

Evaluation of the Environment Agency's Consultation on the Generic Design Assessment (GDA) for new nuclear power stations

Final report

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Executive summary

Introduction

During 2010, the Environment Agency launched a major stakeholder consultation on the Generic Design Assessment they were undertaking to assess two reactor design options for new nuclear power stations. The GDA was a new process developed by the Environment Agency and the Office for Nuclear Regulation (ONR)¹, and the consultation enabled the Agency to gain feedback from stakeholders as part of its GDA assessment process.

An independent evaluation was commissioned, which aimed to assess whether the consultation had achieved its objectives, and to identify lessons from the experience and improvements that could be made to the design and delivery of future consultations. The aim of the GDA consultation was:

To inform the assessment of new nuclear reactor designs by sharing information with people, and by listening to and using their input in the decision-making.

The objectives for the consultation were:

1. To build greater understanding and knowledge among stakeholder participants about the GDA process and the role and responsibilities of the Environment Agency.
2. To provide opportunities for stakeholders who wish to be involved to influence the consultation process to help it best meet their needs.
3. To encourage stakeholder input and responses.
4. To identify lessons to improve future Environment Agency stakeholder consultation activities.

Context

In 2007, the Environment Agency and the Health and Safety Executive (HSE) started to develop a new process for assessing nuclear power station designs called the Generic Design Assessment (GDA). This allows these bodies to assess the environmental, safety and security aspects of reactor designs before any applications are made to build nuclear power stations on particular sites.

During 2010, the Environment Agency launched a major stakeholder consultation to feed into their GDA process. Early planning for the consultation began with GDA planning in 2007, and the formal written consultation ran from June to October 2010. The consequent GDA decisions, delayed in order to incorporate learning from the Fukushima incident in Japan in 2011, were announced in December 2011.

The consultation in practice

The consultation took the form of the publication of two consultation documents, one on each design, which included 17 questions to which stakeholders were invited to respond. Extensive publicity and dissemination of the consultations documents was undertaken, through mailing lists and national and local meetings.

¹ The Office for Nuclear Regulation (ONR) was created on 1st April 2011 as an Agency of the Health and Safety Executive (HSE). It was formed from HSE's Nuclear Directorate and has the same role. In this report we therefore generally use the term 'ONR', except where we refer back to documents or actions that originated when it was still HSE's Nuclear Directorate.

A total of 81 responses (some covering both designs) to the consultation were received online and on paper. The consultation also included a seminar in Birmingham in July 2010, attended by around 100 stakeholders.

Meeting standards of good practice

The consultation was intended to meet the seven criteria in the Government Code of Practice on Consultation, and all these criteria were at least partially met. In summary, the evaluation has found that the criteria on the duration of the consultation and the capacity to consult were fully met. The criterion on the responsiveness of the consultation was almost fully met. The criteria on when to consult, clarity of scope and impact, the accessibility of the consultation and the burden of consultation were partially met.

In general, this was an impressive consultation, with several elements of good practice that met and went beyond the criteria in the Code. The work to raise awareness of the consultation and to proactively disseminate the consultation documents and encourage wide participation were exemplary. In addition, the quality of the responsiveness of the Environment Agency to the consultation was exceptional, with detailed analysis of the responses and very open publication of responses to points raised by participants.

One of the major areas where the consultation was less successful was in relation to the quantity and quality of the information provided in the consultation documents, which was considered by consultees to be both excessive in terms of quantity and incomplete, with certain data felt to be missing. Feedback also demonstrated that the information provided was not fully accessible to ordinary local residents and groups, who were among the target groups for the consultation. The other major concern was the lack of clear links between this consultation and future opportunities for engagement in the process to build new nuclear power stations.

Impacts, costs and benefits of the consultation

The evaluation has found that the consultation did inform the GDA decisions made by the Environment Agency, mostly by confirming that the Agency was addressing the key issues. The consultation also had impacts on those taking part in the consultation and found that the costs of the consultation were seen as 'money well spent'. The findings included:

- **Impacts on GDA decisions.** Numerous changes had been made to the proposals on which the Environment Agency consulted since the consultation. The responses to the consultation were only one of the sources for these changes, alongside more information provided by the reactor developers, as spelt out in the decision documents published by the Agency in December 2011. Issues on which there were clear impacts include aqueous radioactive disposal and limits, solid radioactive waste, water abstraction and discharges to surface water.
- **Impacts on consultation participants.** The evaluation found that:
 - 86% of questionnaire respondents at the July 2010 seminar agreed the event had increased their knowledge of the role of the Environment Agency in the GDA process, and 79% agreed it had increased their knowledge of the Agency's regulatory process for nuclear new build.
 - 50% of these respondents agreed that the seminar had strengthened their confidence in the Environment Agency as an independent nuclear regulator; only 1 respondent (2%) disagreed.
 - Levels of knowledge among the respondents to the evaluation electronic survey of consultation participants rose significantly after the consultation: levels of low

knowledge of the GDA process dropped from 42% to 25%, and levels of high knowledge increased from 28% to 39%; and levels of low knowledge of the roles and responsibilities of the Environment Agency dropped from 36% to 23%, and levels of high knowledge increased from 31% to 45%.

- **Costs and benefits.** The evaluation did not attempt a detailed cost benefit analysis or review of value for money. However, the evaluation did ask interviewees whether they felt the consultation was 'money well spent' and 6 of the 8 agreed it was (only 1 disagreed). The reasons given for the value of the consultation were related to the importance of the issues covered, and the importance of the process being (and being seen to be) open and transparent. The costs of consultation were also seen to be much lower than the potential alternatives (e.g. a public inquiry or judicial review), and that consultation costs were a relatively small part of the budget for development (about £5 billion estimated as the cost of building a new nuclear reactor).

Meeting the aims and objectives of the consultation

The evaluation has shown that the aim and all four objectives of the consultation were fully met, which is a significant achievement.

There was rather lower satisfaction expressed by respondents to the evaluation survey than implied by this success against the aim and objectives: only slightly more were satisfied with the consultation (47%) than were dissatisfied (42%). This is not a very positive response and the level of dissatisfaction is perhaps surprising given the obvious (and often recognised) efforts by the Environment Agency to make the consultation open and inclusive.

Conclusions and lessons for the future

Overall, the consultation was a very comprehensive and thorough exercise, with several elements of good practice that met and went beyond the criteria in the Government's Code of Practice on Consultation.

The evaluation has identified eight lessons from this experience to improve future public and stakeholder consultation exercises. These are, in summary:

- **Take confidence from the successful elements of this consultation**, especially the stakeholder seminar, the work to raise awareness and to attract a diverse mix of participants, and the full and effective response by the Environment Agency to the input from interested parties.
- **Ensure that the information provided is appropriate to the target audiences**, especially where the audience is very diverse and includes the general public and local communities. Translation of complex technical information into material that the public can understand and respond to is not impossible and is essential if these audiences are to participate fully in these sorts of consultations in future.
- **Work with stakeholders to establish agreement on some basic information.** Further work with stakeholders on joint fact-finding on some key issues would be valuable in saving resources later if it enables the constant repetition of the same challenges to be avoided.
- **The questions and issues raised by stakeholders may be the most valuable output of the consultation.** A summary of the key issues raised in this consultation by interested parties could be used as a valuable first step in planning the next stage in the engagement processes on new nuclear power, and is likely to save time later if the answers to these issues can be identified in advance.

- **Clearly establish the place of each engagement opportunity in the overall process for building new nuclear power stations**, and make that information available to all interested parties. This will help avoid interested parties raising the same issues at every opportunity, save agencies' time responding and save interested parties' time feeling they have to respond to all consultations and so reducing the potential for consultation fatigue.
- **Summarise the evidence showing the impacts of stakeholder input.** Use the excellent comprehensive data in the GDA decision documents to produce a summary table showing where stakeholder input has changed the original proposals, where it supported those proposals, when it had not been relevant and was referred on to other departments or agencies (and who this went to), and when it has been held over to feed into another stage of the overall decision making process (and what that is). This would help demonstrate the value of the consultation to interested parties and build trust in these processes for the future.
- **Start stakeholder engagement early with key target groups.** There was interest in engaging earlier and more effectively with academic audiences. In addition, early notice of engagement opportunities, before consultation documents are published, will help alert interested parties and ensure they can respond during the limited timescales of formal consultations.
- **Independence is a key factor in building public trust and confidence.** Trust and confidence can result from effective engagement activities: in this case the July 2010 seminar was seen to strengthen trust in the Environment Agency as a regulator. However, the independence of engagement processes is a key factor in their credibility and the provision of information by companies to the GDA process, and their funding of the consultations, needs to be dealt with clearly and explicitly if trust is to be maintained and built in future.

1 Introduction

The Environment Agency is the leading public body responsible for protecting the environment, including regulating discharges and waste disposals from nuclear power stations in England and Wales, and to ensure that their impact on people and the environment is minimised and acceptable. The Office for Nuclear Regulation (ONR)² is responsible for regulating safety and security at nuclear power stations, including relevant health and safety responsibilities formerly held by the Health and Safety Executive (HSE). Together they are responsible for ensuring that any new nuclear power stations meet high standards of safety, security, environmental protection and waste management.

In 2007, the Environment Agency and the HSE started to develop a new process for assessing nuclear power station designs called the Generic Design Assessment (GDA). This allows these bodies to assess the environmental, safety and security aspects of reactor designs before any applications are made to build nuclear power stations on particular sites.

During 2010, the Environment Agency launched a major stakeholder consultation to feed into their GDA process. Early planning for the consultation began with GDA planning in 2007, and the formal written consultation ran from June to October 2010. The final GDA decisions, delayed in order to incorporate learning from the Fukushima incident in Japan in 2011, were announced in December 2011.

The consultation was designed to inform the assessment of new nuclear reactor designs by sharing information with people, and by listening to and using their input in the decision-making.

This report describes the main findings from the evaluation of the consultation. The evaluation was carried out throughout the establishment and activities of the consultation, from December 2009, and was completed in March 2012. The evaluation research included detailed reviews of comments from stakeholders on the consultation in the main consultation responses, questionnaires to all participants at the seminar, questionnaires to all respondents to the consultation, questions to all those who were invited but chose not to respond to the consultation, interviews with a sample of the stakeholders who took part in the consultation, interviews with Environment Agency staff involved in the consultation, and quantitative and qualitative analysis of all data collected.

This report summarises the methodology used for the evaluation, the aims and objectives of the consultation, and describes the main activities. Assessment throughout draws significantly on feedback from all those involved and covers meeting standards of good practice, the impacts and benefits of the consultation. It considers the extent to which the aims and objectives have been achieved, and identifies some lessons for future practice in the light of these findings.

² The Office for Nuclear Regulation (ONR) was created on 1st April 2011 as an Agency of the Health and Safety Executive (HSE). It was formed from HSE's Nuclear Directorate and has the same role. In this report we therefore generally use the term 'ONR', except where we refer back to documents or actions that originated when it was still HSE's Nuclear Directorate.

2 Evaluation study

The aim of the evaluation, as set out in the Invitation to Tender, was:

- To assess the quality and effectiveness of the consultation.

The objectives for the evaluation were stated as being:

- To provide **robust evaluation data** that is capable of withstanding a high level of public scrutiny.
- To **improve the accountability and legitimacy** of the Environment Agency's engagement - by fully reporting what is done, the resulting conclusions, and what is achieved as a result of the process.
- To **improve the Environment Agency's stakeholder engagement** – so that they do it better next time, and at the site specific stage.

The aim of the evaluation has been to ensure that the data obtained through evaluation research is robust, and the evaluators do have sufficient data and have analysed it sufficiently thoroughly to ensure that the findings can be accepted with confidence. Statistics and quotes are offered as evidence, as well as the qualitative evaluation research being undertaken in accordance with good practice³.

The brief further stated that the independent evaluation was also required to meet the following objectives:

- To determine whether or not the Environment Agency had set the right objectives for our consultation (feedback was required before the consultation planning was finalised).
- To determine whether the objectives that were set for the consultation had been met.
- To generate learning that will help to inform future engagement and consultation.
- To improve project management by building in review and reflection as the work progresses; especially progress towards the objectives of the exercise.

The Invitation to Tender for the evaluation was issued in November 2009, and the evaluator was appointed in December 2009.

The approach and methodology

It was particularly valuable that the evaluation was commissioned at such an early stage, both to allow for the evaluation to help finalise the objectives so they could be used as the basis for final assessment, and to enable the evaluators to follow the process from the earliest stages to review what worked well and less well and to identify lessons from across the whole process.

The evaluation was conducted collaboratively, to ensure that key questions for the Environment Agency and others are fully addressed, and that the perspectives from all those involved were included in the data collection and analysis. However, it was also recognised that the evaluation would also need to be, and be seen to be, rigorously independent in design and delivery and measures were taken to ensure that independence was retained.

³ Such as: HM Treasury, *The Magenta Book. Guidance for Evaluation*. HMT, London 2011.

The criteria for the analysis of good practice were identified early in the evaluation process. The ITT stated that the Environment Agency's hopes for the quality of the consultation were as follows: "Ultimately, we want to ensure that we meet (and hopefully exceed) all the requirements of HMG's Code of Practice on Consultation and any internal requirements i.e. that we have followed our own process." The evaluation of the quality of the process was therefore based on the seven criteria identified in the Government's Code of Practice⁴:

- 1 **When to consult.** Formal consultation should take place at a stage when there is scope to influence the policy outcome.
- 2 **Duration of consultation exercises.** Consultations should normally last for at least 12 weeks with consideration given to longer timescales where feasible and sensible.
- 3 **Clarity of scope and impact.** Consultation documents should be clear about the consultation process, what is being proposed, the scope to influence and the expected costs and benefits of the proposals.
- 4 **Accessibility of consultation exercises.** Consultation exercises should be designed to be accessible to, and clearly targeted at, those people the exercise is intended to reach.
- 5 **The burden of consultation.** Keeping the burden of consultation to a minimum is essential if consultations are to be effective and if consultees' buy-in to the process is to be obtained.
- 6 **Responsiveness of consultation exercises.** Consultation responses should be analysed carefully and clear feedback should be provided to participants following the consultation.
- 7 **Capacity to consult.** Officials running consultations should seek guidance in how to run an effective consultation exercise and share what they have learned from the experience.

The evaluation methodology was designed to draw on a range of data sources in order to gain different perspectives and some detailed feedback from stakeholder participants as well as from those involved in designing and delivering the consultation. In summary, the evaluation research and analysis activities were as follows:

- **Guidance on setting objectives for the consultation.** Detailed discussions were undertaken with the Environment Agency and guidance provided by the evaluator on the drafting of the formal objectives for the consultation.
- **Documentary review.** Review of key documentation for the consultation, including the consultation documents, the reports from the July 2010 seminar, the consultation response documents and the final decision documents.
- **Questionnaires and surveys.** The evaluation research included the following:
 - Questionnaires were completed by participants at the end of the July 2010 seminar, in collaboration with the seminar organisers. Around 100 people attended the seminar and 42 completed questionnaires were returned - a response rate of 42%. The full results are shown in Appendix 1.
 - An electronic survey was circulated in January 2011 to all those respondents to the formal written consultation for whom email addresses were available: 74 out of the total 81 respondents were contacted (lacking contact details for the others), with 37 responses received from that 74 - a response rate of 50%. The full results of the survey are shown in Appendix 2.
 - An email question was sent in January 2011 to all those who had been invited but had NOT responded to the consultation, asking why they had not responded. This was sent to

⁴ *Code of Practice on Consultation*. HM Government, July 2008.

all 241 others on the Environment Agency database. 30 emails bounced back which gave a total of 211 potential respondents to this question - 57 responded, a response rate of 26%. These response rates are all high enough to provide an acceptable basis for robust conclusions. Figures given throughout this report are based on percentages of total respondents to each research method.

- **Interviews.** Telephone interviews were carried out in January and February 2012, soon after the publication of the decision documents so that feedback could include the extent to which stakeholders were satisfied that the results reflected the input to the consultation. Interviews were undertaken with eight stakeholders, identified to represent all eight stakeholder types identified throughout the consultation, plus two Environment Agency staff involved in the content of the consultation and the Environment Agency consultation project manager. Interviews were written up in note form and analysed qualitatively. The questions used in the stakeholder interviews are given in Appendix 3.
- **Analysis and reporting.** Quantitative and qualitative analysis of all evaluation research was undertaken, feeding into the drafting and finalising of the evaluation report.

3 Background and context for the consultation

In 2007, the Environment Agency and the HSE (now the Office for Nuclear Regulation - ONR) started working together on a new process for assessing the environmental, safety and security aspects of reactor designs before specific applications are made to build new nuclear power stations in specific sites: the Generic Design Assessment (GDA).

The Environment Agency regulates the environmental impacts of nuclear sites through a range of environmental permits. These permits may be needed for one or more of the site preparation, construction, operation and decommissioning phases of the plant's lifecycle. The permits issued can include conditions and limits which take into account all relevant national and international standards and legal requirements, with aim of ensuring that people and the environment are properly protected. The Environment Agency works closely with the ONR which is responsible for the safety and security of nuclear sites.

The GDA process provides for a detailed assessment of proposed designs at the first stages of creating new nuclear power stations. At the end of the GDA, a statement is made about the acceptability of the design: a Statement of Design Acceptability (SoDA) issued by the Environment Agency and a Design Acceptance Confirmation (DAC) issued by the ONR. The Environment Agency and ONR may attach GDA Issues (i.e. caveats) to the SoDA or DAC.

The GDA is a voluntary process, undertaken at the request of the developers and/or potential operators of potential new nuclear reactors: in this case EDF (Electricite de France) and AREVA for the UK EPR™ design, and Westinghouse for the AP1000® reactor. These companies cover the costs of the assessment, including the consultation.

The SoDA is provided as advice to the potential developers of new nuclear reactors and has no other formal legal status. However, the Environment Agency have stated that they expect to take full account of the work they have done through the GDA if they receive applications for environmental permits relating to a design that has been through GDA. The six main elements in the GDA are:

- 1 **Initiation.** A submission is made by the company / companies wanting to develop a new nuclear power station
- 2 **Preliminary assessment.** This review identifies if further information is needed from the company / companies before a detailed assessment, and to identify any immediate major issues.
- 3 **Detailed assessment.** At this stage the Environment Agency undertakes a detailed assessment of the submission to decide initially if they might issue a SoDA.
- 4 **Consultation.** The Environment Agency consults on their initial view.
- 5 **Post consultation review.** All the responses to the consultation are considered
- 6 **Decision and statement.** The Environment Agency issues a SoDA with any GDA Issues (caveats) attached, and publishes the background and basis for their decisions.

This evaluation focuses on the last three of these elements: the consultation, post-consultation review and decision and statement.

The nuclear regulators (Environment Agency and ONR) started developing GDAs for two designs which had been submitted in 2007: the UK EPR nuclear power plant design proposed by EDF and AREVA, and the AP1000 nuclear power plant design proposed by Westinghouse. An initial announcement of the public involvement process was launched, with the Health and Safety Executive (HSE), in September 2007. As noted above, the HSE

responsibilities have since passed to the ONR. This initial announcement provided information about how the public could comment on the designs as they were developed through the company websites and through a joint regulators' GDA website hosted on the HSE website.

Preliminary assessments of the two designs were considered and further information was requested by the Environment Agency on both designs in February 2008, with the reports of the preliminary assessments being published in March 2008. Both companies applying to build the new nuclear plants completely revised their submissions during 2008 and provided pre-construction environmental reports (PCERs) which were then reviewed and further updated in March 2010 (and then again in March 2011).

It is this first stage of the GDA (to 2010) that was the subject of the consultation under review in this evaluation: the consultation ran from 28 June 2010 to 18 October 2010. This stage has now been completed, with Interim Statements of Design Acceptability (iSoDAs) issued for both designs. These iSoDAs raised two caveats (referred to as GDA Issues) on both designs (see section 5.3 for details).

The reports on the Environment Agency's decisions on the SoDAs makes clear that the scope of the GDA is based on the following:

- Whilst the Regulators require a certain minimum level of detail to complete the GDA, they recognise that full engineering details of the design will not be available at the GDA stage, as it is considered normal to finalise some of these as part of the procurement and construction programme⁵; and that
- The scope of what is included within the assessments is dependent on the information supplied by the companies applying to build the new nuclear plants. However, the required information for GDA needs to be sufficient in scope and detail to underpin the generic safety case for the design. Should there be omissions in that information that may jeopardize the completion of a meaningful assessment under the GDA process, then the regulators would insist on the scope of the submissions for GDA being expanded to include such essential information⁶.

The next main stage in the regulatory process is for applications for site licences and various environmental permits to be made to the Environment Agency to build new nuclear power stations on specific sites. These applications may be proposing building on new sites or adjacent to existing nuclear sites. The Environment Agency would determine these applications, taking account of the work done during the GDA. At this stage, their focus would be on the operator and site-specific matters including how the operator has addressed any caveats attached to the initial Statements of Design Acceptability (SoDAs).

The two nuclear regulatory bodies have worked closely to assess areas where there are overlapping regulatory responsibility including radioactive waste and spent fuel management, management arrangements for control of design changes, and control of GDA submission documents. There has also been liaison with the Food Standards Agency (FSA) and the Health Protection Agency (HPA), Natural England and the Nuclear Decommissioning Authority (NDA).

The overall timeline for the development of new nuclear power stations is available on the DECC website⁷.

⁵ *Generic Design Assessment. UK EPR™ nuclear power plant design by AREVA NP SAS and Electricite de France SA*, published by the Environment Agency in December 2011; paragraph 51.

⁶ *ibid*, paragraph 52.

⁷ www.decc.gov.uk/en/content/cms/what_we_do/uk_supply/energy_mix/nuclear/new/new.aspx

4 Aims and objectives of the consultation

The aim of the GDA consultation was:

- To inform the assessment of new nuclear reactor designs by sharing information with people, and by listening to and using their input in the decision-making.

The Environment Agency was clear that it remained their responsibility to make the decisions about the acceptability, or not, of a reactor design but they considered that their decisions would be better informed through the consultation. Their aim was "to build and maintain confidence in our decision-making processes for GDA through our public involvement process, our consultation and our ongoing engagement."⁸

The objectives for the consultation were:

1. To build greater understanding and knowledge among stakeholder participants about the GDA process and the role and responsibilities of the Environment Agency.
2. To provide opportunities for stakeholders who wish to be involved to influence the consultation process to help it best meet their needs.
3. To encourage stakeholder input and responses.
4. To identify lessons to improve future Environment Agency stakeholder consultation activities.

The extent to which these aims and objectives were met is analysed in section 8 of this report.

⁸ *ibid*, paragraph 57.

5 The consultation in practice

This section describes the way the consultation operated in practice. It covers the timing of the consultation, the stakeholder participants involved, the formal written consultation and the seminar, the opportunities to respond, publicity and outreach, updates on the consultation, the consultation responses including analysis and publication, the decision documents and next steps.

5.1 Planning the consultation

Significant time was invested in planning the consultation, and the Environment Agency (and HSE - now ONR) published a comprehensive stakeholder engagement plan in 2010, before the consultation was launched. The plan included nine appendices, each providing information about the planned engagement around the nuclear power station sites that were identified in the draft Nuclear National Policy Statement published by the Department of Energy and Climate Change (DECC).

The stakeholder engagement plan briefly introduced the GDA process, and the aim, scope and timetable of the engagement activities at national and local levels, with guidance on how interested parties could get involved. The different communication and engagement methods for different stakeholders (e.g. academics, international regulators, industry, Non-Governmental Organisations (NGOs), government agencies, local authorities, local communities and members of the public close to existing and potential sites) were outlined, together with a request for stakeholders to suggest additional and alternative ways in which they would like to be involved.

Initial discussions with stakeholders informed the development of these plans. Two events were held for potential nuclear power station operators - one in February 2008 and one in May 2009, including the companies which had submitted nuclear power station designs to be assessed through the GDA. In addition, a seminar was held to identify the key issues around the GDA with representatives of 13 NGOs in June 2008, including how best to engage on these issues. A report of this meeting was published by the regulators.

The communication and engagement activities around the GDA were also based on market research undertaken jointly by the Environment Agency and the ONR in June 2009⁹. Technical advice from engagement specialists was also sought in 2009 on the structure and content of the consultation documents and questions, to make it easy to use in print and online.

The consultation was funded by the companies making applications to gain acceptance of new nuclear reactor designs, but was designed and implemented by the Environment Agency with HSE.

5.2 Summary of timetable for consultation

The overall timetable of main events in the planning and delivery of the consultation was:

- Initial joint working between the Environment Agency and ONR started in 2007. A joint regulators website was launched in September 2007 to provide initial access to information on the reactor designs.
- Planning for the GDA and consultation continued throughout 2007, 2008 and 2009 (as above).

⁹ *ibid*, para 68j

- On 28 June 2010, the main written consultations were launched, with a closing date for input set at 18 October 2010 (16 weeks). Two consultation documents (one for each design) with (the same) 17 questions were published.
- On 6 July 2010, a seminar for around 100 stakeholders was held in Birmingham to reflect on the findings so far and answer queries.
- Following the analysis of the responses to the consultation, a summary of all the responses to the two consultation documents were published in two separate documents in December 2010.
- The two decision documents, including the issue of the interim Statements of Design Acceptability (iSoDAs), were published in December 2011. It had originally been expected that these decision documents would be published in June 2011, but publication was delayed to take account of the findings of the inquiry into the implications of the events at the Fukushima plant in Japan by Mike Weightman, HM Chief Inspector of Nuclear Installations. Weightman published an interim report in mid May and his final report in September 2011.

Further details of all these activities are given below.

5.3 Key consultation activities

The main elements of the consultation were a written consultation (with two separate consultation documents), and a stakeholder seminar in July 2010. The key activities are outlined below.

- Consultation documents. Two detailed consultation documents were published, one for each design: the document on the Westinghouse design was 195 pages, and the AREVA / EDF one was 188 pages. Each consultation document included an executive summary and detailed information about how to input views, with a response form structured around 17 questions. These asked whether respondents had any views or comments on the Agency's preliminary conclusions on:
 1. management systems
 2. the radioactive waste and spent fuel strategy
 3. best available techniques to minimise the production of radioactive waste
 - 4a. best available techniques to minimise the gaseous discharge of radioactive waste
 - 4b. our proposed annual disposal limits
 - 4c. our proposed gaseous quarterly notification levels
 - 5a. best available techniques to minimise the aqueous discharge of radioactive waste
 - 5b. our proposed annual disposal limits
 - 5c. our proposed aqueous quarterly notification levels
 6. solid radioactive waste
 7. spent fuel
 8. monitoring of disposals of radioactive waste
 9. the impact of radioactive discharges
 10. the abstraction of water
 11. discharges of non-radioactive substances to water
 12. pollution prevention for non-radioactive substances
 13. Environmental Permitting Regulations 2010 (EPR 10) Schedule 1 activities
 14. non-radioactive waste
 15. Control of Major Accident Hazards (COMAH) substances
 16. the acceptability of the design
 17. Do you have any overall views or comments to make on our assessment, not covered by previous questions?

The consultation documents were published on the Agency's website, the joint regulators' website and hard copies were also available, including Welsh bilingual versions. The consultation documents also included a draft interim statement of design acceptability (iSoDA) based on the Agency's initial view (before the consultation).

A series of detailed technical assessment reports were also published on the website and a non-technical summary briefing note was produced for members of the public.

- **Opportunities to respond to the consultation.** Potential respondents to the consultation were encouraged to make their comments online, using the online version of the two documents and responding to the specific questions. Online comments required respondents to register and to choose a password to give them access. About 45% responded using this online approach.

It was also possible to respond to the consultation by downloading and using the response form, completing and returning that by email or post. In addition, responses not using the form could be sent by email, letter or fax.

- **Joint regulators website.** A joint website was established by the Environment Agency and the ONR in September 2007, to enable access to information on this and on the reactor developers' websites about the reactor designs, and to submit comments and receive comments from the reactor designers. When the consultation was launched, all the consultation and supporting documents were available on the website, as well as the opportunity to answer the 17 questions online.
- **Publicity and outreach.** There was extensive publicity around the launch of the consultation, including:
 - Direct email contact to announce the consultation was made with over 300 individuals and organisations on Environment Agency databases both nationally and locally where sites were proposed. The databases included organisations and individuals from parish and town councils, NGOs and local community organisations, professional institutions and trade unions, energy companies and reactor developers. Two email prompts were sent to remind people when the deadline for input was approaching.
 - Direct contact was also made with MPs, MEPs and Welsh AMs, as well as with key academics and trade unions.
 - Information was also provided on request to others.
 - Advertisements were placed in two newspapers (one daily and one weekly) in each of the areas around the potential new build sites identified in DECC's draft Nuclear National Policy Statement.
 - Press releases were sent to national, regional and local media, which led to coverage in newspapers, radio, television and online.
 - A poster advertising the consultation was sent to 1,798 local authority run libraries in England and Wales, plus 743 public sector management libraries.
 - Where possible, advertisements were placed and editorial coverage gained in local authority magazines around potential new build sites.
 - Documents were made available to be viewed in seven Environment Agency offices around England.

- **Stakeholder seminar.** A one day stakeholder seminar was held in Birmingham on 6 July 2010, attended by around 100 people (including those presenting and observing; no attendance figures or analysis of participants has been made available). The aim of the seminar was "to share the findings so far, respond to queries, gather initial views on the findings and on our ongoing stakeholder engagement process"¹⁰.

The seminar included presentations by the Environment Agency, the HSE, DECC and the Infrastructure Planning Commission (IPC), as well as by the two companies submitting designs to the GDA process. The seminar also included opportunities for stakeholders to discuss the issues among themselves in small table groups (points were recorded by table facilitators), and to put questions to a panel of the speakers. The event was designed and facilitated by an independent facilitator (Icarus Collective). The report of the seminar was published (and participants informed) on 16 September 2010.

- **Other stakeholder engagement events.** Environment Agency staff attended a series of national and local meetings by invitation and by offering to talk about the consultation including with trade unions, existing nuclear reactor site stakeholder groups, academics, local authority and professional bodies.

Agency staff also participated in national nuclear new build seminars and conferences, and in local community consultations run by others (e.g. DECC and potential developers of new reactors) to clarify the Agency role. For example, Agency staff participated in public exhibitions run by EDF to consult the public about proposals to develop a new power station at Hinkley Point in Somerset; these events were held in eight locations and were attended by 1,397 members of the public.

- **Updates on the consultation.** Before, throughout the formal consultation period, and since, the regulators issued quarterly updates to stakeholders via the regulators' joint eBulletin and quarterly reports, published on their joint website. Stakeholders were invited to subscribe to an e-alert system so they would know when new information became available.
- **Consultation responses.** 81 responses were received in total on the consultation documents; slightly more responses (80) were received on the EDF/AREVA design than for the Westinghouse design (65). About 45% responded online.

Almost all respondents commented on both designs; only five organisations commented only on the EDF/AREVA design and one organisation commented only on the Westinghouse design (Westinghouse itself). The remaining difference in the numbers between the two sets of responses is that more members of the public commented on the EDF/AREVA design.

Overall, 54 organisations and 26 members of the public commented on the EDF/AREVA design (one or two organisations sent in more than one response) and 47 organisations and 18 members of the public commented on the Westinghouse design. The names of all organisations providing comments were published in the document summarising the consultation responses (Annex 2 in both documents). The names of members of the public were not published.

Organisational respondents came from seven main categories of stakeholder:

- **Industry:** including the companies proposing the new reactor designs - Westinghouse, AREVA and EDF as well as Horizon Nuclear Power, Scottish Power and RWE NPower
- **Local authorities:** including county, district, parish and town councils as well as the umbrella group Nuclear Free Local Authorities (NFLA)
- **Site stakeholder groups** from existing nuclear power station sites

¹⁰ *ibid*, para 69

- **National NGOs and interest groups:** such as Campaign Against Nuclear Expansion (CANE), Greenpeace, the Low Level Radiation and Health Conference, the Nuclear Consultation Group
- **Local community and residents organisations:** such as Braystones Residents, Parents Concerned About Hinkley, Bradwell for Renewable Energy, Blackwater Against New Nuclear Group (BANNG).
- **Government agencies and other national public bodies:** including the Sea Fish Industry Authority, the Nuclear Decommissioning Authority, Countryside Council for Wales, Health Protection Agency,
- **Others:** including professional bodies such as the Institution for Chemical Engineering and the Nuclear Industry Association.

Individuals responding (categorised as 'members of the public') also clearly came from a wide range of professional backgrounds (including academic and engineering) and offered comments on technical as well as on local socio-economic and environmental issues.

- **After the consultation.** All responses to the consultation were acknowledged but further correspondence was not undertaken.
- **Analysis of consultation responses.** The GDA team reviewed each response received and grouped them in terms of the key issue covered; some were standalone and were grouped separately. Different members of the team then analysed groups of responses relevant to their areas of expertise, considering the content and drafting responses.

Each response received was given a number. A list was given in the decision documents (Annex 7) of all responses to the consultation by name and number, so respondents could find where in the document their comments had been dealt with.

Where issues in responses were seen to fall outside the Environment Agency's responsibilities, they were passed to the appropriate regulator, government department or public body. Responses that were beyond the scope of the GDA and the Agency's remit were summarised in an Annex (8) to the decision documents, together with an explanation of why these were not being considered at this point. These included site specific issues; planning; the development of the Geological Disposal Facility for radioactive waste; safety, security and transport issues.

Some responses to the consultation were about the consultation process itself (including some of those mentioned above as outside the scope of the GDA), and some of these are identified and addressed in this evaluation report.

- **Publication of consultation responses.** The summaries of consultation responses on the two designs were published in two separate documents in December 2010. These documents showed comments under each of the 17 questions, and also explained what was expected to happen next in the GDA consultation and decision making process. Each respondent had been allocated a number (e.g. GDA 38), and the name of each organisation (or 'member of the public') was shown next to their comment. These were also lengthy documents: the EDF/AREVA design consultation response summary ran to 136 pages; the Westinghouse one to 112 pages.
- **Taking the decision.** The Environment Agency made it clear that the responses to the consultation would be taken into account in their decision making. They stated "Before this consultation, we did not make any final decisions, and did not do so until after we had carefully considered all the responses"¹¹.

¹¹ *ibid*, para 60

- **Publication of the decision documents.** Two separate decision documents were published by the Environment Agency on 14 December 2011. As noted above, these decision documents were delayed (from the expected publication date of June 2011) to incorporate any lessons from the inquiry into the implications of the Fukushima incident in 2011. Again, these were large documents: the EDF/AREVA document was 263 pages; the Westinghouse one 261 pages.

An overall two-page summary of the decisions was also produced, as well as an eight page summary of the conclusions on each design.

These documents explained that the Environment Agency has issued interim Statements of Design Acceptability (iSoDAs) for both reactor designs and has said they are content with the environmental aspects of both designs.

The Office for Nuclear Regulation (ONR) also announced that it was content with the safety and security aspects of both designs and also issued an interim Design Acceptance Confirmation (DAC) for each design.

Both the Environment Agency and the ONR decisions are subject to two 'GDA Issues', which are essentially caveats to the approvals (the ONR has a number of additional GDA issues for each design related to nuclear safety matters). For the Environment Agency, the two GDA Issues for the EDF/AREVA design are as follows (directly quoted from the decision document):

- Provide a consolidated Final GDA Submission, including agreed design change for the UK EPR. The Issue reflects that EDF and AREVA will need to continue to control changes to the GDA submission documents, resulting from the management of possible changes to the design, until the issue of final SoDA. Design changes are also possible from resolution of the GDA Issues identified by ONR.
- Consider and action plans to address the lessons learned from the Fukushima Event

The two GDA Issues for the Westinghouse design are as follows:

- Westinghouse to submit a safety case to support the GDA Design Reference and then to control, maintain and develop the GDA submission documentation, and deliver final consolidated versions of these as the key references to any DAC/SoDA the Regulators may issue at the end of GDA. Design changes are also possible from resolution of the GDA Issues identified by ONR.
- Consider and action plans to address the lessons learned from the Fukushima Event.

The decision on the EDF/AREVA design also identified 18 assessment findings, which operators are expected to address during the detailed design, procurement, construction or commissioning phase of any new build project. The decision on the Westinghouse design identified 12 assessment findings.

These 'assessment findings' cover issues such as the requirement for operators to demonstrate evidence during the detailed design phase that the proposed specific techniques for preventing and/or minimising the creation of Low Level and Intermediate Level Waste (LLW) and Intermediate Level Waste (ILW) represent Best Available Technology (BAT), and that proposals are needed for techniques for the interim storage of spent fuel.

- **Dissemination of the decision documents.** There were extensive activities to ensure wide awareness of the publication of the decision documents, mainly to signpost interested parties to the Environment Agency's website on which the documents were available. Activities included writing directly to all consultation respondents, all stakeholders on

the national GDA stakeholder database as well as local stakeholders, held a press conference and issued press releases, sent posters to libraries stating where copies of decision documents were available (other than online), used social media including Twitter to help raise awareness. In addition, the Agency offered face to face briefings to Site Stakeholder Groups and Local Community Liaison Councils around existing nuclear sites and nuclear new build fora, and provided an update at the DECC / NGO nuclear new build forum meeting.

- **Next steps.** The two GDA Issues identified by the regulators require both companies to carry out further work, providing the regulators with further information and resolving certain technical issues. Both the companies have proposed resolution plans to address the Issues, and the Agency and ONR consider those plans credible.

When these issues have been addressed to the regulators' satisfaction, the 'interim status' of the decisions will be reviewed and a final Statement of Design Acceptance (SoDA) and Design Acceptance Confirmation (DAC) will be issued. The regulators expect that, even after these decisions are issued, the design and safety case will continue to evolve as the detailed design progresses and site-specific applications are developed.

In reviewing the additional information required from the companies, the regulators considered whether it should be made available to consultees so they had an opportunity to consider it before the final decision is made. They "concluded that the additional information was not significant enough to require further consultation"¹², although they noted that some matters would be subject to further consultation at the site-specific permitting stage.

Beyond the completion of the GDA process, the Environment Agency has a role at the site-specific stage to consider applications for environmental permits to cover various aspects of site preparation, construction, operation and eventual decommissioning.

¹² *ibid*, para 83

6 Meeting standards of good practice

The Environment Agency stated throughout the consultation documents that they were running this consultation in accordance with the criteria set out in the Government's Code of Practice on Consultation¹³. The seven consultation criteria in the Code are as follows:

1. **When to consult.** Formal consultation should take place at a stage when there is scope to influence the policy outcome.
2. **Duration of consultation exercises.** Consultations should normally last for at least 12 weeks with consideration given to longer timescales where feasible and sensible.
3. **Clarity of scope and impact.** Consultation documents should be clear about the consultation process, what is being proposed, the scope to influence and the expected costs and benefits of the proposals.
4. **Accessibility of consultation exercises.** Consultation exercises should be designed to be accessible to, and clearly targeted at, those people the exercise is intended to reach.
5. **The burden of consultation.** Keeping the burden of consultation to a minimum is essential if consultations are to be effective and if consultees' buy-in to the process is to be obtained.
6. **Responsiveness of consultation exercises.** Consultation responses should be analysed carefully and clear feedback should be provided to participants following the consultation.
7. **Capacity to consult.** Officials running consultations should seek guidance in how to run an effective consultation exercise and share what they have learned from the experience.

This section reviews the GDA consultation activities in the light of these criteria (and the more detailed guidance provided in the full Code), drawing on feedback from participants in the various activities collated in the form of questionnaire and survey responses, comments to the main consultation, and interviews with a sample of stakeholders after the GDA decisions were announced in December 2011.

6.1 When to consult

The key elements of Criterion 1 in the Code, on when to consult, relevant to this consultation, are that:

- the consultation should take place at a time when there is scope to influence the decision
- the consulting body is ready to put sufficient information into the public domain to enable an effective and informed dialogue on the issues being consulted on, and that
- the consulting body may decide that more than one consultation exercise is appropriate if, for example, a more detailed look is needed at specific elements of the policy.

Each of these is dealt with in detail below.

¹³ *Code of Practice on Consultation*. Cabinet Office Better Regulation Executive, London, 2004.

6.1.1 The right time to influence the decision

There are two elements to this issue: whether the consultation was at the right time to influence the decisions on the GDA process, and how the consultation fitted in with the overall decision making process around the development of new nuclear reactors.

On the first, all the evidence from the evaluation shows that the consultation was at the right time in the GDA process. Feedback from the Environment Agency makes clear that the timing of the consultation allowed Agency staff sufficient time to receive responses, fully analyse them and incorporate comments into the final decision documents. This allowed the comments to inform the GDA decisions.

There was no doubt among stakeholder respondents to the survey that it was vital to consult stakeholders and the public about these issues. 92% of evaluation respondents thought it was important for the Environment Agency to consult stakeholders and the public on these sorts of issues; 81% of these thought it was 'very important'. Comments included:

"The safe operation of nuclear reactors is a paramount consideration as the effect on the surrounding environment could be catastrophic." (survey respondent)

Not everyone agreed, although these were very much minority views. A couple of respondents thought that the public were not necessarily the most important parties to consult:

"I think the Agency should pay more attention to the views of well-informed scientists and engineers, and not merely give such people equal weight with the chairpersons of the average Parish Council. That is Political Correctness gone mad." (survey respondent)

"It would be more effective if the Environment Agency carried out its own research by commissioning reports from independent experts, free from government pressure via committees containing lobbyists for the nuclear industry." (survey respondent)

Feedback also suggests that the different elements of the consultation activities were largely at the right time within the overall consultation. 83% of the questionnaire respondents at the July 2010 seminar agreed that the seminar was held at the right time in the consultation.

However, there were some comments that the seminar was held just a little too close to the publication of the consultation documents, which made it difficult for stakeholders to have studied the documents in detail. A little extra time after the publication date (even one extra week) would have been helpful.

On the second issue of how the consultation fitted in with the overall decision making process around the development of new nuclear reactors there were some criticisms from stakeholders. For example, Greenpeace, in their evidence to the main consultation, suggested that it was not clear how any advice issued from the GDA processes might impact on future licensing and permitting processes by the Environment Agency (EA) and/or the HSE's Nuclear Installations Inspectorate (NII) or fit in with other processes such as the revision of the Nuclear National Policy Statement and work by the Infrastructure Planning Commission (IPC). They asked that the EA should make clear how this particular (GDA) process fits in with other regulatory, planning and decision making processes. In response, the EA referred to the overall DECC timeline for the development of new nuclear power stations.

More generally, one respondent to the evaluation pointed out that:

"There are endless consultations on the related issues of decommissioning, new build and waste management and it is impossible to keep track of them all" (evaluation respondent)

The EA's response in the decision documents answers the question of how the GDA fits in with other regulatory, planning and decision making processes, and provides a link to the DECC timeline. However, the DECC timeline does not give any information about future opportunities for engagement within that overall decision making process.

There is always a danger that any opportunity for direct dialogue between decision makers and stakeholders and the public will be used to raise all sorts of issues not directly relevant to the specific consultation. This is particularly likely to happen when it is not clear when else questions and comments can be made on other issues (e.g. site specific issues and planning issues). That lack of clarity will encourage people will take any opportunity to make their points, whether or not they are strictly relevant to the matter in hand. That happened in this case.

The EA did deal with these 'other' issues effectively¹⁴: they stated that they referred issues to the relevant government body, and collated the issues together (in annexes to the decision document) so that they were not lost and could be dealt with at relevant points in the future. This is good practice.

Taking that good practice even further, however, the EA could ensure that all relevant bodies provide a clear picture of how stakeholders and the public can participate in the overall decision making process at later stages, and which issues will be dealt with at which stages, so that the appropriate input can be made at the appropriate time. This would reduce the likelihood that people will simply send in all comments to all consultations, irrespective of their focus, and reduce the pressure on stakeholders and the public to comment on all consultations - even highly technical consultation such as the GDA process.

6.1.2 Sufficient information is ready

The issue from the Code raised here is whether the consulting body is ready to put sufficient information into the public domain to enable an effective and informed dialogue on the issues being consulted on. This relates to the previous point: when is the right point in the decision making process to gain input through public and stakeholder consultation.

The amount and type of information provided is dealt with in more depth in section 6.4.2 but the relevant issue here is related to the point in the decision making process at which information is provided. In general, feedback from stakeholders was that the information was sufficient to enable an effective and informed consultation on the GDA. It is certainly clear that very extensive and detailed information was provided to support the consultation, in the two very detailed consultation papers plus supporting documents (see section 5.3 for details).

Here again, however, stakeholders raised concerns in their responses to the main consultation. The concerns considered here were not about the quality or quantity of the information provided, but that the information was not the final data to be used for the decisions. For example:

"A number of documents which are critical to the assessment of nuclear new build are incomplete or subject to further consideration ... We are now receiving an incomplete statement on the design of the proposed reactors. This is unsatisfactory." (CANE)

CANE go on to express concern that the GDA process is too narrow, focusing on limited elements of the design and construction in isolation from a more holistic process:

"In engineering terms it is regarded as dangerous to make assumptions about the interdependency of parts of systems, so we do wonder what advantage is achieved by taking significant parts of the design from a more holistic process. We appreciate to eat an elephant you need to cut it into smaller pieces, but once this is done you no longer have an elephant."

¹⁴ ibid, para 86d

They go on to say:

"All of these factors make the issue of these documents at this time irrelevant to the communities having to live through the threat of new nuclear power. We call upon the EA and its partners to accept that these papers are incomplete and not needed at this time and to withdraw them from consultation until other documents which affect their completeness and relevance are available."

While this is very much a minority view across all consultation respondents, it is not a unique view (e.g. BANNING and the Nuclear Consultation Group make similar points). While far more respondents felt there was too much rather than insufficient information, the apparent incompleteness of the data provided is an important point in relation to the Code.

It was made clear on publication that the information provided in the consultation documents were 'work in progress', and the EA has accepted that significantly more work needs to be done to complete the GDA (hence the two 'GDA issues' or caveats raised on each design). However, the EA has concluded that further consultation is not required on the next stages of information provision:

"When reviewing this additional information, we have also considered whether it should be made available to consultees so that they have an opportunity to consider it before our decision is made. We concluded that the additional information was not significant enough to require further consultation. In coming to this conclusion, we note that some matters will be subject to further consultation at the site-specific permitting stage (for example, site-specific discharge limit setting)¹⁵."

Given the concern among stakeholders about the limits to the information provided to date, it may be that further consideration be given to making this information available, to inform any consultations at future stages in the process. This may help close off this consultation phase on the GDA more effectively, and provide the clarity and certainty sought by developers through the GDA process.

6.1.3 Further consultation

The issues raised in 6.1.2 above also relate to the final point identified under this Criterion 1 in the Code: that "the consulting body may decide that more than one consultation exercise is appropriate if, for example, a more detailed look is needed at specific elements of the policy". While another major consultation on the GDA process is unlikely to be necessary or desirable, it may be that the final stages of information provision around this consultation could be linked to the next stage of consultation in the overall process for new nuclear power.

6.2 Duration of consultation

The key elements of Criterion 2 in the Code, on duration, relevant to this consultation, are that:

- the consultation should normally last for at least 12 weeks
- it is important to raise awareness of the exercise among those who are likely to be interested.

These are dealt with below.

6.2.1 Minimum 12 weeks

In this case, the consultation lasted beyond the 12 week minimum, with the formal consultation period lasting 16 weeks. In addition, several stakeholder groups (e.g. academics,

¹⁵ *ibid*, para 83

NGOs, developers, unions) were given advance information about the consultation so that they could plan their responses early.

Feedback from participant interviewees suggests that the overall timescale of the consultation was helpful, and the timing was identified as a problem for only one or two among all the evaluation respondents. A couple of interviewees felt that the timescale was too slow, and suggested that an earlier update with interim GDA findings could have been produced rather than waiting for the final Fukushima report. However, the length of the consultation period was seen as an advantage by others; for example:

"I think this type of consultation is very useful. It is important to build in sufficient time before these kinds of things happen to allow this kind of process to occur beforehand and give people enough time to be informed and input. Some people might say it was a longwinded process but it is important to give enough time to this kind of thing." (participant interviewee)

Although it was a very small minority, there was also some feedback that some participants would have liked a little more time, particularly those engaging with the issues on a voluntary basis (rather than as part of their paid work). For example:

"BUT it [the EA] needs to improve the manner in which it does it [consultation] - give consideration to making the information accessible and time for working members of the public to follow and participate in the process." (survey respondent)

Overall, however, the duration of the consultation was appropriate.

6.2.2 Raising awareness

Criterion 2 of the Code notes that "it is important to raise awareness of the exercise among those who are likely to be interested". In this case, extensive efforts were made to make sure that all those who were likely to be interested knew the consultation was happening and how they could participate (see section 5.3). This was done through websites, publicity and outreach activities and other stakeholder engagement activities run by the EA and through EA staff taking part in activities run by others.

More publicity can always be done, and some stakeholders suggested even more media activity could have been done to advertise and publicise such consultations especially at local level, around existing nuclear sites (including more in depth and face-to-face engagement with local people) but also more widely.

Reviewing all the media and other communications and outreach activities, this criterion was fully met.

6.3 Clarity of scope and impact

The key elements of Criterion 3 in the Code, on clarity of scope and impact, relevant to this consultation, are that:

- there should be clarity about the consultation process: how it will be run and what has happened before and will happen afterwards
- the scope of the exercise should be clear in terms of where there is room to influence decision making, and where decisions have already been made
- estimates of the costs and benefits of the options under consideration should be provided
- there should be clarity about which groups or sectors would be affected by the decision, and any that might be disproportionately affected by the proposals

- the questions in the consultation should be clear, and should include open as well as closed questions
- consideration should be given to offering consultees the opportunity to express views on related issues not specifically addressed in the questions.

Each of these is reviewed in turn below.

6.3.1 Clarity about the consultation process

There are two main elements to this point: clarity about how each element of the consultation process is run, and clarity about what has happened before and will happen afterwards.

In terms of clarity about the consultation process, the evaluation findings show that there was a reasonable degree of clarity about the purpose of the consultation:

- 17 (47%) of survey respondents were clear about the purpose of the consultation, plus another 8 (22%) were 'partially' clear; so 69% were clear to some extent. Only 3 (8%) said they were not clear. However, although very few said they were not clear about the purpose of the consultation, for less than half to answer 'yes' to this question is not quite as strong a sense of clarity as one would expect from stakeholders.

In answer to a similar question, 6 of the 8 stakeholder interviewees for the evaluation said they were clear about what the stakeholder involvement in the consultation was designed to achieve, and only one said they were not clear. This is quite a shift over time and it may be that, as the process unfolded and further information was provided, stakeholders became clearer about the purpose of the consultation.

There was much greater clarity about the purpose of the July 2010 seminar. The feedback from those stakeholders was as follows:

- 39 out of 42 (93%) questionnaire respondents agreed they were clear about the objectives of the seminar; 21 (50%) of those agreed 'strongly'.
- 35 (83%) agreed they were clear about the way the outputs from the seminar would be used; of which 8 (19%) agreed 'strongly'.
- 28 (66%) agreed they understood the future opportunities for engagement in nuclear new build; 6 (14%) of these agreed strongly.
- 41 (98%) agreed they understood the next steps in the GDA and site permitting processes; of which 7 (17%) agreed strongly.

These figures show that the objectives of the seminar were very clear and that how the outputs from the seminar would be used was clear. In addition, there was a very high level of understanding of the next steps in the GDA and site permitting processes, and a good degree of clarity about future opportunities for engagement as the process continued, with two-thirds being clear about those opportunities. These figures are certainly enough to suggest that this element of Criterion 2 was met.

6.3.2 Clarity about the scope of influence

This element is about the extent to which the scope of the consultation is clear in terms of where there is room to influence decision making. The feedback was as follows:

- 18 of the 42 seminar questionnaire respondents (43%) agreed they were clear about the level of influence of stakeholders on the Environment Agency's plans; of which only 2 (5%) agreed 'strongly'.

- 30 (72%) agreed that the Environment Agency would listen to and consider stakeholder views; of these 7 (17%) agreed strongly.

These findings are interesting in that there was not a very high level of clarity among seminar participants about what influence stakeholders would have (less than half were clear about this), but a high level of trust that the Agency would consider stakeholder views - nearly three quarters agreed that this would happen. This suggests a higher level of trust in the Agency than clarity about what would happen. This can be seen as a hopeful view at the beginning of the consultation process.

The feedback from survey respondents was very similar in terms of positive feedback about the EA seeking and welcoming views, but here there were fairly low expectations that stakeholder input would make much difference. The findings were:

- 20 survey respondents out of 36 (56%) agreed that their views were actively sought and welcomed during the consultation. 4 felt they couldn't say, and 8 disagreed that this was the case.
- 9 respondents (25%) agreed that they had been listened to but 10 (28%) disagreed, and 13 (36%) felt they couldn't say.
- 10 respondents (28%) agreed that their input would inform EA decisions on this issue, but the same number (10 / 28%) disagreed, and 12 (33%) felt they couldn't say.
- 9 (25%) agreed that they had been able to influence the way the EA consults, but 10 (28%) disagreed, and 13 (36%) felt they couldn't say.

These figures suggest quite low levels of clarity about influence, with about one third in each of the last three questions feeling they couldn't say what influence they would have. There was also a very even split between those that felt they could have an influence, and those that didn't.

Overall, only about one quarter of survey respondents were positive about the influence they felt they might have on the EA decisions, even about how consultations work. In comments following the main questions, the most common explanation for the lack of optimism about influence (although this was from only 5 respondents) was that the EA had already made up their minds and would ignore input if it did not match preconceived assumptions.

6.3.3 Estimates of the costs and benefits

The Code suggests that "estimates of the costs and benefits of the options under consideration should normally be provided". In this case, the consultation was not on 'options' and the consultation documents did not provide any information about the costs and benefits of the designs being considered because "The issue of finance is not considered to be within the scope of GDA"¹⁶.

Questions and comments about the relative costs and benefits of the two designs were raised in passing in only one response to the main consultation (in an assumption that the cost and benefits may be the same, and the only issue therefore was speed of development), but not otherwise. In addition, the evaluation research found very little evidence that this was an issue in terms of information that was required but missing from that provided (although one respondent did raise the issue of there being no consideration of any areas where environmental or safety margins may be in conflict with commercial efficiency). The evaluation interviews did briefly explore the issue of the costs and benefits of the consultation itself, asking stakeholders whether they thought the exercise was money well spent, or not. This is covered in section 7.3 below.

¹⁶ ibid, para 218

6.3.4 Clarity about those affected

This element of Criterion 3 is to encourage clarity about which groups and sectors would be affected by the issues in the consultation, especially those who might be affected disproportionately, and to ensure that these impacts are considered.

It is often part of the basic definition of a stakeholder that they can affect or be affected by the issue under consideration. Ensuring that the appropriate stakeholders are involved and able to give their views about how they (and their interests) would be affected should therefore address this criterion. In this consultation, there was an appropriate mix of stakeholders, some whose knowledge and experience could affect the issue, but also some (including those living close to existing and potential new nuclear sites), who could very definitely be affected by the development of new nuclear reactors.

As can be seen in section 5.3, all these groups were invited to participate in the consultation, extensive efforts were made to publicise the consultation and reach all those who might have an interest, and all these groups were represented in responses received. The issues of the accessibility of the consultation are also covered in section 6.4.

The only negative feedback about a good mix of stakeholders were in relation to the July 2010 seminar. Most of the respondents felt that the right stakeholder interests were represented at the seminar, and the Environment Agency had taken steps to achieve a balance between the various interests. However, there were some comments about the seminar being rather industry-dominated, and that it would have been good if more NGOs and local authorities had attended.

6.3.5 Clear questions

This element of Criterion 3 is to ensure that the questions in the consultation are clear, and should include open as well as closed questions. In this consultation, all the questions were open questions, inviting comments on each issue (rather than tick box answers).

The evaluation survey included a specific question on whether the consultation questions were clear, which showed:

- 13 of the 36 respondents to the survey (36%) said 'yes', the questions were clear, and a further 11 (31%) said the questions were 'partially' clear; so 24 (67%) felt the questions were fairly clear. 4 (11%) felt the questions were not clear and 3 couldn't say.
- Comments on this survey question showed that a couple of respondents did not follow the questions, and simply sent an overall response; and a couple said that the questions were not the 'right ones' and did not relate to the issues on which they wanted to comment. A couple said that the questions were biased and too narrow.
- Overall, 24 of the 36 respondents (67%) said that the questions were completely or partially clear, which is a reasonably good achievement given the technical nature of the consultation. Although not ideal that only about one third unequivocally answered 'yes' to this question, two-thirds felt the questions were at least partially clear.

There is not sufficient information available to establish exactly how many of the 81 responses overall followed the questions. The 45% who responded online did follow the questions but it is unclear how many of the other responses used the questions. If all those who did not respond online did not follow the questions, that may suggest that the questions were not comprehensive enough to cover all the issues of concern to stakeholders.

Given the lack of complete clarity over the questions, and some feedback that the questions did not cover all the issues of concern to stakeholders, it might be helpful in future to involve stakeholders in identifying the key issues on which questions should be framed; perhaps a

small representative sample of stakeholders sitting on an oversight group as part of the planning of the consultation.

6.3.6 Opportunity to raise related issues

This element of the Criterion is about consideration being given to offering consultees the opportunity to express views on related issues not specifically addressed in the questions.

In this consultation, 16 of the 17 questions were very specific to the technical specifications of the two designs (e.g. the radioactive waste and spent fuel strategy or the abstraction of water); the 17th question was a more open question, asking "Do you have any overall views or comments to make on our assessment, not covered by previous questions?". This was the opportunity for respondents to "express views on related issues not specifically addressed in the [other] questions".

Respondents did take the opportunity to raise issues in response to Q17 that were not covered elsewhere, including comments on the consultation itself. The Environment Agency responded to these in the final decision documents, both in the introductory section (2.5.3) which describes the consultation and responds to comments from respondents, and also in Annex 8 which summarises the issues raised by respondents that did not directly concern GDA and includes the Agency's responses.

Issues covered in Annex 8 in (both) the decision documents included issues about more than one reactor on sites, regulatory justification, the relationship between GDA and planning, concerns about radioactive waste and spent fuel, and concerns about the interim storage of spent fuel and waste on site as well as the impacts of climate change, radiation dose limits, transporting waste and fuel, and incinerating core graphite.

While these were not by any means all the 'other' comments raised by respondents (which also included socio-economic issues, aesthetics and landscape impacts), these were seen to be the issues raised (not covered by specific questions) of most relevance to the Environment Agency's responsibilities and therefore to which they could provide a response.

The Agency also undertook to pass on issues that were outside their own responsibilities to the appropriate regulator, government department or public body. This is good practice.

It is, however, important to note that there were concerns among stakeholders that this was their one opportunity to comment on the generic development of nuclear power stations rather than specific designs of nuclear reactors. Greenpeace pointed out, in its response to the main consultation, that this consultation was "the first and last of its kind within the GDA process". This could therefore have been seen as the only opportunity for comment on the design and development of nuclear power stations before the focus on site specific issues - at which point generic issues can no longer be raised and considered. The gap between the generic and the site specific was therefore not entirely clear.

It may be that one of the most valuable results from the consultation is that it has provided a very clear indication of the key concerns and questions from stakeholders - from large national NGOs to local groups. The concerns and questions that fitted into the GDA process related to these two specific reactor designs, and that the Environment Agency could respond to, have been very effectively identified and responded to. However, many others, including the still unresolved problem of dealing with the radioactive waste and spent fuel, remain unanswered. It is understandable that some stakeholders saw that this was the final chance for comment on many key issues, and their concerns that resolution of key issues may be deferred to the next stages in the development process on which the engagement opportunities are not clear. There were real concerns about issues falling down the gaps between the different stages of decision making.

These concerns related to the scope of this consultation overall. It focused on two specific designs for nuclear reactors, but there were comments from stakeholders that raised concerns that this separation of design considerations from site issues was a problem. One evaluation survey respondent, clearly sympathetic to the GDA approach, said that his concerns were around:

"the division of approval process from individual site appraisals meant that some important questions, whose answers may depend on context, could be lost in the interfaces between GDA and individual site processes ... The Agency is clearly trying to participate within a constrained policy framework to help secure this. It is to be hoped that this de-coupling of generic design from site specific analysis does not deliver the wrong technologies into the wrong locations"
(survey respondent)

Another evaluation survey respondent made a similar point:

"The distancing of assessing the design as a separate issue and not in conjunction with the aspects of the sites in which they might operate, is short-sighted and unrealistic. Integration of design and site specific environmental issues has been left to the IPC process, in which, those of us who have serious misgivings about the technology being promoted, will be prevented from cross-examining the evidence in support of new nuclear power plants." (survey respondent)

This concern about the narrowness of this consultation, and lack of clarity about future opportunities to engage in future, was echoed by other stakeholders.

It could be a very valuable exercise to identify all key questions raised by respondents to the consultation, and use that to prepare information answering those questions for the next stages of consultation whatever they might be. At present, the same questions seem to be raised over and over again whatever the precise nature of the consultation, causing frustration for those running the consultations as much as for the stakeholders who feel that fundamental issues have still not been addressed. It may also be useful for the Environment Agency to work with other agencies so that these questions can feed into the development of other consultation activities later in the overall decision making process.

6.4 Accessibility of the consultation

The key elements of Criterion 4 in the Code focus on the need for consultation exercises to be designed to be accessible to, and clearly targeted at, those people the exercise is designed to reach. The issues relevant to this consultation, are that:

- interested parties are identified early in the process so that consultation exercises can be designed and targeted accordingly; where consultations need to reach a diverse audience, several approaches may be necessary
- consultation documents should be easy to understand: they should be concise, self-contained and free of jargon
- it is vital to be proactive in disseminating consultation documents, and consideration should be given to how to alert potential consultees (directly or through intermediary bodies)
- thought should be given to alternative versions of the consultation documents (e.g. Braille, an 'easy read' version, translations), and to alternative methods of consultation (e.g. meetings, online tools)
- people should be able to decide easily if a consultation exercise is relevant to them.

These are addressed in detail below.

6.4.1 Accessibility and targeting

This first element within Criterion 4 is that interested parties should be identified early in the process so that consultation exercises can be designed and targeted accordingly and that, where consultations need to reach a diverse audience, several approaches may be necessary.

This consultation did have some difficulties with these issues. It did make extensive efforts to reach as wide an audience as possible, but the content of the consultation was a very specific exercise on the highly technical and detailed design specifications for two types of nuclear reactor. The aim was to "inform the assessment of new nuclear reactors by sharing information with people, and by listening to and using their input in the decision-making". All the evidence suggests that this was a genuine attempt to get as much feedback as possible into this part of the decision-making.

The 'interested parties' identified for this consultation were identified early (which is good practice) and were a very diverse mix. They included industry, local authorities (from parish to county councils), site stakeholder groups (related to existing nuclear sites), national NGOs and interest groups, local community and residents organisations, the general public, government agencies and other public bodies, professional bodies, unions and others. Producing information and consultation processes that are relevant and accessible to all these hugely diverse interests is very challenging indeed.

In this consultation, the emphasis was on a robust decision making process, informed by the best possible stakeholder input, as well as on making the process open and transparent. That suggests an open and wide-ranging process, and that is what the consultation aimed to achieve - and that was largely successful in terms of reaching and involving a very wide range of interests. However, many of the 'interested parties' identified did not necessarily have the knowledge and expertise to comment on these technical issues, nor did they necessarily have particular interest in these technical details. Even those that might be expected to have the knowledge to respond had difficulties. For example, the Nuclear Industry Association said (and made exactly the same point on the Westinghouse design):

"Given their highly technical nature the NIA does not propose to comment on the EA's detailed conclusions, which are more a matter for AREVA as the design vendor and EDF as the utility that would operate the new stations."

If the Nuclear Industry Association feels the consultation is too technical for them to comment on the detail, it is unlikely that a small local residents group will have greater technical expertise or the confidence to give their views.

The Environment Agency did clearly make real efforts to take the consultation out beyond their usual mailing lists and contacts, and responded to numerous requests for face to face meetings with local groups and others to explain the proposals, but that willingness could not overcome the technical nature of the content of the consultation. This has serious implications for the accessibility of the consultation. One respondent to the main consultation (BANNG) pointed out that:

"Given that the decision on design approval is fundamental to the whole future of new nuclear power it is vital that the wider public and especially those communities around the listed sites who are most likely to be affected by the decision are provided with an opportunity to participate fully in the debate and are able to have an input into the decision making process. In our view the consultation process, despite some effort to open it up, has been overly technical, exclusive and not interactive or participative. In consequence nuclear interests enjoy a position of privileged access while the wider public remains uninformed and unaware of the scale and implications (especially for long term waste management) of the proposed reactor designs."
(consultation respondent)

The evidence collected for this evaluation suggests that the charge against the consultation as being neither interactive nor participative is not accurate. However, the other points remain.

Other stakeholders made similar points in their responses to the main consultation such as complaints about:

"The desk-bound nature of this consultation [was a concern], especially considering the wish to involve members of the general public. Having attended the seminar in Birmingham on the reactor designs, and having strongly inputted into the workshop on stakeholder engagement, it is depressing to see a consultation process that is seemingly designed to put off the average member of the public." (consultation respondent)

"The consultation cannot be called a truly public consultation. This is the first of its kind within the GDA process. It overburdens the reader with information and assumes the public will be able to access all relevant documents (as well as the use of computers and printers) as well as a sufficient level of knowledge to interpret the available data. This is an unreasonable assumption." (consultation respondent)

The issue of the technical complexity deterring members of the public from responding was also mentioned by an evaluation interviewee:

"As far as I personally am concerned I could respond to it, but the general public could not and it was not particularly well orientated towards members of the general public ... Although an effort is made by the Environment Agency it is very difficult to engage with the wider public. We felt more could be done." (participant interviewee)

However, another interviewee felt that, although not perfect, this consultation was a great improvement over previous engagement activities:

"Yes. I think ... the GDA has been a huge leap forward. There is actually a process in place for a start, and it has built on things like the BNFL National Dialogue. It has shown willing, and has been an exhaustive process, but it needed to be in order to involve the broad range of interests." (participant interviewee)

The difficulties faced by the public and any voluntary or community bodies in responding to this consultation (e.g. time for people to respond, knowledge and expertise in the technical issues) do clearly disadvantage them in terms of their ability to challenge the proposals, in relation to public and private bodies in which people are paid to participate in these sorts of activities.

Even some local authorities, invited to respond to the consultation, suggested that they did not know why they had been invited to respond in this instance and were at a loss as to what they could say. Similarly, a youth organisation invited to respond welcomed the opportunity for young people to comment on circumstances that affect their lives, but that:

"this consultation is not appropriate for young people ... to put it bluntly I doubt whether an adult would be able to engage with the technical detail so comprehensively spelt out in the documentation. It's my job to 'digest' and re-present information across a whole range of topics / concerns for young people, but I wouldn't know where to start in relation to making this process accessible. I can appreciate the intention in theory i.e. to be transparent and inclusive ... However, with such a technical project I would assume that only a few individuals would have the expertise to make such comments." (individual communication with the Environment Agency)

The July 2010 seminar breakout groups that discussed the consultation itself (covered in the report of the seminar) identified a number of concerns about the process including the need to enable NGOs with resources that allow them to participate.

It is very unfortunate that the genuine willingness of the Environment Agency to open up this consultation process as much as possible to as wide a group of interests as possible has caused such problems. This consultation was not at all a failure of will, but of content and scope, and the information appropriate for that.

The feedback from the evaluation research with those who did not respond to the consultation provides some information to support this. Findings here included:

- The reason given most often for not responding to the consultation was lack of time: 19 of the 57 respondents (33%) mentioned this. For most of those who gave this as their reason, it was simply not enough time. However, for some it was not enough time within the deadline, some referred to not enough time or resources, and some specifically mentioned not enough time given the specific nature of the consultation. Comments included:

"The paperwork volume (considerable) and lack of time" (evaluation respondent)

- The second most frequently mentioned reason for not responding was that the consultation was not relevant to their knowledge, skills or organisation: they did not have the technical knowledge or expertise to respond. This was mentioned by 15 respondents (26%).

"The GDA process is/was highly technical to comprehend, hardly making it user-friendly. There was a lot of documentation which was indexed or collate from a technical perspective rather than from a lay person's view point." (evaluation respondent)

- 13 respondents said that they had in fact taken part in the consultation: 5 said they had attended the July seminar and given their views there, and others mentioned that they had responded through their organisation rather than individually and in other ways.
- 6 (11%) made comments that clearly reflected a lack of trust in the process - some they felt that no-one would listen and any comments they made would be ignored, some talked about having little faith in these consultations and one was clear that they felt that to take part would mean they had been co-opted into a process they did not want to support. For some of these, the overall process felt like an unstoppable juggernaut and that nothing that people could say would make any difference.
- Some (3) mentioned consultation fatigue as a result of an overload of consultations around this issue.

This does not mean that evaluation respondents were unsympathetic to the Environment Agency role in this. One said:

"Generally, the Environment Agency, if it is genuinely neutral, is between a rock and a hard place, condemned by environmentalists and human rights groups if you approve the process and condemned by Government and Industry if you don't" (evaluation respondent)

However, some respondents (including the one making the comment above) did conclude that the Environment Agency is seen as "a partner rather than a challenge to the nuclear companies".

The Environment Agency response, in the decisions documents, to the criticisms about the very large amount of very technical information given in the consultation document was:

"We acknowledge this is a technical consultation, and there is a lot of information. However, we aim to write our documents in a clear way with a format that allows people to access those elements that they are interested in. Our Consultation Document said we would do our best to respond positively to requests to attend meetings and other events to explain our findings, and where we received requests we have been able to respond. Consultees also ranged widely from those with very little knowledge of the subject to experts in their field. Therefore, the documentation was also tiered from short eight page summary documents, to the Consultation Document, supporting assessment reports and ultimately with links to the designs on the RPs websites."

It is clear from the range of engagement activities that the Agency undertook that real efforts were made to address these issues, but even the shorter documents were very technical and, while it is true that the range of consultees was very wide, they were not all able to respond in the same ways. In this particular consultation, therefore, the ambition to reach out to very diverse audiences was not entirely matched by the information provided. These issues are considered in more detail in section 6.4.2 below on the consultation document.

It is important, here, to also consider the July 2010 seminar, which was the main engagement activity undertaken by the Agency beyond the consultation documents and specific meetings with stakeholder groups. The seminar attracted around 100 participants and was generally felt to be a useful and worthwhile exercise although with some elements that could be improved in future events.

Some of the feedback from the evaluation questionnaire distributed on the day has been summarised earlier in relation to specific issues; more general feedback on the process of the seminar is shown below. As mentioned above, this feedback is based on a response rate of 42%, a good response rate for research purposes. There was an option in the questionnaire for respondents to say they neither agreed nor disagreed, and these figures are not always included in this summary so the percentages do not always total 100%, plus not every respondent answered every question. See Annex 1 for a full analysis of these questionnaire results.

- **Overall**, 40 of the 42 questionnaire respondents (95%) agreed that the seminar was useful and worthwhile. Not one respondent disagreed. This is a high level of positive feedback from this type of event.
- **Sharing views**. 38 of 42 (90%) agreed that they were able to engage with others and share their views. Again, not one respondent disagreed.
- **Coverage of issues**. 35 of 42 (83%) agreed that, given the objectives, all the main issues were covered in the seminar. Again, not one disagreed.
- **Questions answered**. 23 (55%) agreed that their questions were fully answered by the seminar, although only 3 (7%) agreed strongly and 10 (22%) disagreed. Comments included that the plenary process at the end was overly constrained and some important questions were not asked. Questions put to the panel at the end had been collected throughout the event, and the most 'popular' questions were put to the panel. One comment on this approach was that it meant that the "questions became distorted", and another that "some important questions were not asked". Nevertheless, the Q & A session was identified by some respondents as one of the most useful elements of the seminar, and others were glad of the time given to write down questions between presentations.
- **Enough time for discussion**. 28 (67%) agreed that, given the objectives, there was enough time to discuss the issues properly, although only 2 agreed 'strongly'. 11 (26%) disagreed. The time for discussion was clearly an issue, including more time needed for round table and breakout discussions. The most common answer to a question about the 'least useful' aspects of the seminar was the lack of time for discussion.

The seminar was carefully structured to provide time for discussion in small groups by participants: 5 minute slots were allocated after each set of presentations for people to talk briefly in their table groups and write down questions; 65 minutes was allocated for discussions in breakout groups, and the final session was a 60 minute question and answer session with a panel made up of the speakers. At a total of 150 minutes, this was a larger proportion of the time spent on table discussions during the seminar than was spent in formal presentations (110 minutes). Nevertheless, participants would clearly have appreciated more time for discussion. Comments from evaluation respondents included:

"Far too much time was spent in presentations and almost none on harvesting discussion from attendees" (evaluation respondent)

"Table discussions most useful - would consider extending these to 10 minutes" (questionnaire respondent)

The questions raised in the final Q & A session and the discussion in the breakout groups were all recorded, and reported in the report of the seminar published in September 2010. However, there was feedback from some evaluation respondents who had not taken part in the written consultation that they had used the seminar as their sole method of feeding in their views, whereas it seems that the expectation from the seminar organisers was that seminar participants would also provide detailed views in writing through the formal written consultation. This slight misunderstanding of the role of the seminar may have resulted in fewer formal written responses and also to frustration among a few participants that insufficient attention had been given to developing and recording views at the seminar event.

The value of these discussions to stakeholder participants is reflected in responses to a questionnaire question asking what had been most useful. By far the most common response was the information exchange, table discussion and breakout group aspects. Several did mention the information provided and presentations but it was clearly the discussion that had provided the most value to them.

- **Information to inform input to the seminar.** 27 of the 42 respondents (64%) agreed that there was enough information provided to inform stakeholder input to the seminar; only 3 respondents (7%) agreed strongly. Although only 4 respondents did not agree there was enough information, 11 (25%) neither agreed nor disagreed, showing some uncertainty about the information provided. Comments included that people would have preferred the information earlier: the consultation documents were only published the week before, so they found there was little time to digest the documents.

It is also important to note here the feedback on the extent to which participants felt they could express their views fully in the consultation. This was a question on this issue in the evaluation survey to respondents to the consultation, and the findings were:

- 20 of the 36 survey respondents (56%) said 'yes', they were able to express their views fully; a further 7 (19%) said they felt they were 'partially' able to do this: a total of 27 (75%) who felt they could express their views.
- 5 of the 36 respondents (14%) said they could not express their views fully.

In summary, therefore, over half the survey respondents (56%) did feel they could express their views fully, and only 14% felt they could not. The reasons given for not being able to respond fully were that the consultation was too technical and outside their expertise, and that they only felt able to fully respond by writing a letter / email rather than responding to the questions. Although this may not have been their ideal situation, these respondents at least still felt able to express their views.

6.4.2 Consultation documents

This element of Criterion 4 states that "consultation documents should be easy to understand: they should be concise, self-contained and free of jargon". This is an area where there were some significant problems in this consultation.

The Environment Agency did publish a two-page non-technical summary, which was essentially an introduction to the GDA process and the consultation rather than covering the key issues. As outlined in section 5.3, the main consultation documents were lengthy (each over 180 pages) and highly technical.

Some of the problems with the highly technical and detailed information in the two main consultation documents (as well as the supporting documents) have already been identified above. There is some relevant feedback from respondents to the evaluation survey:

- 12 of the 36 survey respondents (33%) agreed that there was enough information for them to contribute fully to the consultation. However, 13 (36%) disagreed and 11% said they couldn't say.
- 12 respondents (33%) also agreed that the relevant information was provided for them to contribute fully. Here slightly more said they couldn't say (14%) while 31% disagreed.
- 15 respondents (42%) felt there was information missing from what had been provided; here 22% disagreed and 22% couldn't say.

In summary, only about one third of survey respondents thought there as enough relevant information provided to enable them to contribute fully to the consultation, and not far from half (42%) felt there was information missing.

There were apparently contradictory comments here about quantity and relevance of the information provided but these were not contradictions in practice. One said:

"There was a huge amount of material to get through but having read it all it didn't seem to cover everything" (survey respondent)

The information that evaluation survey respondents felt was missing included data on issues such as spent fuel stored on site, water required, health impacts, aquatic discharges, fuel manufacture, construction process, command and control systems, filtering and sensor mechanisms, potential impacts on fish stocks, the geology of areas and some other site specific issues.

Several evaluation respondents pointed to the problems of anyone who is not a paid technical expert being able to respond to these documents:

"A non-technical summary outlining the issues for affected communities would have been helpful. Not everyone who wants to reply to the consultation would have understood the complicated documents" (survey respondent)

"To expect ordinary, lay or even informed people to plough through these endless technical papers in their own time and make any serious, considered comment is beyond credibility. Only those paid to do so or those with heroic dedication will have the knowledge, patience, incentive and stamina to even contemplate such a task" (evaluation respondent)

"We do not have the manpower, in depth expertise or funds available to comment on the massive technical documents generated by your consultation. The documents are lengthy and of such a technical nature that we are surprised that members of the public are expected to read these, understand them and comment on them in the depth demanded by such an important process" (SANE, respondent to the main consultation)

"The consultation document is highly technical and it is therefore difficult for communities to draw out the key issues that are important to them. Whilst we understand that many issues associated with the design of the UK EPR will be site-specific issues, more effort should be made to link these issues to the communities that will be affected by new nuclear power stations. In particular, issues that are likely to be important to communities living close to new nuclear power stations should be drawn out of the background reports and made more clear in the Consultation document" (Somerset County Council, respondent to the main consultation)

Of all the critical comments to the evaluation (and to the main consultation), this issue of the quantity and nature of the consultation documents is the one that has caused most concern to respondents. One evaluation interviewee identified the problems slightly differently:

"There is always the imponderable about what levels you pitch at, how many summaries, what level of detail etc. I think it was actually pretty well done but you have to look at what materials were actually used. You always have to have the detailed information for those who want it, but then it's a question of looking up the accessibility ladder above that and how that is managed" (participant interviewee)

The problem here is not, therefore, with the quantity or level of detail in the consultation documents per se, it was about whether that quantity and level of detail was appropriate to all the audiences for whom the documents were intended. It is understandable that the Environment Agency wanted a robust technical document, and that it is hard to get the balance right. However, in this case, it is clear that while some stakeholders were comfortable with the level of detail, many others were not and felt they could not respond fully as a result.

There was some sympathy among respondents about the challenge of making a highly technical subject accessible to a diverse set of audiences. For example:

"As in many of these consultations on subjects that depend on broad and detailed technical content and analysis, there is a real problem in pitching the consultation (a) at a level which does not trivialise the science and engineering (b) is non-technical enough to allow a spectrum of stakeholders to engage and (c) involves a small enough effort (and time spent) in responding to allow the involvement of people for whom it isn't their 'day job'. By the very nature of GDA, this ranges from 'very difficult' to 'impossible' - but my personal view is that you have tried very hard and achieved as much as was possible." (evaluation survey respondent)

However, it is possible to make even very technical information accessible to the public in ways that go beyond the efforts that the Environment Agency did make by commissioning an external specialist technical editor to ensure the documents were 'plain English'. Elsewhere, highly complex scientific information has been 'translated'¹⁷ into documents that can be understood by ordinary members of the public so they can participate in public dialogue to input to decision making, even if they have never come across the issues before, including on issues as complex and technical as nanotechnology, synthetic biology and geoengineering¹⁸.

This type of translation, that retains the important issues but makes the technical detail accessible in written information, is a skill that is increasingly part of designing effective engagement exercises with the public. It is still relatively new. In the past, stakeholder engagement has assumed levels of knowledge that allow those with an interest to participate fully. However, that assumption, even for stakeholders, is now being challenged: as this evaluation has shown, even the Nuclear Industry Association found this consultation too technical to make a detailed response, as did several local authorities.

Evaluation respondents also raised an associated point about the sheer quantity of information in the consultation documents. Again, these issues have been referred to above. The decision to produce two separate consultation documents (one for each design), two documents summarising responses and two separate decision documents actually compounds the problem. A great deal of the information is common to both, especially in the summaries of responses and the decision documents; many of the responses were exactly the same to both. The separation into two documents simply adds to the quantity of information that consultees need to review. One evaluation respondent specifically mentioned this issue:

"In the EA's area of regulation, the two designs have very similar characteristics and challenges (much more so than for the HSE) - thus having two separate documents duplicated much of the effort of responding. In the end I only responded on the AP1000, but virtually all my comments would have also applied to the EPR - but I had run out of time/effort." (evaluation survey respondent)

¹⁷ Horlick-Jones, Tom, Rowe, Gene and Walls, John (2007) 'Citizen engagement processes as information systems: the role of knowledge and the concept of translation quality', in *Public Understanding of Science*, vol 16.

¹⁸ See, for example, work through the Sciencewise-ERC programme: www.sciencewise-erc.org.uk

In making these points, it is not suggested that there was any dishonest motive in the production of the consultation documents. All the evidence to this evaluation has suggested that the intentions of those running the consultation were to be as open, transparent and inclusive as possible. Unfortunately, the implementation of these laudable motives was undermined by difficulties of making technical detail accessible to a diverse audience.

In this case, this element of this criterion was clearly not met - the consultation documents were not concise, self-contained or free of jargon.

6.4.3 Proactive dissemination

This element of Criterion 4 of the Code stresses that "it is vital to be proactive in disseminating consultation documents", and that consideration should be given to how to alert potential consultees (directly or through intermediary bodies).

As has been shown above, extensive efforts were made to reach a very diverse audience and the success of those efforts was reflected in a diverse range of respondents to the consultation.

One of the breakout groups at the July 2010 seminar, focusing on the consultation itself, proposed using a wider mix of approaches that would reach a broader range of people including forums, newspaper articles, leaflets, site specific events, working through intermediary bodies, using social media to publish feedback etc. There was also a suggestion that better intelligence was needed about who the stakeholders are and should be for this type of exercise, and to reach out beyond informed stakeholders to the wider public on these sorts of issues. These ideas may be useful in future consultation planning.

Overall, this element of Criterion 4 was fully met both in the activities undertaken and the success of those activities.

6.4.4 Alternative version of consultation documents

This element of Criterion 4 is that thought should be given to alternative versions of the consultation documents (e.g. Braille, an 'easy read' version, translations), and to alternative methods of consultation (e.g. meetings, online tools).

In this case, the consultation document was translated into Welsh, as the Environment Agency covers England and Wales, and we are aware of the Agency's commitment through its Welsh Language Scheme to comply with the Welsh Language Act. Efforts to reach sectors of society that might be disadvantaged by English language only documents are generally to be commended. However, in this consultation, it might have been worth considering diverting the costs from Welsh translation into a translation of the text that would be accessible to the general public, given that is likely to be a much greater proportion of the audience sought.

In terms of alternative methods of consultation, in this case an online tool was used which aimed to make it easy for consultees to respond. It was also designed to help the Environment Agency to collate and analyse the results. The evaluation survey explored this element of the consultation, and the results were:

- **Input of views online.** 18 of the 36 survey respondents (50%) found it easy to input their views online to the consultation; 9 found it very easy and 9 fairly easy. 5 (14%) found it was not easy. Comments included problems including having to download everything and limitations with the nature of the questions (see also section 6.3.5 above).
- **Viewing results online.** Slightly fewer found it easy to view the results of the consultation online: 14 found it easy (39%); 5 found it very easy and 9 found it easy. 11 (31%) found it was not easy. Comments here included several respondents who had not tried to do it and one who had to ask for help. A couple were also unhappy about the 'results' as they felt their points had not been answered.

These are not very high levels of satisfaction with the online system, and this was also reflected in the feedback to a small internal Environment Agency review of the online system.

The Agency's own review of the online system received 17 responses which seems very low, although given that only 45% of the 81 responses to the consultation were online (i.e. 36), 17 responses is a 47% response rate. Of these 17 responses, 7 agreed it was easy to take part in the consultation in this way (3 strongly agreed), and 4 disagreed; 5 neither agreed nor disagreed. Again, this does not demonstrate enthusiasm for the online system used.

The reasons why these respondents found it difficult were the practical difficulty of being able to return later to an uncompleted entry, the length of the documents and consultation, and the long time to go through the registration process before being able to do anything. A comment from a respondent to the main consultation was:

"The online consultation proved impossible to use - I saved some draft comments which I could then not find to re-access. I wasted a considerable amount of time. Please improve the navigation system." (consultation respondent)

In addition, a few of the respondents to the main consultation mentioned the difficulties of using the online tool and not necessarily having the expertise to access all the documents electronically. Online access was also raised at the July 2010 seminar, where the point was made that the consultation needed to reach rural areas and other places where people do not have easy online access.

The Environment Agency has already begun to review its approach to this sort of online engagement.

In addition to the online tool, numerous meetings were run by the Environment Agency including the stakeholder seminar, attendance at Site Stakeholder Groups, and other meetings with specific stakeholders. There was generally a real willingness by the Agency to go out and talk about the process whenever required.

Overall, this element of Criterion 4 was fully met.

6.4.5 Easy to see relevance of consultation

This element of Criterion 4 is that people should be able to decide easily if a consultation exercise is relevant to them (e.g. there should be a standard table of basic information).

In this case, the consultation documents did include an Executive Summary and there were various other leaflets explaining about the consultation and what it was covering. Various sources of additional help and information were signposted including telephone lines. These enabled potential consultees to decide fairly easily whether the issues in this consultation were relevant to them.

The concern on this issue (also referred to above in section 6.3.6) is the extent to which consultees were clear about whether they should contribute to this consultation, whether they had missed an opportunity earlier or whether there would be other opportunities to engage later. The lack of information about where this consultation fitted into the wider set of opportunities to participate in decisions about the future development of nuclear power stations was a problem for this consultation.

Overall, therefore, significant efforts were made to clarify the relevance of the consultation to stakeholders, and this element of Criterion 4 was largely met. However, while the relevance of the specific issue was made clear, the relevance of this particular consultation in the overall process of engagement in new build nuclear power was less clear.

6.5 The burden of consultation

Criterion 5 of the Government Code of Practice on Consultation is about keeping the burden of consultation on interested parties to a minimum so that consultations are effective, and about obtaining consultees' buy-in to the process.

The Code identifies four main elements of relevance to this consultation:

- Whether the information already exists so that interested parties do not need to be asked again. In this case, the information on what interested parties thought about these specific issues did not already exist. This was a very specific consultation on new issues.
- The potential for looking for "opportunities for joining up work so as to minimise the burden of consultations aimed at the same groups". This was a crucial issue for this consultation, and has been dealt with in several parts of section 6.4 above. Consultation fatigue was clearly an issue for some of the stakeholders in this consultation, not as a result of being asked the same questions over and over, but as a result of the large number of different and apparently unconnected consultations over the single issue of building of new nuclear power stations.
- Putting questions online to help reduce the burden that way. The Code suggests that online technology can reduce the burden but that "the bureaucracy involved in registering ... should be kept to a minimum". As noted in section 6.4.4, this was done in this case but did have some problems.
- Whether a formal consultation is needed at all. In this case, the Environment Agency were clear that the consultation was needed to ensure that this stage of the process of building new nuclear power stations was open and transparent, and that the issues were so significant that they merited a full consultation. A formal consultation was therefore clearly necessary in this case to achieve this.

Overall, although the consultation was clearly needed, as can be seen from the comments in section 6.4 above, the burden of consultation on many consultees in this case was excessive and did cause problems.

6.6 Responsiveness of the consultation

Criterion 6 of the Code is focused around the need for consultation responses to be analysed carefully and clear feedback provided to participants following the consultation.

There are four main elements to this Criterion:

- all responses should be analysed carefully to develop a more effective and efficient decision
- the likely timetable for further decision making should be indicated in the consultation documents
- a summary of who responded and summary of the views expressed should be provided, including what decisions have been taken in light of what was learnt from the consultation exercise; consideration should also be given to publishing the individual responses received to consultation exercises
- the criteria of the Code should be published in consultation papers alongside the contact details of someone to whom comments can be made about whether the Code has been observed and any ideas about improving consultation processes.

These are covered below.

6.6.1 Analysis of responses

This element of Criterion 6 is about the analysis of responses in order to develop more effective and efficient decision.

The Code suggests that all responses, from whatever source, should be "analysed carefully", to use the expertise of respondents to "develop a more effective and efficient" decision. In this case, the Environment Agency did clearly undertake a rigorous process of analysis of all responses to the consultation (see section 5.3). This is good practice. The Agency's response to this input is described in section 6.6.3 below.

The Code also suggests that responses may be analysed taking into account evidence given by consultees and who different bodies represent. There is no evidence that the Agency used any sort of weighting to differentiate between those comments that provided supporting evidence, or that came from representative bodies rather than individuals. In this case, it appears that all comments were weighted equally insofar as that can be ascertained, and this can be considered good practice in these circumstances (i.e. seeking input from a diverse set of stakeholders with different skills and knowledge about the technical issues but equal rights to comment).

6.6.2 Timetable for further developments

The Code suggests that the likely timetable for further decision making should be indicated in the consultation documents.

In this case, a clear timetable for the consultation, publication of results and the final decisions was provided in the consultation documents. When this timetable changed, as a result of the Fukushima incident, all stakeholders were informed about the delay in publishing the final decision documents, and the reason for that delay.

A link to the DECC timeline on the overall process was published in the decision documents, but this had not been provided earlier; nor was there any information about future opportunities for engagement. This issue of links to engagement in the wider development process is covered in more detail in section 6.4 above.

Overall, therefore, this element of Criterion 6 has been largely met: the timetable for further developments was published but not the timetable for future opportunities for engagement.

6.6.3 Publication of consultation responses and influence

The Code suggests that a summary of who responded and of the views expressed should be provided, including what decisions have been taken in light of what was learnt from the consultation exercise. It also suggests that consideration should be given to publishing the individual responses received to consultation exercises.

In this case, two comprehensive documents were published summarising the responses to the consultation, structured around the 17 questions asked in the consultation. This included details of who responded. In addition, the full responses were published on the consultation website and it was possible to obtain specific responses from the Environment Agency direct. This is good practice.

The decisions taken in the light of the consultation responses were published in two decision documents (one for each reactor design). These very detailed documents announced the decisions (the issuing of interim statements of design acceptability (iSoDAs) on each design subject to two caveats / GDA Issues) and included those iSoDA documents. The decision documents also provided very lengthy responses to the issues raised in the consultation (each decision document is over 260 pages).

The assessments provided in the decision documents include "consideration of any consultation responses relevant to the topic"¹⁹, alongside changes made as the result of other work since the consultation began. Points made in individual consultation responses are quoted, with their source, and responded to. This is good practice.

There is also evidence about how some elements of the assessment had changed since the draft proposals published in the consultation papers both around the main technical issues within the GDA (see section 7.1 for more details on the impacts of the consultation on decisions), on other issues raised by respondents to the consultation (Annex 8 of the decision documents), and on comments on the consultation itself (section 2.5.3 of the decision documents). There is therefore evidence in these documents that decisions have been affected by input from the consultation exercise. This too is good practice.

There were clearly concerns from some respondents to the evaluation that their questions and worries would not be addressed, particularly those that did not fit easily into the 17 consultation questions. Some of these were addressed in Annex 8 of the decision documents although some issues were not covered, including socio-economic issues (e.g. the extent to which construction would engage with the local supply chain and local stakeholders in maximising the benefit to the local communities in terms of employment), the traffic impacts of construction, and aesthetic issues (e.g. the visual impacts of the new reactors generally and in relation to historic landscapes, and in terms of noise during construction, bulk, height, mass, colour, lighting etc).

More generally, and more often, evaluation respondents were concerned that there would be no further chance to engage with these issues, in spite of many unresolved technical concerns (some major) before the site-specific stage. The concerns are not that further technical work needs to be done (that is accepted) but that there will be no further opportunity for engagement to review whether what has been done is acceptable. As noted above, the Environment Agency considers that the additional information needed is not sufficient to warrant further consultation, but there clearly remains unease among some stakeholders that the work is not complete.

Given the work that has clearly gone into very careful analysis and responses to many points made during the consultation, one further step might add significantly to stakeholder satisfaction: clear summaries of what has changed as a result of stakeholder input. While it is possible to identify areas where input has made a difference (e.g. the summaries at the beginning of each chapter of the decision documents showing what had changed or not), it is not easy to get an overall picture from these specific points within a 260-plus page document, nor where those changes had come from (e.g. stakeholders responding to the consultation or further information from the reactor developers). A brief summary in one place (possibly the Executive Summary of the decision documents) would demonstrate quickly and easily exactly where and on which issues stakeholder input had had an impact.

Finally, the evaluation did check with evaluation interviewees on the extent to which they had seen and were satisfied with the responsiveness of the Environment Agency to input from respondents. This exercise found that 6 of the 8 interviewees had seen and had a chance to read the decision documents. This high level of awareness and commitment of time to look at the documents suggests a successful approach to disseminating the decision documents. In addition, 6 of the 8 interviewees were satisfied with the information they had been given about the decisions and the form and content of the decisions. Only 1 was not satisfied; their reason being that they disagreed with the decisions as they felt that one size (design) did not fit all.

In addition, 6 of the 8 interviewees felt the Environment Agency had listened to and taken account of stakeholder input in their final decisions. Comments included:

¹⁹ *ibid* para 140, page 35

"I can only really answer for myself and say that the questions I have asked have all been answered." (participant interviewee)

"Yes, and I think particularly I am glad I went to the Birmingham event as there's nothing like seeing the whites of people's eyes and how they are behaving first hand. There was some very good behaviour displayed towards stakeholders by the Environment Agency, which would have been unthinkable seven years ago." (participant interviewee)

"I was able to feed in ideas and concerns. On a spot check I remember seeing a few of those carrying through." (participant interviewee)

Overall, therefore, this element of the Criterion has been fully met.

6.6.4 Publishing the Code

This element of Criterion 6 is that the criteria of the Code should be published in consultation papers alongside the contact details of the Consultation Co-ordinator to whom comments can be made about whether the Code has been observed and any ideas about improving consultation processes.

In this case, the consultation document does provide a summary of some of the criteria of the Code, presented in terms of a statement that the consultation "follows the Government Code of Practice", with a brief summary of the aspects of the criteria that the consultation aims for. This does cover the main aspects of the criteria, phrased in slightly different language. There was a weblink in the decision documents to the actual Code. This is good practice.

Contact details are provided for an individual who is the Consultation Co-ordinator, with whom anyone with any "queries or complaints" can make contact. A postal and email address are provided. This is also good practice.

Overall, this element of the Criterion has been met.

6.7 Capacity to consult

This final Criterion of the Code is around the need for officials running consultations to "seek guidance in how to run an effective consultation exercise, and share what they have learned from the experience". The three elements within this Criterion are as follows:

- The organisation should appoint a Consultation Co-ordinator as the contact point for any queries regarding the consultation. As noted above, this was done and publicised in the formal consultations documents.
- Officials who are to run a consultation exercise should seek advice from the Consultation Co-ordinator early in the planning stages. In this case, this did happen and, indeed, a new stakeholder engagement officer was appointed and a stakeholder engagement sub-group was established to plan communications and process.
- The learning from consultation exercises should be shared with the Consultation Co-ordinator who will facilitate the sharing of lessons learned within the organisation, and between departments and agencies. In this case, an independent evaluation has been commissioned (the subject of this report) to identify learning. This report will be used internally and will be published. In addition, a lessons learned workshop planned jointly between the Environment Agency and ONR took place in March 2012 to share learning.

This Criterion has been fully met.

6.8 Conclusions

The detailed analysis above shows there was significant good practice in the design and delivery by the Environment Agency of this consultation, and also some problems. The following table summarises the extent to which the criteria in the Government Code of Practice on Consultation were met.

Criterion	Evidence on how criterion was met	Concerns	Extent to which criterion was met
1. When to consult	<ul style="list-style-type: none"> The consultation was at the right time in the GDA process as it was in time to allow the results to influence decisions 	<ul style="list-style-type: none"> It was unclear how the consultation on the GDA fitted in with other consultations leading to the development of new nuclear power stations Information provided during the consultation was not the final information needed for decisions on the GDA It was unclear if further consultations were likely or needed with the GDA 	Criterion partially met
2. Duration of consultation	<ul style="list-style-type: none"> The consultation lasted 16 weeks, more than the minimum 12 weeks Extensive efforts were made to raise awareness 	<ul style="list-style-type: none"> More can always be done to raise wider awareness 	Criterion fully met
3. Clarity of scope and impact	<ul style="list-style-type: none"> Participants were clear about the purpose and activities of the consultation and next steps in the GDA process There was clarity about who would be affected by the decisions Most participants felt the questions in the consultation were fairly clear One more open question (Q17) was included in the consultation so people could raise related issues, and respondents did raise numerous related issues 	<ul style="list-style-type: none"> Less than half of the participants were clear about the scope of their influence The costs and benefits of the decisions were not considered 	Criterion partially met
4. Accessibility of consultation	<ul style="list-style-type: none"> Extensive efforts were made to encourage input from very diverse audiences There was extensive proactive dissemination of the consultation documents There were alternative versions of the consultation documents (Welsh translations, online versions) Summaries of the consultation documents and other information were provided so interested parties could easily see the relevance of the consultation to them 	<ul style="list-style-type: none"> * The highly technical nature of the consultation documents did deter and exclude some interested parties from participating The consultation documents were seen by some participants as providing insufficient relevant information, with information missing The consultation documents were not 'translated' for the general public whose involvement was sought The online system had problems 	Criterion partially met

<p>5. The burden of consultation</p>	<ul style="list-style-type: none"> • The information created in the consultation did not exist, and was needed • There was an online system through which responses could be made, created to reduce burdens on participants • A formal consultation was clearly needed at this stage. 	<ul style="list-style-type: none"> • Opportunities for joining up work to minimise the burden on the same groups were not created • The online system had problems 	<p>Criterion partially met</p>
<p>6. Responsiveness of consultation</p>	<ul style="list-style-type: none"> • Responses were carefully collated and analysed • The timetable for the next steps in the GDA consultation process were clear, published and understood by participants • Interested parties were informed when the decisions on the GDA process were delayed by the report on the implications of the Fukushima incident • A detailed summary of responses, and details of who had responded, was published, and the full responses were made available • Detailed responses to points made by participants were published in comprehensive decision documents, quoting points by participants and identifying who had made them • Information on the Code of Practice on Consultation was published, alongside contact details for an individual who could provide further information and answer queries and complaints. 	<ul style="list-style-type: none"> • There was no overall timetable showing how this consultation linked to the overall engagement processes around further decision making on building new nuclear power stations 	<p>Criterion almost fully met</p>
<p>7. Capacity to consult</p>	<ul style="list-style-type: none"> • A Consultation Co-ordinator was appointed • Advice was sought from the Consultation Co-ordinator, a new stakeholder engagement officer was appointed, and a specialist internal sub-group established to plan communications and engagement • An independent evaluation was commissioned to identify learning, and a joint workshop to share learning between the Environment Agency and Office for Nuclear Responsibility (ONR) has taken place 		<p>Criterion fully met</p>

As can be seen from this summary table, the criteria on the duration of the consultation and the capacity to consult were fully met. The criterion on the responsiveness of the consultation was almost fully met. The criteria on when to consult, clarity of scope and impact, the accessibility of the consultation and the burden of consultation were partially met.

In general, this was an impressive consultation, with several elements of good practice that met and went beyond the criteria in the Code. The work to raise awareness of the consultation and to proactively disseminate the consultation documents and encourage wide participation were exemplary. In addition, the quality of the responsiveness of the Environment Agency to the consultation was exceptional, with detailed analysis of the responses and very open publication of responses to points raised by participants.

One of the major areas where the consultation was less successful was in relation to the quantity and quality of the information provided in the consultation documents, which was considered both excessive and incomplete, and also not accessible to ordinary local residents and groups, who were among the target groups for the consultation. The other major concern was the lack of clear links between this consultation and future opportunities for engagement in the process to build new nuclear power stations.

7 Impacts, costs and benefits

All public and stakeholder consultations have a range of impacts, costs and benefits: impacts on the people involved as well as on specific decisions, and costs and benefits for individuals and organisations. Impacts in particular can be short, intermediate and long term, with some impacts not being apparent until after a considerable passage of time, with direct and indirect links to

the results of a particular consultation, making clear impact analysis complex and challenging.

This section describes the information available to the evaluation at this point in terms of the impacts, costs and benefits of this consultation.

7.1 Impacts on GDA decisions

The most immediate and expected impacts of the consultation are those on the actual decisions reported in the two decision documents on the two designs published in December 2011.

At the outset of the consultation, the Environment Agency made it clear that:

"Before this consultation, we did not make any final decisions, and did not do so until after we had carefully considered all the responses."²⁰

The consultation was undertaken on the basis that the Environment Agency (as well as ONR and others) had completed extensive work to review the two proposed designs (rejecting two other designs earlier). The consultation was on the Agency's draft decisions on the granting of statements of design acceptability (SoDAs).

As summarised in section 6.6 above, the Agency's decision documents include the agreed interim statements of design acceptability on the two designs (iSoDAs), which had two caveats or 'GDA Issues' attached to each of them, but also extensive reference to comments from consultees that are directly responded to. This is good practice.

A review of the decision documents shows that there were several areas where input made to the consultation clearly informed the Environment Agency's original conclusions on the designs, alongside new information provided by the companies proposing the two designs. The following table summarises the main relevant sections of the decision documents and shows which were changed or unchanged after the consultation.

Section of decision document	EDF/AREVA design	Westinghouse design
Management systems	Conclusions unchanged, but now subject to a GDA Issue including the need to provide a consolidated GDA Submission including agreed design change	Unchanged, but now subject to a GDA Issue including the need to submit a safety case to support the GDA Design Reference, and then to control and develop the GDA Submission documentation etc
Integrated waste strategy	Conclusions updated as a result of additional information. Decommissioning is no longer the subject of a GDA Issue but a new assessment finding was added in relation to solid radioactive waste and spent fuel. This was partly due to comments to the written consultation and questions at the July seminar.	Conclusions updated as a result of additional information. Decommissioning is no longer the subject of a GDA Issue but a new assessment finding was added in relation to the operator to provide an updated decommissioning strategy and plan. This was partly due to comments to the written consultation and questions at the July seminar.

²⁰ *ibid*, para 61

Best available techniques to minimise production of radioactive waste	Conclusions unchanged	Conclusions unchanged
Gaseous radioactive waste disposal and limits	Conclusions unchanged	Conclusions unchanged
Aqueous radioactive waste disposal and limits	Conclusions unchanged, although as a result of the consultation, further assessment was done, and two additional assessment findings were added in relation to liquid waste processing	Conclusions updated since the consultation as a result of respondents' concerns about the UK's obligations under OSPAR. More assessment was done in relation to minimising aqueous discharges.
Solid radioactive waste	Conclusions unchanged, but have reworded the assessment findings and added two additional findings on specific techniques for minimising low level waste (LLW) and intermediate level waste (ILW), and incineration of ILW	Conclusions unchanged, but have reworded the assessment findings and added one additional finding related to waste conditioning plans
Spent fuel	Conclusions updated since the consultation	Conclusions updated since the consultation
Monitoring of radioactive disposals	Conclusions unchanged, but have reworded the assessment finding	Conclusions unchanged, but have reworded the assessment finding
Impact of radioactive discharges	Conclusions unchanged, but have reworded them to be more concise	Conclusions unchanged, but have reworded them to be more concise
Other environmental regulations:		
<ul style="list-style-type: none"> • Water abstraction • Discharges to surface water • Discharges to groundwater • Combustion plants • Waste management • Control of Major Accident Hazards Regulations 1999 (COMAH) 	<ul style="list-style-type: none"> • Conclusions updated to reflect respondents' concerns about damage to marine life at seawater intakes • Conclusions updated to reflect respondents' concerns about the impact of biocides • Conclusions unchanged • Conclusions unchanged • Conclusions unchanged although added a requirement for a site waste management plan for each construction project • Conclusions unchanged 	<ul style="list-style-type: none"> • Conclusions updated to reflect respondents' concerns about damage to marine life at seawater intakes • Conclusions updated to reflect respondents' concerns about the impact of biocides • Conclusions unchanged • Conclusions unchanged • Conclusions unchanged but have removed an issue on construction waste that was in the Consultation Document, and added a requirement for a site waste management plan for each construction project • Conclusions unchanged

As can be seen from this very brief summary table, there have been numerous changes to the Environment Agency's conclusions since the publication of the consultation documents. Although the responses to the consultation are only one source of these changes, there have clearly been some impacts as a result of respondents' comments, and these are spelt out in detail in the decision documents.

Feedback from the Environment Agency suggests that they saw the main issues for stakeholders as being around higher activity wastes (spent fuel and radioactive wastes) and that a lot of concerns were expressed about that. As can be seen from the table above, although the overall conclusions on these issues remain unchanged, additional work was done and further requirements added on that topic.

In addition, the Agency suggest that:

"There were some issues that wouldn't be relevant until the site specific stage that we can't deal with now but are for future consideration." (Environment Agency staff interviewee)

As mentioned earlier in this report (section 6.6), the Environment Agency did state that comments that did not relate specifically to the technical issues of this consultation would be passed to the appropriate responsible body or be held for consideration later in the process (at the site specific stage). Some of these issues were captured in an Annex (8) to the main decision documents, and initial responses given there.

The Agency were also pleased that there were a lot of positive comments on the draft proposals; each section of the decision documents includes details of the number of respondents supporting the draft proposals.

In interview, the Agency stated that:

"We listened and considered all comments and put efforts into explaining where comments did or did not influence in the decision document. It is as important to say why you haven't acted on something as to say where you have." (Environment Agency staff interviewee)

This is confirmed in the text of the decision documents which quotes from individual respondents as well as answering points in detail. This is all good practice. It also seems that the comments from the smallest local organisation are given as much respect and attention as the largest public body. That is also good practice.

However, as mentioned in section 6.6, the extent to which respondents' input is accepted or simply answered is quite hard to identify in such lengthy documents. In future, it might be very valuable to produce a brief summary of exactly where respondents' input has changed things, supported existing proposals or not been relevant and therefore passed on to others (and who) or to another stage in the process (and what). Stakeholder and public responses to the consultation do clearly seem to have informed the final decision documents, and a clearer report of that would help build trust in this and future engagement processes.

In terms of the overall achievements and impacts of the GDA consultation, the Environment Agency were clear that it did also have some other positive, if less direct, impacts:

"I think it made the designers consider environment in more detail perhaps than they would have done. This is in contrast to the similar process in the United States, which is much more safety focused." (Environment Agency staff interviewee)

7.2 Impacts on consultation participants

Any consultation has impacts beyond the obvious impacts on the decisions the consultation is designed to influence. Very often, there are - sometimes equally powerful and important - impacts on those involved. Various aspects of the evaluation research explored the impacts on those involved, particularly in terms of increasing participants' knowledge of the GDA process and the role and responsibilities of the Environment Agency (as this was one of the stated objectives of the consultation). The findings are summarised below.

- After the July 2010 seminar, the findings from that evaluation questionnaire were:
 - 36 of the 42 respondents (86%) agreed that the seminar had increased their understanding of the role of the Environment Agency in the GDA process; only 2 (5%) disagreed (4 neither agreed nor disagreed). A couple of respondents commented that they already knew about the EA role, which might possibly account for the 2 whose understanding had not increased.

- 33 of the 42 (79%) agreed that the seminar had increased their understanding of the EA's regulatory process for nuclear new build; again only 2 did not agree (7 neither agreed nor disagreed). Again, 2 said they already knew this.
- 21 (50%) agreed that the seminar had strengthened their confidence in the EA as an independent nuclear regulator; only 1 disagreed (strongly), although 20 (48%) neither agreed nor disagreed. Comments here included that the methodology was not independent, and that the process was flawed. However, again, a couple said they already knew about the Environment Agency's role: one said they understood the EA role in this and the other said they were "already very confident".
- The evaluation survey circulated early in 2011 to all respondents to the main consultation also found that knowledge had increased significantly. Survey respondents indicated levels of knowledge from 1 (very low) to 5 (very high). The findings here were:
 - In terms of their level of understanding and knowledge of the GDA process before the consultation:
 - 15 survey respondents out of 36 (42%) initially said was low: they gave their knowledge scores of 1 to 2 (11 gave their knowledge a level 1; 4 said level 2).
 - 7 (19%) scored their knowledge in the middle, with a level 3.
 - 10 (28%) said their knowledge at that stage was fairly high, giving themselves scores of 4 to 5 (9 said level 4 and 1 said level 5).
 In summary, 42% of these respondents had little or no knowledge of the GDA process before the consultation.
 - After the consultation (after the consultation had closed but before the decision documents had been published), survey respondents said their understanding and knowledge of the GDA process was as follows:
 - 9 out of 36 respondents (25%) said their knowledge was low (scores of 1 to 2; 3 saying 1 and 6 saying 2)
 - 9 (25%) scored their knowledge in the middle, with a level 3.
 - 14 (39%) said their knowledge at that stage was fairly high, giving themselves scores of 4 to 5 (11 said level 4 and 3 said level 5).
 By this stage, the level of low knowledge had dropped from 42% to 25%, and the level of high knowledge had increased from 28% to 39%.
 - In terms of their understanding of the roles and responsibilities of the Environment Agency in the GDA process, the findings before the consultation were:
 - 13 survey respondents out of 36 (36%) initially said was low: they gave their knowledge scores of 1 to 2 (8 gave their knowledge a level 1; 5 said level 2).
 - 8 (22%) scored their knowledge in the middle, with a level 3.
 - 11 (31%) said their knowledge at that stage was fairly high, giving themselves scores of 4 to 5 (11 said level 4 and none said level 5).
 In summary, 36% said they had little or no understanding of the roles and responsibilities of the Environment Agency in the GDA process.
 - After the consultation, survey respondents said their understanding of the roles and responsibilities of the Environment Agency in the GDA process was as follows:
 - 8 survey respondents out of 36 (23%) initially said was low: they gave their knowledge scores of 1 to 2 (2 gave their knowledge a level 1; 6 said level 2).
 - 8 (22%) scored their knowledge in the middle, with a level 3.
 - 16 (45%) said their knowledge at that stage was fairly high, giving themselves scores of 4 to 5 (15 said level 4 and 1 said level 5).
 By this stage, the level of low knowledge had dropped from 36% to 23%, and the level of high knowledge had increased from 31% to 45%.

Similar findings resulted from the follow-up evaluation interviews conducted with participants in the consultation early in 2012. Although this was essentially a qualitative

rather than quantitative process, 5 of the 8 interviewees said that the consultation had increased their understanding and knowledge of the GDA process (1 said they already knew about this and 1 said it had not increased their understanding). Comments included:

"I think I would say no because I am fairly well informed already – so that's not a criticism." (participant interviewee)

"Yes – it forced me into understanding very quickly, which was one of the flaws of the consultation process. We've lived with Sellafield since the 1940s, but it was still a shock to be told we have 13 weeks to formulate an argument against having a new reactor in our back yard." (participant interviewee)

"Yes certainly of the GDA process and how it would be done. What we were doing was clarifying the map, which is only part of the much bigger process." (participant interviewee)

"Yes we were given a lot of detail and some specifics." (participant interviewee)

"Personally I gained a lot of knowledge on reactor design and the overall GDA process." (participant interviewee)

The same number (5 of the 8 interviewees) said it had increased their understanding of the roles and responsibilities of the Environment Agency (3 said they already knew this). Comments included:

"I think the thing it did do was show a step change in openness and clarity. I went to the Birmingham event and the amount of openness the Environment Agency people were displaying was great – a real step change from the past." (participant interviewee)

"Yes, the extent to which the Environment Agency is now facilitating input into this kind of issue." (participant interviewee)

"Yes it did. I have had a certain amount of dealings with the Environment Agency before, but learning the more precise interactions they have with the ONR [Office for Nuclear Regulation] was very useful." (participant interviewee)

7.3 Costs and benefits

The costs of the consultation were borne by the Requesting Parties (RPs) i.e. the companies proposing to build the new nuclear reactors under consideration; the Environment Agency made clear that

"There was no public money spent on this" (Environment Agency staff interviewee).

There were therefore no direct financial costs to the Environment Agency. The consultation did, however, involve a great deal of work and commitment from many Agency staff. It is unclear the extent to which all this work was covered by the costs recovered from the RPs but, even if they were, this is time that staff were not able to spend on other activities. It is therefore important to consider the benefits of the exercise to the Agency.

There were also risks of other types of costs to the Agency including potential reputational damage if the consultation had been unsuccessful. In practice, this cost was not incurred. Indeed, there seem to have been reputational benefits from the exercise, in that the Environment Agency's role in opening up the process was welcomed and appreciated by stakeholders.

The evaluation did consider the balance of costs and benefits of the consultation to a very limited degree: only asking evaluation interviewees whether they felt that the consultation was 'money well spent'. 6 of the 8 interviewees felt that it was; only one disagreed and that was because they felt that the result was pre-determined (had already been decided), so for them the consultation was a waste of time and money. Although very much a minority view in this case, this correlation of value for money in consultations being associated by stakeholders with the level of influence of the consultation is very common. It is important that this perception is understood in any future assessment of value for money of public and stakeholder consultations.

Those that felt the exercise was money well spent felt that it was because the consultation covered important issues that required such investment, and that the process needed to be open and transparent. Comments included:

"There is a view that some form of participation is essential for a legitimate process and therefore is money well spent. But some would claim that this money is being spent so that the government and Environment Agency can say they have consulted. I can only speak from an untechnical site-specific viewpoint. I think the Environment Agency (and the NII) go further than the government on this and should be commended." (participant interviewee)

"It is important people recognise the route to a decision gave an opportunity for people to input transparently. Making the decision in an open and transparent way is value for money and produces a much more robust result." (participant interviewee)

"It is a big enough issue to require this kind of process. It gave assurance to stakeholders and the public that the process was being done openly, not behind closed doors. I think a lot of people, when they saw the level of detail going into it, felt reassured and didn't feel the need to ask any questions. For the sceptics, I think it allowed them to have their say whether they liked the decision or not." (participant interviewee)

"In time and collateral damage it is nowhere near a public inquiry cost, so yes. I would say anything that will lessen the chance of a successful judicial review costing lots of money – if it reduces that risk from 5% down to 1% for example – then it is always worth it. And a very small amount in the context of overall nuclear spend." (participant interviewee)

"I don't know how much money was spent, but it seems an important part of the process and probably a small overall proportion of the budget, so yes." (participant interviewee)

This feedback suggests that there was a strong sense at least among these stakeholder interviewees that the consultation was money well spent.

For the EA staff involved, the point was made that this was not public money (so no costs to them or the public purse) and that there was clear value in the exercise (real benefits). Also, in common with some stakeholders, there was a sense that the costs of the consultation were small in comparison to the costs of the proposals overall. Comments included:

"The predicted cost to build a reactor is something like five billion, so a couple of hundred thousand for a consultation in the grand scheme of things is good value if it builds stakeholder understanding and relationships." (Environment Agency evaluation interviewee)

"I think it is really important that people who wish to respond are informed and able to respond, and if that happens then these consultations are good value for money. We also have a responsibility as a public body to show we are very competent and a safe pair of hands to make decisions of this kind, and that our decision making process is transparent. If we go even part way towards achieving that then yes, it is good value." (Environment Agency evaluation interviewee)

Overall, therefore, the consultation exercise was clearly seen as money well spent. There was no information on the costs and benefits of the two designs but these issues were not raised by

any feedback to the consultation or in the evaluation research and so may not be crucial issues to stakeholders.

In addition, the exercise did provide specific benefits to the Environment Agency, including in its wider work:

"I hope it demonstrated the robustness of the assessment process ... I also believe the consultation was a means of communicating to stakeholders the process and the robust approach we have taken, and to government our progress towards a low carbon economy. The communications element is an added benefit." (Environment Agency evaluation interviewee)

For participants in the consultation, there were different benefits (more direct impacts on participants are covered above in section 7.2). Evaluation interviewees were asked about the achievements of the consultation, and the main things they and their organisations gained from being involved. The findings were:

- For evaluation interviewees, the main *achievements* of the consultation were greater openness, greater understanding of the GDA process, giving people confidence that their views had been captured and built in, and the chance to input and get information. Comments included:

"It was possibly the first time I had seen the government give the opportunity to people to raise the issues with such an open correspondence, for such a major decision. I believe the final decision may not necessarily take account of everyone's opinion or listen to all public views, but the event itself provided the opportunity for people to get information and have their say, on the day and online." (participant interviewee)

"It made it very open and obvious at whatever level you looked at what was being taken into account and how." (evaluation interviewee)

"I would like to see the approvals process shortened but still remain robust. I think the consultation helped to do that and to give a greater understanding of the overall process." (participant interviewee)

One interviewee took an alternative view:

"No I don't think there were any [benefits]. The consultation process as far as I'm concerned was a total waste of time." (participant interviewee)

- The main benefits for evaluation interviewees were greater depth of understanding of new plant design, learning more and getting new information, reassurance that their concerns were taken into account, gaining an overview, gaining a real understanding of public and stakeholder views, and providing the opportunity to ask questions. 6 of the 8 interviewees said they got what they wanted from the consultation. Comments included:

"A real understanding and grasp of the wide range of public and stakeholder views. It is easy to get bogged down in the technical detail but to be reminded of and challenged by the big picture questions is important." (participant interviewee)

"It gave me the opportunity to ask some specific questions about fuel type, waste storage, whether there would be an overlap of staff from existing staff, or any additional training to existing staff, and decommissioning." (participant interviewee)

- Similarly, the most useful elements of the consultation for evaluation survey respondents were the documents and information provided although they also mentioned the periodic reports on the process, the opportunity to have a say and, for some, the workshop was particularly valuable. Comments included:

"The documents showed me where the (massive) gaps were in the whole appraisal process"
(survey respondent)

"Availability of information on reactor designs and intentions" (survey respondent)
"Explanation of the scope of the EA role and responsibility in relation to GDA." (survey respondent)

"Adequate time was allowed for consultation among our members before formal submission. It did not feel 'hurried'." (survey respondent)

"Web pages and regular email alerts from the Regulators on the progress." (survey respondent)

"Gives one the opportunity to express one's rage and beat on the doors of Whitehall however futilely." (survey respondent)

"Just the ability to make some form of contribution and criticism." (survey respondent)

"The public disclosure of a wide range of technical information more or less gathered in one place" (survey respondent)

As can be seen from these comments, even those who were very much opposed to some of the proposals, and to new nuclear power generally, appreciated the opportunity to have a say. Not everyone agreed even with that, with a couple of survey respondents simply saying there had been no useful elements at all.

Questions were also asked in the survey about the 'least useful' elements. The main concerns here were similar to issues raised in previous sections of this report, with comments about the information being poor (including that the production of two separate consultation documents added to the problems), and again a couple who felt that no notice would be taken of the consultation. Comments here included:

"The whole exercise seemed to involve a huge amount of information which was all very superficial. Nothing quite got to the nub of the issues. Lots of reading cast no extra light on the subject at all." (survey respondent)

"Amount of paper; lack of key evidence; time available" (survey respondent)

"Large amount of information available but not always clear on website what was old and what was updated." (survey respondent)

"The knowledge that one's responses will be buried somewhere in the vaults of Westminster and decisions will go on being taken behind closed doors under totally different criteria"
(survey respondent)

"The omission of significant suites of relevant information, because their omission means that both EA and public understanding of all of the issues is less effective than it needs to be" (survey respondent)

- More specifically, the questionnaire to participants at the July 2010 seminar identified rather different benefits for them personally and at an earlier stage of the consultation. The four most common benefits identified here were understanding how to get involved next (in the next stages of the consultation process), understanding of the GDA process, increased general understanding, and information exchange and hearing the views of other stakeholders. Meeting and networking with other stakeholders and data on the designs were also seen to be benefits. Final other comments confirmed that this was generally seen as a valuable event by participants.

Although this is far from a full costs and benefits analysis, this very brief review of the costs and benefits suggests that the consultation was seen to be money well spent, and did create value for the Environment Agency and most participants.

7.4 Conclusions

The analysis above shows that the consultation responses did inform the final decisions by the Environment Agency, and that there were clear benefits for the participants in the process. The consultation was considered money well spent as a result of the balance of costs and benefits, and there were clear impacts on the participants particularly in terms of having gained awareness and understanding of the GDA process and the role of the Environment Agency.

8 Meeting the consultation aims and objectives

Clear aims and objectives were established for the consultation, and this section summarises the detailed analysis elsewhere in this report in terms of the extent to which those aims and objectives were met. It also includes summary information on the overall satisfaction of participants with the consultation.

8.1 Analysis against aims and objectives

Aims and objectives	Evidence on how objective was met	Concerns	Extent to which objective was met
<p>Aim: To inform the assessment of new nuclear reactor designs by sharing information with people, and by listening to and using their input in the decision-making.</p>	<ul style="list-style-type: none"> • Information was shared, and input from interested parties was listened to, through the consultation documents, the July 2010 seminar and a range of other meetings • The input to the consultation from interested parties was explicitly used (and responded to) in the GDA decision documents, and clearly informed the assessment reported there 	<ul style="list-style-type: none"> • Less than half the interested parties involved were clear about the level of their influence • There were problems with the information provided in terms of quantity and quality 	<p>The aim was fully met.</p> <p>However, there were some problems with the quality of delivery as shown in section 6.8</p>
<p>Objective 1. To build greater understanding and knowledge among stakeholder participants about the GDA process and the role and responsibilities of the Environment Agency.</p>	<ul style="list-style-type: none"> • Feedback from questionnaire respondents from the July 2010 seminar found that 86% said the seminar had increased their understanding of the role of the EA in the GDA process, and 79% said the seminar had increased their understanding of the EA's role in nuclear new build • Feedback from the evaluation survey found that the levels of low knowledge of the GDA process had dropped from 42% to 25% and the level of high knowledge had increased from 28% to 39% • Feedback from the evaluation survey found that the levels of low knowledge of the roles and responsibilities of the EA in the GDA process had dropped from 36% to 23%, and the level of high knowledge had increased from 31% to 45%. 		<p>This objective was fully met</p>

<p>Objective 2. To provide opportunities for stakeholders who wish to be involved to influence the consultation process to help it best meet their needs</p>	<ul style="list-style-type: none"> • The stakeholder engagement plan published at the beginning of the consultation included requests to stakeholders to propose additional and alternative ways in which they would like to be involved • Initial meetings were held with NGOs, and with potential developers and operators, to discuss plans for the consultation before it was finalised or launched • The July 2010 seminar included breakout groups to gain feedback and ideas on improving the consultation process • Comments were also made to the main formal written consultation on the process itself • Feedback from evaluation interviewees was that 6 of the 8 did feel that the consultation provided opportunities for stakeholders who wanted to influence the consultation process to do so. Only 1 felt it did not. 	<ul style="list-style-type: none"> • NGOs and other national and local interest groups were not fully satisfied with the opportunities to influence the consultation process • There were no clear systems for responding to concerns expressed by interested parties about the consultation 	<p>This objective fully met in that opportunities were provided.</p> <p>However, the success of those opportunities resulting in improvements to the consultation are less clear.</p>
<p>Objective 3. To encourage stakeholder input and responses.</p>	<ul style="list-style-type: none"> • 6 of the 8 evaluation interviewees felt that the consultation did encourage stakeholder input and responses. They mentioned, in particular, the good quality of the seminar and also commented on how open the process was, the value of the regular updates, and the benefits of having both the seminar and the written consultation. Only 1 felt it did not. • Extensive efforts were made to encourage stakeholder input and responses, both at the start and during the consultation. This was done through use of existing and new mailing lists, and through much wider dissemination of information about the consultation. • Extensive efforts were also made to engage with local interests to 	<ul style="list-style-type: none"> • There were concerns that the technical complexity of the information provided deterred and excluded some potential participants 	<p>This objective was fully met, as stakeholders were encouraged to respond, and over half felt they could express their views fully.</p> <p>However, the technical complexity of the consultation deterred some other potential respondents</p>

	<p>encourage them to input to the consultation, including through meetings with local groups</p> <ul style="list-style-type: none"> • Over half of evaluation survey respondents (56%) said they were able to express their views fully in the consultation 		
Objective 4. To identify lessons to improve future Environment Agency stakeholder consultation activities.	<ul style="list-style-type: none"> • An independent evaluation was commissioned to help identify lessons, which are included in this report. • The evaluation research included questions to respondents (and non-respondents) to the consultation, and analysis of comments to the main formal written consultation, to draw out the lessons for the future from participants • A joint meeting has been held between the EA and ONR to share learning from the lessons of this consultation. 	<ul style="list-style-type: none"> • It is unclear how the lessons identified will be implemented in future stakeholder consultation activities. 	This objective has been fully met.

This summary shows that the aim and all the objectives of the consultation were fully met, although some problems were identified. The success of the design and delivery of the consultation in fully meeting its overall aim and objectives is an important achievement.

8.2 Participant satisfaction with the consultation

The evaluation survey of respondents to the consultation, undertaken early in 2011 (before the decision documents were published) found:

- 17 (47%) were satisfied with the consultation overall, of these, 6 (17%) were 'very' satisfied.
- 15 (42%) were not satisfied, of which 7 (19%) were not at all satisfied.

Those who were satisfied did not add comments but those who were not satisfied did, and their comments revealed that their reasons for dissatisfaction tended to be around the limits to the GDA process (e.g. concerns that safety issues are not sufficiently focused on future rather than just current operations), as well as around the problems with the timing, approach and limits of the consultation including that crucial data was missing. Comments included:

"All the new nuclear build consultations I have taken part in have been very heavily structured to encourage responses favourable to the nuclear applicants. As the regulators are supposed to be acting on behalf of the government and the public, these consultations should have been more objectively designed and presented." (survey respondent)

"Every non-pro-nuclear body that we are aware of has complained about every one of the many 'consultation' exercises from the start. That there have been so many of them and the process so rushed has precluded many points of view being included." (survey respondent)

"GDA is such a vital part of the approval of new nuclear build that it is a pity that the consultation was taking place before the documents were useful." (survey respondent)

This is not a hugely positive response, with less than half of respondents being satisfied with the consultation, and a large minority actively 'not satisfied'. There were clearly some problems with the consultation, particularly the technical complexity of the issues and the uncertainty about future opportunities for engagement in the development of new nuclear reactors. However, the level of dissatisfaction is perhaps surprising given the obvious (and often recognised) efforts to make the consultation open and inclusive.

8.3 Conclusions

This section has shown that the aim and all four objectives were fully met, although not without caveats. It has also shown that participant satisfaction with the consultation was not particularly high, perhaps surprisingly given the expressions of support for the efforts of the Environment Agency in the way the consultation was run. This lack of enthusiastic support for the consultation may be due to the strength of feeling among participants about the issues that they have identified as flaws in the consultation, particularly the technical complexity and early stage of the information provided on key issues and the uncertainty about future opportunities for engagement in the development of new nuclear reactors. These are important messages for future consultation both within the field of nuclear power and more widely.

9 Conclusions and lessons for the future

9.1 Conclusions

In general, this was an impressive consultation, with several elements of good practice that met and went beyond the criteria in the Code. The work to raise awareness of the consultation and to proactively disseminate the consultation documents and encourage wide participation were exemplary. In addition, the quality of the responsiveness of the Environment Agency to the consultation was exceptional, with detailed analysis of the responses and very open publication of responses to points raised by participants.

One of the major areas where the consultation was less successful was in relation to the quantity and quality of the information provided in the consultation documents, which was considered both excessive and incomplete, and also not accessible to ordinary local residents and groups, who were among the target groups for the consultation. The other major concern was the lack of clear links between this consultation and future opportunities for engagement in the process to build new nuclear power stations.

There were clear impacts on GDA decisions and on consultation participants, especially increased knowledge about the GDA process and about the role of the Environment Agency in the GDA process and as an independent nuclear regulator. Overall, there was a sense that the consultation was money well spent given the importance of the issues covered, and the importance of the process being (and being seen to be) open and transparent. The costs of consultation were also seen to be much lower than the potential alternatives (e.g. a public inquiry or judicial review), and consultation costs were a relatively small part of the budget for development (about £5 billion estimated as the cost of building a new nuclear reactor).

The evaluation has shown that the aim and all four objectives were fully met (with some caveats) or, in the case of identifying lessons for the future, currently being met.

There was rather lower satisfaction expressed by respondents to the evaluation survey than implied by this success against objectives: only slightly more were satisfied with the consultation (47%) than were dissatisfied (42%). This is not a very positive response and the level of dissatisfaction is perhaps surprising given the obvious (and often recognised) efforts by the Environment Agency to make the consultation open and inclusive.

Overall, the consultation was a very comprehensive and thorough exercise, with several elements of good practice that met and went beyond the criteria in the Government's Code of Practice on Consultation. However there were also some aspects of the consultation that were less satisfactory, covered in the lessons for the future below.

9.2 Lessons for the future

The evaluation has identified eight lessons for future public and stakeholder consultation exercises which are, in summary:

- **Take confidence from the successful elements of this consultation.** The stakeholder seminar, the work to raise awareness of the consultation and to proactively disseminate the consultation documents and encourage wide participation were exemplary. In addition, the quality of the responsiveness of the Environment Agency to the consultation was exceptional, with detailed analysis of the responses and very open publication of responses to points raised by participants.
- **Ensure that the information provided is appropriate to the target audiences,** especially where the audience is very diverse and includes the general public and local communities as well as academics, NGOs, industry, international regulators, government agencies and

local authorities. This consultation suffered from its attempt to fully engage all these audiences at the same time with the same information. The need for the Environment Agency to get better at presenting scientific and technical issues to the public so they can participate was the most common single suggestion for improving future consultations in responses to the evaluation survey of consultation respondents. Numerous non-respondents explained that they had not taken part because of the highly technical nature of the proposals and their lack of relevant technical knowledge and expertise.

Translation of complex technical information into material that the public can understand and respond to is not impossible and is essential if these audiences are to participate fully in these sorts of consultations in future. In this case, the open and transparent process, and the obvious attempts to ensure inclusivity, allowed the consultation to remain effective, but it is unlikely that repeating this approach to information provision would be acceptable in future.

- **Work with stakeholders to establish agreement on some basic information.** Much of the debate around nuclear power revolves around a lack of agreement on basic scientific evidence. It is clear from stakeholder input to the consultation, and Environment Agency responses, that the same issues are rehearsed over and over again. There have been successful efforts in the past to reach agreement on these sorts of issues (e.g. around the CORWM consultations). Without being simplistic about the difficulties, it is likely that further work with stakeholders on joint fact-finding on some key issues would be valuable in saving resources later if it enables the constant repetition of the same challenges to be avoided.
- **The questions and issues raised by stakeholders may be the most valuable output of the consultation.** The decision documents from this consultation provided a detailed response to many of the questions and challenges raised by interested parties. However, this resource of input from stakeholders could be of further value. A summary of the key issues raised in this consultation by interested parties could be used as a valuable first step in planning the next stage in the engagement processes on new nuclear power, and is likely to save time later if the answers to these issues can be identified in advance.
- **Clearly establish the place of each engagement opportunity in the overall process for building new nuclear power stations.** Many of the comments made by interested parties to this consultation were not relevant to the draft proposals presented or the questions asked. It was clear from the evaluation that numerous stakeholders were taking advantage of the opportunity to comment on wider issues relating to new build nuclear power because they were unclear what if any further opportunities there may be comment in future.

The Environment Agency was clear about the place of the GDA process in the wider timeline of the development of new nuclear power, but not about the future opportunities for future engagement in that process. Establishing a timeline for future engagement, and making that information available to all interested parties may encourage the relevant stakeholders to respond to the relevant consultation at the relevant time. This will help avoid interested parties raising the same issues at every opportunity, save agencies' time responding and save interested parties' time feeling they have to respond to all consultations and so reducing the potential for consultation fatigue.

- **Summarise the evidence showing the impacts of stakeholder input.** The detailed decision documents published on the GDA process in December 2011 were comprehensive and thorough in both explaining the final decisions and responding in detail to input from stakeholders. This excellent data could be used to produce a summary table showing where stakeholder input has changed the original proposals, where it supported those proposals, when it had not been relevant and was referred on to other departments or agencies (and who this went to), and when it has been held over to feed into another stage of the overall decision making process (and what that is). This would help demonstrate the value of the consultation to interested parties and build trust in these processes for the future.

- **Start stakeholder engagement early with key target groups.** The consultation did consult with NGOs and industry during the planning stage and there is potential to extend this early approach to targeting engagement with additional audiences, such as academic audiences. In addition, early notice of engagement opportunities, before consultation documents are published, will help alert interested parties and ensure they can respond during the limited timescales of formal consultations.
- **Independence is a key factor in building public trust and confidence.** Trust and confidence can result from effective engagement activities: in this case the July 2010 seminar was seen to strengthen trust in the Environment Agency as a regulator. However, the independence of engagement processes is a key factor in their credibility and the provision of information by companies to the GDA process, and their funding of the consultations, needs to be dealt with clearly and explicitly if trust is to be maintained and built in future. These factors were referred to in consultation documents but the precise relationships were not entirely clear and it would be helpful in future to fully recognise and address these sorts of potential conflicts of interest, and how they are dealt with in consultation processes.