

Foreword

We are living through a period of conscious experimentation with the mechanisms of British democracy. In face of a steady increase in public disillusionment with politics and politicians, many of our traditional political institutions have come to seem singularly ill-suited to the times - at once too remote from and too overbearing towards the public. Faced with this situation, the British Government has initiated a range of reforms at the national, regional and local levels. At the same time, it has shown growing interest in new forms of public consultation which promise to allow citizens a greater say in public policy-making. A "People's Panel" has been established, in order to provide regular feedback to central Government on a range of social and political issues; and a large number of so-called "citizens' juries" have been held in order to contribute to regional and local decision-making.

This report represents the outcome of another form of public consultation - a "consensus conference". Consensus conferences were developed in Denmark in the 1980s as a form of participatory technology assessment. In a consensus conference, a panel of lay people comes together to conduct an investigation into a particular science or technology-related policy question. The lay panel undertakes a preliminary review of the question in order to define its research agenda, it selects and then publicly cross-examines experts about the question, and it produces a report of its findings. The aims of a consensus conference are to stimulate informed public debate, and to contribute to public policy-making. During the 1990s, this distinctively Danish model of public consultation has been adopted by a growing number of other countries. The first UK National Consensus Conference on Plant Biotechnology was held in 1994. After a somewhat surprising gap of almost 5 years, a second British consensus conference on the issue of radioactive waste management took place in May 1998.

If public consultation is to contribute to overcoming what has been termed the "democratic deficit" in so much of modern politics, then it must be treated with the utmost seriousness by the policy-making community. In 1994, the first consensus conference lay panel ever to be assembled in the UK expressed a number of substantial reservations about the way in which plant biotechnology was being developed. Unfortunately, however, there is little evidence to suggest that these views were attended to with any very great care by the policy-making community. In the second UK consensus conference reported here, the lay panellists actually suggested that if more attention had been paid to the views of their predecessors in 1994, some of our present difficulties over GM foods might have been avoided. It is to be hoped that this lesson has now been learned, and that the present British Government (which contributed towards the costs of the Consensus Conference on Radioactive Waste Management through a grant from the Office of Science and Technology) will take careful note of the views expressed in this Report as it prepares its policies on the handling and storage of radioactive waste. Hopefully, in another five years time we shall be able to look back to this recent and well-executed initiative in public consultation as a crucial constructive step in the forging of a workable political consensus on this most delicate and difficult of matters.

John Durant

Assistant Director and Head of Science Communication

The Science Museum

Professor of Public Understanding of Science

Imperial College, London

Member of the Steering Committee,

Second UK National Consensus Conference on Radioactive Waste Management

EXECUTIVE SUMMARY

- A Consensus Conference is a form of public participation, pioneered in Denmark, which aims to influence the policy making process by opening up a dialogue between the public, experts and politicians.
- The key player in a Consensus Conference is a Citizens' Panel made up of fifteen members of the public selected at random.
- The Citizens' Panel prepares for the Conference over two weekends at which they formulate questions for the Conference and choose the experts they wish to hear from.
- The UK's second national Consensus Conference took place on 21-24 May 1999 at Westminster Central Hall, London on the theme of radioactive waste management.
- At the Conference, the Panel cross-examined their chosen experts from industry, government and environmental groups and then wrote a report on their findings. Their overall conclusions were:

Overall Conclusions from the Citizens' Panel Report

- Radioactive waste must be removed from the surface and stored underground, but must be monitorable and retrievable. Cost cannot be an issue. We must leave options open for future solutions.
- We recommend the appointment of a neutral body by the Government to deal with waste management, including the selection of a national storage site. The criteria for site selection should be open and publicised.
- All institutions handling radioactive waste should conform to the same high standards which should include random scrutiny.
- Research and development must be continued on a much larger scale and international co-operation should be encouraged.
- We see no problem with privatisation within the nuclear industry if done properly with adequate safeguards.
- At present there is a lack of trust and understanding and public awareness must be raised. The public needs to be fully informed of the problems and solutions available. Decision-making must be open and transparent. Radioactive waste issues should be made part of the Government's education strategy.
- We are not fundamentally opposed to nuclear power, but it should not be expanded until a way is found to deal adequately with the waste problem.
- A new and internationally accepted method of waste classification is needed that clearly and openly communicates information about nuclear waste to the public as well as industry.
- Existing international reprocessing contracts should be honoured but no new ones should be taken up.
- Finally, while the industry has in the past had a well-deserved reputation for secrecy, we have in the course of the conference noted a welcome shift in culture and a new feeling of openness in dealing with these difficult issues.

INTRODUCTION

This is the final report from the UK's second national Consensus Conference, held on 21-24 May 1999 at Westminster Central Hall, London, on the theme of radioactive waste management.

The format of the report closely follows that of the Conference and is essentially the Conference 'proceedings', the intention being to provide a comprehensive report on what actually went on at the Conference. This section provides some general background to the Consensus Conference process, followed by details of this particular Consensus Conference.

The main body of the report contains the witness presentations. These are the brief five minute presentations that witnesses were asked to give at the Conference in response to one of the nine key questions identified by the Citizens' Panel. The Panel members were provided with a copy of these presentations at the Conference and they are reproduced here under each of the nine question headings. This is then followed by the Citizens' Panel Report which was written on the third day of the Conference. This is entirely the work of the Panel. It gives the Panel's views and conclusions on the subject, based on the evidence they received.

This report ends with transcripts from the final day of the Conference where an eminent group of speakers, including the Rt Hon Michael Meacher MP and Lord Flowers, were invited to give their responses to the Panel Report.

A copy of the Conference Programme and a list of the witnesses who spoke at the Conference are included in the appendices. Contact details for UK CEED and David Plater, the facilitator, can be found on the inside front cover.

In order to ensure that the Panel Report was factually correct, all the witnesses who took part in the Conference were invited to check the Panel report for accuracy. Any necessary factual amendments have been incorporated into the text, but the main substance of the report has remained unchanged. Additional comments have been included in an addendum at the end of the Panel Report.

BACKGROUND

What is a Consensus Conference?

A consensus conference is a forum at which a citizens' panel, selected from members of the public, questions 'experts' (or 'witnesses') on a particular topic. The Panel then assesses the responses, discusses the issues raised, and reports its conclusions at a press conference. A distinctive feature of this approach is that the citizens' panel is the main actor throughout: it decides the key aspects of the debate, including the choice of questions and selection of the witnesses, and formulates its own conclusions. At the end of the conference, the panel produces a report outlining its conclusions and recommendations, which is circulated to key-decision makers in the government and industry and to other interested parties.

Despite the title 'Consensus Conference', the citizens' panel is not forced to reach a consensus, but rather is encouraged to explore the extent to which they are able to agree. Experience shows that citizens' panels take an independent line and give a unique insight into the way in which issues are perceived by members of the public who have had the opportunity to fully consider the evidence. The citizens' panel's decisions and observations are not binding on the various parties it consults as part of the process, or any other body, but the conclusions of panels in the past have proved influential in the subsequent development of policy.

Consensus conferences are especially suited to dealing with controversial issues of public concern at a national level which are often perceived as being too complex or expert dominated. Past consensus conferences have tended to focus on issues of science and technology, but this approach is equally well suited to other issues which require careful consideration by informed members of the public.

The only previous national Consensus Conference to have been held in the UK was in November 1994 on the topic of plant biotechnology. This conference was co-ordinated by the Science Museum and funded by the Biotechnology and Biological Sciences Research Council.

History of Consensus Conferences

The consensus conference concept is based on a model of technology assessment which originated in the health care sector in the USA during the 1960s. This was further developed in Denmark by the Danish Board of Technology, who introduced the use of a citizens' panel to the process. Since 1987, over fifteen consensus conferences have been held in Denmark, with issues of debate ranging from air pollution to gene therapy. Several of these are claimed to have had a direct impact on parliamentary decision-making. The Netherlands, the UK, New Zealand, Norway and Austria and, more recently, France, Switzerland Australia and Canada have followed suit, building upon the Danish example.

Aims

The main aim of a consensus conference is to influence the policy making process by opening up a dialogue between the public, experts and politicians. Through informed and structured debate on issues which are often complex and contentious, areas of public concern are identified along with recommendations as to how they may be examined and resolved. A consensus conference promotes constructive links between industry, government, NGOs, academia and the public and expands the availability of accessible, accurate information. Through wide media coverage, it acts to advance public understanding of the topic and policy alternatives.

The Consensus Conference Process

The approach pioneered by the Danish Board of Technology provides a basic outline for the organisation of a consensus conference. To guarantee the integrity of the whole process, a set of basic rules, detailing how the process should be conducted, is established at the outset and made clear to all those involved. The main features of a consensus conference are as follows:

Ensuring independence

The initial task is to recruit an advisory committee of between eight to ten members. The committee must be balanced and objective, following clear and transparent procedures. The committee oversees the whole process, ensuring the independence and integrity of the proceedings and safeguarding the credibility of the conference. Key tasks of the committee include defining the broad scope of the debate, selecting the method for recruiting the citizens' panel and drawing up a list of witnesses for the citizens' panel to call upon.

Selecting the witnesses

A comprehensive list of 'experts' or 'witnesses' is drawn up from which the citizens' panel can select those they wish to give 'evidence' at the actual conference. This list is based on the knowledge and expertise of the advisory committee and on recommendations from other interest groups. The witnesses include scientific and technical experts as well as people from wider perspectives, such as social and ethical fields.

Recruiting the citizens' panel

Since the citizens' panel is central to the consensus conference process, fair and independent recruitment is essential. A panel of between 10-20 people is selected to reflect a variety of socio-demographic criteria, such as gender, age, education, occupation and geographical location. Panel members should not have any significant prior involvement with the conference topic - they are taking part in their capacity as citizens, not as professionals or specialists. The panel is too small to be a statistically representative sample of the population, but should nevertheless represent a genuine cross-section of the general public, reflecting as wide a range of views as possible.

The selection process may involve advertisements in the media inviting applications for membership of the panel or random selection techniques undertaken by an independent market research company. The advisory committee is responsible for deciding the appropriate method to be used.

Citizens' panel preparation

In order to be able to fulfil their role as informed citizens, the panel is given time to prepare before the actual conference. The panel members receive a comprehensive information pack and attend two preparatory weekends. Throughout the whole process, it is crucial that the citizens' panel is seen to be free of all

pressures and influences that might jeopardise the independent and balanced nature of the debate.

The introductory material, commissioned by the advisory committee, outlines the essential aspects of the subject under consideration. The committee must ensure that the information is presented in a balanced and neutral way, since this is likely to be the first in-depth encounter with the subject for the panel members.

The two preparatory weekends take place in the two months before the actual conference. Over the course of these weekends, the panel have the opportunity to get to know each other, learn to work together and receive an overview of the various technical and ethical issues concerned. The panel identifies the key questions to be addressed at the conference and selects the witnesses it wishes to hear from.

Facilitating the process

Throughout the preparatory weekends and during the conference, an independent facilitator is present to support the panel through the process. The facilitator is responsible for monitoring group dynamics, ensuring all panel members have their fair say, and assisting in the writing of the final report. The facilitator should have no influence on the deliberations of the panel or the content of the report.

The Consensus Conference

The consensus conference itself is the forum at which the citizens' panel is able to put its chosen questions to the selected witnesses, discuss the topic in-depth and produce a final statement on its conclusions. These conclusions, along with the witnesses' presentations, are incorporated into a final report which forms the key document for policy makers.

The UK National Consensus Conference on Radioactive Waste Management

The idea of holding a national Consensus Conference on Radioactive Waste Management in the UK originally came from the UK Centre for Economic and Environmental Development (UK CEED). UK CEED was responsible for securing funding for the project, the majority of which came from public sources - through a Public Understanding Grant from the Office of Science and Technology and from the Natural Environment Research Council. The remainder of the funding was provided by NIREX, the company responsible for implementing national policy on disposal of intermediate level radioactive waste in the UK. The Conference was organised by Jane Palmer, Project Manager at UK CEED.

Aims of the National Consensus Conference on Radioactive Waste Management

- To contribute the views of informed citizens to the policy-making process for radioactive waste management;
- to gain an appreciation of the way in which the issues are framed and prioritised by the public;
- to identify key issues of concern as seen by the public and to recommend a process by which they might be examined and resolved;
- to expand the availability of reliable and high quality information to the public;
- to stimulate wider and better informed public debate on the issue.

This Consensus Conference was not:

- a replacement for the normal democratic decision-making processes - it was intended to enhance the existing structures;
- about making detailed technical judgements on the treatment of radioactive waste or the merits of alternative repository sites;
- intended to give a view that is representative of the whole UK population;
- a public relations exercise on behalf of the nuclear industry or the anti-nuclear groups.

The Advisory Committee

The whole project was overseen by an Advisory Committee, which was appointed after consultation with several organisations including Friends of the Earth, the Natural Environment Research Council and Nirex.

The Committee met five times during the year of the project. The members of the Committee were:

- Ian Christie, Deputy Director, Demos
- Professor David Cope, Director, Parliamentary Office of Science and Technology
- Professor Charles Curtis, Research Dean, Faculty of Science & Engineering, Manchester University
- Professor John Durant, Assistant Director, Science Museum
- Dr Simon Joss, Senior Research Associate, Centre for the Study of Democracy
- Sir Ron Oxburgh, Rector, Imperial College
- Jane Palmer, Project Manager, UK CEED
- Dr Andy Stirling, Research Fellow, SPRU
- John Winward, Executive Director, UK CEED

Selection of the Citizens' Panel

Recruitment of the Citizens' Panel was undertaken by an independent market research company, CFS International, using random selection techniques. Four thousand people, selected at random from the national electoral register, were invited to take part in the Consensus Conference as a member of the Citizens' Panel. They were asked to give up their time voluntarily to attend the two preparatory weekends in March and April and the four days of the Conference in May. At this stage, the subject of the Conference was not mentioned. Just over 120 people responded expressing their interest. They were then contacted again, given details of the Conference topic and asked to confirm that they were still available for the necessary dates. Around 70 people responded, confirming their availability and interest. From this group of people, the sixteen members of the Panel were selected essentially at random, whilst ensuring that there was an even balance of men and women with a mix of educational backgrounds and that regions throughout the country were represented. Of the sixteen people who originally agreed to take part, one person did not attend the first preparatory weekend and so the Panel remained at fifteen members.

The Citizens' Panel

The members of the Panel were:

Mary Allan, Ross-shire, Scotland	Pam Phillipou, South Glamorgan
Ted Bowen, Shropshire	Elisabeth Prescott, Merseyside
Carole Dancox, Lancashire	Jake Rolfe, Wiltshire
David Denham-Smith, Norfolk	Christine Talbot, Hertfordshire
Anna Hiett, Wiltshire	Trystan Tavener, Nottinghamshire
Ben Humphries, Buckinghamshire	Chris Thomas, West Yorkshire
Colin Hunter, Norfolk	Derek Windsor, Cambridgeshire
John Paxton, Tyne & Wear	

The Citizens' Panel Remit

The Citizens' Panel was provided with the following remit by the Advisory Committee as the key focus for their report, although the Panel was also free to consider any other related issues that they saw as important:

The Consensus Conference is to focus on the effective and publicly acceptable long-term management of nuclear waste in the UK, both civil and military, concentrating particularly on intermediate and high level waste. This will be considered by the Citizens' Panel in their capacity as members of the public, taking into account what they see as the relevant issues.

Preparation of the Citizens' Panel

Before their first preparatory weekend in March, the Panel was provided with a document called the

'Introductory Material', which was intended to be, as far as possible, a balanced and 'neutral' introduction to the area. This was specially prepared for the Panel by Ehsan Masood (Science writer with the journal Nature), based on contributions and comments from a range of organisations within the field, who also agreed the final version. A copy of this document is available from UK CEED on request and is also available on the UK CEED website at www.ukceed.org.

The Panel then attended two preparatory weekends. The first was in March at the White Hart Hotel in Harrogate, where the Panel met for the first time. They were provided with further information from the organisations who contributed to the Introductory Material. They also received two presentations - the first as an introduction to the basic science from Averil Macdonald (Reading University) and the second on a historical perspective of the UK situation from Gary Kass (Parliamentary Office of Science and Technology). At their second preparatory weekend at Harris Manchester College, Oxford, the Panel chose to concentrate on formulating the questions and selecting the witnesses for the Conference, rather than having more speakers. They asked for only one presentation from Dr John Connor (Ministry of Defence) in an 'extra' evening session.

Between the two preparatory weekends, the House of Lords report on Radioactive Waste Management was published and a copy of this was sent to each Panel member, along with the corresponding press releases from Nirex, British Nuclear Fuels plc, Greenpeace and Friends of the Earth.

Throughout the whole process, the Panel was supported by a professional, independent facilitator, David Plater of David Plater & Co (see inside front cover for contact details).

Selecting the Witnesses

Over two hundred potential witnesses were contacted in Autumn 1998 and asked if they would be prepared to be included on a 'Witness List' from which the Panel could choose speakers for the Conference. To ensure that this list was as balanced and comprehensive as possible, all those contacted were also sent a copy of the provisional Witness List and asked to make suggestions of anyone else they thought should be included. Around 80 people registered for the Witness List and completed a 'witness registration form', stating their area of expertise and giving a brief paragraph on their perspective on radioactive waste management in order to help the Citizens' Panel make their choice of witnesses. Where appropriate, witnesses were listed as organisations rather than individuals so as to make the process of selection easier for the Panel.

Each member of the Panel was provided with a copy of the Witness List at the first preparatory weekend. The List was indexed by area of expertise and type of organisation and included the registration forms for each witness. The Panel was invited to suggest any additions to the list if there was anyone they felt was missing. At their second preparatory weekend, after finalising their questions for the Conference, the Panel then chose the witnesses to respond to each question. In total, the Panel asked for twenty-six witnesses - only two of these were subsequently unable to attend due to prior commitments.

The Consensus Conference

21-24 May 1999, Westminster Central Hall, London

The UK's second national consensus conference was a four day event, open to a wide audience, including members of the public, policy-makers, industrialists, pressure groups, the media, the scientific community and other interested parties. The first two days of the Conference were organised into nine sessions, one for each of the main questions formulated by the Citizens' Panel. In each session, the chosen witnesses gave a brief five-minute presentation, followed by further discussion and debate between the Panel and witnesses. Members of the audience were able to submit written questions throughout these two days for consideration by the Panel who would ask those they felt were appropriate.

On the third day, the Panel retired behind closed doors to the Parliamentary Offices of Science and Technology to write a report on their conclusions and recommendations, based on the information they received over the previous three months and from the discussion and debate at the Conference itself. They were provided with editorial and secretarial support to help them in their task but still worked late into Sunday night before the report was ready to be sent to the printers. Copies of the report were available at the Conference the next morning for the fourth and final day. The Panel presented their findings to the Conference and answered questions from the audience and media. Key figures from the Government, industry and environmental groups were invited to respond to the report: The Rt Hon Michael Meacher MP, Lord Flowers, Professor Sir John Krebs (NERC), David Bonser (BNFL), Charles Secrett (Friends of the Earth)

and Chris Murray (NIREX). The Conference ended with a reception at the House of Lords.

This second national consensus conference to be held in the UK has made an important contribution to public debate and involvement in the policy-making process. This initiative has the potential to help shape future consultation processes and establish a more permanent role for public participation techniques within the wider political context.