a change, how does this affect what you want to happen?
- Six years ago, the calendar was created with the knowledge available at the time, since science has moved along and scenario has changed. 1<sup>st</sup> paragraph in discussion paper covers site restoration over the next few years
- Cannot have blanket arrangements, needs to be site by site
- Should not disappoint the public by being over-optimistic
- NDA would lose credibility
- Expectations need to be realistic
- SES is generational. Needs to be reviewed. Bear future generations in mind.

## **Statement 2, Question 2, Session 2:**

Statement 2: The NDA believes that our focus should be on IS and our decision on SES should be made closer to the time when the next planned use is apparent.

Q2: Which attributes of an IS would be particularly important to you and why?

- What is meant by 'attributes'?
- If NDA were to move to define attributes, what would you want?
- C&M - all depends on those.
- Attributes = issues to be included within IS definition, e.g. impact of IS on employment; impact on asset management
- One thing, visual impact. This is what impacts risk perception of general public.
- Need to do some visual work: skyline.
- C&M - won't have skills to do it as there are no drivers to keep skills there.
- What happens to expertise?
- Hunterston SES - take it all away but you're actually adding.
- Once you lose skills, resource is gone and irreplaceable.
- Will end up with one area in country continually going.
- How much should NDA engage around defining IS.
- Part of NDA's duty to define that.
- Public should not decide.
- Part and Parcel of SSGs.
- Some changes have wider implications, cannot just do it with SSGs.
- Missing attribute: changes to stigma / reputations.
- Should be able to say that sites have been cleaned up.
- Need to be mindful how IS are seen.
- If I were prospective customer looking at site, I would want prospectus from NDA with details and definition of state at that time.
- Keep previous processes in mind.

- Scepticism on consultation end states.
- Shorter time to SES, more likely consultation is to be valid. Budget will be known.
- Level of detail will vary.
- Purpose of IS will be to feed into attributes.

### **Statement 2, Question 2, Session 3:**

Statement 2, Question 2 was not discussed during session 3.

### **Key Points from the Sessions on Statement Two**

Following discussion of the statements and questions put to groups, key points were developed by each group that were brought back to discuss in plenary. These were as follows:

#### Session 1 key points:

- Agree with the statement
- NDA new position
- Any decision must be open and honest
- Talk with SSGs, inform and manage their expectations
- Clear, consistent with clear timescales
- Must be realistic
- Need to be site specific
- Timescale clarifications asked for
- Interesting: different public has different perception of change
- Public judges on entirely visual grounds
- 25 years decommissioning sold by SSGs
- SSG as NDA's managers
- Should IS be factored into Masterplans for communities and regions?
- This would make sense
- What is the mechanism and is it being done?
- Interim plans can be worked into community plans as timeframe fits more realistically
- Is this interface occurring? If it is not, then SSG members should work on that.

#### Session 2 key points:

- IS should be C&M 3 box
- Loss of skills, skills need to be retained
- Generic skills?
- All IS are likely to be different
- Skyline issue
- Reputation
- Short term

#### Session 3 key points:

- Case specific / site specific
- Support for idea of IS, as long as SES isn't forgotten
- IS allows to reflect changing circumstances
- Articulating opportunities
- Cannot be dealt with in isolation, everything ties together
- Some states can be in two states at once
- NDA can demonstrate what is been done
- Not serial process, parallel process
- Opportunity to encourage joined up thinking
- Clearer articulation better for communication and transparency

Plenary Round Up: Following the group sessions, a plenary session was held to allow the NDA team to present the whole group with a summary of each break-out session and provide for further questions and comments.

Plenary Review of the Group Work, Session 1:

**Q:** Did the risk group think that high risk should be the over-riding factor?

**A:** Yes.

**Q:** Was public liability risk considered? Paris Convention? Should be looked at. Constraints are there too.

**A:** This was not considered in that much detail. Discussion did cover worker versus public risk.

**Q:** How much intolerable risk is there in the nuclear estate? If there is a lot, should you bother? Should money go into the highest risk, i.e. Sellafield?

**A:** Yes it should, until it is not doing any good.

**Q:** Clear that risk is going to be the over-riding factor, are other factors going to be prioritised? Socio-economic etc?

**A:** Reduction of skyline, important or not?

- Maintaining skill capability.
- Temptation to go into algorithm for decisions, real decisions need to be informed.
- Goes back to decisions being site specific.
- Are the right things being considered?

**Q:** Top level has to be legal compliance incorporating risk management, safety and resource use optimisation. This has to be taken into account at process level. These external factors might drive process on IS, natural assessments might not have been the same without external factors. Would clarification of definition help?

**A:** Fit for purpose restoration objectives. Have to operate within legal framework, merit in talking to legislators. 2 options: (1) Comply with law. (2) Reconsidering law where it is believed it goes against societal good.

- Are these statements the best way?
- Information needs to be spelled out clearly for public.
- 'Intolerable' who and how decides what 'intolerable' is?
- 'Intolerable' equals incomprehensible
- Should other issues be embedded into statement?
- Ensure and Safety: loaded words
- Need more choices
- If it was phrased to say that risk is first priority but not sole factor in decision making
- Statement needs re-working
- Range of other factors and how they are weighted vary according to circumstance
- Cannot satisfy everyone with simple thesis
- Should focus on key factors without trying to quantify them
- What is 'intolerable' changes according to who you're talking to
- Need less detail
- Should question be asked at all?
- NDA "believes"- aren't they charged with risk?
- 1<sup>st</sup> / 2<sup>nd</sup> order helps with prioritising
- Where is the word 'impact'?
- Factors should be used to maximise impact of site restoration
- IS: asset management and asset management plan needs to be defined

### Plenary Review of the Group Work, Session 2:

**Q:** Harwell is already going down this road, how long will IS be? Timescale should be considered.

**A:** Case specific. As we go into definition process times and dates will be added.

**Q:** What about money?

**A:** How much money is available depends on weighing of benefits. Harwell is an example of where decisions are being made on grounds other than risk. Resources are constrained and this affects delivery.

**Q:** From the facilitator: Are these the right areas to have in consultation?

- The other group had a view, we have a view, both views are important, and both views are just as valid.
- TEC will report all comments made in the report.

### Plenary Review of the Group Work, Session 3:

No further points were raised during the plenary session.

## **4.3 Spent Fuel Management**

The **purpose of this session** was to provide stakeholders with a pre-consultation opportunity to provide feedback on the Spent Fuel strategic theme strategy and to give stakeholders the opportunity to help the NDA refine the consultation document.

An outline of the **session content** is as follows: Participants heard a presentation given by John Clarke, Commercial Director and Paul Gilchrist, Head of Fuel Cycle Technology, in which NDA outlined possible options for spent fuel at the sites. Following the presentation, there was an opportunity for questions and answers of clarification. Participants were then asked to discuss the following two questions on Magnox and Oxide fuels respectively, designed to elicit feedback on the strategy.

- Question on Magnox: Given we have a mature strategy that is clear and embedded in policy, but delivery is at risk due to aging assets, what are your views on NDA's proposed approach?
- Question on Oxide: What do you think of the options we are pursuing and the issues that come up as a result? Of all the factors NDA need to take into account when deciding on the way forward, which are the most important to you and why?

Participants were asked to conduct their discussions in "café style" groups: This comprised an arrangement of round tables with between five and ten participants at each, and provided with an NDA host. A rotation of participants took place after each question was discussed at each table. The NDA table hosts acted as note-takers during the discussions. At the conclusion of these café conversations, the facilitator asked each table for the highlights of their discussion in plenary.

### **Questions and Answers (Q&A) of Clarification on the Presentation**

#### **Session 1:**

**Q:** With respect to the Oslo and Paris Convention (OSPAR) deadline – how does the sliding back of the Magnox deadline affect our OSPAR obligations?

**A:** Based on current plans, our 2020 OSPAR obligation will be met. If not, then we need to move to a contingency plan – i.e. agree not to meet OSPAR deadline or put in place a different strategy.

**Q:** With respect to the 45 te at Dounreay – where would it go? Would it come back to Dounreay if it was reprocessed?

**A:** We can store at Dounreay. If it is suitable for transport it could be sent to Magnox for reprocessing.

There was then a general discussion about how the Scottish Government classifies spent fuel as waste and an unresolved (among the group) question about how spent fuel reprocessing could be handled under the Scottish system.

**Q:** You mentioned the 2016 completion date for Magnox. Will it not be complete before then?

**A:** Yes, 2010 was the original date. Now we have permission from the government to extend this and, subject to licence, we can run power generation through 2012.

The maximum life is really 2014; Periodic Safety Review is being requested for that timeline.

**Q:** If the site is in good condition then is its operation simply limited by the fuel condition?

**A:** Yes, once the fuel is used it is all gone and the site must close.

**Q:** Can exotics be used at Magnox by 2016?

**A:** Yes.

**Q:** Will you need to build new storage at Sellafield?

**A:** No, we have sufficient storage at Sellafield under the current strategy. A new strategy of implementing dry storage means we can store elsewhere.

**Q:** With respect to Springfields and the MOP – if we cannot meet 2016, when will you make decision on a new plan, because you'll need to decide a lot earlier than 2016.

**A:** Yes, we want the discussion about that. What criteria and confidences need to be in place? Based on those, we can then make a conscious decision about the strategy and dates. We also need to look at utilising other people's facilities.

**Q:** Is dry storage available for Magnox?

**A:** No, metallic fuels only - but these types of fuels are not dissimilar to Magnox.

## Session 2:

**Q:** If you extend THORP you said it would cost billions. Why does a modern project cost so much?

**A:** THORP by itself would not cost this much, but when you factor in the additional elements such as if you need to replace storage tanks or evaporators, the design, build and commission phases, operational and decommissioning costs, the true picture would cost billions.

Option 2 assumes no additional infrastructure beyond what is already committed.

Option 3 would be a minimum £1.5 billion investment and more; a colossal investment would be needed.

**Q:** Are you committed to reprocessing Advanced Gas-Cooled Reactor (AGR) fuels?

**A:** Yes, we are contractually obliged to take all EDF British Fuel AGR. They pay a price for this. The contract stipulates 50% reprocessing and 50% storing. The NDA has the option to reprocess stored fuel at the NDA's cost.

- Q:** Regarding the potential of importing fuels to be reprocessed. Is there enough to make this financially viable?
- A:** This would be option 4 – using overseas fuels, after everything else, to fill the gaps. The question then is; is it commercially viable, and this will depend on what the price is for this overseas fuel at that time.
- Q:** Why wet store when you know it corrodes?
- A:** Historically that is how it was done. Yes, we know it corrodes. Originally there wasn't bulk storage as it was all for reprocessing.
- Q:** Additional fuels were added at Magnox. Is that right, it seems small?
- A:** Yes, we need an extra 20 te from extended generation. All the fuel is committed as you just burn it for longer.

Session 3:

- Q:** Doesn't investing in new facilities to undertake new business reprocessing at Sellafield take the NDA into more of an operator mode rather than a regulator, e.g., like a return to former BNFL?
- A:** This does pose a very interesting question. The answer will come through the development of the strategy with input from stakeholders.
- Q:** What is the risk of not doing anything?
- A:** We can store the fuel for a number of years. But it is stored wet and there is a finite time. So we need to do something with the fuel. It is not sustainable to store the fuel indefinitely. We need to determine, now, how long can the fuel be stored for (through the current study)? We cannot wait another 10 years to find that the fuel can only be stored for 15 years.

**MAGNOX: Given we have a mature strategy that is clear and embedded in policy, but delivery is at risk due to aging assets, what are your views on NDA's proposed approach?**

Magnox Question, Session 1, Café Discussion:

Table 1

- Follow existing policy and get fuel out and processes on schedule.
- Storage versus transport - locally or move to one storage facility, locally at Sizewell want fuel moved (exportation), wet store versus dry store versus storage in reactor.
- Public perception issue - original plans to move fuel, now to store on site longer. Trust what NDA / SLC / regulators says for planning assumptions / delays.
- Primary question: why continue to reprocess?
- Evaluate financial implications - of new reprocessing URS storage option.
- Need to move all to centralised storage, get on with cleaning up legacy.

Table 2

- Confidence in MOP- Flask issues - "Meeting the MOP"
- Why is there an issue with the flasks?
- Frustrations at issues facing the MOP. Recognition of the risk
- "Strategy not a problem: it is meeting it"
- Question the credibility of dry storage?
- Solution: to leave it where it is? At station. Issue: security
- Activity at Sellafield Ltd doesn't change
- Sellafield Ltd - benefit in jobs. Problem: storing at Sellafield Ltd indefinitely. "Do not want it to become a storage site". What is in it for us?"
- Could fuel be sent abroad?
- Extend OSPAR agreement? Can we limit discharges?

- Not popular. OK. No problem. Cost
- Balancing cost for options
- Storing for the interim? At stations
- Limits on storage
- Discussion: frustrations over MOP. Options for acceleration and recovery. Of the options, a balance between cost assuming they are all safe

Table 3

- Strategy not mature, concept is, strategy weak
- Past performance not great
- Reputational risk if does not go well on NDA
- Cumbria wants reprocessing
- Reprocessing seen as an asset
- If new build, where does money come from?
- Not funded from Lifetime Plan (LTP)?
- Cumbria as a "fuel store" not a "repro" not keen

Table 4

- Would like firm decision on DFR breeder to Sellafield by 2016 in line with MOP
- Proliferation and security costs should drive timely decisions on exotics
- Question: How confident are we about quantity of exotic materials? (e.g. margin of error)
- Question: How much money is being spent on upgrading aging facilities?
- Question: Will MOP be adequately funded for duration of programme?
- Question: How will funding be prioritised?
- Question: What is Plan B?
- Need to pursue dry storage option

Table 5

- CCC: Would support utilising THORP to reprocess Magnox fuel - jobs, socio-economic benefits. But there are other constraints presented by other Sellafield infrastructure and the life of THORP itself
- Question: What are the CoRWM's disposal requirements, and does this have an influence?
- Balance to be struck between the options and CoRWM disposal needs
- Plan B is needed if Plan A fails, and lead times (e.g. THORP as a solution) may dictate the need for Plan C

**Magnox Question, Session 1, Plenary Feedback:**

Table 1: There was a view about utilising THORP as a way forward. Proposed GDF disposal requirements might influence this.

Table 2: There's frustration with the MOP process. What are the options for acceleration? Perhaps we can look at storing dry fuel at reactor stations.

Table 3: There were a lot of opposing views. Store on site versus transportation versus reprocessing or not. These decisions need to be made.

Table 4: There was an energetic discussion. Do we have a mature strategy or a concept? There is a significant risk. There was strong feeling for a committee to see the job through. We need the appropriate contingencies to address the risks.

Table 5: We want a firm commitment for 2016. Will it be adequately funded? How much needs to be spent on the ageing capital facilities? There was a positive response to dry storage.

NDA response: Yes, there are diverse views. We need to resolve DFR soon.

## **Magnox Question, Session 2, Café Discussion:**

### Table 1

- Can we extend 2020 OSPAR agreement?
- Does OSPAR relate to Sellafield only?
- Can you leave fuel in reactors and send direct to GDF when available?
- What impact on OSPAR [to] invest in new reprocessing?
- Site Ion Exchange Effluent Plant (SIXEP) at Sellafield filters out all discharges - can we develop technology to make OSPAR irrelevant?

### Table 2

- Plans seem robust
- Within reason would like reprocessing fixed to finish off but at what cost?
- Clear business case - when reprocessing falls over do not fix.
- What about OSPAR?
- OSPAR is not necessarily a drop dead date if could continue to reprocess all, but it would be a brave "former" government that decides to do so
- Any further extension of electricity generation delaying reprocessing would cause problems regarding OSPAR

### Table 3

- Concern regarding option to retain fuel in reactors
- Research into developing credible alternative for dry storage out of reactor needed
- Continuous review of MOP needed
- Localised versus centralised (preferred) location of dry storage
- Continued generation supported due to low impact but must not compromise safety
- Opportunistic use of facilities for other feeds but not at cost of primary mission - Magnox
- Impact of new opportunities or lifetime impacts on 'OSPAR' (political / policy impact)
- Increased risk through reprocessing rather than leaving alone

### Table 4

- Good discussion about the status of MOP and sharing issues
- Deep consideration given to options by NDA and that is positive
- Sufficient resources in NDA and at the sites
- Good to consider "holistically" the balance of risk at reactor sites versus those placed at Sellafield

### Table 5

- Query over extended question
- Cost-effective way to give "safest" solution
- Reprocess the fuel and look at Plan B
- If society fell apart...where would we put it?
- How would people know what to do?
- Strategy should be robust enough to terrorism
- Storage under CO<sub>2</sub> plant?
- Build entirely new facility
- Rely on experts

## **Magnox Question, Session 2, Plenary Feedback:**

Table 1: There was an extended discussion about generation. There was consensus over reprocesses with a "Plan B" in place. There was a question about the robustness of the strategy with respect to security threats. How might fuel be managed under dry storage?

Table 2: Our group thought that looking at dry storage seems sensible. There was a question about where the NDA would do it – in the reactor outside the reactor? Centralised or localised? The table thought we should put fuels through opportunistically but not overburden the system. The table noted that this could put pressure on OSPAR policy.

Table 3: We had a debate about OSPAR. We discussed how if we want to get more electricity we could push back reprocessing time. But the group thought it will take bold politician to make that decision.

Table 4: The table thought the MOP consideration is good and that the NDA is on right road. There is a concern about resources; there needs to be a balance of risk at reactor sites and Sellafield.

Table 5: We questioned whether we could extend OSPAR? We thought this unlikely and that the NDA will have to work within it. The group noted that there's a lot of plant at Sellafield and that with a small investment we could get round OSPAR because of the low levels. There was a question about whether we leave fuel in the reactors to put into GDF when it becomes available?

NDA Response: Storing in the reactor might be an option. But you require all infrastructure to be in place and it is no longer about decommissioning as it is essentially an active site.

### **Magnox Question, Session 3, Café Discussion:**

#### Table 1

- What is the risk?
- Balance of risks
- "Embedded in Policy" - Query?
- Alternative option of dry storage
- Has it really been shown that metal fuel drying?
- Uncertainty / Risks
- Substantiated case before changing course?
- Credibility, cost...then I will consider it?
- Left in reactors? Should be considered as an alternative?
- Shifting to do. If you shift to an alternative "storage" strategy – do not assume storing at Sellafield is (a) right answer and (b) acceptable to Cumbria
- Security issue? Debate...
- Site storage
- Issues particular to Scotland?
- Environment Agency (EA) - Credible...justified...Balance of Risk
- Consensus: "Crack on with MOP" (Plan A). "Have something in your back pocket" (Plan B)
- Is there date when you should stop MOP?
- "Endless pot of money"

#### Table 2

- Can there be a Plan B?
- We need more data / numbers to make sense of the question - for example, strategy needs to provide cost-benefit analysis) at high level
- Is it better to keep fuel un-reprocessed rather than produce a waste?
- Need a more holistic picture - what is the potential commercial benefit of the reprocessed product?
- Need to think in terms of commercial value, not just treating the problem in our face today
- The "flask issue" seems to dominate - should just be manageable issue. Just manage the fix!!

#### Table 3

- Accept that there is risk and it appears to be under stress: and it is right to look into these.
- Up levels of effort to get Plan A back on track
- But need to do full options appraisal recognising timeframes / others may exclude some options
- 2016: careful about what the timeframe
- Alternatives / contingencies bring new unknowns: one product stream
- Challenge why we continue to reprocess perhaps?

#### Table 4

- Got to meet contractual obligations? (really oxide related)
- Moral / ethical dimension - is it right to store if we can reprocess?
- Previous position is that it must be reprocessed - pleased that we are looking at alternatives
- Does direct disposal of spent fuel pose any specific questions to GDF?
- NDA working with Radioactive Waste Management Directorate (RWMD) and United States – Yucca Mountain, on the issues and safety cases
- What happens to Sizewell fuel (not NDA accountability - working with BE on contingencies but current plan is to store at Sizewell, encapsulate and use GDF. No current commercial arrangements between NDA and BE).

#### Table 5

- Confidence that NDA now addressing problem with Plan B
- Can communicate that work in place
- Concern that there is a single stream for reprocessing
- Concern that more funding may be required to support this
- Explain to broader stakeholders what these options might mean, why this is better, implications, risks
- See that this might create concerns with stakeholders
- Need better understanding of costs and costs of risk
- What are options for final disposal?
- What are implications for classifying fuel as waste?
- Prioritisation of this relative to other decommissioning
- Would prefer reprocessing

### **Magnox Question, Session 3, Plenary Feedback:**

Table 1: We were reassured about the fact that the NDA is looking at options and alternatives. The previous NDA position seemed to be that spent fuel had to be reprocessed. There is also a moral question: is it right to store fuel when it could be reprocessed? There is a question about the liability of Sizewell B fuel.

NDA response: This is BE's liability.

Table 2: The consensus with the group was to move forward with the MOP but have a "Plan B." Then there was a discussion of what are the costs of Plan B and does it represent a true alternative? There was a recognition that there's not an endless pot of money. Also, the group wanted to point out that no one should assume storage at Sellafield is a given.

Table 3: There was confidence that the NDA is looking at the issues and that a Plan B is appropriate. The group recognised the need for NDA to be able to explain to broad stakeholders what some of the technical considerations are. For example, what does "Dry Fuel" mean? And what are its risks? What are the costs of the options and, equally importantly, what are the costs of the risks? How might that be prioritised across whole NDA? The group thinks there are implications to classifying fuel as waste and that we need to look at alternatives to GDF.

Table 4: The group felt that the MOP seems under stress. We discussed whether it is right to reprocess. With some of the options, the 2016 time frame seems too close to implement them. We know a lot about reprocessing. Some of the other options bring unknowns.

Table 5: It was not clear to our group whether there could be a Plan B and is it really to correct Plan A? Technically speaking, can there be a Plan B? We need to understand the net outputs of reprocessing set within the broader commercial context. Is there commercial viability? Also, the flask issue dominates the discussions: why is something so simple causing such problems? Can we not just fix the flask issue?

NDA response: Regarding the potential uses of reprocessed material. Yes, we need to know what the purpose is. Is it truly a commercial proposition or really more about treating something you just do not want anymore?

Yes, we already know about the broader context of reprocessing – it is a good point.

There is a concern about the disposal of fuel – is it the right thing to do? This strays into the policy / government arena.

**OXIDE: What do you think of the options we are pursuing and the issues that come up as a result? Of all the factors NDA need to take into account when deciding on the way forward, which are the most important to you and why?**  
**Session 1:**

**Oxide Question, Session 1, Café Discussion:**

Table 1

- Minimum is to fulfill contractual obligations (option 1)
- Option 4 - due to historical issues there may be public resistance to receiving overseas fuels. Trade unions in Cumbria take alternative view, bridge the skills gap with socio-economic benefits
- Historic twisting of the truth makes public sceptical of current assertions / statements
- What will help - deliver what we say we'll deliver
- Conflict between BE Liabilities (Pressurised Water Reactor (PWR)) of Oxide and NDA only optioneering AGR fuels. If not NDA's remit then whose is it - who is advising Her Majesty's Government (HMG)?

Table 2

- Support option 4 - waste to asset / revenue benefits
- Options depend on business case / cost-benefit
- Also moral case to optimise scarce resources
- Which options best supports NDA mission
- But: Will NDA mission / remit need to be re-examined?
- Options appear a bit negative
- Implications of New Build

Table 3

- Sweat the asset as it is currently configured
- Look to bring in other materials
- Need to be clear regarding the stability of the products
- 1: What are the objectives of reprocessing?
- 2: Why are we reprocessing? (Safety and risk to environment. Consistency with current and future strategic approaches)

#### Table 4

- Economy of West Cumbria dependent on reprocessing
- Cost: affordable?
- Plutonium? What should be done with plutonium?
- How long will the assets last?
- Money? Asset?
- Send abroad? Store
- Is the asset capable of reprocessing AGR fuel?
- Shall we look at new business?
- Contingency planning inadequate. Plan B?
- "Corporate arrogance"
- Too parochial?
- Energy security
- Links to New Business
- Plan B
- Realism - strategy

#### Table 5

- Finish contracts - finish all AGR including extended life
- Consider repository requirements - community buy-in to dispose
- Understand cost-benefit of reprocessing UK fuel and building new facility – no. 3
- Option 3 and 4 depending on economics

### **Oxide Question, Session 1, Plenary Feedback**

Table 1: There was a wide ranging discussion. There are many factors to consider: are the assets appropriate? There needs to be realistic views of the assets complete with a "Plan B" for each asset. We also note that current management of operations contributes to local economies and energy security.

Table 2: There was broad agreement on the business case. There was a discussion of the moral case about optimising scarce resources and using as much as possible without waste. The implication of new build needs to be factored in and the case needs to be made.

Table 3: There was a spirited discussion, particularly around what the objectives of reprocessing are. What does reprocessing do for us? Should we sweat the assets? Should we maximise feeds coming in? Should we carry on? What's the purpose? Important factors to take into account when looking at these questions: safety and environment. Is the current (old) stock consistent with new fuel standards?

Table 4: We think the minimum position is to fulfil our current contractual obligations. Option 4 in the presentation needs to be viewed with other groups like trade unions and the socio-economic benefits e.g., bridging the skills gap.

Somewhere between options 3 and 4 seems to be best solution. Receiving overseas fuel is contentious and the public may have strong opinions about this.

British Energy and NDA could be in potential conflict over this and there is a question about who is resolving this with government? The table felt the NDA has in some instances a history of twisting of truth. However, the table thought the NDA may now be more open. But, the table felt the past is taken into account in looking at the NDA's assertions. This means the NDA needs to deliver to prove itself.

Table 5: There was an agreement that NDA should complete its AGR contracts. We need to understand the cost versus benefit of reprocessing versus new build. There is a question about whether communities will allow fuel to go into their areas. It is a big issue to consider.

NDA response: Options 3 and 4 go into the policy space i.e. the UK Government needs to be involved here.

### **Oxide Question, Session 2, Café Discussion:**

#### Table 1

- Is UK in the market for new business?
- Broader assessment from just technical options - economics, safety
- One additional option - sub contract measures
- Affordability / cost-benefit assessments
- Is there an inter-generational equity issue with dry storage?
- Safe, (2) affordable, (3) future market potential

#### Table 2

- Option 5 - First view this is a non starter (need to be justified)
- What about sending our AGR fuel abroad for reprocessing?
- What about socio-economic responsibility?
- What about New Build and viability for new reprocessing
- Reprocessing versus store and dispose. "Rock and a hard place" (i.e. stored spent fuel on site 50 years plus or reprocess and create more plutonium
- We would like this further out in time to account for future fuel cycle options
- Reuse / Recycle (i.e. reprocess to modern standard)

#### Table 3

- Range of options considered is extensive
- If stored what is length and what should we do not to foreclose options?
- Appetite for overseas business?
- Dry storage - costs us alternatives (e.g. wet)
- Value of products
- Options must / may not only be delivered at Sellafield
- THORP considered an asset
- Key factors: (1) economics / cost-benefit, (2) connection between GDF community goodwill and reprocessing continuing
- Discharges (not big issue)
- Commercial
- Government policy
- Safety
- Products

#### Table 4

- Feasibility of the option to reprocess everything: is it credible to get new contracts?
- Stop: can you really do this?
- Why are we looking at these: focus more on the middle?
- We need to do more on wet store and make that case and put more energy into dry.
- Want contingency for wet storage as soon as possible: Plan B.
- Debate about clarity of the option descriptors: particularly definition of end-of-life.

#### Table 5

- Credible potential business? Option 4: No-one knocking at the door. One order from SOGIN
- Are you going to plan for something that is already going to happen?
- Under what circumstances?
- If reuse of plutonium? Why reprocess?
- Explore the reuse of plutonium for Energy Security
- Energy independence
- Asset reliability - for benefit?
- Cost / safety - if we reprocess more AGR fuel what drops off the list?

- Safety - spare
- Proliferation
- Security
- Socio-economic – major local impacts in stopping
- Safety: (1) safer option to store, (2) consider reuse of plutonium, engage with HMG
- (3) Costs / economics
- Why do we reprocess?
- Overseas business
- Socio-economic factors should be considered
- Overlaying options should be considered

### **Oxide Question, Session 2, Plenary Feedback:**

Table 1: There was some debate about the titles for the 5 options presented – for example, what does “end-of-life” mean? The two “extreme” strategies didn’t look viable. In the middle seemed more realistic. More energy is needed to make the wet storage case. Also, more energy needs to be put into dry storage as a contingency as it is not an option in itself.

Table 2: The group commented that the options are quite technical. For this reason, the decision needs additional overlays – for example what are the economic considerations? A safety perspective is needed. Other lenses (factors) are needed to understand the options thoroughly.

Table 3: There was a discussion about what other considerations there should be. For example, local socio-economic factors. Safety is critical. We need to store the fuel rather than handle it. This needs to be balanced with the costs of reprocessing.

Table 4: Do commercial markets even exist for option 4? Option 2 is a bit like “how long’s a piece of string?” We need to compare the options of dry versus wet. What is the connection to geopolitical considerations?

Table 5: We discounted option 5. Is it feasible to send UK AGR fuel abroad? What are social and economic impacts of shutting Sellafield earlier? We discussed reprocessing versus storing / disposing. We looked at the broad tenets of responsible resource management – reduce, re-use, recycle – and felt NDA should look at these and look further out in time and more internationally in scope.

NDA response: A common theme to the discussions you have had seem to be about what other factors need to be taken into account. Yes, economics and safety are important here. AGR fuel is bespoke to the UK so it presents challenges to sending it elsewhere.

To reprocess or not to reprocess is the question. And when to stop if stop is the decision.

**Q:** What are the government long term policy objectives?

**A:** New build does have an interaction here with the NDA. That is, if you are spending large sums on decommissioning then it is being lost from somewhere else.

## Oxide Question, Session 3, Café Discussion:

### Table 1

- Why reprocess - policy and contract
- What is the economic case?
- What is the end-of-life plan?
- See that minimum would be to use existing plants to end-of-life as costs already sunk
- What happens to fuel if reprocessing stopped, and what is most economical way of safe storage?
- Risk concern that if take plant to end-of-life it might not be possible to reprocess contracted fuel
- Factors: Financial case. Impact of continuing to reprocess on local community (e.g. would create continued employment)
- Not happy about importing fuel and creating waste / political sensitivity
- Perception of nuclear industry and how this is communicated
- NDA role if new plant and extension to new business, as not part of decommissioning mission

### Table 2

- Right to ask these questions
- Difficult to comment on options with the level of tangible information
- Discriminating factors not apparent in info pack
- Learning from experience: Spent Fuel Management Options Working Group
- Environmental impact
- Safety
- Financials (you make money for what?)
- Socio-economics
- Contribute to NDA - estate
- Consequences
- Recognise disparate / wide-range of views and so it is important that process is robust (noting commercial issues may prevent full clarity)

### Table 3

- The question of the role of the NDA and its purpose (decommissioning / commercial). Option 4 requires key questions around the end of the cycle - (1) store, (2) into fuel - into private sector for Mixed Oxide (MOX) fuel manufacture
- The drivers of reprocessing? This delivers the option to be followed
- Commercial viability - new reactors
- Greater understanding of cost-benefit of options
- Factors are commercial and closing the whole cycle
- Commercial and End Use (What are we doing with the existing plutonium?)
- If early stop - options for storage need underpinning

### Table 4:

- Minimise reprocessing - problems associated
- Previous reasons for reprocessing (1) Plutonium recycled, (2) cost / economics
- Maintain capability
- Is business core still there?
- NDA's remit: to decommission
- Decide if the plutonium is waste: what is the point?
- Should NDA consider New Build programme? (NB - affects options on table?)
- Timing of decisions?
- Budget - expense. "Make up your mind moment" - Urgency
- Diversity of views on reprocessing (energy security)
- Don't know...
- New generation - should we consider?
- Cost?

- Who else? Is doing?
- Socio-economics?
- Environmental impact. Lifecycle?
- Impacts, Benefits, Outline
- Delays in decisions - foreclose option
- Why reprocess? (Plutonium, BC)
  - Concerns are experience,
  - Positive views on reusing fuel
- Quantify options – benefits / detriments
- “Political Decision” made by Government

### **Oxide Question, Session 3, Plenary Feedback:**

Table 1: We felt these [questions posed by this session] were the right questions to ask stakeholders. But we felt it was difficult to comment on the options with the level of information sent out in the Information Packs. We point to the previous Spent Fuel Management Working Group. We felt that this group did handle the Information Packs sent out very well and with full information. We feel there’s a lesson to be learned there about preparing the right amount of information for these discussions. The environmental, financial, and social impacts are all important as well as consequences of the options. We are going to get a wide range of views from stakeholders. What is important is to have a robust decision-making process. We also need to acknowledge there are commercial sensitivities that may make some of the information less visible to stakeholders.

Table 2: Our discussion raised more questions than answers. For example, what is the end-of-life plan? What happens to the fuel if reprocessing stops? The minimum option should be to use the plant to its end-of-life because it is a sunk cost. The main issue is the financial case with end-of-life. Can we reprocess contract fuel? Importing fuel and creating further waste creates political sensitivities. There is also the perception of the nuclear industry to take into account. Also, as said by some of the other groups here, new plant creation is no longer about decommissioning.

Table 3: We discussed the question: why reprocess? What is the business case? The NDA needs to specify the costs and benefits of the options. There are also clear political decisions. For the UK, it is make your mind up time. Are we reprocessing or not?

Table 4: Our group feels the mission of the NDA is about decommissioning, not commercial. What do the options mean for this mission? What were the historical, and what is the future, drivers of reprocessing? We felt we were missing high level data e.g., what are the costs and benefit of the options? Strategic high level cost versus benefit analysis would have helped us evaluate the options more clearly. We need to look at the whole cycle in the commercial and technical space. The early stop (option 5) needs a thorough understanding of the storage underpinning it to go forward.

NDA response: We accept more data is needed. There are many variables, but we could have provided more to help the discussion.

We absolutely do have to decide now about which options to take; we cannot put off the decision any longer.

There are policy issues about reprocessing. With options 1 and 2, the NDA can make the decisions here. But once you get into Option 3 and 4 with new contracts, the government would need to undertake a public consultation.

Urgency to make the decision now is key.

## 5. Day 1, Plenary Updates

The facilitator introduced a short plenary session for further updates of interest to stakeholders. Before these began, reference was made to the question raised by a participant earlier in the day regarding consultation, the need for it and how it plays out in the nuclear sector. Stakeholders were advised that John Whitton of the National Nuclear Laboratory (NNL), who has specialised in this topic, was happy to talk to people about any issues or concerns they may have.

### 5.1 **Scottish Higher Activity Waste Policy**

Elizabeth Gray, Head of the Radioactive Policy Team, Scottish Government, provided a short presentation to explain what the HAW policy is and what is happening with regard to its consultation. The key points from the presentation are set out below.

In June 2007 the new Scottish Government decided it would not endorse the MRWS proposal. While it did not endorse deep geological disposal, in all other aspects of policy the Scottish Government works with UK policy with regard to HAW aspects such as research. The policy for Scotland with regard to HAW is near surface, near site, long term storage facilities that are monitorable and retrievable, with minimum need for long distance transport.

A number of stakeholders have asked: "what does this mean for us in managing our waste?" We have engaged with and had a lot of help from people and a lot of openness in discussion.

Scottish ministers agreed there would be a detailed statement of policy and that a SEA would be undertaken.

Fundamental to the approach being taken is looking at what waste Scotland actually has and where it is. We have sought to identify the waste and this has informed the development of the statement. With regard to Scotland, it has no High Level Waste (HLW). There is a small amount of LLW as there is no facility to take it currently. The policy does not cover fuel, plutonium or anything exotic. It covers HAW and includes ILW.

What we are trying to do is to look at what we have and then how to deal with it. Other countries have near surface facilities.

The inventory of waste for Scotland indicates that around 75% of the volume is graphite and metal. Treating and minimising this is appropriate in this context. It is not a consultation about siting, but a high level framework. It is about making decisions depending on the inventory, rather than having a generic solution. All of the policy is bounded by regulation and people are able to comment on it.

What we have identified is the possibility for near surface disposal. Therefore Ministers agreed to Scotland having this as part of the policy. Other countries have facilities for this type of disposal. There is a consultation document, an environmental report, and a guide to waste for those not familiar with it.

Chapelcross for example has mainly graphite and metal and includes resins. It has arisings for which treatment options may become available. Dounreay has a very different inventory: however it still has a high proportion of waste that could be dealt with in a different way.

For further information, including on the consultation please visit the website at [www.scotland.gov.uk/topics/environment/waste-and-pollution/Waste-1/16293](http://www.scotland.gov.uk/topics/environment/waste-and-pollution/Waste-1/16293) Elizabeth emphasised that the content of the documentation on the site has been significantly informed by consultation.

There was then an opportunity for participants to ask Elizabeth Gray questions:

**Q:** What is "near surface"?

**A:** We have said tens of metres. This is the international reference definition and that is in the regulators guidance on requirements for authorisation. At a stakeholder workshop last month the example of one hundred and three metres was used, which is the depth of the St Petersburg underground rail system.

**Q:** Given that you are only emplacing this material close to surface and it will be active for geological time and there will be ice ages within that time: are you content for radioactive waste to be spread by glaciers across the north of England?

**A:** No decision has been taken on siting. Strategy is still to be developed on this, and any site would be subject to stringent regulation which would take such matters into account. I would encourage you to review the environmental report which also looks at these issues.

**Q:** If your material is more accessible, will it not be more susceptible to dirty bomb type terrorists?

**A:** Any facility will be subject to the regulatory requirements. There are a number of facilities that are near surface in other countries and these examples are set out in the consultation document. You need to ensure that the security is sufficient to prevent this.

## **5.2 Geological Disposal Facility**

An update on the Geological Disposal Facility (GDF) which had been requested by stakeholders as a regular item at the NSG meetings was provided by Alun Ellis, GDF Project Director. No presentation slides were used for this update and the main points are set out below.

At the last NSG in November 2009 (NSG9) the update to stakeholders set out the position on the RWMD development as the delivery organisation for the GDF which would become a SLC. Following a regulatory review of the RWMD's state of readiness and the receipt of the final regulatory report; and with the agreement of the Repository Development Management Board; RWMD has started operating as a shadow prospective SLC and will, voluntarily at this stage, be subject to regulatory scrutiny. This will help the NDA's learning and development. There are areas for improvement that have been agreed with the regulators and an action plan has been developed to address these.

Linked to that, the NDA has been working on its commercial strategies for the current preparatory studies work and for future surface based investigations. It will be starting to engage with its suppliers in a different way. Traditionally RWMD has split up work into small components with lots of contracts. The NDA is now looking to engage on the basis of presenting problems, with suppliers then finding solutions. There will be a notice in the OJEU soon to start this process. Work on the commercial strategy for the surface-based investigation phase is underway. The project will move from being focused on research and development, and desk-based, to one that starts working out in the field with an increase in spending accordingly. Following a workshop with suppliers in January 2009 we have been working internally on the commercial strategy to support this phase but are close to having ideas to share with suppliers. We are looking to have a meeting soon with the Nuclear Industry Association (NIA) about how the NDA's thinking is developing and taking that forward with government.

In November last year the update set out two strands of activity within RWMD: one of which was organisational development to an SLC. This milestone has been achieved. The other major deliverable is a generic Disposal System Safety Case (DSSC). This will be ready for publication in the autumn it is planned. Most documents are complete and an internal review is to be finished by end of March. The set of over twenty documents covering information on different designs in different geologies and transport operations and post-close safety assessments will be externally peer reviewed over the next six months. Three high level safety cases have been produced based on these documents covering transport, operations and the long-term or post closure safety case for deep geological disposal. This work will set out our justification for why the NDA thinks it would be safe to set up and operate a GDF.

Operators that are recovering and conditioning their waste are given Letters of Compliance (LoC) by the NDA. This gives comfort that once the operator has produced a waste package it could be accepted within the safety case for disposal. This has been extended to cover new build. NDA disposability assessments are supporting Generic Design Assessments for new build, to show how waste could be disposed of in a GDF. These assessments are available on the NDA website [www.nda.gov.uk](http://www.nda.gov.uk)

The disposability assessments and discussions with new build vendors have identified a number of opportunities relating to new build: improvements around management of waste, and of spent fuel storage, encapsulation and conditioning. Under the auspices of the NIA the NDA may be commissioned to look at the opportunity for alternatives to the current plan of storage and encapsulation of new build wastes including spent fuel on the site of the power station. Information will be put on the NDA website about this after the contractual arrangements for the work have been agreed.

Publication of the safety case documents in the autumn will let people know what the NDA is doing to implement the GDF programme since the MRWS white paper was published in 2008. Some people may feel that there has been little information since then, so a document "Geological Disposal: Steps Towards Implementation" has been produced that sets out the work that the NDA is doing to plan for implementation of a GDF. An A5 summary will be available and a package of information on a DVD. This will provide good, reliable, sound information for reference that can also be used by scientists and environmental journalists. There are some video question and answers and animations on the DVD, covering waste management at a disposal facility.

A preview extract from this DVD was then shown to the attendees. Participants were advised that copies of the various materials could be obtained either by leaving contact details with Alun or visiting the NDA website at [www.nda.gov.uk](http://www.nda.gov.uk). Alun expressed his thanks to John Dalton, Head of Communications for RWMD for the work that has gone into pulling together the information. It will be a valuable tool to show how the NDA is making progress in moving the GDF project forward and what it involves.

Alun then affirmed that there were two essential requirements to moving the project further forward: a willing host community and a technically suitable safe site. Alun noted that there had been no further expressions of interest regarding the MRWS siting process, so the NDA is continuing to work with the West Cumbria MRWS Partnership. A number of briefings have been given by the NDA to the Partnership, including those on potential impacts that the community would need to consider. The proposals for design optioneering have been discussed with the Partnership: including the issue of retrievability. Also discussed have been ideas on a process of moving from a broad geographic area to specific sites. Information is also available on the West Cumbria MRWS Partnership website. The next step for the MRWS process would be for the British Geological Survey to conduct the coarse unsuitability screening test to screen out any unsuitable sites according to criteria in the White Paper, which is anticipated soon.

Alun concluded the update by advising that Elizabeth Atherton, Head of Stakeholder & Community Engagement for RWMD, was due to start maternity leave soon. Alun asked participants to join with him in wishing her the best. Elizabeth is expected to return to the Directorate but will not be at the next NSG in September 2010.

**Q:** It is important to understand that Alun's team is doing a tremendous job of work, but a lot is predicated on MRWS which is a weak donkey with a lot of expectation on it. The public may think it is a done deal and the more heavy weight information about what may happen goes out there the more off putting to the local community it may be. It is important to note that the British Geological Survey screening will be initiated by the West Cumbria MRWS Partnership and not the NDA.

**A:** The safety case and work to date is all generic and no assumptions have been made about the site or the geology. We are very mindful of this and it is a good point made. Thank you also for your kind opening comments.

The meeting facilitator advised stakeholders that there would be further opportunity for questions on both the Scottish HAW Policy and the GDF during the subsequent Structured Networking session for John and Alun to take further questions and clarifications as required.

## **6. Structured Networking Session**

This session was introduced by Mike King. Mike emphasised that the entire NSG event was a final chance to engage before the draft strategy was published. The Structured Networking Session would consist of a number of 'market stalls' or stands, which were provided to cover either the themes not included in the NSG10 sessions, or topics that had not come to the NSG previously. This session was an opportunity for stakeholders to prioritise their own areas of interest, to ask questions and gain further information and to speak one-to-one with the NDA and other participants.

Stakeholders were encouraged to seek answers from the relevant NDA staff member for any questions on themes or topics relating to the stalls. The NDA team was available throughout the session and the market stands also displayed information on posters. There was an opportunity for stakeholders to post any written comments at the stalls, for referral to the relevant NDA topic lead for consideration as part of the ongoing strategy development.

The Stakeholder Relations stand acted as a help desk to marry up stakeholders with the relevant NDA staff member. Two internet consoles were available to participants to enable access to further information via the NDA website. The structured networking session was run twice during the meeting, to give stakeholders an adequate opportunity to cover the topics and themes that they wished to discuss.

The sixteen themes / topics covered during the Structured Networking Session are set out below along with a transcript of all the comments posted by stakeholders. Further information on each aspect of the emerging NDA Strategy II can be found on the NDA website at [www.nda.gov.uk](http://www.nda.gov.uk).

### **6.1 Asset Management**

#### Comments posted:

- Stop selling land: lease instead – keeps the asset in UK ownership and gives income.
- Plutonium and uranium are assets of significant value. Treat them accordingly.
- Ensure increased asset management costs of programme deferral are understood and communicated.
- Ensure that changes in lifetime plans are reflected back into asset management plans and correctly funded.

## **6.2 Business Optimisation: NDA Lead, Sean Balmer**

### Comments posted:

- Accelerate Harwell to release asset value!

## **6.3 Health, Safety, Security, Safeguards, Environment and Quality (HSSSEQ)**

### Comments posted:

- Would be nice to see a more positive contribution i.e. enhance environment, good quality, and social benefit.

## **6.4 Information and Knowledge Management: NDA Lead, Stuart Hunt**

### Comments posted:

- Hope there are no plans to move the Harwell archive.

### NDA response posted:

The NDA are planning a National Archive Facility but this won't affect Harwell in the short term, but eventually the building will be decommissioned and the site closed.

## **6.5 Competition**

### Comments posted:

- What a waste of public funds the splitting of Magnox North & South was!!

## **6.6 Contracting**

### Comments posted:

- Clear visibility of 'sustainability' and environmental optimisation in contracting strategy.
- What about the remaining 5%?

## **6.7 Funding**

### Comments posted:

- Based on sustainable development principles.
- Joining Magnox South and Magnox North makes sense. Why have two separate companies with two separate management teams?
- More research into the reused active marketing of de-licensed sites. Have end use and end state documents to work with.
- Get rid of contractors. Train up the staff whose jobs are not required.
- Promenex are too powerful and are doing our jobs – reduce their numbers...we can do this work.

## **6.8 International Relations**

### Comments posted:

- How can supply chain (below SLC) benefit from these agreements?

## **6.9 Nuclear Materials: NDA Lead, Paul Gilchrist**

### Comments posted:

- Can you recycle the rep uranium?
- What does tails look like? Why is it an issue?
- Uranium is a diminishing resource. Plutonium can be used to extend and enhance that resource – discuss!
- Can you deal with surplus MoD plutonium?
- The military will never let plutonium be out of reach permanently! (Will they let it be used to enhance fuel?)

## 6.10 Public and Stakeholder Engagement: NDA Lead, Bill Hamilton

### Comments posted:

- Use the youth parliament
- ...And Education Business Partnerships
- Civic Trust Initiative
- It would be helpful if the attendance list included job titles of NDA members.

## 6.11 Research and Development (R&D)

### Comments posted:

- Share knowledge with countries technically struggling in the field.
- Are we doing enough to encourage inventiveness and enterprise among the innovations centres of the UK? They are one of our greatest strengths – but are they aware?

## 6.12 Skills and Capability

### Comments posted:

- Critical but needs consistent investment and support to encourage new entrants.
- Needs clear policy / guidance from NDA regarding the implementation of the nuclear skills passport across SLCs.
- At multiple sites, Hinkley, Sizewell there needs to be an acceptance that workforce can move across site to fit in with peak workloads for operation, decommissioning and construction.
- Must ensure that skills are transferable into other sectors. Especially important for Scotland – no new build.
- Consider ways to support stem projects to encourage young people into the industry.
- Link with new build. 'Joined up thinking.'
- Over the coming years, other 'nuclear skills' opportunities will arise (e.g. new build, fusion). How will NDA 'attractivise' waste and remediation in order to compete?

## 6.13 Socio-Economic: NDA Lead, Bob Churchill

### Comments posted:

- Socio-economic must include workforce transition – how the workforce is prepared for life after...
- Integrating "technical" strategies to give long term economic benefits to area, for example, infrastructure / bypass / railhead.
- Driven by new build – sort out the infrastructure around Sellafield.
- Integration of socio-economic issues into the value framework.
- Process to demonstrate that socio-economic impacts are always taken into account in NDA decisions (per policy).
- Must consider the whole UK.
- Revisit four Priority Areas.
- Each application should be judged on its merits i.e. scrap the idea of priority areas – they were chosen in a previous era.
- Springfields and socio-economics post new arrangements?
- Closer integration with responsible agencies / local authorities, etc.
- Critical enabler – not just money / jobs.
- Socio-economic benefits of maintaining / increasing operations.
- Need to encourage investment in diversity of employment to supplement nuclear jobs.
- ? Fund a think-tank for future of Dungeness

- NDA socio-economic policy should recognise that, even in apparently affluent areas, there are 'pockets of poverty'. Are they not equally deserving of socio-economic assistance?
- National Laboratory / technology based economic development. (Partnering Lab / Dalton / NDA etc.) Licenses / spin out / commercial scale.

#### **6.14 Supply Chain**

##### Comments posted:

- Focus on sustainable procurement.
- Copy the procedures already established by the aerospace industry.
- Seek UK suppliers where possible just as the principal followed by the French.
- Local suppliers to be utilised.
- Support and development of SMEs
- Preference for local / national over international, and sustainability.
- But sustainability is UK government policy! And is about localism.
- Develop synergy with new build.

#### **6.15 Transport and Logistics**

##### Comments posted:

- Strict application of the transport hierarchy throughout the estate to reduce carbon impact.
- Development of regional solutions as well as national approaches.
- Partnership with new build to be encouraged.
- Transport to / from Sellafield by sea is not desirable.

### **7. Dinner for NSG Stakeholders**

The first day of sessions for the NSG meeting was followed by an evening reception and dinner for all attendees. Stephen Henwood the Chairman of the NDA gave an address to stakeholders during the evening and there was an opportunity for further informal networking and one to one conversations between participants and the NDA staff.

## **SECTION 2: DAY 2, 18 MARCH**

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### **8. Day 2, Plenary Updates**

Mike King opened the second day of the meeting with a review of the objectives for the event. With regard to the meeting being an opportunity for pre-consultation feedback, Mike emphasised that the NDA considered that a lot of useful feedback on this had been received from stakeholders. The final session of the day would include an update from Adrian Simper reflecting on the inputs received from stakeholders during the NSG.

#### **8.1 SSG Chairs' Forum Update**

This update was provided by Richard Smith, Chair of the SSG Chairs' Forum. No presentation slides were used.

Richard reported that the Forum had met on 16 March. The meeting had opened by thanking David Moore of West Cumbria SSG for all his work as the previous Chair of the Forum including the establishment of the Forum's terms of reference. The representative from Dounreay had unfortunately not been able to join the meeting in time due to transport difficulties.

Richard advised that the first half of the meeting involved a report from each of the sites. A major part of what the Forum does is networking: looking at what is happening at sites, reflecting on what has gone well and what has not; giving support. The consensus from the Forum is that this is a very good use of the group's time.

The Forum had a detailed report on the MOP8. MOP is crucial to the delivery of de-fuelling. Plans are in place to recover progress with the programme. Sizewell for example will need three or four flasks per week to get on schedule. Richard noted that there were still a lot of imponderables relating to the programme.

The Chair then gave a summary of the Forum's remaining business. The group were making arrangements to visit Dounreay on 29 June 2010. The Forum's previous visit to Sellafield had been considered very useful by the group's members and the visit to Dounreay was looked forward to. The future of the Forum and of the NSG had also been discussed. Richard reported that the Forum was starting from the position that the members wanted both of these to continue as they are.

The Forum had also discussed the trial scheme for the NDA's Site Programme Managers to move off site and the potential to roll this out to all sites. There had also been some discussion of socio-economic funding and this was to be looked at in more detail at the next Forum meeting. The Forum's attention had also been drawn to the potential for submarine waste to be brought to sites and this had also been discussed.

## **8.2 Further Update on the GDF Project**

Alun Ellis provided some further reflections on the GDF update. Alun thanked stakeholders for their interest in the GDF project during the plenary update and the networking session.

A number of stakeholders had commented on the animation providing information about the GDF and the use proposed for it. Alun advised that some improvements had been suggested and the NDA had concluded that the DVD would not be distributed at this stage. Alun thanked participants for their requests for copies. The NDA was still looking to launch and publish the "Geological Disposal: Steps Towards Implementation" document itself and would be sending copies of this out. The animation would follow once it had been reviewed. Alun thanked stakeholders very much for their input.

Note: Following the NSG meeting and further review by the NDA Executive of feedback received on this document, as well as other draft documents in preparation, NDA has decided not to proceed with the publication and launch for the time being.

## **9. Future Arrangements for the NDA's National Engagement**

Jon Phillips, Director of Communications and Stakeholder Relations gave a short update about NDA thinking on future arrangements for national engagement.

Jon reflected that the NDA now had five years worth of experience of stakeholder engagement with the present meeting being the tenth NSG. There was a track record of how everyone worked together in terms of stakeholder engagement and also what worked well or not. Other aspects of the present context were that the development of Strategy II was drawing to a close and that the Authority was operating in a very difficult financial environment where the reduction of overhead and support costs was very relevant.

Bearing these three points in mind, Jon proposed that it was a good time to take a step back and review the engagement arrangements as with all the other aspects of the NDA's work.

Jon emphasised that such a review was about national engagement rather than the NSG. It was not an exercise about 'scrap or keep' the forum; rather a broader consideration of national engagement. There was a need to understand how a mechanism like the NSG fitted with other mechanisms that the Authority had in place; for example, the NDA had a mechanism to engage with unions nationally and there were fora for regulators and the supply chain. There were a number of mechanisms that were separate from NSG so there was a need to be able to take a holistic view: how everything worked together, whether it was fit for purpose, so the review was not about choosing NSG or not.

Jon proposed that there was a need to test thinking about the elements of engagement such as frequency, format and representation; and to test where this was appropriate and where it needed to improve. This needed to be done in the context of both NDA and stakeholder needs. From the NDA's perspective this included the following factors: Strategy II was nearly concluded from an engagement point of view. There were fewer topics to consult on going forward, but the NDA still had substantial strategic challenges about which it needed to consult in future, such as the GDF, Spent Fuel and others. Future engagement may not have similar breadth of issues but there were significant areas where stakeholder input was required.

Jon noted that the NSG had demonstrated once again that the NDA does get value out of the engagement process, through sharing early thinking and getting information from stakeholders' challenging views. Jon further outlined that the NDA has an annual business cycle and annual review so it needed a mechanism to have that happen effectively. The Authority needs to communicate its progress and challenges and to build stakeholder understanding and support. The NDA needs informed stakeholders; to build relationships and to continue them as it had done over the last five years and that transparency is at the heart of its thinking. Jon concluded by noting that this was a summary of where he thought the NDA was in terms of its needs on engagement and that the session was an opportunity to gather input about what stakeholder needs are.

Jon advised that the NDA had asked The Environment Council (TEC) to take a process forward regarding future national engagement and to come back to the NDA with recommendations. Winsome MacLaurin, the CEO of TEC would be providing further information. The NDA was seeking feedback from stakeholders on what their needs were from engagement (rather than mechanisms) to help identify the way forward.

Winsome then set out further details about the engagement review: she began by reflecting that over the five years that the NSG had been operating, TEC had been there at the beginning, following its involvement in the BNFL Dialogue. What the organisation had noticed on returning to the convenor role is how much more mature and sophisticated the relationships were, which was a testament to everyone's good will, and the commitment to openness and transparency in the process. Winsome noted that stakeholders have been growing up together as the Chair had described during the previous day's address at the stakeholder dinner.

TEC started its work with a focus on the purpose: what you were seeking to achieve; and that was where stakeholder input was needed regarding the engagement review. The needs identified by stakeholders would inform the needs of engagement. The feedback given at NSG10 would be an early snapshot. TEC was to conduct desk research: There would be an analysis about NDA engagement, for example the feedback on engagement within the NSG7 report; also any evaluations that have been undertaken, the baseline data today and any other information. TEC were going to look at what other engagement the NDA do, as mentioned by Jon. Another aspect of the review would involve looking at international examples of nuclear and other sectors.

Winsome highlighted that TEC had a short timeline to conduct the review. The organisation would generate some early options and take these to a group of stakeholders to consider them. It would not be feasible to involve every single person in this step, given the timeline so it would be more streamlined with a smaller number of people. TEC would then present the NDA with some credible options which the NDA would then consider. Like everything else it would be the NDA's decision as it has the statutory obligation and necessity to own these. The Authority would aim to reach its decision in advance of NSG11. TEC was tasked with getting the options to the NDA by July. The organisation would be working with a short time line but was looking to produce quality output.

There was then an opportunity for stakeholders to ask questions on the review:

- Q:** The most important thing that the NDA and TEC to consider is that we all have very diverse views and we each have our own agenda. Through coming here to the NSG and bouncing ideas off each other and discussing our ideas, we moderate our views in taking account of all the factors and you can only do that by listening and taking account of others' views. That for me as an SSG Chair is very important: those things that you have not thought of and the cross matching of information is very important.
- A:** The most important thing that the review will do, which should have been mentioned in the outline of it earlier, is that it will also be informed by stakeholder interviews. TEC will be talking to individuals and also conducting a questionnaire. Its scope will be much a broader than just this group and we will be able to capture things such as this comment.
- A:** We are just about to have a session where these kind of points will be captured around the table. That is exactly the kind of input that will be helpful, along with identifying your very specific needs.

There was then an opportunity for stakeholders to share their views. Mike King asked stakeholders to consider the following questions:

- What are your needs from national engagement in the future?
- What would you like to have from national engagement in the future?

Mike asked participants to think beyond the NSG for the first question to how they would like to engage with the NDA across the piece and also in terms of their role, and what they needed to do that effectively. The second question would be important in understanding the range of things that stakeholders wanted to get from the national engagement process.

There followed a discussion among participants, in small groups around tables, in response to these questions. An NDA member of staff at each table was available to record key points from the discussion. This information has been transcribed and is set out below.

### **What are your *needs* from national engagement in the future?**

#### Table comments:

- Chairs' meeting to stay as is.
- Duty to respective site
  - Progress
  - NDA contribution to this
- What is NDA trying to achieve, and has achieved, and vision to achieve
- Understand that NDA are / remain as guardians
- Changes to above strategy are consulted / discussed
  - How often (suggested one per year)
  - Timing September or October to align with local SSG meetings

- How Strategy impacts on each site
- Value of seeing how each part fits together in NSG to SSG
- Ability to put context of National to Local.

Table comments:

- Don't need?
- Update – mechanism of "state-of-the-nation"
  - Is it a good way. Yes: Access; relationships; understanding; networking
- Process information. Mechanism
  - "Context". Better feedback
  - Feedback. Moderation.
- Personal interaction – Improving quality
  - Two-way quality – Testing
- Maturity? Cordial. Chaotic. Working. Mature
  - Consistency and maturity
  - What would we lose if we did something else?
- Criticism. Conflict?
  - Too cosy? Undermine our needs?
- Have to consider rationalising?
  - Right to do
  - One [meeting] per year. "Save Tony Fountain's money"
  - Careful. Two ideal
  - Regional meetings
  - Technology.
- Exposure to divergent views
- Forum develops "us all" – can do it
  - Brings the team together

Table comments:

- Information via concise bulletins to enable stakeholders to easily disseminate information: tied into SSG meetings. For example: business plan, key milestones, and key strategic areas.
- Networking benefits: for example, contact with policy makers, opportunity to share views, personal relationships. The quality of human contact or dialogue cannot be substituted by website etc.
- Need comprehensive engagement forum to put issues into context.
- Perceived need for the NDA to hear feedback.
- Need for stakeholders to be able to influence or provide constructive feedback.
- Need minimum frequency of event to maintain human contact and relationships - the key to success: two per year.

Table comments:

- For NDA to communicate how or when they have used stakeholder views or feedback to influence its decision making: would help to build trust and demonstrate the NDA is listening.
  - The above is not easy for NDA to fulfil due to the range of views received.
- Advance information 'could be' more detailed; current information is seen as too brief.
  - Could improve engagement during break-out sessions.
- Primarily focussed on 'strategy' matters
- The need to engage on 'operational' matters was not seen as important, others thought the mix of strategy / operational engagement was important.
- Need to bring topics to the table which the NDA need to 'prompt' people to think about.
- "Face-to-face" engagement is essential – where the many can be heard as opposed to only individuals.
- NDA to be clear about what is 'up for grabs' and what isn't – therefore where engagement would be more valuable.
- As needed rather than specific frequency: for a specific purpose.

Table comments:

- Need to understand the challenges and constraints on the NDA.
- 'Real time' issues and information – providing answers and can make contribution.
- Obtaining information so that everyone is better informed.
- Need to feel part of the 'family'.
- Need to be able to share views.
- Need to know the NDA delivers its stakeholder charter – so that can provide feedback to local stakeholders.
- Need for collective engagement.
- Need to avoid secrecy.
- Need to provide support to avoid mission failure.

Table comments:

- More influence for stakeholders: do not just skim across issues.
  - More involved discussion leading to "joint" solutions.
  - Smaller focused groups
- Need for sub groups: perhaps task defined and time defined.
- One event for everybody: say annual, to feedback??
- Need NDA to have a culture change, to be more inclusive.
- National meetings for truly national issues.
- Local meetings or regional meetings for local / regional issues.
- National policies with regional variations allowed.
- National groups have influence but local bodies make decisions.

Table comments:

- More of the 'bigger picture' (interesting to hear what is going on around the estate).
  - Totality of the picture
  - Need that background to contribute.
- Need to test the mood of the stakeholders and hear what others think and see and hear; the reaction of others.
  - (Not necessarily NSG – but needs to provide this.)
- Interaction between stakeholders.
- Need to get the right stakeholders
  - Includes local authorities, which is necessarily achieved by SSG representatives
  - Could mean larger or could mean smaller
- Need to maintain the networking opportunity
- Right people, right size, right agenda
  - Need to be able to advise – get message across – influence.
- To be provided with the information.

Table comments:

- SSG Chairs represent the local community and need reassurance for the local community that the NDA are doing their job.
- Knowledge sharing (which improves process itself).
- Discussion: based around specific topics; and invite the specialists and supply chain representatives etc.
  - Performance management.
  - More focussed attendance.
  - Allow more challenge.
- A kind of governance of NDA.
  - Stakeholders akin to shareholders.
- Over time attendance at NSG has narrowed, which in some ways is an improvement but has also reduced engagement and reduced discussion.
- A point was raised on flasks, but it had been discussed six months ago, but hasn't been resolved – could have had this as a focussed discussion topic. Need to avoid getting too bogged down in details.
- Showing value for money to taxpayer.

- NSG is very good for networking.
- Is there merit in a specific Scottish NSG given the divergence on policy?
  - There is a Scottish [representatives] site meeting, which NSG could incorporate into.
- Does it have to be a five star hotel?
- Could it be two days, one night – later start on day one, later finish on day two?
- If these meetings with supply chain and unions are happening, could they report back into NSG?
- NDA are bad at communicating between NSGs.
- NDA staff to be available for questions rather than dashing off after presentations.

Table comments:

- Join up all forums; varied representation; end up with logical structures understandable to all.
  - Check overlap and gaps. Get feedback from forums / connectivity.
- Get the NSG membership right.
- GDF not relevant to Scots – peripheral interest. Not worth travelling.
- Need to be able to get NSG to see wider context better, not just local.
- Need to share common problems. Networking is vital, put face to a name.
- Need better information base before launching into NSG meetings.
- Have to put up with less relevant stuff from the sites – air time at NSG.
- Need is local socio-economic issues.
- Share experience with site competition. How to handle?
- Consultation aspect is vital.
- Representative role of SSGs needs this NDA / UK-wide focus. SSGs feed out into NDA wider stakeholder community.
- Opportunity to button-hole the CEO and executive team. NSG provides time better than site visits.

Table comments:

- Networking with other groups.
- Allows regulatory bodies to hear SSGs views.
- Need for NDA to disseminate information.
- NDA gets informed consultation.
- Possibly amount of communication with NDA related to work carried out on site.
- Amount of information dropping off as approach becomes mature and better understanding of each other's position.
- Central issues explored at NSG rather than site-specific concerns.
- Building trust.
- Sharing context with which NDA is working.
- Only forum where you get so many NDA personnel at all levels.

Table comments:

- Two-way communication / dialogue.
- Diverse engagement.
  - How do we engage those who are not here?
- Better metrics.
  - To understand how progress is made.
- Face-to-face – the opportunities to build trust.
- Early engagement in process.
- Feedback.
- Avoid emotional responses.
- Need to be able to go back to community knowing that SSG voice has been heard and influenced.
- Continued need to be seen to take it seriously.
- Continued engagement of NDA in SSG.
  - More needed if NDA moves to 'hands-off'.

Table comments:

- To learn about NDA:
  - Decision making processes.
  - Hear direct from CEO and Chair.
  - Context of why decisions made.
- To understand what decisions do NDA need to make:
  - When.
  - What input can stakeholders have to these decisions.
- To have the opportunity to understand in plain English what is going on. NDA's opportunity to explain in plain English.
- Get understanding of site issues within national / big picture.
- Understand what the influence of stakeholders is on particular issues.
- To be able to network.

Table comments:

- Need data / information to be the credible interface between industry and community.
- Need to have the ability to influence NDA at a high level.
- Need an opportunity to be able to challenge the plans – achievability.
- Need the chance to discuss and influence options before decisions are made.

Table comments:

- Need direct line of sight of government and NDA thoughts.
- Overall direction understanding.
- Contact points: face-to-face.
- NDA to be able to demonstrate views taken on board and that many folks contribute on a voluntary basis and they are an asset.
- Need to have all folks together so that NDA estate in the whole and interdependencies can be understood.
- Quality / merit of any contribution should be given priority over number of votes cast.
- Need to be educated: have opinion shaped.
- Need to recognise commitment and recognise SSG views to be heard.
- Regular and consistent engagement.

**What would you *like* to have from national engagement in the future?**

Table comments:

- Agenda:
  - Changes to strategy
  - Impact on a site by site level
  - National versus local.

Table comments:

- Palatial venue?
- Need it once a year – local at six months.
  - Two meetings.
  - Regional meeting to offset one per year.
- Cordial. Mature. Sophisticated. Works.

Table comments:

- Engagement with broader spectrum of stakeholders to stimulate discussion, etc.
- Gear frequency of national engagement to major issues, for example, input to strategy.

Table comments:

- To meet policy drivers (responsible people).
- Like to have enough information to report back to the local community
- Like to have other key stakeholders (regulators, funders, senior SLCs, supply chain) and 'translators'.
- Like to have occasional site programme managers in attendance
- Like to have broader experience by meeting other similar members leading to enhanced perspective.
- Like to understand bigger picture.

Table comments:

- SSGs and local authorities should both be involved in issues equally. Both are important. For example, VLLW could have gone smoother.
- SSGs part of communications framework
- Not joined up enough.
- Need clarity of NDA's policy of national engagement.
- What do NDA want?
- More challenge to NDA needed.

Table comments:

- Access to national government – bring the Minister here! (Because NDA has to work within policy – greater access to policy).
- Like to see more getting done!
- Exposure to and testing of the decisions and opportunities the NDA raise.
- Testing of stakeholder engagement materials.

Table comments:

- Less often but longer meeting to allow more in-depth discussions.
- Combine NSG with union and supply chain engagement meetings.
- Between meetings – weekly / monthly email with links to articles of interest.
  - And feedback mechanism.

Table comments:

- Discussion – one meeting per annum, but see 'joined-up-ness' on needs [Varied representation – end up with logical structures understandable to all. Check overlap and gaps. Get feedback from forums / connectivity.]
- Possible 'issues' sub-groups could go deeper. But who should be on any such sub-groups?
- Like to have better background information prep for NSGs rather than having to learn on the spot!

Table comments:

- Like to hear DECC view and importance of decommissioning – like to hear from a minister.
- Like Manchester venue.
- Chairman of stakeholder group should input to agenda.
- Hear about supply chain issues.

Table comments:

- Balance, frequency, length and quality of dialogue.
- Engagement with younger audience – to deal with future problems e.g. youth parliament.
- More time when consulting ahead of key events / decisions.
- More collaborative responses from SSG - ?online forum / internet.
- Unique selling point of this event – incorporate SSG into the session, not separate.
- Balance cost of event and venue.

Table comments:

- Face-to-face contact with NDA and other stakeholders.
- Smaller focus groups for communities of interest on theme or topic, for example, Magnox Operating Programme for SSGs. Broader representation – non nuclear fans; let them have a voice.

Table comments:

- Like a forum to have constructive dialogue – recent NSGs have been more constructive with the absence of some parties, regretfully.
- Like the opportunity to discuss options before decisions are made.
- Good representation of divergent views.
- Like the opportunity to discuss national picture e.g. new build.

Table comments:

- More of the same process but improvements.
- Refine some of the day-to-day business.
- Objectives of what it wants:
  - Information packs (level of detail).
  - Forewarning of questions to be asked.
  - cursory treatment.
- More dialogue (face-to-face).
- More respectful of what the contributors do and the value they bring: volunteers and that they're an asset.

Mike reflected that the café process had been a first step in some participative research for the engagement review, by getting stakeholder thoughts on their needs around engagement. Mike requested that the table groups each share a key point on the questions to get a flavour of the views.

The key points highlighted about engagement **needs** were as follows:

- The need for collective engagement.
- To be able to take back to the local perspective, the national perspective and show they fit into it.
- The need for joining up the various forums. An annual event is ok, but do join up and avoid partitioning.
- The quality of human contact and maintaining human relationships.
- The NDA needs to be clear about what is up for grabs and what is not and where engagement is most valuable therefore.
- The frequency to be as required as rather as fixed and to have a specific purpose such as engagement around Strategy II.
- The NSG provides governance and reassurance. It is part of the governance chain back to local communities.
- Information about the state of the nation and processing that information to moderate and understand things as a whole. The NSG has a high level of maturity; do not jeopardise that.
- Joint solutions sub groups that are task and time defined. Local for local; and national for national issues.
- The opportunity to challenge plans and their achievability: the ability to influence NDA at high level; that is, having the NDA's CEO and Executive here.
- The opportunity to understand in plain English what is going on.
- Sharing the context in which NDA is working.
- To test the mood of stakeholders; to be able to hear and see what others think: subtle but valuable.
- The NDA need to be able to demonstrate that they are taking views on board and that people who meet do it voluntarily and are an asset.
- The need for diverse engagement of those people who are not here: how to engage with them.

The key points highlighted about **nice to haves** for national engagement were as follows:

- Gear frequency of national engagement to when major issues arise.
- Advance information is brief and more detail would help with engagement in sessions.
- Better background information to be provided so people are better prepared to speak with authority in sessions.
- Would like to meet policy drivers; meet the people responsible for driving forward.
- An opportunity to discuss the national picture, for example new build.
- Smaller focus groups; communities of interest to look in more detail at topics, for example the MOP to SSGs.
- Would like to have more access to national government.
- The NDA needs to be clearer about what it wants and the NDA needs more challenge.
- Would like to hear the DECC view and the importance of decommissioning: would like to hear from the Minister.
- More face to face dialogue.
- Communications to be improved between meetings.
- Consider the use of regional meetings if the NSG is reduced to once a year.
- Internet forum.

Winsome was then invited to reflect on what had been said and outline the next steps for the engagement review: Winsome noted that the comments had been interesting, thanked stakeholders for the diversity of needs expressed and that the information would be very helpful to the review. TEC would be synthesising the material in the meeting report and would get on very quickly with desk research and crafting interviews for the review. In view of the short timescales there would be considerable activity on the task between then and July.

There was then an opportunity for further questions before the close of the session:

**Q:** This is not a question but an offer of help. We did a piece of research on radioactive waste engagement and on engaging in other ways and can send you a web link to access it.

**A:** Thank you very much for that, much appreciated.

## **10. Way Forward on Strategy II**

Adrian Simper gave the meeting participants some initial feedback on the views put forward by stakeholders during the two day meeting. There had been some excellent learning for the NDA from the meeting and the Authority had got a lot from it.

Adrian commented that one extra thought that he would be taking away from the NSG was that the NDA did need to continue to work on how it communicated. This encompassed a need for better clarity and plainer English and to match provision to the information required by stakeholders, since people had variously fed back that they wanted both further detail and less quantity.

Adrian then reflected on the feedback that had been heard during the NSG with regard to IWM. The NDA understood that people were broadly content with the strategy and the broader and more diverse way of handling waste. There was the recognition by the NDA of the need for local engagement, since whatever it did would play out in a particular location. Adrian noted that there was a need to be sensitive to the wider national picture where communities are hosting national or regional infrastructure, even if it was nothing directly to do with the NDA's mission. The NDA could put its waste management activities into the broader UK context of waste management, not just radioactive waste, and give clearer sense of scale of its activities; for example the numbers of trucks per week.

With regard to the sessions held on Site Restoration, Adrian reflected that there was broad agreement on use of interim end states to focus delivery and to provide clarity of direction within a short timescale, and to realise opportunities for beneficial use along the way. People liked the idea of fit for purpose restoration objectives. The NDA noted the concerns raised by stakeholders, about the focus on interim end states having the potential to result in a loss of focus on the final End States for sites.

With regard to risk: Stakeholders broadly agreed with what the NDA meant regarding risk and the emphasis given to it and that when the focus was not about risk that it was still important. However Adrian acknowledged that the NDA struggled with the right words to get that across. Adrian proposed that the NDA would aim to find better words and would be having further engagement on this aspect to ensure that risk could be better communicated and understood.

Finally Adrian considered the feedback from the Spent Fuel sessions. With regard to Magnox: the messages that NDA were taking away was that the strategy is clear; people are content with it and pleased with the contingencies, but concerned about the MOP performance. For fuel and reprocessing there was a diversity of opinion reflected. Some stakeholders were in favour for the benefits it would bring, and some were not. Adrian noted that the NDA ultimately has to make the decision and that it will not be possible to reconcile these positions. However the decisions would be evidence-based and clearly communicated.

Adrian thanked everyone for their participation in the engagement emphasising that the NDA really values it. Adrian advised that the Authority does listen carefully and then deliberates hard about how to make best use of the feedback.

## **11. Evaluation**

Stakeholders and the NDA team were invited to complete a questionnaire to evaluate the tenth NSG. The responses to these were to be reviewed by the convenor. TEC evaluates its engagement processes to assess their effectiveness and to inform their future approach. The questionnaire covered three key evaluation areas of accountability, impact and, learning and development. The responses are collated, analysed and reproduced in a summary report with recommendations. This is published on the NDA's website at [www.nda.gov.uk](http://www.nda.gov.uk)

## **12. Closing Remarks**

Tony Fountain closed the meeting with some final words. Tony remarked that the tenth NSG had been a very interesting meeting and that in following the proceedings, he had been struck by how much happens both outside and inside the meeting rooms. The CEO reflected that phenomenal networking occurs at the NSG both on a small and large scale. This enables receipt of many pieces of information that would not otherwise have been caught. Some important topics are also dealt with via the sessions.

Tony went on to say how the NSG demonstrates that there is real power in the diversity of the people that you have involved; the opportunity of networking and the development of relationships. The concept of everyone involved having grown up together was also important. This was not a cosy type of relationship as there were always robust challenges from stakeholders. These challenges went along with a broader understanding which was aligned to the NDA: Stakeholders too wish to get the core task of decommissioning done and done well. There are many exchanges within the NSG on how best to do that.

The CEO reflected that NSG10 had been a fascinating couple of days. The meeting provided something unique. While the NDA were not by any means oblivious to social context, the Authority did have a technical and economic bias as was its task. Tony emphasised that it would be naïve to think that the best technical solutions would be achieved if it did not take account of the wishes and needs of communities around them. The CEO affirmed that the advice that the NDA gets from stakeholders about attitudes towards the NDA's activities in this respect was invaluable.

To illustrate this latter point, Tony used the example of the dimension brought by stakeholders to waste issues. He noted that unless aspects of the strategy had the support of the community it would not have a chance of going ahead.

With regard to the future strategy for Spent Fuel, Tony emphasised that, if there was to be a solution for what will happen to it, there was an essential need to be clear about the criteria for whether there was reprocessing or not. There needed to be clarity about whether for example this was to provide competitive fuel supply, or hazard reduction, or jobs and skills and so on. There was a need to be crystal clear about the benefits of the way forward in order to apply it.

There was then an opportunity for final questions of the meeting to the CEO and Executive team from stakeholders:

**Q:** Taking the MOP as an example, if we were to have a topic specific NSG, could we hold you to account on its performance?

**A:** This is a good point. What has gone well or not is relevant. The Authority does have a Board and Shareholder Executive to hold it to account on performance so it does not lack challenge on how well it is doing, but something different, the perception of the community about what were doing well or not; their sense of progress is a very good idea.

The meeting concluded with some words of thanks from Tony Fountain to Janice Houghton, the NDA's Stakeholder Relations Team Support acknowledging the phenomenal amount of work required by her to arrange the NSG. The CEO expressed best wishes to Richard Griffin, Stakeholder Relations Manager, and to his family since he was on paternity leave. Tony also thanked Jon Phillips who as the Director of Communications and Stakeholder Relations has accountability for the NSG. Finally Tony thanked most of all, the stakeholders for giving such tremendous participation and for contributing to the event with such generosity.

### 13. Acronyms

AGR	Advanced Gas-Cooled Reactor
BE	British Energy
BNFL	British Nuclear Fuels Limited
BPE	Best Practice Environmental
C&M	Care & Maintenance
CEO	Chief Executive Officer
CNPP	Combined Nuclear Pension Plan
CoRWM	Committee on Radioactive Waste Management
DECC	Department for Energy and Climate Change
DFR	Dounreay Fast Reactor
DSSC	Disposal System Safety Case
EA	Environment Agency
ERP	Expenditure Review Panel
ESPS	Electricity Supply Pension Scheme
EYF	End Year Fund
FED	Fuel Element Debris
GDF	Geological Disposal Facility
GPS	Group Pension Scheme
HAW	Higher Activity Waste
HLW	High Level Waste
HMG	Her Majesty's government
HSE	Health, Safety & Environment
HSSSEQ	Health, Safety, Security, Safeguards, Environment & Quality
IAEA	International Atomic Energy Agency
ILW	Intermediate Level Waste
IS	Interim States
IWM	Integrated Waste Management
LLW	Low Level Waste
LLWR	Low Level Waste Repository
LoC	Letter of Compliance
LTP	Lifetime Plan
MDU	Magnox Depleted Uranium
MoD	Ministry of Defence
MOP	Magnox Operating Programme
MOX	Mixed Oxide
MRWS	Managing Radioactive Waste Safely
MWDF	Mineral's & Waste Development Framework
NDA	Nuclear Decommissioning Authority
NIA	Nuclear Industry Association
NII	Nuclear Installations Inspectorate
NIMBY	Not In My Back Yard
NMP	Nuclear Management Partners
NNL	National Nuclear Laboratory
NORM	Naturally Occurring Radioactive Material
NSG	National Stakeholder Group
OJEU	Official Journal of the European Union
OSPAR	The Oslo-Paris Convention
PBO	Parent Body Organisation
PVP	Public Value Programme

R&D	Research & Development
PWR	Pressurised Water Reactor
SIXEP	Site Ion Exchange Effluent Plant
SLC	Site Licence Company
SMP	Sellafield Mox Plant
SSG	Site Stakeholder Group
TEC	The Environment Council
THORP	Thermal Oxide Reprocessing Plant
VLLW	Very Low Level Waste
VRR	Vitrified Residue Returns
WAGR	Windscale Advanced Gas-Cooled Reactor

## Appendix 1: Attendees

Name	Organisation
Cllr Penny Wride	Berkeley Site Stakeholder Group
Cllr Brian Main	Bradwell Local Community Liaison Council
Cllr John White	Bradwell Local Community Liaison Council
Raj Jassal	British Energy (BE)
David Challen	Capenhurst Site Stakeholder Group
Cllr Ian Lindsay	Chapelcross Site Stakeholder Group
Cllr Sean Marshall	Chapelcross Site Stakeholder Group
Dr Trevor Jones	CIRIA / SAFESPUR
Mark Verrier	Civil Nuclear Constabulary (CNC)
Tony Regan	Civil Nuclear Police Authority
Adam Scott	Committee on Radioactive Waste Management (CoRWM)
Andrew Craze	Department of Energy & Climate Change (DECC)
Bob Earnshaw	Dounreay Site Stakeholder Group
June Love	Dounreay Site Stakeholder Group
Eva Foran	Direct Rail Services (DRS)
Chris Connelly	Direct Rail Services (DRS)
Simon Middlemas	Dounreay Site Restoration Ltd (DSRL)
Ken Nicol	Dounreay Site Restoration Ltd (DSRL)
Andrew Parry	Dungeness Site Stakeholder Group
Colonel George Smythe OBE	Dungeness Site Stakeholder Group
Dr Paul Mountford-Lister	Environment Agency (EA)
Ian Lowles	Environment Agency (EA)
Paul Tossell	Food Standards Agency
Peter Kane	General & Municipal Boiler Makers Union (GMB)
Jon Ford	GPS Pensions Trustee
Cllr Terry Fraser	Harwell-Chilton Campus Local Stakeholder Group
Cllr Terry Joslin	Harwell-Chilton Campus Local Stakeholder Group
Cllr Mike Caswell	Hinkley Point Site Stakeholder Group
Cllr Mike Short	Hinkley Point Site Stakeholder Group
John G Lamb	Hunterston Site Stakeholder Group
Kenneth MacDougall	Hunterston Site Stakeholder Group
Steve Dutton	International Nuclear Services Ltd (INS)
Dan Robson	International Nuclear Services Ltd (INS)
Paul Lenartowicz	Isle of Man Government
Cath Giel	Low Level Waste Repository Ltd (LLWR)
Richard Raaz	Low Level Waste Repository Ltd (LLWR)
Neil Baldwin	Magnox North Ltd
Nigel Monckton	Magnox North Ltd
Brian Hibdige	Magnox Pension Trustees
Pip Hatt	Magnox South Ltd
Mark L Lesinski	Magnox South Ltd
Tony Frost	Ministry of Defence (MoD)
Roger Anderson	National Nuclear Laboratory (NNL)
John Whitton	National Nuclear Laboratory (NNL)
Richard Arnott	Strategy II Programme Manager, NDA
Sean Balmer	Head of Commercial Projects & Revenue, NDA
Randall Bargelt	Programme Director – DSRL, NDA
Dr Brian Burnett	Programme Director – SO21 & LLWR, NDA

<b>Name</b>	<b>Organisation</b>
Bob Churchill	Head of Socio-Economics, NDA
Dr Anna Clark	Land Quality Manager, NDA
Dr Matthew Clark	LLW Technical Support Manager, NDA
John Clarke	Commercial Director, NDA
John Dalton	Head of Communications, RWMD, NDA
Phil Davies	Head of Waste & Nuclear Materials, NDA
Alun Ellis	GDF Project Director, RWMD, NDA
Tony Fountain	Chief Executive Officer, NDA
Danny Fox	Fuel Cycle Technology Manager, NDA
Paul Gilchrist	Head of Fuel Cycle Technology, NDA
Richard Griffin	Stakeholder Relations Manager, NDA
Karen Hallsworth	Socio-Economic Assistant, NDA
Bill Hamilton	Head of Stakeholder Communications, NDA
Stephen Henwood	Chairman, NDA
Janice Houghton	Stakeholder Communications Assistant, NDA
Stuart Hunt	Head of Group Information Governance, NDA
John Inkester	Head of Group Engineering Strategy, NDA
Jonathan Jenkin	Socio-Economic Manager, NDA
Dr Sara Johnston	Programme Director – Magnox & RSRL, NDA
Graham Jonsson	Head of HAW Management, NDA
Jim McLaughlin	HR Director, NDA
Clive Nixon	Head of Strategy, NDA
Andrew Oldham	Corporate Controller, NDA
Jon Phillips	Director of Communications & Stakeholder Relations, NDA
Colin Rhodes	Fuel Cycle Operations Manager, NDA
Dr Adrian Simper	Director of Strategy & Technology, NDA
Richard Waite	Executive Director, NDA
Dr Janet Wilson	Director of Nuclear Assurance, NDA
Cllr Jim Finn	Nuclear Free Local Authorities (NFLA)
Sean Morris	Nuclear Free Local Authorities (NFLA)
Veronica Lekavicius	Nuclear Industry Association (NIA)
Rick Lockwood	Nuclear Institute
Fred Barker	Nuclear Legacy Advisor Forum (NuLeAF)
Stewart Kemp	Nuclear Legacy Advisor Forum (NuLeAF)
Cllr Tim Knowles	Nuclear Legacy Advisor Forum (NuLeAF)
Cllr Fergus McMorrow	Nuclear Legacy Advisor Forum (NuLeAF)
Cllr Mike Hawkins	Oldbury Site Stakeholder Group
Cllr Malcolm Lynden	Oldbury Site Stakeholder Group
Raymond Pascoe	Prospect Union
Emma Burwood	Research Sites Restoration Limited (RSRL)
Angela Vincent	Research Sites Restoration Limited (RSRL)
Cllr John G Mitchell	Scottish Councils Committee on Radioactive Substances (SCCORS)
Cllr George Regan	Scottish Councils Committee on Radioactive Substances (SCCORS)
Murray Bainbridge	Scottish Enterprise
Jim Cochrane	Scottish Environment Protection Agency (SEPA)
Elizabeth Gray	Scottish Government
Martin Macdonald	Scottish Government

<b>Name</b>	<b>Organisation</b>
Phil Hallington	Sellafield Ltd
Howard Rooms	Sellafield Ltd
Mike Baily	Sellafield Ltd - Capenhurst Site
Phil Malem	Sellafield Ltd - Capenhurst Site
Nick Welch	Sellafield Ltd - Capenhurst Site
Elisabeth Cuthbertson	Shareholder Executive
Cllr Trevor Hawkins	Sizewell Site Stakeholder Group
Richard Smith MVO	Sizewell Site Stakeholder Group
Lydia Meryll	Socialist Environment & Resources Association (SERA)
Colin Partington	Society for Radiological Protection
Steve Whitehead	Springfields Fuels Ltd
Jayne Ashley	Springfields Site Stakeholder Group
Cllr Bernard Whittle OBE	Springfields Site Stakeholder Group
Idwal Williams	Trawsfynydd Site Stakeholder Group
Cllr J Isgoed Williams MBE	Trawsfynydd Site Stakeholder Group
David Alexander	UNITE / AMICUS
Charlie Thomson	UNITE / AMICUS
John Deighan	UNITE / TGWU
David Whitnall	UNITE / TGWU
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
Cllr Elaine Woodburn	West Cumbria Site Stakeholder Group
Cllr Sandra Ellis	Winfrith Site Stakeholder Group
Cllr Aled Morris Jones	Wylfa Site Stakeholder Group
Cllr Jac Jones	Wylfa Site Stakeholder Group