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# Regulating Policy Discourse: UK Guidelines on Scientific Advice and Policymaking

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#### Preface

A case study, on GM crops, was selected as the paradigm, anchoring, case of an issue of technology governance in the UK in which public participation played a part, at least rhetorically, at the time of the STAGE network, and which reflected many of the issues raised by the catastrophes of scientific and technological governance that had arisen in the UK over the previous 15 years. It is bolstered by two short ancillary cases: one on the general challenges to scientific governance, and this one on specific guidelines for the framing and use of scientific advice in government, guidelines which tried to encapsulate and diffuse some of the lessons drawn from the earlier failures.

Peter Healey March 2004 The **Guidelines on Scientific Advice and Policymaking**<sup>1</sup>, first produced by the then Chief Scientific Adviser, Lord (Robert) May, in March 1997, were strongly influenced by the BSE episode and constitute the first response to it in terms of broad governance practice. They are summarised in their 2000 edition in *Figure 1*.

The importance of the Guidelines is that they act as a reference point in the diffusion of a particular kind of 'best practice' - one seemingly based implicitly on the notion of deliberative governance - across government. They are also indicative of a certain level of political will to change the governance of science in that their implementation is intended to be assessed in detail, government department by department, on a more or less annual basis. Because of this, they are one of the ancillary cases for the UK, although it might be that they would be more valuable as a basis for international comparative analysis.

# Figure 1. Challenges to scientific governance - Guidelines 2000: Scientific advice and policy making - July 2000 (PH summary of OST Source)

#### Scope:

- Covering all research from all sources
- Particularly important where issues sensitive, for example where there is significant uncertainty, a range of opinion, or implications for public policy;

### • Identification of issues needing advice:

- o Information on issues likely to be important from a variety of sources
- These include non-departmental sources, including international bodies ('eg the European Commission ') and issues identified by 'the interests directly concerned (eg individuals, companies, scientists or lobby groups) or by reports in the media'
- Speedy identification of the unexpected, and appropriate linkages across government in response

#### • Balance of scientific disciplines:

- Consult all relevant disciplines
- O At minimum, check with experts consulted if they believe they cover the ground

## Bringing together the right people:

- Experts, advisory committees, learned societies or consultants; also professional bodies, public sector research establishments, lay members of advisory or consumer groups & other stakeholder bodies
- Bring in others from eg other disciplines, not necessarily scientific 'to ensure that the evidence is subjected to a sufficiently questioning review from a wide-ranging set of viewpoints' (para 12)
- Consider experts from outside UK
- Require declarations of interest, consider whether conflicts of interest likely to undermine the credibility or independence of the advice, make declarations available to all those acting on the advice, and consider making them public

### • Ensuring right questions asked:

- o Frame questions which experts can address consult them in doing so
- On sensitive issues, ensure that questions cover concerns of all relevant stakeholder groups. Consult on questions if necessary

#### • Give experts clear guidance:

- Indicate roles clearly
- o Allow for uncertainty and indicate how critical it is to the analysis
- Alongside scientific input, determine scope of inputs on social, political, economic, moral or ethical concerns
- Respect the line between responsibility of experts to give advice and departments to make policy

# • Open and transparent procedure:

- Publish data, analysis, judgements, data omissions, etc. Test claims for privacy rigorously
- Especially when not subject to peer review, make available for external checking

# Issues with European or wider dimensions:

Ensure sound scientific basis for Community decision-making

# Handling of advice by departments:

- Presumption of openness beyond 'minimum obligations'
- o Plan presentation, avoiding uncertain or conflicting conclusions
- Distinguish scientific advice from ministerial action based on it
- Communicate results early to key interest groups

In introducing the 1997 edition of the guidelines, Lord May stressed that their application was particularly valuable when:

- i. there is significant scientific uncertainty;
- ii. there is a range of scientific opinion;
- iii. there are potentially significant implications for sensitive areas of public policy

The particular importance of the 2000 edition of the guidelines was that

'greater emphasis is placed on key issues such as the need to involve consumer groups and other stakeholder bodies in the development of *scientific evidence-based policy*. The need to be open about the degree of uncertainty attached to a piece of advice is also highlighted.'<sup>2</sup> [my emphasis].

This case study briefly examines what the Guidelines represent, and examines the available written evidence on four questions:

- 1. How far do they fulfil the deliberative mode of governance?
- 2. How broadly have they been implemented within the governance of science and technology within the UK?
- 3. Have they had a wider influence on scientific governance at the European level?
- 4. Have they had a wider influence within the governance of other policy domains within the UK?

# 1. How far do the guidelines fulfil the deliberative mode of governance?

Given that the guidelines were introduced by a temporary, albeit senior, public servant whose former and future career lay in the wider scientific community, the guidelines are a remarkably consistent statement of the principles of deliberative governance and a strong challenge to established practice. Although the field of application of these principles is limited to the commissioning, challenging and use of scientific advice within government S&T policy and management - with the role of the public here restricted judging a much more open and accountable process post-hoc - there is no doubt that they are a marker for change and a significant reference point for much else that follows in UK scientific governance. This included the preparation of more detailed guidelines for scientific committees<sup>3</sup> (see below).

The context in which the guidelines were born was one in which some dilution of discretionary governance may have seemed uniquely attractive given the scale of the erosion of public trust as a result of BSE. The changes represent a distinct and significant change in scientific governance from what had gone before; however, it is important to be conscious that against our framework of possible actions the offer is a limited one. What the guidelines chiefly propose is:

- more awareness of the context, including uncertainty and ignorance, against which scientific advice is framed;
- more pluralism and/or competition of ideas in the formation of advice, and
- more transparency including more awareness and visibility of possible conflicts of interest – in the delivery of the process.

For example, the rigour of scientific advice is to be tested through ensuring 'that the evidence is subjected to a sufficiently questioning review from a wide set of viewpoints'; and 'on sensitive issues' the process should ensure that 'questions cover the concerns of all relevant stakeholder groups.' Furthermore, consumer representatives and other stakeholders are to be

consulted in the process. However, stakeholders do not participate as of right, their terms of engagement are at the discretion of the policymaker, and there is no more direct public participation in the process.

The guidelines are emblematic of UK science and technology policy post BSE in that they try to secure the perceived benefits of a deliberative governance style whilst retaining discretion over the dynamics of the process and the presentation of outcomes. Government departments are seen as being able to do better in these respects by planning ahead. It is in relation to the presentation of outcomes that at one point in the guidelines document a more discretionary or educational model of the public breaks through the prevailing style.

'It is important that sufficient early thought is given to presenting the issues, uncertainties and policy options to the public so that departments are perceived as open, well prepared and consistent with one another and with the scientific advice. The difficulties associated with presenting uncertain or conflicting conclusions should not be underestimated.' [my emphasis].

However, although the guidelines reveal some of the digestive problems which occur when a discretionary and traditionally secretive government culture tries to assimilate more open and deliberative approaches, they are, nevertheless, an important reference point and contain many of the core ideas which influence subsequent development in scientific governance, which themselves form the context for our core UK case, on the GM Debate.

2. How broadly have the guidelines been implemented within the governance of science and technology within the UK?

The three key principles that the guidelines address concern identifying issues, building science into policy, and presenting policy.

Reviews of the implementation guidelines took place in 1998, 1999 and (with reference to the revised 2000 guidelines) 2001. The 1998 report is more than just formal accountability statements - it includes, for example, designation of a specific lead minister within each department to carry the process forward. The 1998 and 1999 reviews, conducted under the guidelines' originator, Sir Robert (now Lord) May, include accounts both of the machinery put in place, and case studies of new issues of public policy which the new approach was said to assist, in relation to each of the three key principles.

The 2001 review marks the full implementation of the process: instead of OST providing a commentary on departments within a common frame, a introductory chapter from the new chief scientist David King is followed by a variety of departmental chapters. There is something of a flavour of the exercise having lost its momentum, having gone from largely top-down in 1998, through a dialogic stage of interaction between OST and the individual departments in 1999, to bottom-up in 2001. It is hard to judge whether this represented a real incorporation of the messages and procedures at departmental level, or whether there was a loss of momentum. To date there have been no reviews since 2001.

The OST itself may, ironically, not be a lead adopter of wider processes of openness and public participation, especially in the seven Research Councils. Although all the councils have a priority to improve the engagement of stakeholders, the priority within that is improving industrial contacts. The councils have recently come together as Research Councils UK – not a unitary body but a collaborative arrangement with a default presumption of working together on each new issue – and this has been working to present an integrated programme to the world. The first output, *Synthesis of Strategies*<sup>3</sup>, contains one page on public engagement. This sets out a continuing commitment to the stakeholder and public engagement necessary to deliver 'independent information and advice to policymakers, the public and the research community on specific issues of public concern, on the effective conduct and management of research, and on research ethics and probity.' In this context, the motivations of the Councils seem to be to play a directly educational role, in order to qualify the public to engage in more deliberative processes:

'Part of our activities will focus on increasing awareness amongst these stakeholders. This will help the public to take a more active interest in influencing the choices or [sic] research priorities and the overall direction of public investment in research. It will also aid understanding of the nature of risk, so that the public are empowered to make informed decisions about the balance of risk and benefits to individuals and society of scientific and technological developments.'

The Councils do not, however, see themselves in the forefront of delivering these wider

# Figure 2. An anomaly in development towards more deliberative governance – the role of the Research Councils?

There is one instructive anomaly in these reviews – the slow pace of progress towards the new governance of S&T in the research council system. This is a puzzle to this author, who in speculating about potential developments in a emerging democratic model of science, had earlier suggested:

'Bodies like research councils... are likely to find themselves key institutions, with their traditional role of mediating between government and academia expanded to embrace holding the ring between industry, government, public and academic interests.'<sup>4</sup>

The argument ran that Research Councils, historically established as bodies enjoying a level of insulation from the immediate political demands of government<sup>4</sup>, in recent years had already taken significant steps towards developing strategic programmes able to incorporating industry and government scientific needs as expressed by stakeholder participants in scientific committees and exercises like Foresight. Some of these were explicitly organised as exercises of dialogue between scientific opportunities, on the one hand, and social (in practice largely industrial) needs on the other. Research councils, specifically the ESRC, had also been active in organising social science research on public understanding of science as part of an early response to the Bodmer Report<sup>5</sup>, the document which prompted the initial policy and research focus on science communication in the UK, and had been developing a new round of research on scientific governance since 1997. So there might have been seen to be a natural progress towards factoring wider public opinion into their deliberations, and experimenting with deliberative mechanisms. So why did the Research Councils fail to take up the challenge of deliberative scientific governance and run with it?

- A lack of perceived relevance to the Councils' remit? A classical argument of separation of responsibilities could apply here. The Haldane principle, it might be said left the Councils with the job of covering basic and strategic applied science, whilst government departments retained responsibility for specific applied work. The Councils could argue in principle that their remit is located at the end of the science production process furthest from application to issues of public policy they may sponsor and develop knowledge expertise used in scientific advice within government, but they were not direct managers of that process.
  - So although this is true in principle, it has less pertinence in practice. Research Councils were long used to balancing longer and shorter term utilities in a varied portfolio of appeal to a variety of customers. Furthermore, the interpretation of Haldane itself had weakened over the years to the point when government sees itself as constrained only from direct interference in the choice of which individual projects should be funded. There is no question that the Councils are in constant dialogue with the government on the shape of their portfolio and the size of the budget needed to support it. It was not some principle of research council autonomy that was holding up change.
- Too much inertia behind an earlier model of science communication? It had only been in 1993 that the PUS agenda had formally reached the research councils. In tackling 'external relations' frequently the term staff until then had been drawing on approaches from press and public relations. They faced two revolutions in quick succession. An educational agenda had to be grafted onto their approach in 1993, and science and society requirements less than eight years after that. The pace of assimilation of new practice may simply have been too great. At a policy level also the science and society agenda may have had little resonance with the academic members of Councils and their committees, which still formed the plurality.
- A lack of political space from government? These constraints from within the research councils may have mattered little were there to be strong pressure from the government itself in favour of a more deliberative agenda. However, if government's interest in open process is simply functional to ensure more robust science advice there may be few incentives to embrace it as a principle in areas where it need not apply. Rather, as we have suggested, the deliberative agenda over science advice may be one small area within a wider discretionary frame. It seems likely that government's main agenda for the research councils is orthogonal to the public participation dimension: to encourage the councils to work more closely together, and to seek to retain or extend control over agreed programmes as a broad quid pro quo for budget increments. Both for the government and for the research councils a two party game for determining priorities trading political against scientific legitimacy may be more acceptable than the uncertainties of a wider process of political accountability.

although a legitimate public interest is acknowledged:

'Society rightly expects to be consulted on research agendas and priorities, and on issues with ethical, moral or social implications. The Councils will continue to seek the views of the general public, responding to concerns and priorities, but also explaining the significance of research, and the reasons for funding it... Public confidence depends on public trust. We will take account of the continuously developing social and legislative context, and the shifting attitudes within society itself. Issues that we know concern the public are research involving animals, genetically modified crops, research based on human tissue and individuals' personal data...We are giving careful thought to how we might improve dialogue with the public. This involves developing a better understanding of the communication process itself; helping the research community to participate in communication; taking the issues to the public (eg through special interest groups such as Women's Institutes); showing research as a personal human activity; involving the public in debate; and using surveys to identify potential public concerns.'

This is hardly seizing the high ground of science-society relations post the Jenkin Report, and is contrary to this author's expectations. It could have been written at any point in the last twenty years. Figure 2 explores some of the reasons why the research councils have this restricted reading.

The Guidelines were followed by a Code of Practice for Scientific Advisory Committees, published in December 2001.<sup>6</sup> The Code covers

The Committee's **role and remit,** emphasising the need for clarity in terms of reference, and that they do not require the committee to make political decisions on levels of risk;

The need for **transparency**, making explicit uncertainties in the committee's advice, communicating with others, and publishing information;

The **governance** of the committee: the role of the chair, the balance of interests and expertise in its membership, and the relationship with its secretariat and other civil servants:

Members' duties and responsibilities, including dealing with conflicts of interest;

The **use of research** for early warnings and risk assessment;

**Procedures for arriving at conclusions**, and for exchange of information with other committees.

The Code of Practice has not yet been formally reviewed; nevertheless POST estimated<sup>7</sup> that by mid-2003, 84 advisory committees and bodies were following the code. Considering that the Code is not mandatory, this is some evidence that at least at this formal level, new approaches to scientific governance were widely acknowledged in the UK. With wide adoption comes equally wide scope for variable implementation, however, and it is not clear whether the kind of iterative review of arrangements applied to the early years of the advice guidelines will apply.

Further an National Audit Office report on government procurement of research, *Getting the evidence: using research in policy making*, published in April 2003, does not list the Guidelines amongst six recent reviews of scientific and technological development on which it draws.

3. Have the guidelines had a wider influence on scientific governance at the European level?

The UK explicitly sets out the ambition to use its reformist agenda on science advice to effect wider change at the European level; the EU is, unsurprisingly, less direct in acknowledging its debt to the UK. However, the EU does cite BSE as one of its main stimuli to action, along with the positive ambition, adopted at the Lisbon summit, of making the EU, by 2010, 'the most competitive and dynamic knowledge-based economy in the world.'

There is, however, a clear line running from the White Paper on European Governance<sup>8</sup> through the Science and Society Action Plan in favour of good practice on the collection and use of expertise in Commission policy-making. The White Paper sets out five principles of good governance – openness, participation, accountability, effectiveness and coherence – and identifies the need for guidelines on the use of expertise. The Action Plan<sup>9</sup> is organised around three areas of activity – promoting scientific education and culture in Europe, a science policy closer to the citizens, and responsible science at the heart of policy making. The framing and use of scientific advice comes under the last of these. Three requirements are set out:

- The need consequential on scientific uncertainty, for a more coherent interface between providers and users of advice, with 'mutual understanding and clear communication.'
- The need for a more systematic and open approach to the sourcing of advice, tapping into more knowledge resources within nations and across Europe;
- A parallel need for more involvement of the public and stakeholders to provide 'opportunities for the voicing of alternative views ("a competition of ideas"), for scrutiny and for constructive debate.' <sup>10</sup>

There is, then, a good deal of parallel thinking – both as to objectives and approaches – between the development of scientific governance within the UK and European documents. The European example, however, is rather more transparent with regard to what it believes public engagement will deliver:

'Experience shows that when scientific networks link with national regulators, associate representatives of the various stakeholders, including civil society when appropriate, and operate with transparent procedures the conflict potential of certain issues is largely defused and acceptance of the ensuing regulation increases.'

The JRC's networks of GMO laboratories, or the network on Integrated Pollution Prevention and Control, are cited in support of this claim.

In December 2002 the Commission published its own principles and guidelines on the collection and use of expertise by the Commission, <sup>11</sup> applying core principles of quality, openness and effectiveness to the process of securing and using advice. These are broadly in line with the May guidelines, but although they recognise that a successful process involves interaction between experts, representatives of relevant interests and the public, the detailed advice is framed almost entirely in terms of the former.

4. Have the guidelines had a wider influence within the governance of other policy domains within the UK?

By 2001 the Science Advice guidelines refer to a wider cross—departmental programme, *Modernising Government*. This aimed to improve policy development and service delivery in UK public services. It was launched by a White Paper issued in March 1999, and is very wide-ranging, including the introduction of an objective to have all government services capable online by 2008. The sections on policymaking concentrate on it being more 'joined-up' – integrated across government departments and agencies – and strategic, and although there are references to policy becoming more responsive to public needs, there is no broad push in this document towards deliberative principles.

## **Conclusion:**

The guidelines on scientific advice were an early fruit of new thinking on scientific governance that arose in the UK from the BSE crisis. Although their initial objective was to improve the robustness of science advice used in policymaking- essentially an efficiency criterion - , the values of transparency and open competitive scrutiny employed to secure this have been a wider stimulus for those seeking to develop wider accountability to publics based on dialogue. However, this wider framework, exemplified in the House of Lords Committee Report on *Science and Society*, seems as yet to have limited influence back on the operation of government science.

A particular case of limited impact is on the world of the research councils. A research council's role in developing a broad portfolio of new knowledge put it at the nexus of competing interests, where new means of governance might be expected to be welcomed. However, the research council's operating style seems to be more shaped by the need to reconcile wider user interests - as determined by government and industry proxies - with agendas of academic autonomy in a quasi-corporatist manner. This of course is superimposed on a culture of confidentiality and professional autonomy in peer review. As STOA comments in a 1998 review of the American experience with scientific advisory committees

'Interpretation of scientific evidence in a purely scientific context and peer review are generally accepted as professional activities that are most appropriately conducted in private. Experts accustomed to operating this way are unused to openness in S&T advisory contexts and tend to be interested in principle but wary in practice.'

If anything, government seems to be increasing its discretion in what the research councils do in line with its own belief in the 'knowledge economy'.

As already noted, the guidelines, although addressing a narrow function in government, are emblematic of wider UK science and technology policy post BSE in that they try to secure the perceived benefits of a deliberative governance style whilst retaining discretion over the dynamics of the process and the presentation of outcomes.

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<sup>&</sup>lt;sup>1</sup> Source: Transparency and Openness in Scientific Advisory Committees: the American Experience. European Parliament. STOA Study, 10/98 PE 167 327/Fin. St. A table drawn from this study on key issues relating to openness and transparency in S&T advisory committees is given at annex A

# Annex A.

Source: Transparency and Openness in Scientific Advisory Committees: the American

Experience

European Parliament. STOA Study, 10/98 PE 167 327/Fin. St.

# **Key issues related to openness and transparency in S&T advisory committees**

| in 5&1 advisory committees                              |  |  |  |   |  |
|---|--|--|--|---|--|
| Key issues  | United States  | European<br>Union  | Other countries  | Comments  |  |
| Science vs.<br>science<br>advice<br>to policy<br>makers | FACA committee meetings can be closed to review grant applications; the Congress is considering a blanket exemption for all grant review committees. <i>Policy-related</i> deliberations are considered appropriate fora for transparency and public accessibility | "Pure" science<br>remains the<br>responsibility of the<br>Member States; EU<br>RTD has socio-<br>economic objectives<br>in addition (fusion<br>research is fully<br>coordinated with<br>national research) | Research<br>councils tend to<br>operate as<br>professional<br>bodies within a<br>governmental<br>framework   | Interpretation of scientific evidence in a purely scientific context and peer review are generally accepted as professional activities that are most appropriately conducted in private.  Experts accustomed to operating this way are unused to openness in S&T advisory contexts and tend to be interested in principle but wary in practice. |  |
| Executive decision making                               | Committees<br>comprised exclusively<br>of Federal employees<br>(e.g. NIH researchers<br>advising on laboratory<br>safety policy) are<br>exempt from FACA   | Inter-service consultations are  |  | Generally accepted as appropriate to conduct in private   |  |
| Independence<br>of expertise                            | Independence from government is assumed; standard rules on conflict of interest apply. National Academies are subject to less stringent requirements than FACA committees as the scientific advice they provide is quasi-independent from government               | Experts given great leeway in refining mandate, organising and conducting deliberations.   | High-level<br>committees in<br>Australia and<br>Japan include<br>both government<br>officials and<br>independent<br>experts                              | "Independence" of expert advice is highly sensitive to national and cultural context.   |  |
| Commercial confidentiality                              | FACA committee<br>meetings can be<br>closed  | DG XXIV<br>developing<br>guidelines on good<br>practice  |  | Appropriate extent of openness controversial and difficult to resolve   |  |
| Conflict of interest                                    | Well-developed rules<br>and expectations from<br>broader national<br>experience  |  | New Zealand and<br>the UK<br>considering the<br>appointment of<br>foreign members<br>to help assure<br>impariality, even<br>if only by<br>correspondence | Conflict of interest policy does not seem to have kept pace with a world-wide trend towards public-private partnership in research policy.  |  |

| Regulation  | Covered by the Administrative Procedures Act of 1946; draft regulations must involve public consultation and responses to all substantive points.  | Ambiguity in the role<br>of "comitology"<br>committees being<br>addressed in recent<br>Commission decision<br>Highly contentious                         |   | Largely an executive, "downstream" function   |
|---|--|--|---|---|
| Recruitment<br>and<br>selection<br>of<br>committee<br>members | Committee members<br>typically selected by<br>Agency officials in<br>consultation with<br>colleagues and<br>outside expert advice<br>(National Academies<br>select and appoint<br>their own<br>membership) | Committee members<br>typically selected by<br>Commission officials<br>in consultation with<br>colleagues and<br>outside expert advice                    | in UK Technology Foresight to provide pool of   | Similar system operates in countries covered by this study  |
| Selection<br>criteria   | Mandates can specify categories of membership in some detail  Informal guidelines "EEGG" (expertise, ethnicity, gender and geography) often apply  | Geographical<br>balance takes<br>relatively high<br>priority   | Germany includes expertise from social as well as natural sciences and related disciplines such as law; Australia and Japan have a mix of officials and independent experts on highest-level advisory councils; Australia and the UK prioritise industrial representation | All place highest priority on expertise; secondary attention to disciplinary diversity, geographical balance,           |
| Geographical<br>balance                                       | North-East-South-West: informal  | Important for all,<br>mandatory for<br>regulatory<br>committees [check],<br>but for most other<br>committees not all<br>Member States are<br>represented | Germany?  | North-East-South-West most common approach  |
| Gender<br>balance   | Relatively high<br>proportion of women<br>in cases examined; no<br>data on FACA<br>committees as a<br>whole  |  | Women sought<br>out at the<br>discretion of<br>those recruiting<br>and advising on<br>membership  | Largely discretionary on the part of the officials nominating candidates; lack of data in all countries                 |
| Balance<br>vs.<br>circumvention                               | Balance largely<br>accepted but<br>excessive "pressure"<br>might deter Federal<br>Agencies from using<br>FACA committees   |  |   | Too prescriptive an approach can<br>alienate experts and drive officials to<br>seek other means to obtain expert advice |

| Decision<br>making                           | Consensus where possible  | DG XXIV<br>committees must<br>publish minority<br>opinions as well as<br>main<br>recommendations   |   |  |
|--|---|--|---|--|
| Openness<br>vs<br>deliberative<br>efficiency | After 25 years, experts have learned how to operate in the FACA environment, and use alternative channels if necessary for private communication  |  | UK views<br>openness as<br>improving<br>efficiency<br>through<br>independent peer<br>review   | Many S&T policy experts view openness vs. efficiency as a trade-off  |
| Language                                     | English   | Many committee<br>members have to<br>operate in second or<br>third languages   | Belgium?<br>Switzerland?<br>Canada?   | Not normally a problem   |
| Publication                                  | Federal Register: agendas, minutes, recommendations Internet: discretionary but used extensively at all stages of the deliberative process Some final recommendations are published in final reports  | Interim or draft<br>reports are not made<br>public; sometimes<br>final reports are<br>published.   |   |  |
| Public<br>involvement<br>vs.<br>efficiency   | Public involvement often <i>less</i> than what is desired by the Federal Agency and/or the committee members; some "nuisance" individuals and groups  |  | UK seeking out greater public involvement  Consensus conferences in Denmark, the Netherlands and the UK   | Experiements in participatory S&T policy processes increasingly common   |
| Parliamentary<br>role                        | Congress authorises and requires two-thirds of all FACA committees. They can exempt committees from FACA, amend the Act, can investigate and evaluate through the GAO, and receive some final reports and an annual report on overall FACA activity from the GSA. | provides some information on specific request by the Parliament, but has not centralised the administration or evaluation of S&T advisory activities | In Japan, 5 of the<br>11 Council on<br>Science and<br>Technology<br>members are<br>selected by the<br>Prime Minister in<br>consultation with<br>the Diet. | National Parliamentary systems do not generally have strong separation between Government (executive) and Legislative functions. The US and the EP are notable exceptions (in the US the Executive has clear responsibility for regulation, while the European system is more ambiguous)  Many Parliaments have committees of Members that hold inquiries and contribute to the legislative process; several including the EP, have Technology Assessment organisations supporting their work. |
| Voluntary<br>measures                        | Discretionary initiatives to extend   |  | Most activities involving public  | Internet-based sources of information and consultation are developing in many  |

| to increase<br>public<br>participation | openness (such as<br>Websites) and public<br>participation are<br>common   |  | participation in S&T deliberations, such as consensus conferences in Denmark and the Netherlands, are discretionary. | countries  |
|--|--|--|--|--|
| Role<br>of<br>the<br>public            | Highly dependent upon the topic under discussion. The press and interested NGOs often serve as mediators between FACA committees and the public. | Truly "European" interests are underdeveloped except in the commercial area.   |  | Vulnerability to lobbyists   |
| Inter-<br>institutional<br>relations   | FACA provides a very formal legal basis for S&T advice to the Executive Branch.  |  |  | Parliamentary committees and parliamentary questions to ministers are important modes in many countries. |
|  | Congress does not generally get involved in FACA deliberations, though it can set up committees with a very detailed mandate.                    | Very strong mediation role by COREPER between the Council and the Commission, and between the Council and Parliament (through Conciliation). |  |  |
|  | Most Federal<br>Agencies have<br>Congressional liaison<br>staff.   |  |  |  |

|                                     | GSA and OMB (Executive Agencies responsible for oversight of FACA) are themselves subject to GAO  | Very weak links<br>between the<br>Parliament and the<br>Commission.<br>Regular, formal<br>appearances by<br>Commissioners<br>before the EP are not<br>limited to matters<br>within the<br>Commissioner's<br>portfolio. |   |
|-------------------------------------|---|--|---|
| Exemptions<br>and<br>circumventions | Complaints about the bureaucratic burden of FACA may be a surrogate for other concerns, including a desire to control the expert recommendations for political reasons.  GSA is developing new regulations to clarify what is covered by FACA and what is exempt. | No provisions in place: thus no exemptions and no circumventions.  | The US has by far the most formalised regime for openness and transparency. |

### Notes and references

<sup>&</sup>lt;sup>1</sup> Guidelines 2000: Scientific Advice and Policymaking. DTI/Office of Science and Technology, July 2000.

<sup>&</sup>lt;sup>2</sup> Government Response to the Jenkin Report, *Science and Society*, October 2000, para 5.

<sup>&</sup>lt;sup>3</sup> available at www.rcuk.ac.uk/documents/strategy-synthesis.pdf

<sup>&</sup>lt;sup>4</sup> Peter Healey (1999) 'Popularising science for the sake of the economy: the UK experience' in Reijo Mietennen (ed) *Biotechnology and Public Understanding of Science*: proceedings of the UK-Nordic Cooperative Seminar, Helsinki, October 25-27, 1998. Academy of Finland, 3/99.

<sup>&</sup>lt;sup>5</sup> Public Understanding of Science. The Royal Society, 1985.

<sup>&</sup>lt;sup>6</sup> Code of Practice for Scientific Advisory Committees, December 2001

<sup>&</sup>lt;sup>7</sup> Parliamentary Office of Science and Technology. London: Postnote number 196, *Science in Policy*, June 2003.

<sup>&</sup>lt;sup>8</sup> European Governance: A White Paper. Brussels, Commission of the European Communities, Com (2001) 428 final, 25 July 2001.

<sup>&</sup>lt;sup>9</sup> Science and Society Action Plan. ISBN 92-894-3025-7. Luxembourg: Office for Official Publications of the European Communities, 2002, p.24

<sup>&</sup>lt;sup>10</sup> ibid, p. 25

<sup>&</sup>lt;sup>11</sup> Brussels, 11.12.2002 COM (2002) 713 final