

# The Government's Approach to Public Dialogue on Science and Technology

## The need for public dialogue on science and technology

The Government believes that if the UK is to take better advantage of the opportunities for creating wealth and improving quality of life offered by scientific discovery and technological development, it is crucial that we develop new approaches to bring funders, scientists and the public together in more equal and constructive dialogue to explore emerging issues and wider possibilities.

The Sciencewise programme, which is led and funded by UK Research and Innovation (UKRI) with support from the Department for Business, Energy & Industrial Strategy (BEIS) provides assistance to policy makers to carry out public dialogue, a two-way conversation with members of the public, to inform their decision-making on science and technology issues.

## The purpose and status of this document

This document outlines a set of guiding principles for public dialogue on science and technology-related issues. These guidelines have been developed by the Government through its Sciencewise programme, in collaboration with policy makers, practitioners, academics and representatives of the scientific and business communities working in the areas of science policy and public engagement. UKRI is very grateful to all those who have contributed to the development of these principles.

These guidelines provide the basis of public dialogue activity carried out under Sciencewise funded projects. In addition, they provide guidance in best practice in public dialogue, which Sciencewise recommends be adopted in all dialogue activity.

### **This document should, therefore, be considered in relation to the following:**

Consultations and public dialogue activities on specific science and technology related issues to be carried out by (or on behalf of) Government departments, advisory committees, agencies or non-departmental public bodies (including research councils)<sup>1</sup>.

These guiding principles may also be useful in public dialogue activities on issues beyond those involving science and technology.

This document will be kept under review and the guidance will be revised and re-issued periodically<sup>2</sup>.

## What is public dialogue?

Public dialogue is a process during which members of the public interact with scientists, stakeholders (for example, research funders, businesses and pressure groups) and policy makers to deliberate on issues relevant to future policy decisions.

---

<sup>1</sup> UK non-departmental public bodies and local authorities are encouraged to follow this guidance. Devolved Administrations are free to adopt this guidance should they wish to do so.

<sup>2</sup> This edition published June 2019.

Some of this deliberation must be face-to-face and it needs to give all sides the chance to speak, question and be questioned by others. It must take place far enough ahead of policy decisions being made to be able to have some influence over those decisions.

Such dialogue is normally commissioned by policy makers who are in the process of formulating policy positions, so it feeds directly into the policy-making process; effectively as part of the evidence-base alongside other types of evidence. A key requisite of public dialogue as developed by Sciencewise is that it must have a 'policy hook' (a clear link to decision making) along with a clear understanding of who will be listening to the outcomes.

For Sciencewise, public dialogue **includes**:

- opening up discussion with public and different perspectives to help explore issues, aspirations and concerns when shaping policy
- talking with the public about ethical and societal issues related to public policy
- requiring the instigators of the dialogue to be potentially willing and able to change their minds
- ensuring that public insights can inform policy involving science and technology issues

Public dialogue **is not**:

- solely one-way communication 'to' the public
- representative - participants do not formally represent their geographic area or discipline
- a talking shop with no policy purpose
- about the public actually making decisions - these are ultimately the responsibility of elected Government Ministers and others
- about simply gaining public support or acceptance for preconceived policies

### Why carry out public dialogue?

Public dialogue is carried out in order to inform Government thinking and the thinking of other participants and to add to the body of evidence presented to decision makers (Ministers and others). It can facilitate better discussions around science and result in better decisions for society, and can be one way of opening up policy-making.

**The BEIS Public Attitudes to Science Survey 2014 concluded that:**

- the public is very positive about science
- scientists and Government should take account of what ordinary people think
- the general public would like to feel better informed on scientific and technological debates and developments
- there are some issues with trust in science and its governance

The House of Lords Select Committee on Science and Technology<sup>3</sup>, reporting in 2000, stated that: '...direct dialogue with the public should move from being an optional add-on to science-based policy-making and to the activities of research organisations and learned institutions, and should become a normal and integral part of the process'.

In 2005, the Council for Science and Technology recommended the development of a new framework for the use of public dialogue to inform science and technology related policies, and for

---

<sup>3</sup> House of Lords (2000) *Science and Society* - Third report of the Science and Technology Committee.

the Government to develop a 'corporate memory' for public dialogue<sup>4</sup>. Parliament has also recognised the role that public dialogue can play in supporting effective policy making. For example, in 2017 the Science and Technology Committee noted the government's "...primary responsibility for fostering and facilitating science engagement in its policy-making." The committee recommended that the Sciencewise programme "...should be routinely used across all government departments, so that public opinion is fully captured in developing government policy where science is involved."<sup>5</sup>

Sciencewise experience is that, when a policy area is discussed early with a group of citizens who have access to key scientists, pressure groups and other leaders in the field, the better and more robust that policy will be, and the more certain Government and Ministers can be that the policy will be successfully implemented.

### **Government's aim**

Our aim is to ensure that the public and the broad science community are able to see that a wide range of views and perspectives have been heard in the open, and been taken account of by policy makers as decisions relating to science and technology innovation are taken.

### **Government's objective**

Our objective is to enable more informed policy in science and technology and so build confidence in decision-making related to the undertaking, development and overall governance of science and technology; to build on the public's generally positive views of science - and both to maximise the opportunities offered by new areas of science and technology and to minimise potential downsides.

### **Government's approach**

Our approach is to enrich decision-making by working with the public to understand the aspirations and concerns of the UK population in the development of policies involving science and technology and their governance. Such public dialogue will inform, rather than determine, policy and decision-making by those empowered to do so.

### **Support**

Sciencewise will facilitate this through robust, timely, inclusive and properly resourced public dialogue that is clearly linked into decision-making processes on public policy involving science and technology. Such dialogue will involve the public, scientists, policy makers and other perspectives, and will explore existing and potential opportunities as well as concerns related to technological, scientific, social, ethical, legal, economic, health, safety and environmental issues.

Sciencewise will ensure that public dialogue is informed, drawing on evidence and information from a wide variety of sources. It will ensure that dialogue is delivered according to the principles of openness, honesty and fairness, designed to generate mutual understanding of views and underpinned by a willingness to take account of the outcomes of such dialogue in decision-making.

---

<sup>4</sup> Council for Science and Technology (2005) *Policy through dialogue: informing policies based on science and technology*. March 2005.

<sup>5</sup> Science and Technology Committee (2017) *Science communication and engagement - Eleventh Report of Session 2016–17*, March 2017



**UK Research  
and Innovation**

Sciencewise will also ensure that the results and the influence of public dialogue on decision making are communicated effectively.

### **Government commitment**

Government is committed to listening to and taking account of views expressed in our policy and decision-making. We believe strongly that public dialogue will help us to identify the most appropriate directions for science and technology and deal with the issues arising.

We are committed to improving our approach to public dialogue on science and technology. We will review policy, guidance and experience to ensure that our approach is compatible with and contributes to good practice. We will share the learning gained from this approach within the science, engineering and technology community and beyond.

## The guiding principles for public dialogue in science and technology

Based on theoretical understandings and practical experience, the essential elements of public dialogue on policy involving science and technology are set out below. The Government has adopted the approach set out in this document, but recognises that this guidance will continue to be refined as experience grows.

### The key principles for public dialogue seek to ensure that:

- the conditions leading to the dialogue process are conducive to the best outcomes (Context)<sup>6</sup>
- the range of issues and policy opinions covered in the dialogue reflects the participants' interests (Scope)
- the dialogue process itself represents best practice in design and execution (Delivery)
- the dialogue can deliver the desired outcomes (Impact)
- the process is shown to be robust and contributes to learning (Evaluation)

In fulfilling these principles, it is recognised that the specific context of each issue will determine the relative importance of each of the following principles. However, as far as practicable, public dialogue on science and technology aims to:

#### (1) Context<sup>7</sup>

- Be clear in its purposes and objectives from the outset
- Be well timed in relation to public and political concerns
- Commence as early as possible in the policy/decision process
- Feed into public policy - with commitment and buy-in from policy actors
- Take place within a culture of openness, transparency and participation with sufficient account taken of hard to reach groups where necessary
- Have sufficient resources in terms of time, skills and funding
- Be governed in a way appropriate to the context and objectives

#### (2) Scope

- Cover both the aspirations and concerns held by the public, scientists in the public and private sector, and policy makers
- Be focused on specific issues, with clarity about the scope of the dialogue. Where appropriate we will work with participants to agree framings that focus on broad questions and a range of alternatives to encourage more in-depth discussion. For example, we might start by asking, "How do we provide for our energy needs in the future?" rather than by asking "should we build new nuclear power stations?"

---

<sup>6</sup> The means by which dialogue can impact upon policy and decision-making will be specific to each organisation involved in the dialogue process and each issue under consideration. It is important, therefore, that organisations involved in dialogue address their own institutional arrangements and working practices to ensure effective application of dialogue processes.

<sup>7</sup> It is probably not advisable to embark upon a dialogue process, where these requirements cannot be met.

- Be clear about the extent to which participants will be able to influence outcomes. Dialogue will be focused on informing, rather than determining policy and decisions
- Involve a number and diversity of perspectives that is appropriate to the task to give robustness to the eventual outcomes<sup>8</sup>

### (3) Delivery

- Ensure that policy makers and experts promoting and/or participating in the dialogue process are competent in their own areas of specialisation and/or in the techniques and requirements of dialogue. Measures may need to be put in place to provide support to build the capacity of the public, experts and policy makers to enable effective participation
- Employ techniques and processes appropriate to the objectives and that are sufficiently credible to policy makers to enable them to take the dialogue into account in decision making. Multiple techniques and methods may be used within a dialogue process, where the objectives require it, including offline and online discussions
- Be organised and delivered by competent bodies
- Have clear and specific objectives, which are clearly communicated with the participants, with specific aims for each element of the process
- Take place between the general public, policy makers, scientists (including publicly and privately funded experts) and other specialists and stakeholders as necessary
- Involve relevant stakeholders at appropriate times in the oversight of the dialogue process, including the production of materials to inform the public participants
- Ensure that no relevant participants are excluded from taking part, with special measures to access hard to reach groups where appropriate, including considerations of appropriate venues, timing and technical equipment in line with the Equality Act 2010<sup>9</sup>
- Where the objectives require it, the use of appropriate conventional and digital media may be needed to ensure that the process reaches the wider population
- Be conducted fairly with no in-built bias; non-confrontational, with no faction allowed to dominate; all participants treated respectfully; and all participants enabled to understand and question others' claims and knowledge
- Provide participants with information and views from a range of perspectives, and encourage access to information from other sources, to enable participants to be adequately informed
- Be deliberative - allowing time for participants to become informed in the area; be able to reflect on their own and others' views; and explore issues in depth with other participants. The context and objectives for the process will determine whether it is desirable to seek consensus, to identify where there is or is not consensus, and/or to map out the range of views
- Be open about areas where there remains plurality and a lack of consensus. The outputs of deliberation should present the rationales and implications of divergent views. Clearly explained reasons for disagreement are as important as carefully crafted collective statements

---

<sup>8</sup> Where advice is sought very early on in decision-making on an issue that is not yet known about by the public, this may be a 'narrow but deep' approach, including a small group of participants. Where there is some knowledge and the impact is likely to be wide-ranging, the policy is nearer to being formed and/or is controversial, an approach involving a wider number of people may be appropriate. This must be decided on a case by case basis.

<sup>9</sup> For more information see the Equality and Human Rights Commission website, [www.equalityhumanrights.com](http://www.equalityhumanrights.com)



- Be of appropriate scale and be appropriately 'representative' - the range of participants may need to reflect both the range of relevant interests, and pertinent socio-demographic characteristics (including geographical coverage). At times, there may be a need to enable participants to be self-selecting. In these circumstances, there will be measures in place to take account of any potential bias this may cause. NOTE: Public dialogue does not claim to be fully representative, rather it is a group of the public, who, after adequate information, discussion, access to specialists and time to deliberate, form considered advice which gives strong indications of how the public at large feels about certain issues. The methodology and results need to be robust enough to provide credible results and give policy makers a good basis on which to make policy
- Involve participants in the reporting of their views, provide them with reports of the dialogue process, and inform them about how their views are being communicated and used in policy and decision making
- Produce outputs from the dialogue (e.g. reports) in a form which is relevant to, and can be easily understood by, public participants, policy makers, the scientific community and other stakeholders, and the wider public
- Enable all those involved in the process to increase their knowledge and understanding of the subject under discussion, relevant scientific processes, and the nature and place of public dialogue in policy-making

#### **(4) Impact**

- Inform relevant public policy decision-making involving science and technology. Addressing the reasons for adoption or non-adoption of dialogue results is the responsibility of policy makers
- Direct the dialogue results towards all those best placed to learn from and act upon them
- Ensure that participants' views are taken into account in policy and decision-making, with clear and transparent mechanisms to show how these views have been taken into account
- Influence the knowledge, attitudes and capacity of the public, policy makers and the scientific community to be involved in public dialogue in informing policy and decision-making in future
- Encourage collaboration, networking, broader participation and co-operation in relation to public engagement in science and technology

#### **(5) Evaluation**

- Be evaluated in terms of impacts and process, so that the outcomes and impacts of public dialogue can be identified, and that experience and learning gained can contribute to good practice
- Ensure that evaluation commences as early as possible, and continues throughout the process
- Ensure that evaluation addresses the objectives and expectations of all participants in the process
- Be evaluated by independent parties
- Be clear that evaluation itself depends on frameworks that should be open to deliberative scrutiny

June 2019