# CITIZENS AND SPECIALISTS INFORMING DECISIONS ON SCIENCE AND TECHNOLOGY

briefing 1 Opportunities and challenges for involving citizens in decision making

> This briefing sets out the background to attempts to involve citizens more in public policy decision making, especially about scientific and technological developments which may conflict with public values and attitudes.







### A loss of trust in decision makers

In the last decade the United Kingdom has experienced a series of scientific, medical and technological controversies – BSE (so-called 'mad cow disease'), hospitals retaining the organs of dead patients without permission, the measles, mumps and rubella vaccine, and genetically modified crops are just a few examples.

These have, in part at least, led to a loss of public trust in the information provided by government, scientists and the medical professions. One House of Lords Committee has called this 'a crisis of confidence' in government regulation of science and technology.<sup>1</sup> Governments are now faced with some troubling questions about how decisions are made, by whom and what the consequences might be.

Within this context there are specific concerns relating to medical technology. Recent advances in biotechnology and the medical sciences raise the possibility of a host of new treatments and cures for disease. For example, scientists are working on techniques like xenotransplantation, where the cells or organs of one species (like pigs) are transplanted into another (potentially humans). However, such procedures raise significant ethical and social questions for many citizens. There is growing scepticism about technological developments which threaten deeply held values or pose risks to human health and the natural world.

Creating systems which better reflect public values in policy making is therefore an urgent task facing government at all levels. But how are decisions to be reached when difficult and competing health and safety, environmental, social, economic, cultural and ethical concerns are all affected by the choices?

### New ways of involving citizens in decision making

One answer to this question is to ensure wider public support for decisions about which scientific and technological innovations to develop and how they are to be used. This means involving the public more intimately in these decisions. Currently citizens are largely excluded from processes of public policy decision making on science and technology, and are not given an opportunity to evaluate all the information on an issue and make a judgement accordingly.

There are signs that a shift is taking place in an effort to increase the legitimacy and democratic accountability of decision making. For example in the environmental area, the Aarhus Convention commits European governments to provide adequate information to support more active participation by citizens in policy processes. This endorses the view that a more open process of communication between government and its citizens should become the cornerstone for policy making.

In the area of science and technology, researchers have experimented widely with ways of involving citizens and stakeholders more in policy-making processes, and to bring them into face-to-face contact with specialists. Techniques that are being developed to address this include advisory panels, citizen's juries, scenario workshops and consensus conferences.

Many questions arise about how to address different stakeholder interests and combine citizen and specialist perspectives, quantitative and qualitative information and individual and group-based deliberation. One approach which aims directly to address these questions is Deliberative Mapping (see Briefing 2 in this series).

## **Deliberative Mapping**

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### Involving citizens in decision making: the opportunities

Opening up the policy-making process to public involvement and appraisal could present a number of opportunities including:

- empowering those who participate, and raising wider public confidence in the decision-making process
- providing better information to policy makers about the detailed nature of public priorities and concerns
- promoting greater public understanding of the complexities and difficulties involved in decision making on science and technology issues
- guarding against the domination of decision making by small groups of experts with particular points of view
- leading to decisions that are accountable and more in tune with public values and interests.

In summary, if they are done well, processes which include citizens more in decision making can widen the range of people involved in the appraisal of policy options. This may help legitimate the basis of future policy making and make the resulting decisions more robust.

### Involving citizens in decision making: the challenges

However there are also challenges inherent in these approaches. These include how to:

 find and justify the amount of money and other resources required to run high quality public involvement processes

- prevent those involved, particularly people representing interest groups and organisations who feel obliged or are required to take part, from tiring of such processes
- prevent expertise being acquired but then lost through one-off exercises independent from broader changes in approach by government
- ensure that those responsible for policymaking processes are committed to acting on the findings
- avoid being overly reliant on the quality of facilitators and other individuals to guide public participation processes
- develop satisfactory evaluation frameworks to ensure that the process and outcomes are genuinely beneficial.

The practicalities of involving citizens, and in what form, will continue to be debated. Will new processes lead to any wider sense of public legitimacy? Or could they in fact undermine existing democratic processes? In short, will they lead to better decision making?

Some commentators fear that processes which include the public may prove to be protracted. Others are concerned about a lack of transparency. There are also worries that these processes could lead to decisions which are either inconclusive or based on artificial agreements where participants have felt obliged to consent to one option over another.

### The future for involving citizens in decision making

In the last decade, researchers have experimented with a wide variety of participatory processes to support a more open public policy-making process. The need to find ways of engaging citizens and stakeholders more in this way is likely to increase in the coming years.

An ever-expanding range of challenging new scientific and technological developments are in the pipeline. These include gene therapy, embryonic stem cells, human cloning and nanotechnology. All pose complex social, economic and ethical challenges.

If members of the public are to be meaningfully involved in processes to assess the risks, benefits and costs of cutting-edge technologies, then more work needs to be done to refine processes designed to maximise citizen participation. Exploring how such approaches can be integrated effectively into policy-making processes also needs further examination.

The challenge lies in designing and implementing new processes of public engagement which are tailor-made (or 'fit for purpose') as part of a more strategic approach to decision making.

#### About the Deliberative Mapping briefing paper series

This is one of five briefings which explain Deliberative Mapping. This is an approach designed to help specialists and members of the public weigh up evidence to reach a joint decision on a complex policy issue where there is no obvious way forward.

The five briefing papers are:

- 1. Opportunities and challenges for involving citizens in decision making
- 2. The Deliberative Mapping approach
- 3. Deliberative Mapping in practice: the 'kidney gap'
- 4. Citizens' panels in Deliberative Mapping: a user guide
- 5. Using the Multi-Criteria Mapping (MCM) technique.

#### **Further information**

These briefings are available to download at **www.deliberative-mapping.org** 

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#### Reference

1 House of Lords Select Committee on Science and Technology (2000) *Science and society*, The Stationery Office: London