

White Paper on Governance  
Work area 1  
Broadening and enriching the public debate  
on European matters

**REPORT OF THE WORKING GROUP  
“DEMOCRATISING EXPERTISE  
AND ESTABLISHING SCIENTIFIC  
REFERENCE SYSTEMS”  
(Group 1b)**

Pilot : R. GEROLD  
Rapporteur : A. LIBERATORE

MAY 2001 (version finale du 2/7/01)

## ***Executive Summary***

1. **‘Experts’** are consulted by policy makers, the media and the public at large to explain and advise on such diverse issues as climate change, employment policy, BSE (‘mad cow disease’), and genetically modified organisms. However, many recent cases have shown that **expertise, while being increasingly relied upon, is also increasingly contested.**
2. Furthermore, in the interplay between **different levels of governance in the European Union**, expertise must be credible across a variety of national scientific and policy cultures. It should be sufficiently robust to support policy proposals both at the Community level and in international arenas. **Enlargement** presents additional opportunities and challenges: greater diversity and knowledge, but also the need for adaptation and potential for broader societal questioning.
3. **Community institutions have already responded** to the demands for increased accountability and transparency in its policy making process, including the use of expertise. General provisions concerning public access of documents of Community institutions have been adopted. The advisory scientific committees of the Commission were reformed in 1997, and criteria of excellence, independence and transparency were consolidated. The European Commission consults widely by making use of ‘Green Papers’ on a variety of issues, and makes increasing use of the Internet.
4. While building on such positive developments, **more is needed to improve the interactions between expertise, policy making and public debate.** A number of important issues were identified by the Working Group: the definitions of ‘expertise’; the meaning of ‘democratising’ in this context; the identification of needs and features of European reference systems; uncertainty and the Precautionary Principle; ‘independence’ and ‘integrity’; the factors leading to effectiveness; and the role of the media. In all of these issues, important lessons can be drawn from past and ongoing experience.
5. **Seven aims** were agreed, corresponding to ‘democratisation’ criteria: **access and transparency; accountability; effectiveness; early warning and foresight; independence and integrity; plurality; and quality.** To implement these aims, **five action lines** were identified as promising avenues for further exploration - at this stage, no assessment has been made of the resource implications.
6. In the first instance these action lines would **apply to the work of the Commission and its departments.** As part of this process, discussions would take place with other EU institutions and agencies, and with Member State administrations. This should not only build a common understanding of current practises and priorities, but should also help identify opportunities **for eventually adapting and implementing linked actions more widely across the EU** (e.g. through the open method of co-ordination). The desired outcome is both better **quality** decision-making, and restored **trust** in the use of expertise in European policy-making.
7. Some action lines complement activities foreseen to implement the **European Research Area**, and may form part of the action plan foreseen by the end of 2001 following the Commission services’ working document **“Science, Society and Citizens in Europe”**.
8. The **action lines** are outlined below. A common feature throughout is the need for clear **communication strategies** to be integrated into the process:
  - i. **A more complete understanding of the expertise currently used at EU level.** An **inventory** of those sources (committees, agencies, institutes, etc.) currently providing expert advice to EU policy making will add transparency, and will provide a service to policy-makers

and those parties, including the media, requiring rapid access to acknowledged expertise. The inventory would initially be limited to EU bodies, but could be expanded to build upon existing national and international databases and networks.

- ii. **Establishing guidelines for the selection and functioning of expertise in the policy-making processes.** These would implement the previously cited aims of access and transparency; accountability; effectiveness; early warning; independence and integrity; plurality; and quality. More specific rules for individual officials and experts could be enshrined at a later stage in ‘codes of conduct’. **This action line is expected to act also as a catalyst for the implementation of the following three.**
- iii. **More openness of expertise and greater opportunity for informed participation by society in policy-making.** A number of measures should better connect experts, policy makers and society at large, and make this process more transparent:
  - **Attendance by the public and by stakeholders at meetings where expert advice is developed and transmitted.** The objective is to improve access to meetings to the greatest extent possible. The favoured approach calls for all meetings generally to be open with the possibility of restricting access for duly motivated and published reasons.
  - **Publication of expert evidence and how it is used in reaching political decision.** The objective is to enhance accountability by providing the public and stakeholders with a ‘trace’ of the path to a particular decision. Implementation rules should be aligned with the recent institutional agreement on public access to documents.
  - **Promotion of participatory procedures.** The principles of access and accountability demand public debate, knowledge-sharing and scrutiny of policy makers and experts at the grass-roots level. Citizens’ juries, consensus conferences, participatory foresight are among the mechanisms implemented on specific topics at local and national level. Drawing on past experiences, steps could be taken to foster these throughout the EU Member States and accession countries.
  - **Establishment of intermediary platforms.** The objective is to provide more permanent and effective interfaces between experts, policy-makers and the public. This will involve the identification of key bodies capable of synthesising expert material in forms understandable to the public and policy-makers, and/or helping experts better formulate their advice in such a form.
- iv. **Broadening and integrating the expertise used in policy-making.** The objective is to deliver knowledge for decision making that is ‘**socially robust**’. This implies a notion of expertise that embraces diverse forms of knowledge (plurality). Expertise should be multi-disciplinary, multi-sectoral and should include input from academic experts, stakeholders, and civil society. Procedures must be established to review expertise beyond the traditional peer community, including, for example, scrutiny by those possessing local or practical knowledge, or those with an understanding of ethical aspects. This is sometimes referred to as ‘extended peer review’.
- v. **Greater integration in risk governance processes.** The objective is to have wider and deeper integration of expertise during the full cycle of risk governance (identification, assessment, evaluation, management and communication). This will enhance early warning and encompass plurality. The key objective is to ensure **an effective interface and networking between risk assessment and risk management** at various levels, whilst recognising the iterative nature of the process. An essential element is knowing the capacity in which the actors participate, requiring clear procedures and objectives.

## Table of Contents

Foreword	1
Part 1: Knowledge and Democratic Governance	2
1.1 Introduction	2
1.2 A brief view of the evolution of expert advice for regulatory policy in The EU	3
Part 2: Selected Findings	5
2.1 Methodology and issues	5
2.2 Expertise and its organisation and mobilisation	6
2.3 Democratising expertise	7
2.4 European scientific reference systems	8
2.5 Management of uncertainty	8
2.6 Independence and integrity	9
2.7 Effectiveness	9
2.8 Mass media	9
Part 3: Learning from Experience	10
Part 4: Recommended Action Lines	14
4.1 Aims	14
4.2 Action lines	17
(i) A more complete understanding of the expertise currently used at EU level	17
(ii) European Guidelines for the selection and use of expertise for policy-making	18
(iii) Ensuring access, improving participation and developing intermediary platforms for more transparent and accountable policy-making and informed public debate	19
(iv) Broadening and integrating the expertise used in policy-making	22
(v) Integrated procedures for risk governance	23
Conclusion	25
Annex – Members of the Working Group	26

## Foreword

Policy decisions and informed public debate are more and more dependent upon expert advice; this is due to rapidly advancing scientific knowledge as well as to the complexity and interdependence of contemporary societies, economies and cultures. The report of the working group "*Democratising expertise and establishing scientific reference systems*" addresses the question of how to develop and use expertise to improve the quality of policy-making and at the same time secure the trust of the public in European governance.

This report is the outcome of a collaborative effort by Commission officials acting in a personal capacity. It is based on stimulating discussions within the group and with external experts to whom we should like to pay particular tribute.

The result of our work can only be the beginning of a process. We now must learn to promote an open dialogue in order to make best use of the opportunities offered by scientific progress, whilst coping with its inherent risks. It is our hope that the suggestions in this report will contribute to a broader debate and to concrete actions to enhance democratic governance in Europe.

Rainer Gerold

# **PART 1: KNOWLEDGE AND DEMOCRATIC GOVERNANCE**

## **1.1 Introduction**

‘Experts’ are consulted by policy makers, the media and the public at large to explain and advise on issues as diverse as climate change, employment policy, BSE (‘mad cow disease’), genetically modified organisms and uranium depleted weapons. They may be frequently called upon to identify options, to tackle or prevent problems, or to assess impacts. The power of expert knowledge (whether scientific or not) in defining and responding to these issues is increasingly visible for policy making and public debate. The experts themselves are thus key actors of ‘governance’: either as proactive agenda-setters in their own right (e.g. top scientists, or experts in administrations) or, more often, as ‘resources’ (e.g. external advisers) for actors in government, business and civil society.

While being increasingly relied upon, however, expertise is also increasingly contested. ‘Official experts’ (within or appointed by governmental authorities), ‘industry experts’ (the private sector being an important source of expertise) and other experts, sometimes referred to as ‘counter-experts’ (from non-governmental organisations, or self-appointed experts), often contradict and challenge one another. ‘Traditional’ science is confronted with the ethical, environmental, health, economic and social implications of its technological applications. Scientific expertise must therefore interact and at times conflict with other types of expertise, while at the same time being subject to the normal cut-and-thrust of academic debate within the scientific disciplines themselves. In general, the lack of transparency in the way expertise is selected, used and diffused by governments is considered by many (e.g. parliaments, media, civil society organisations) to undermine the legitimacy of the policy process.

In short, we witness the paradox of expertise being a resource that is increasingly sought for policy making and for social choice, but one that is also increasingly contested. Efforts to restore the credibility of expertise, and trust in it, are vitally important. But they cannot be confined to ‘educating the public’: the very process of developing and using expertise needs to be made more transparent and accountable, and sustained dialogue between experts, public and policy makers needs to be pursued.

Whilst this situation is common to most contemporary societies, it involves additional considerations in the context of the interplay between different levels of governance in the European Union. Firstly, the credibility of expertise developed and used at the European level needs to be established across a variety of national scientific and policy cultures. It needs to be sufficiently robust to support policy or legislative proposals both at the Community level and in international arenas where, for example, environmental, health or trade rules are negotiated. Secondly, expertise has an important role to play during the enlargement process, namely to support the adaptation to existing legislation (the ‘*aquis communautaire*’) by the accession countries. Thirdly, European debates on key issues using expertise can either exacerbate national cleavages (a distrust of ‘foreign’ expertise), or, on the other hand, may contribute to ‘Europeanising’ the debate (the European or even global scale of certain problems; the potential for common or co-ordinated responses, etc.). Fourthly, the fragmentation of some scientific communities in Europe inevitably affects the way

expertise is provided for policy making. The European Framework Research Programmes catalysed efforts to overcome such fragmentation and the 'European Research Area' launched in January 2000 aims to further improve co-ordination of research efforts in Europe and to foster the dialogue between research, society and policy-making. Finally, since the working of the many committees providing expert advice to the European institutions are, for many, opaque and difficult to follow (a problem also found, of course, at national and international levels), a debate on the use of expertise contributes to the broader quest for a more accountable and transparent EU policy process.

**Against this background, the working group set out to:**

- **clarify the notion of expertise and how it can be mobilised for public policy and debate;**
- **identify options and implications for 'democratising' expertise;**
- **recommend action lines aimed at both better quality policy-making and restored trust in the use of expertise.**

**This report presents the findings of the group.**

## **1.2 A brief view of the evolution of expert advice for regulatory policy in the EU**

The very process of European integration – which has progressed from mainly economic aspects, to gradually include more prominently social and institutional ones, has always involved an extensive use of expertise.

Expertise available at the EU level comes from many sources. These include:

- 'in-house' (EU institution's officials own knowledge in administrative, economic, legal and technical matters; research undertaken by the EC Joint Research Centre extended through networks involving a broad range of organisations);
- scientific advisory committees;
- European Agencies;
- Member States (who appoint experts to the Commission's 'comitology' committees and Council's working groups);
- 'stakeholders' (with some prominence of the more resourceful ones, such as industry);
- expertise developed through the research policy of the EC (which is a unique case of trans-national research policy, with distinct features as compared to international research co-operation programmes);
- ad hoc expert groups;
- consultancy studies.

Regulatory policy-making in the European Community has been an important feature of European integration. It is strongly based on expertise for the development and implementation of strategies and measures across a broad spectrum of topics (e.g. vehicles' emissions, use of pesticides, safety at work), and involves the handling of complex technical information at different levels. For example, Directives setting targets but leaving Member States the choice of implementation mechanisms involve issues of comparability, interoperability and - when appropriate - harmonisation of measurement methods and monitoring data. Such technical information is not just the

basis for 'technical' decisions: it can also shape options linked to distributive issues (costs of options, access to resources), health, and the environment. The Directive on Large Combustion Plants provides a useful illustration. Its adoption involved the handing of technical issues concerning the comparability of methods to measure emissions, as well as the calculation of costs of abatement options across countries. This led to a 'burden sharing' agreement where different contributions by the Member States were agreed upon to reach a common overall emission reduction. In addition to these 'intra-European' dynamics, the Community has succeeded in several cases to promote European regulatory standards at the international level.

While such expert-based regulatory policy of the European Union can be seen as a guarantee of efficiency, it is often perceived as technocratic and in need of review. This may be because many issues once dealt with at national level are now dealt at the European level, and have as a result become more visible. For example, the trans-boundary nature of BSE ('mad cow disease') requires decisions at European as well as national levels. The criticism of 'technocracy' can also be seen as a part of the broader quest for more accountable institutions at all levels, and for more transparent and participatory procedures.

Community institutions have already responded to the demands for increased accountability and transparency in its policy making process, including the use of expertise. General provisions on transparency – called for by the Maastricht and Amsterdam Treaties – have been adopted concerning public access of documents of the Council of Ministers (Decision 93/731/EC), the Commission (Decision 94/90/ECSC, EC, Euratom) and the European Parliament (Decision 97/632/EC, ECSC, Euratom). A new legal instrument on public access to EU documents – intended to expand and systematise earlier provisions – was approved by the European Parliament on 3 May 2001.

With regard to expert advice, the advisory scientific committees<sup>1</sup> of the Commission were reformed in 1997 and criteria of excellence, independence (e.g. members and ad-hoc experts are required to make declarations of interests which may be considered prejudicial to their independence), and transparency (namely in the recruitment of experts) were consolidated. The Commission has also used the Internet for publishing the opinions of some of its scientific advisory committees in the interest of transparency. Indeed, steps have been taken to make more transparent the workings of the many advisory groups currently contributing to the Commission's policy making. For example, in the domain of research policy itself, the implementation of the Fifth Framework RTD Programme is guided by Expert Advisory Groups composed of scientists, stakeholders and users. Both the composition of the groups and the advice they deliver are made publicly available on the Internet.

In response to criticisms regarding the opaqueness and lack of accountability of 'comitology' (the complex system of advisory, management/implementing and regulatory committees composed of experts nominated by Member States and involved in the Commission's execution of Community activities), a new 'Comitology Decision' was adopted in 1999 (OJ L 184, 17.7.1999). This provides for the involvement of the European Parliament for those acts subject to co-decision. A

---

<sup>1</sup> Providing advice in matters of health and consumer protection.

subsequent Decision gives the Parliament additional rights such as receiving agendas, list of members and minutes of committees<sup>2</sup>.

The European Commission also consults widely by making use of ‘Green Papers’ on issues ranging from PVCs to innovation policy. While they have been used for many years, Green Papers are now an important instrument in responding to the Protocol to the Amsterdam Treaty on the Application of the Principle of Subsidiarity and Proportionality. This calls upon the Commission to consult widely before proposing legislation and, wherever appropriate, to publish consultation documents.

The Working Group acknowledged recent positive developments such as those described above. However, it recognised that much more is needed to improve the interactions between expertise, policy making and public debate. This entailed a deeper consideration of the lessons to be learned from problematic cases, and an analysis of the basic questions: what is ‘*expertise*’ and how does it work? What does it mean to ‘*democratise*’ expertise and how can this be achieved? Could the establishment of *European scientific ‘reference systems’* help early identification and effective response to health, environmental and other problems? These and other related questions and options were formulated and identified through intense internal work and external consultations.

## **PART 2: SELECTED FINDINGS**

### **2.1 Methodology and Issues**

The working group drew upon the Commission’s own knowledge and experiences, contributions from external consultations, and relevant research, studies and other published documentation.<sup>3</sup> The internal work included elaborating short, illustrative examples (“case studies”) selected against common criteria and drafted on the basis of common guidelines. This was aimed at identifying critical points and drawing lessons. The external consultations gathered insights from a variety of expertise and areas of knowledge. Taking account of time and other constraints, different forms of consultations were undertaken to allow for constructive, pluralistic exchanges of views and experiences. These consisted of meetings with individuals or small groups of experts, two workshops with over 60 external participants, and an open e-questionnaire on the Web involving over 200 responses.

A number of important issues and options were identified by the Working Group on the basis of this internal debate and external consultations. Three main issues are: the definitions of ‘expertise’, its organisation and its use; the meaning of ‘democratising’ expertise (including possible misunderstandings) and options for achieving it; and the identification of needs and features of European reference systems. Other important issues include the management of uncertainty (including interpretation and use of the Precautionary Principle); the notions of ‘independence’ and ‘integrity; the factors leading to effectiveness; and the role of the media.

---

<sup>2</sup> The issues of transparency and accountability of the EC Committee System is also addressed by the Working Group on Evaluation.

<sup>3</sup> A summary of these consultations and documentation will be available on an accompanying CD-ROM and the governance website.

## 2.2 ‘Expertise’ and its organisation and mobilisation

Expertise covers a variety of forms of specialised knowledge possessed by a selected part of the population – the ‘experts’. Expertise may be used to advise governments or the private sector and/or to contribute to public debate. Experts may be called upon by those seeking knowledge, or they may act on their own initiative. Expertise is increasingly understood in a very broad sense, encompassing both the knowledge arising from natural and social science and that arising from specialised practices (administration, farming etc.).

Science remains a key source of expertise, but it is no longer the ultimate depository of trusted knowledge. This is partly due to the linking of science and technology with the economy, society and policy (including ethical considerations). The relations between science-based expertise and other types of knowledge are far from easy. It is already difficult to make the different areas of science (including social sciences) interact; to make them interact with other forms of knowledge (e.g. practical knowledge) requires additional efforts. The ‘compartmentalisation’ of knowledge makes it difficult to address issues that cut across different policy areas, disciplines, natural and social processes. This is an important obstacle to the mobilisation of expertise. In addition, some might find it difficult to discern when expertise provided by ‘stakeholders’ is an input to the broadening and ‘cross-checking’ of the knowledge base, and when this is part of ‘claiming a stake’. Others could find this distinction irrelevant as all providers of expertise could be regarded as having ‘stakes’, and the issue is rather to make them explicit rather than assuming the neutrality of some experts as compared to the partiality of others (see also the point below on independence and integrity).

Expertise may be used to assist in a variety of functions, ranging from the provision of early warning, to target-setting, policy implementation and evaluation. Diverse types of expertise can be needed depending on the functions, stages and time horizon of policy making and public debate. Specific examples can be found in relation to *policy evaluation* (e.g. regulatory impact assessment or business impact assessment), the working of specialised *agencies* (e.g. concerning risk assessment and other tasks), the role of *networks* (e.g. in fostering knowledge development and use)<sup>4</sup>.

Problems arise with regard to the credibility and legitimacy of expertise and its role in public policy and debate when it seems to be used mainly as a ‘legitimizing device’ for decisions already made by politicians. The same applies when experts seem to replace political deliberation with ‘technocratic’ decisions apparently inaccessible and unaccountable to public scrutiny. Furthermore, the provision of expert advice is not a well recognised role in most European countries. For example, there are disincentives for scientists and researchers to provide expertise since this may jeopardise publication records and recognition within the research system. This may unduly restrict the ‘pool’ of available expertise. In addition, expertise may be organised in very different forms. For example, public authorities tend to establish clear (sometimes rigid) procedures for expert advice, while private actors may rely more often on ad hoc advice. Finally, issues of responsibility - including legal liability - may deter experts from providing advice if such responsibility is not clearly defined or is misunderstood. For example, it is obvious that misconduct (e.g. providing evidence known to be ‘false’) should be subject to sanctions, but the definition of

---

<sup>4</sup> See Working Groups on evaluation, agencies, networks.

boundaries between political responsibility in making a decision and the responsibility of experts whose advice is used in decision making needs further clarification.

### 2.3 ‘Democratising’ expertise

‘Democratising expertise’ is not about ‘majority voting in science’, but rather about guaranteeing ‘due process’ in the way expertise is developed, used and communicated. This implies principles such as accessibility, accountability, and pluralism. In contrast, ‘majoritarianism’ is generally incompatible with the development and use of expertise. ‘Majority groups’ within science and administrations are normally responsible for organising the mobilisation of expertise; this is not a problem if clear procedures are set out. However any choice of ‘preferred expertise’ based on political majorities is at odds with quality and the need for pluralistic debate and testing. In particular, if ‘majoritarianism’ leads to the neglect of minority views, this can prove detrimental to early identification of problems, the prevention of ‘crises’ or the identification of suitable response options.

‘Democratising expertise’ should not be understood as sacrificing quality, but as extending the traditional procedures for assessing quality. This refers not only to scientific excellence but also to the ability to respond to policy and social concerns. In this regard, ‘democratising expertise’ goes hand-in-hand with ‘expertising democracy’, or the provision of expertise to democratic institutions. Faced with complex problems – often involving technical and scientific aspects - democratic institutions (Parliaments as well as Governments) and citizens need to have access to relevant and ‘usable’ knowledge of good quality. This should include the explicit acknowledgement of uncertainty. Specific efforts are required to ‘translate’ information in suitable forms (e.g. synthesis documents) for democratic institutions and the wider public while trying to avoid ‘information overload’. It is considered that a key element of the ‘democratisation of expertise’ would be to reinforce the functioning of democratic institutions in this way.

The ‘democratisation of expertise’ entails some potential trade-offs. One is the balance between legitimacy and efficiency. Consultation and democratic scrutiny require time, and this might conflict with the need for quick decisions. On the other hand, some experience shows that quick decisions reached without scrutiny and consultation might prove socially unacceptable and thus inefficient. Another trade-off could be between simplification and participation. Simplification of legislation is regarded as desirable (especially with regard to transparency), but the participation of experts with different viewpoints can involve complex policy outcomes to ‘compromise’ between diverse views. Whilst this should be borne in mind, experience shows that early involvement of ‘target groups’ and their expertise can optimise the choice of action and, again, reduce problems of implementation.

Another important aspect is the preparedness to be influenced by the act of participation. If participants only attend meetings to present their views rather than being open to other views, important information is lost and plurality does not lead to learning but to mere ‘positioning’. These points relate to the broader debate on improving civil society participation to the policy process and the enhanced role of organisations ‘intermediating’ with civil society such as the Economic and Social Committee<sup>5</sup>.

---

<sup>5</sup> See Working Group on participatory rights.

## 2.4 European scientific reference systems

Recent and less-recent ‘crises’ (e.g. BSE and Chernobyl respectively) have demanded co-ordinated, prompt and effective policy responses at the European level. They point to the desirability of organising expertise to assist such responses, and to enhance early warning. In addition, economic globalisation and the important role of international organisations and agreements suggest the need to improve the European capacity to interact with international scientific references (e.g. Codex Alimentarius of FAO and WHO, the Sanitary and Phytosanitary Agreement –SPS– of WTO, the Biosafety Protocol to the Biodiversity Convention, the International Panel on Climate Change). This is especially the case in areas of exclusive Community competence, such as agriculture and trade, but is also very important for areas of mixed competence such as environment protection. This aspect can be regarded as a component of the role of Europe in the international context <sup>6</sup>.

The specific functions of reference systems include the continuous collection, comparison, validation and storage of data, provision of foresight analysis, contribution to early alert and crisis management, communication between scientific laboratories, other providers of relevant knowledge and users (policy makers and others). The specific features of such systems are less easy to define. An informal inter-service working group was set up to examine ‘scientific and technical reference for policy implementation’. This group, chaired by DG Research and the JRC, noted the existence of mechanisms of networking between EC structures and Member States organisations, while wider consultation fora appear less developed. A network rather than centralised approach was also suggested during the consultation of the Working Group. This implies flexible co-ordination between all institutions developing and using expertise for EU policy-making (agencies, research centres, Commission services and committees, etc.). The relation with ‘democratising expertise’ will be an important element when examining the possible features of European reference systems. This should entail a comparison of good/best experiences in addressing issues of access, accountability, transparency, plurality etc.

Some other issues connected with the above three main issues were also addressed and are briefly examined below.

## 2.5 Management of uncertainty

Uncertainty is a key issue in policy making and public debate involving expertise. It is vital to make uncertainty explicit in the knowledge base, and to act accordingly. This point is highlighted in scientific literature and in policy circles (e.g. Canadian<sup>7</sup> and UK Guidelines on scientific advice<sup>8</sup>). It was also stressed during the work of the Working Group. The Precautionary Principle is a general principle of law used to address decision making under conditions of scientific uncertainty. In its Communication on the Precautionary Principle of February 2000 (COM (2000) 1), the Commission set out the way in which this principle should guide decisions when information is uncertain, insufficient or inconclusive and where there are indications that possible risks, linked for example to the environment or public health, may be

---

<sup>6</sup> See Working Group on global governance.

<sup>7</sup> “A framework for science and technology advice: principles and guidelines for the effective use of science and technology advice in government decision making”, Industry Canada, 2000.

<sup>8</sup> “Guidelines 2000: Scientific Advice and Policy Making”, Office of Science and Technology, July 2000.

dangerous and inconsistent with the chosen level of protection. The Presidency Conclusions of the Nice Summit of December 2000 endorsed the broad thrust of the Commission's Communication, and called for specific guidelines for the application of the principle. Mention is made, among other aspects, of transparency in risk assessment, reporting on minority opinions, early involvement of civil society and examination of social, economic, environmental costs.

## **2.6 'Independence' and 'integrity'**

These notions are sometimes controversial and need clarification. Key advisory committees are expected to provide 'independent' advice, and members are required to 'act independently of all external influence'. However, it has been argued that the best experts in a particular field might have some economic, political or personal interests that could affect or be perceived to affect their independence. Such a situation need not prevent the use of such expertise, provided that measures can be established to deal with possible conflicts of interest. For example, in order to give external confidence with regard to integrity, experts should be required to make and regularly update verifiable declarations of interest. In addition, publicity and procedures to guarantee plurality of expertise can be regarded as important safeguards against vested interest or misconduct.

## **2.7 Effectiveness**

Factors that enhance effectiveness in the mobilisation and use of expertise for policy making and public debate differ depending on the functions and tasks to be performed, and the time horizon concerned. For example, effectiveness in 'early warning' involves the capacity to seize the right 'window of attention' in issuing the warning: 'too early', and people are not ready to 'listen'; a warning issued without pointing to specific risk to be addressed by policy makers may pass unnoticed. Effectiveness in target setting may require the ability to find a sound and acceptable balance between a number of factors (e.g. sources of greenhouse gas emissions, their relative contributions to climate change, their distributions between countries and economic sectors, the costs of emissions reductions, etc.).

## **2.8 Mass media**

Last but not least, the role of the mass media is of great importance in connecting expertise, policy making and public debate. The media can be seen as a vehicle of communication between different views, knowledge sources and interests, as well as providers of expertise (e.g. investigative journalism can provide information which is very hard to disclose), and as 'agenda setters' and 'shapers' of public perceptions. It has been pointed out in many instances that the mass media tend to emphasise 'crises' and problems rather than 'good news'; in some cases the spreading of inaccurate or wrong information can exacerbate 'crises'. However the media do not normally 'invent' crises – in spite of charges sometimes addressed in this regard (e.g. following the Chernobyl accident). When taking into account that freedom of information is a basic guarantee of pluralism and democratic debate, it becomes obvious that improved communication between mass media, experts and policy makers is very important in 'democratising expertise' in the context of democratic governance.

### **PART 3: LEARNING FROM EXPERIENCE**

To illustrate the emergence and importance of some of these issues in the Commission's experience, a number of examples were examined. These were BSE ('mad cow disease'), GMOs (genetically modified organisms), PVC (a chemical based on chlorine), employment guidelines, standardisation, and medical products. A comparison of EU and USA experience with regard to GMOs and air quality provided additional inputs<sup>9</sup>. The Table that follows synthesises the main insights from the selected examples examined by the Working Group.

---

<sup>9</sup> "A comparison of institutional changes to improve the credibility of expert advice for regulatory decision-making in the US and EU", A. Koenig and S. Jasanoff, study for the European Commission 2001.

	<b>Definitions of the issue</b>	<b>Provision and use of expertise</b>	<b>Options formulated to democratise expertise</b>	<b>European scientific reference systems</b>	<b>Lessons</b>
<b>BSE</b> (‘mad cow’)	Started as animal disease (emphasis on eradication at minimum economic impact) then –due to link with vCJD- consumer protection (aimed at minimising risk for consumers)	First in-house, then expert committee – no formal procedures for independence and transparency. After 1996 reform of EC scientific committee (SSC), separation between risk assessment and risk management, proposal for European Food Authority	Reinforced principles of excellence, independence transparency in SSC; publication of SSC opinion on Internet; extension of scientific community through a European research programme	Proposal for a European Food Authority would establish a reference system that include BSE aspects, with focus on networking. Cooperation between Joint Research Centre and DG Health and Cons.Prot. ongoing.	Need for effective interface between ‘risk assessors’ and ‘risk managers’; importance of risk communication and public involvement at all stages; cross-checks before reacting to new evidence; independence; importance of dealing with minority views.
<b>GMOs</b> (genetically modified organisms)	Use of GMOs in the agricultural and food sectors raise public concerns in relation to possible risks for health and the environment. Directive 90/220/EEC (revised in 2001) on deliberate release of GMOs into the environment introduced pre-marketing approval and safety requirement. Approvals are contentious.	Member States provide scientific advice in early stage of product approval. EC scientific committees are consulted in case of disagreement; revised Directive makes consultation of such committees mandatory. Regulators criticised for not taking sufficient account of wider range of expertise	Advice of scientific committees is available on Internet. Conferences and workshops. Revised Directive introduce mandatory consultation of the public. An independent advisory group on bioethics established by the Commission; opinions published.	European Network of GMO Laboratories (EC Joint Research Centre and Member States). Commission proposal to make future European Food Authority reference for advice on authorisation of GMO products. International references: Biosafety Protocol, OECD, Codex Alimentarius.	Need for mechanisms for resolving scientific disputes in context of products approval, for better dissemination of evidence, for taking into account practical expertise, for dealing with ethical aspects, for structured public dialogue (emphasis on conclusions and follow-up), for risk/benefit analysis, for taking global perspective.

<p style="text-align: center;"><b>Employment strategy</b></p>	<p>New chapter on employment in Amsterdam Treaty: design and implementation of employment policies rests at national level but requires co-ordination at European level. Seeking of integration of ‘real economy’ in economic integration.</p>	<p>Employment guidelines are drafted by the Commission, in cooperation with experts from national administrations and external experts (to define operational concepts, statistics and indicators). Social partners are also a main source of expertise.</p>	<p>Since the Feira Council of 2000, social partners are invited to provide expertise for identification of good practices, develop national action plans, etc. in relation to the ‘adaptability pillar’.</p>	<p>Intense networking – for development and monitoring of guidelines- between European Commission (including Eurostat), Member States, other institutions and social partners.</p>	<p>Expertise provided by social partners is especially relevant to implement structural transformations. Getting such expertise is not straightforward: interest groups make strategic use of information. Organising debate at European level had impacts at national level.</p>
<p style="text-align: center;"><b>PVC (a chemical based on chlorine)</b></p>	<p>Potential negative effects on health and environment, mainly related to waste incineration. Controversy over two issues: dioxin and incineration, risk from cadmium and lead. National measures on PVC have consequences for internal market.</p>	<p>Commission’s Green Paper on PVC based on 5 main studies by consultants chosen through tendering. Studies took account of divergent views. Studies and Green Paper submitted to public scrutiny (e.g. through Internet consultation and public hearing).</p>	<p>Green paper made available in all EU languages and presented to European Parliam.; Internet consultation resulted in 32,000 replies, most (95%) from industry; public hearing with 250 seats (mainly industry and NGOs).</p>	<p>European risk assessment procedures (e.g. for cadmium) with national experts as rapporteurs upon initiative of Commission and Member States. European Chemicals Bureau at Joint Research Centre also important.</p>	<p>Review of expertise (through the public consultation) led to identification of research not covered by the studies. Transparency of consultation (responses on Web) obliged participant to provide arguments. Time and money as constraints in mobilising expertise. Bias in the response to consultation (95% from one side).</p>

<p style="text-align: center;"><b>Standardisation</b></p>	<p>Harmonised standards support the “New Approach” legislation by which the European legislator intends to overcome still existing barriers to the free movement of goods within the internal market.</p>	<p>Three European standards organisations: CEN, CENELEC (decentralised structures) and ETSI (based on direct participation of its members –companies, etc) mandated by the Commission to draw up the harmonised standards. These bodies are largely dependent on operator expertise, but other interested parties may participate in the process.</p>	<p>Commission urged CEN and CENELEC to further open their structures to interested parties, suggested national public enquiries, supports stakeholders’ involvement (e.g. financial support to interest groups with less resources)</p>	<p>The cooperation of the three standard organisation and the European Commission can be seen as a European reference system on standardisation. Relations with international references (ISO).</p>	<p>Shift of standardisation work from national to European level. Good cooperation between public authorities and market operators -latter expertise directly taken into account. Balanced participation need to be enhanced to ensure plurality and legitimacy.</p>
<p style="text-align: center;"><b>Medical products</b></p>	<p>Creation of European marketing authorisation system for pharmaceuticals, with EMEA (European medicine Evaluation Agency) as focal point, as response to tensions between completion of internal market, resistance by Member States, and health policy.</p>	<p>EMEA’s scientific committees (Comm. For Proprietary Medical Products and Comm. for Veterinary Medical products) are supported by a network of some 2400 experts suggested by national authorities.</p>	<p>EMEA has public access obligations: European Public Assessment Reports published for each authorised medical product after decision is taken; list of experts and declaration of interest for experts, staff, committees; use of Internet; dialogue with interest groups representing patients, consumers, health professionals, industry; etc.</p>	<p>EMEA can be seen as focal point of a European reference system of medical products. Relations with international references (e.g. WHO), dialogue with third countries regulatory agencies (e.g. International Conference on Harmonisation with USA and Japan).</p>	<p>Scientific committees are exploring options to be more open to wider scientific community and internat. learned societies. Traditional consumer groups represent the ‘healthy’: patient groups need to be involved as well. Resistance to openness in pharmaceutical sector to be addressed. The process of experts' nomination and selection could be made more transparent (e.g. through open calls for expression of interest).</p>

The examples, which range from the highly controversial to the more 'routine', point to a number of important issues. These include the importance of problem definition in mobilising the relevant expertise (including practical expertise); the merits and problems (e.g. unbalanced responses) related to public consultation; and the complex relations between risk assessment, risk management and risk communication. The examples also highlight some ongoing challenges and lessons to be learned: the changes in procedures used to select and mobilise experts in scientific advisory committees; the explicit consultation of experts with practical knowledge (e.g. operators, social partners) as well as the wider public; the handling of ethical aspects; the networking of national and European 'reference systems', and their relations with international structures.

When comparing European and USA experiences and regulatory approaches, different 'transatlantic trends' emerge. In Europe there is a trend to open up the 'technocratic' processes, formerly regarded as being driven by an expert elite, to increasing transparency and broader participation in decision making. In the USA, on the other hand, a trend is emerging to carve out increasing space for expert authority in a rather aggressive 'adversarial' context with a strong role for the judiciary. In addition, the linking of risk assessment and risk management was endorsed by the US National Research Council in 1996 (modifying earlier guidance on strict separation issued in 1983) and is being debated, while the separation of these functions has been advocated in recent Community decisions (e.g. establishing specialised agencies). Some lessons can be drawn from these comparisons. 'Adversarial' approaches (including resort to courts) can enhance the social 'robustness' and acceptability of expert-based decision; however it should be taken into account that formal mechanisms of participation do not result in democratic decisions if participation is 'unbalanced'. The 'technocratic' approach may be more efficient in terms of time, and may sometimes protect 'expertise' from 'vested interest'. However, it runs into problems of legitimacy and acceptability, and may jeopardise quality due to restrictions in the 'pool' of expertise taken into account. Finally, the relations between different elements of 'risk governance' need careful examination.

## **PART 4: RECOMMENDED ACTION LINES**

### **4.1 Aims**

The internal work and the consultation highlighted the fact that making expertise more accessible is important, but that this has to go hand-in-hand with other more fundamental changes. Among these, there was a clear call for more accountability and procedures to provide a 'trace' of sources and uses of expertise; procedures to acknowledge minority views; involvement of 'stakeholders' at early stage; and better management of uncertainty .

With regard to options for establishing European scientific reference systems, there was a consensus on the need to avoid bureaucratic and overly-centralised modes of operation; to focus on networking (including virtual networking); to allow for review and flexibility; and to develop such systems consistently within the overall 'democratising' approach.

Taking account of all this, a number of options aimed at 'democratising' expertise and establishing European reference systems were explored. Out of the large pool of

possible options, five action lines were identified as particularly promising within the context of the White Paper on Governance.

These action lines concern an inventory network on expertise, guidelines on expert advice, procedures to guarantee access and participation, 'extended peer review', integrated procedures for risk governance. Strands of all the action lines are closely interlinked; for this reason they should be treated as related components of an overall strategy. They evolve from existing mechanisms and should be regarded as a contribution to the experimental, open process of learning with which the Commission is particularly engaged at the moment, for example, in the Reform Process.

The proposed action lines should help to improve the 'input legitimacy' of the process through which expertise is developed, selected and used and, at the same time, the 'output legitimacy' through the quality and effectiveness of policy decisions as well as public debate.

More specifically, the main aims of the action lines include:

- **access to, and transparency of**, the process of the development, selection and use of expertise for policy making;
- **accountability** to citizens and representative institutions of those who provide and use expertise for policy making;
- **effectiveness** in providing expertise - helping to 'deliver' policy decisions that meet citizens' needs and demands;
- **early warning and foresight** to help identify new issues and threats;
- **'independence'** and **'integrity'** (for example, experts should be required to make and update prior declaration of interest);
- **plurality** of sources and types of expertise consulted for policy making and public debate, including acknowledgement of minority views;
- **quality** of expertise (including scientific excellence and policy and social relevance).

The main action lines and their aims can be visualised in a matrix.

		<b>ACTION LINES</b>					
<b>AIMS</b>	<b>A more complete understanding of the expertise currently used at EU level.</b>	<b>Guidelines for the selection and use of expertise for policy making</b>	<b>Access, participation, intermediary platforms</b>			<b>Broadening and integrating the expertise used in policy-making</b>	<b>Integrated procedures for risk governance</b>
			<b>Access to expertise provided and used for policy advice</b>	<b>Participatory procedures for debate on risk issues and their regulation</b>	<b>Intermediary platforms to facilitate interaction between experts, public, policy makers</b>		
<b>Access and transparency</b>	*	*	*	*	*		
<b>Accountability</b>		*	*	*		*	*
<b>Effectiveness</b>		*	*	*	*	*	*
<b>Early warning and foresight</b>		*		*	*	*	*
<b>‘Independence’ and ‘integrity’</b>		*					
<b>Plurality</b>	*	*		*	*	*	*
<b>Quality</b>		*		*	*	*	*

The action lines complement and reinforce each other. The **Guidelines**, depending on the actual content, could meet all the aims and act as the ‘catalyst’ for the other action lines. The **Inventory** network can be regarded as a ‘service’ to the other options by mapping the ‘jungle’ of sources of expertise. The action line on **Access, Participation and Intermediary Platforms** focuses on different aspects of transparency. Procedures for ‘**Extended peer review**’ aim to reconcile quality, access and accountability (sometimes perceived as conflicting with each other). Finally **Integrated Procedures of Risk Governance** intend to ensure accountability and effectiveness.

Initially the action lines could be implemented within the Commission. Many of the strands of the action lines could be taken up within other EU institutions. They could also be further exploited at national, regional or local level within the EU through appropriate dialogue with Member States. This could be achieved, for example, through the open method of co-ordination, taking account of national diversities and circumstances. The report does not propose single solutions to be applied in a uniform manner at all these levels. More work will be required for any implementation within the Commission and will certainly be needed for extensions to the other levels. The proposed action lines should be regarded as topics for the start of such a process.

An assessment of the resources (budget, personnel, etc.) needed to eventually implement these action lines, and the comparative analysis between such costs and the expected benefits, are beyond the mandate of this group. Such an assessment would clearly be required before embarking on concrete implementation steps.

## 4.2 Action lines

### (i) *A more complete understanding of the expertise currently used at EU level.*

An inventory, or ‘inventory network’, would improve access to and transparency of these sources and their use, and would provide continuity over time and ensure that ‘institutional memory’ is maintained within the administration. This ‘mapping’ of expertise would simplify access to relevant information on ‘who knows what, and provides/d expert input to whom about what’. It could be useful not only for policy makers but also for the interested public and the media. For example, it could provide a ‘one-stop search engine’ to check about ‘news’ related to scientific and technological impacts, risks, etc. This could be especially beneficial during ‘crises’ when little time is available for searching for relevant expertise, and rapidly taking stock of available expertise assumes greater importance. This work could be undertaken as part of the establishment of European scientific reference systems.

Some relevant work is already underway. The Secretariat General has compiled an inventory of ‘comitology’ Committees,<sup>10</sup> and is compiling, for internal use, a list of all other committees, including advisory committees. An inventory of consultative bodies and civil society organisations is also being compiled.

---

<sup>10</sup> OJ 8.9.2000

The working group's suggestion builds on these ongoing efforts, and complements similar proposals by other groups<sup>11</sup>. It is suggested to extend these to map all sources of expertise used by the Commission (e.g. consultants, evaluators, etc.).

A second step could involve the establishment of a network (or a virtual network) of inventories of EU bodies providing expert input to EU policy-making. This could embrace European agencies, the Scientific and Technological Options Assessment office (STOA) of the European Parliament, the Economic and Social Committee. It could also include inventories established by the Commission for purposes wider than its direct work, for example those set up by the Joint Research Centre, and 'networks of excellence' to be established with the European Research Area and the Research Framework Programme 2002-2006. At a third stage the inventory could link with national networks and relevant organisations (e.g. 'large facilities network'/CERCLE) and with international structures (e.g. scientific/advisory bodies related to FAO, OECD, UNEP, WTO and others).

The benefits of such inventories and networks would naturally need to be weighed against the resources required for their continuous updating and review.

(ii) **European Guidelines for the selection and use of expertise for policy-making**

European guidelines would embody the aims and principles previously discussed. They could act as a 'catalyst' for other proposals within other EU institutions and at the Member State level. Such guidelines would be applicable to the Commission (including its scientific and other Committees) but could also inspire other European organisations (e.g. Council Working Groups, European Agencies) and form the basis of a dialogue with Member States to explore whether similar or related guidelines could be used at national level.

Some governments (UK and Canada) have already issued guidelines on scientific advice for policy-making. The UK Guidelines were first issued in 1997 by the Office of Science and Technology and were revised in 2000; the Canadian Government issued guidelines in 2000 based on the report 'Science Advice for Government Effectiveness' published in 1999 by the Council on Science and Technology Advisors. While both the UK and Canadian Guidelines focus on scientific advice, they encompass a plurality of sources of expertise in their coverage (e.g. the UK guidelines refer to expert sources from research, lay members of advisory groups, consumers groups and other stakeholders bodies; the Canadian guidelines refer to 'traditional knowledge').

- **Drafting the Guidelines:** This should be the product of a co-ordinated effort by the Commission's services and, where appropriate, with early consultation and involvement of other EU institutions, Member States and a variety of providers and users of expertise. Without prejudging the outcome of this process, the working groups expects that the guidelines could include principles aimed at ensuring early identification of issues requiring mobilisation of expertise, enhancement of foresight capability, openness and

---

<sup>11</sup> Namely the WGs on Participatory rights and Evaluation.

transparency, accountability, ‘independence’ and ‘integrity’, plurality as well as quality in the way experts are selected and the expert advice is used.

- **Implementation and monitoring:** Guidelines merely set principles; to ensure that these are followed in practice, procedures also need to be established. These can include reporting obligations by the institutions concerned, and/or independent monitoring by an external body/’super *partes*’. These functions can include reporting to the Parliament (or even involve monitoring within the Parliament) and publication of all such reports. In addition, guidelines can be supported by, or complemented with, Codes of Conduct.

The working group considered that clear procedures need to be elaborated to assess whether Guidelines are followed and to establish the consequences of not implementing them. These could include periodical reports to, and scrutiny by, other institutions, such as the European Parliament (which could be assisted by STOA), Council, the European Ombudsman, etc. For example, the Secretariat General or an external body could report to the monitoring institution, and the report with monitoring conclusions could be published. Codes of Conduct could support the implementation of the Guidelines (e.g. by providing for procedures to guarantee integrity of expert advice).

(iii) **Ensuring access, improving participation and developing intermediary platforms for more transparent and accountable policy making and informed public debate**

A number of measures could be adopted to better connect experts, policy makers and society at large. These measures would not only ensure transparency, communication and involvement of relevant ‘actors’, but also contribute to ‘confidence building’ and improved quality of policy-making and public debate. Three distinct but related actions are suggested under this action line: access to expertise, participatory procedures and intermediary platforms.

- **Access to expertise and evidence provided for policy advice:** Making expertise accessible is a key feature of its ‘democratisation’, of overcoming the frequent opaqueness of the process of providing advice and of tracking the evidence produced and used. Access to expertise can be seen as an important ‘ingredient’ and complement of freedom of information provisions<sup>12</sup>.

Such access can take two main forms: a) open meetings of Committees where expert advice is elaborated and/or special public hearings organised by such Committees; b) publication of expert advice, and more broadly, of any evidence used for policy formulation, evaluation, etc. With regard to both forms, issues of time and of balance between access and ‘time to think’ need to be taken into account.

With regard to access to **meetings of experts’ advisory Committees**, the fundamental issue is whether all meetings should be open all the time (as provided by the US Federal Advisory Committee Act) or only some meetings or parts of meetings. It is imperative to ensure access but, at the same time, to

---

<sup>12</sup> Such as the EC Directive on Public access to environmental information – COM (2000) 402 final, the Aarhus Convention on access to information, public participation in decision making and access to justice in environmental matters or, in the US context, the Freedom of Information Act.

avoid provisions that could ‘put off’ relevant sources of expertise or could lead to the creation of other informal arenas to circumvent the rule. Therefore, the working group favours generally open meetings with rules of access being clearly specified (e.g. right to attend the whole meeting, but to take the floor only at certain stages and under certain procedures) and with any exceptions (closed meetings) to be duly motivated and justified. The reasons for restricting access should be published. In addition, public hearings at the stage of preparation of the advice could be organised to allow broader participation and debate.

As a general rule, **the evidence used to shape policy decisions, and how it was used, should be published.** This includes synthesis documents (e.g. for Members of Parliament) that provide a ‘track record’, explaining how evidence was produced and used, including accounting for minority views and making explicit the uncertainties. Publication of documents could be through the paper format, as well as on Internet, and provisions for transparency (already adopted and under re-definition by the European institutions) should apply to such ‘expert-based’ documents.

Nevertheless, the desire to ensure that evidence is published must be balanced against possible drawbacks. For example, publishing evidence that is not yet peer reviewed in any form can lead to more controversy than existing practices. More confusion could be caused through unclear and quick ‘changes in evidence’. Publication of rough, unprocessed data can lead to problems in relation to intellectual property rights. It is important, although far from easy, to define criteria for ‘relevance and usability’ of documents to be made public.

In addition to these important but ‘passive’ publication provisions, a proactive communication strategy should be implemented, aimed at informing citizens on what is accessible and how<sup>13</sup>. Such a strategy should take into account the diversity of ‘target audiences’ (young people, interested citizens, social partners, etc.), and should address both the EU and accession countries. The aim should be to provide a clear picture of the content of expert advice, and how it is used. Rather than providing simplistic ‘black and white’ message that could prove inaccurate or wrong, the strategy should ensure that uncertainties and controversies, where they exist, should be made explicit.

---

<sup>13</sup> On communication aspects see also the Working Group on Developing a European Public Space.

- **Participatory procedures for debate on risk issues and their regulation:**

Actively involving citizens and ‘stakeholders’ in decisions that concern all aspects of their lives is a key element of democracy. Participation goes beyond mere access. Participatory mechanisms can enhance knowledge-sharing, scrutiny of experts and policy makers and overall effectiveness of, and trust in, the decisions being made.

Citizen’s juries, consensus conferences, focus groups and public hearings have been implemented on specific topics at local and national levels (for instance in Denmark, France, Germany, Italy, Norway, The Netherlands, UK). Participatory foresight –focusing on risks and opportunities offered by science and technology in a timeframe from 5 to 15 years- has also become a major effort in some national contexts (e.g. Ireland, Germany, Sweden, UK). Given the diversity of Europe, there is no question of establishing a homogeneous and centralised procedure for participation. The issue is rather to develop a range of mechanisms having a ‘European dimension’ while not being ‘Brussels focused’. Three types of actions could be envisaged:

- **Exchange of information** between Member States, accession countries, and other countries within and outside Europe, on the types and features of participatory procedures implemented so far, outcomes of such procedures, and topics addressed. This could provide a useful basis for comparing and learning from good practices. It could also prove a useful ‘capacity building’ exercise for countries or communities that have not tried such participatory procedures so far. Some research on this topic is ongoing and some informal networks have been established. Taking stock of such developments and drawing lessons on what could be best suitable for improving participation in European policy-making and with related use of expertise would be fruitful.
- **‘Soft’ co-ordination of participatory mechanisms** could involve reciprocal information on what topics are addressed, when and how, as well as joint meetings (either in same location or by virtual networking) on the same topic. This could allow an exchange of views of participants from different countries on the same topic of European relevance. When feasible and appropriate, a ‘mixed’ group of citizens from different countries could gather in one location – for example, hosted by the European Parliament, a national parliament, a city council, a research organisation, an NGO - and link with panels/groups/conferences in different countries.
- **Formal procedures** (eventually legal rules) could involve requirements for European institutions and/or for Member States, or other legal entities, to organise participatory procedures to allow scrutiny of expertise and of policy-making at the earliest stages of policy-making, (e.g. policy formulation), and/or policy implementation. Some provisions of this type are already in place<sup>14</sup>.

---

<sup>14</sup> For example, EC Directive 97/11 on environmental impact assessments states that ‘*Member States shall ensure that any request for development consent and any information gathered (...) are made available to the public within a reasonable time in order to give the public concerned the opportunity to express an opinion before the development consent is granted*’.

Some financial resources could be ‘earmarked’ by the Commission (and other organisations) to assist such exchange of information and co-ordination and to help less ‘resourceful’ organisations (e.g. patient groups) to participate in all three actions mentioned above.

- **Intermediary platforms to facilitate the interaction between experts, public, policy makers and the media**

The establishment of intermediary platforms at the European level should be encouraged.

Some institutions or fora can facilitate interactions between experts, policy makers and the public by ‘translating’ scientific findings into policy issues and options or ‘news’, or by ‘translating’ policy and social issues into ‘researchable’ questions. They can also assist in overcoming distrust due to lack of knowledge or understanding of the different arguments (including between experts). In addition, they can enhance the examination of existing issues and emerging/future issues that cross policy, disciplinary or national boundaries by gathering together relevant ‘actors’ from different domains. Some existing ‘intermediary institutions’ can be identified (such as the Danish Board of Technology, a pioneer of ‘participatory technology assessment’, or the Rathenau Institute in the Netherlands) but intermediary ‘platforms’ can also consist of virtual platforms such as networks, workshops or journals putting into communication different sources of expertise and their ‘users’. Encouraging ‘mixed career paths’ namely mobility between academia and administration, between public and private sectors, between national and European or international organisations, could provide important support for enhancing the interaction between experts, policy makers, media and civil society organisations.

(iv) **Broadening and integrating the expertise used in policy-making**

The goal is to ensure that relevant knowledge is mobilised to assess both scientific quality of expert advice, as well as social and policy implications.

Knowledge used for policy-making and public debate should not only be excellent from a scientific point of view; it also needs to be ‘socially robust’, responding to policy, social, economic needs or concerns. This involves expertise beyond both the traditional and professional ‘peer’ community to include those with practical or other knowledge about the issue at hand.

For example, ‘gender impact assessments’ have indicated, that ‘gender blind’ assessments may fail to identify that certain relevant aspects are neglected or poorly addressed in research proposals or in expert advice provided for policy-making. Similarly, in environmental impact assessments, the links between environmental, economic, social, legal and cultural aspects require review procedures involving a plurality of experts from different disciplines and practical knowledge.

This widening of expertise is also known as ‘extended peer review’. It can reconcile the often opposing criteria of quality and participation: broadening the

participation in the review of knowledge developed and used for policy advice could enhance quality.

‘Extended peer review’ is already being practised. For example, the offices for technology assessment of some Parliaments (e.g. OPECCST in France, STOA in the European Parliament) call on a plurality of experts, often including practical knowledge, to address the specific questions by Members of Parliaments. Also, extended reviews were introduced from 1995 for the evaluation of proposals submitted for financial support under EC research programmes<sup>15</sup>. At the international level, an interesting example of ‘extended peer review’ is the Cochrane Collaboration, an international organisation established in 1993 and with centres in 15 countries. Cochrane aims to help people make well informed decisions about health care by preparing, maintaining and ensuring the accessibility of systematic reviews – by researchers, health care professionals, consumers and others - of the effects of health care interventions.

Extended peer review processes could be used systematically where expertise is involved in policy or decision-making processes.

In addition to mapping ‘relevant knowledge’: science based, as well as local, practical knowledge covered by action (i), the working group considered two areas of particular relevance for extended peer review:

- **The elaboration of criteria to identify ‘relevant’ knowledge.** These would help determine which knowledge is relevant, for what purpose, and on what basis. The criteria should reflect the plurality of knowledge sources as well as the issues and context where the knowledge is to be ‘applied’, (e.g. identifying risks, assessing options, monitoring and implementation, evaluating performance, etc.).
- **‘Clearing houses’ to make broadly-based expertise available.** These could be public databases organised by topic (rather than discipline), journals, etc. The establishment of ‘clearing house(s)’ could be part of the establishment of European reference systems and individuals with ‘mixed career background’ (e.g. within the Commission as well as within research and other organisations) could be instrumental in animating and updating such ‘clearing houses’.

(v) **Integrated procedures for risk governance**

While most discussion focuses on the relationship between risk assessment and risk management, risk analysis also encompasses risk identification, evaluation and communication. ‘Risk governance’ takes all these elements into account and involves all actors – with clear, although not necessarily separated, articulation of responsibilities. These range from those who provide risk assessment, those who might be most exposed to the risks, those who decide on specific risk management options, to those who implement such options. There are different views as regards whether these two functions should be performed by the same or different organisations. This issue is beyond the mandate of this Working Group,

---

<sup>15</sup> Scientific excellence is first assessed by peers in the relevant scientific disciplines, while the socio-economic impacts and policy implications of proposals that ‘pass’ the scientific screening are subsequently assessed by involving a broader range of experts.

although whichever perspective is followed, there is wide agreement on the need for an effective interface between the different components. The importance of such an interface can be seen, for example, in the report for the European Commission 'A European Food and Public Health Authority: the future of scientific advice in the EU', published in December 1999.

The working group identified four ways to enhance the interface between the different components and different actors of risk governance:

- **Methods and platforms for 'joint problem definition', taking into account policy and social concerns.** These could include open meetings or public hearings of expert advisory bodies performing risk assessment to receive inputs from a plurality of sources. These might involve potential or actual victims having practical knowledge of risks, those having practical experience as operators (from industrial engineers to medical staff), as well as policy-makers at various levels (local to global, depending on the issue at hand) and on management options to be decided, etc..
- **Interfaces between risk assessors and risk managers.** These could be provided by secretariats (for instance, by scientific secretariats within the administration) that liaise with expert advisory bodies and ensure continued dialogue at all stages, from the process of preparing questions to the transmission of opinions. Such dialogue and regular exchange of information should be pursued at all levels: between EU institutions, between EU and Member States institutions and, where relevant, with international organisations. Particular attention should be paid to the development of common practices for the exchange of information between risk assessors and risk managers at EU, national and international levels in case of 'crises'. The development of such practices and of suitable co-ordination procedures could take stock from past experience of 'crisis management' both within the Community (e.g. radiological and food alert) and internationally (e.g. international conventions such as IAEA Convention on Early Notification of nuclear accidents and on Assistance in case of nuclear accidents). The focus on 'early warning' could be part of 'crisis prevention' and be a component of co-ordination efforts. An additional and informal interface could be provided by small meetings with experts not directly involved in the process and acting as 'sounding board' at the stages of preparation of questions, identification of options, preparation of communication and consultation procedures.
- **Monitoring, evaluation and review mechanisms for risk governance.** Monitoring can detect risks from invisible (e.g. radiation) and/or unknown sources; 'secretive' management of data can delay the detection of risks and experience shows that monitoring needs to be accessible and transparent for proper risk identification. Evaluation ranges from risk/cost/benefit analysis to the analysis of the social perception and acceptance of risks or the administrative feasibility of different management options. Comprehensive evaluation appears preferable when, as is often the case, distribution of risks, costs, benefits etc. are unbalanced. Review mechanisms are needed to adapt decisions taking account of progress in knowledge and changes in the socio-economic conditions.

- **A comprehensive communication strategy.** This is essential during the whole process, from identification of risks to the evaluation of policies intended to manage them. This must embrace the relevant ‘stakeholders’, and will foster an ‘understanding’ at every stage, helping to engender public trust in the whole policy-making process. Specific actions could be envisaged to improve the communication capacity of administrations, media and experts to avoid ‘patronising’ attitudes towards the citizens and engage in real dialogue.

Although the matter of risk governance is considered a priority, integrated approaches are needed to ensure consistency across policy areas, as well as across time and space. This is a matter examined, for example, in the Commission Strategy on Sustainable Development that has been developed in parallel to the White Paper on Governance.

## CONCLUSION

The working group has made five recommendations that, in its collective view, will contribute to the dual goal of better **quality** policy-making, and restored **trust** in the use of expertise. These recommendations are in the form of **action lines**, representing promising avenues for further exploration.

In the first instance these action lines would **apply to the work of the Commission and its departments**. As part of this process, discussions would take place with other EU institutions and agencies, and with Member State administrations. This should not only build a common understanding of current practises and priorities, but should also help identify opportunities **for eventually adapting and implementing linked actions more widely across the EU** (e.g. through the open method of co-ordination).

Further development and implementation of these action lines will be done in the context of the follow-up to the White Paper, and, as far as the **European Research Area** is concerned, as part of the action plan foreseen by the end of 2001 following the Commission services’ working document “**Science, Society and Citizens in Europe**”.

## Annex

### Members of the Working Group

Mona Bjorklund	DG ENTR	
Grete Bossenmeyer	DG ENV	
Colette Cotter	DG ENTR	
Alan Cross	DG RTD	
Catherine Fallon	DG EMPL	
Francesco Franca	SJ	
Silvio Funtowicz	JRC	
Rainer Gerold	DG RTD	Pilot
Roderick Hurst	DG RTD	
Ludwig Kraemer	DG ENV	
Notis Lebessis	SG	
Angela Liberatore	DG RTD	Rapporteur
Robin Miège	JRC	
Lars Mitek Pedersen	SG	
Michael Rogers	SG	
Michael Shotter	SJ	
Peter Wagstaffe	DG SANCO	

The challenge, and opportunity for the group was to implement “good governance” in its working methods, with emphasis placed on frank exchanges of views and experiences, and open, instructive cooperation.