



Typifying Scientific Advisory Structures and Scientific Advice Production Methodologies (TSAS)

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Typifying Scientific Advisory Structures and Scientific Advice Production Methodologies (TSAS)

Final Report
Annexes

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Annex 1 - Methodology

1 Database framework

Where there are multiple entries possible I have used tick boxes. In the actual database these may well be drop down menus.

For our information – what/who are the sources of the information:

Section A – Background

1. **Country:** Austria

2. **Name (in English and original language):**

3. **Contact details (name of contact person, address, telephone, email):**

4. **(a) Does the body have a website:** Yes No *single entry*

(b) Web address

5. **Date of establishment:**

6. **Brief history and overview:**

7. Policy Area(s) covered by the body:

Agriculture	<input type="checkbox"/>	Transport	<input type="checkbox"/>
Environment	<input type="checkbox"/>	Research	<input type="checkbox"/>
Health	<input type="checkbox"/>	Energy	<input type="checkbox"/>
Fisheries	<input type="checkbox"/>		

8. **Size of body (no. of members):**

9. **Does the body have a secretariat? Yes**

If yes please indicate:

The annual costs of providing the secretariat (in Euros)

The number of people on the secretariat

Please describe the role of the secretariat

10. **Is the body?** *Single entry*

Statutory	Permanent	<input type="checkbox"/>
	Fixed-term	<input type="checkbox"/>
Non-statutory	Permanent	<input type="checkbox"/>
	Fixed-term	<input type="checkbox"/>

Comments:

11. **What is the legal status of the body?**

this will vary from country(e.g. for the UK advisory committees would be non-departmental public bodies) to country as to how this is defined but we can analyse this afterwards.

12. What advisory activities has the body recently undertaken? Please provide a brief list of 3-5 issues that have recently been covered by the body.

--

Section B – Operation of the body

13. Is the operation of the body governed by any formal guidelines or code of practice? Yes/No

Comments:

14. Who does the body advise?

	<input type="checkbox"/>	
Head of Govt (PM or Cabinet)	<input type="checkbox"/>	
Legislature	<input type="checkbox"/>	
Ministry	<input type="checkbox"/>	<i>Please specify</i>
Agency	<input type="checkbox"/>	<i>Please specify</i>
Other Advisory body	<input type="checkbox"/>	<i>Please specify</i>
Other	<input type="checkbox"/>	<i>Please specify</i>
Don't know	<input type="checkbox"/>	

Comments:

15. What other activities does the body undertake?

		Are these major or minor activities for the bodies	
		Major	Minor
Research performance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Research funding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Update review on state-of-the-art	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Education & Training	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Standard-setting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Regulation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Licensing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ethical review	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Raising public awareness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Don't know	<input type="checkbox"/>		

Comments:

16. What resources are provided to the body? Where known please indicate the annual costs involved (in Euros).

		Costs
Costs of employing members full-time	<input type="checkbox"/>	
Costs of employing members part-time	<input type="checkbox"/>	
Costs of reimbursing members expenses only	<input type="checkbox"/>	
Costs of commissioning research	<input type="checkbox"/>	
Other	<input type="checkbox"/>	
Don't know	<input type="checkbox"/>	

Comments:

17. What is the annual budget of the body (in Euros)

Please estimate the proportion of this that is used in the generation of scientific advice

Comments:

18.If the body has a fixed budget then is there any flexibility to increase funds if the needs arise (if yes are there any recent examples where this has happened) yes

--

19. Regarding the composition of the advisory body:

a) What are the backgrounds of the members?

		Total numbers (where known)	Numbers of women (where known)
Academic experts in natural and physical sciences	<input type="checkbox"/>		
Academic experts in social science and humanities	<input type="checkbox"/>		
Industry representatives	<input type="checkbox"/>		
NGO representatives	<input type="checkbox"/>		
Lay people	<input type="checkbox"/>		
Parliamentarians	<input type="checkbox"/>		
Civil servants	<input type="checkbox"/>		
Other	<input type="checkbox"/>		
Don't know	<input type="checkbox"/>		

Total no of women	
-------------------	--

Comments:

b) Of these, are any of the members:

		Numbers (where known)
Experts who work in other countries	<input type="checkbox"/>	
Members from the body requesting the advice	<input type="checkbox"/>	
Members of other advisory bodies (from the country in question)	<input type="checkbox"/>	
Members of international advisory bodies	<input type="checkbox"/>	
Other	<input type="checkbox"/>	
Don't know	<input type="checkbox"/>	

Comments:

20. How are the members of the body selected?

- Peer nomination/election
- Appointment
- Advertisement/open application
- Other
- Don't know

Comments:

21. Do the members of the advisory body have to declare any potential conflicts of interest? Yes/no

Comments:

22. Are the members of the body formally required to keep confidential:

- (a) Material used by the body in generating advice Yes/no
- (b) The discussions of the body Yes/No

Comments:

23. What is the scope of the body's work?

Focused (one main issue within policy area)

Comments:

24. Can the body select its own subjects for examination or is it purely reactive? *Single entry*

- Can select subjects
- Purely reactive
- Other
- Don't know

Comments:

25. What is the mode of operation of the body?

- Regular meetings
- Meetings as required (own initiative)
- Meetings on request
- Electronic meetings
- Formation of sub-groups
- Continuous operation
- Other
- Don't know

Comments:

26. (a) Where does the information used to formulate advice come from?

		In general, are these sources of information used often or rarely	
		Often	Seldom
Expertise held by members themselves	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Review of existing literature	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
National external expert consultation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
International external expert consultation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Public consultation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Background work by secretariat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Perform own research	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Commission new research	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Another advisory body (same country)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Advisory body from different country	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
International advisory body	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Don't know	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Comments:

(b) Where there is public consultation, what forms can this take?

Focus groups	<input type="checkbox"/>
Citizens' juries/panels	<input type="checkbox"/>
Consensus conferences	<input type="checkbox"/>
Stakeholder dialogues	<input type="checkbox"/>
Internet dialogues	<input type="checkbox"/>
Other	<input type="checkbox"/>

27.Regarding the transparency of the operation of the body:

(a) Is the following information confidential, available on request or published? Where published is it available on the web

	Confidential	Available on request	Published	On the web
The remit of the body	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Advice reports (on specific issues)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Activity reports (e.g. annual reports)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Agendas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Minutes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Comments:

(b) Does the body hold any meetings that are open to the public? Yes

Comments:

28.How is the advice finalised and delivered?

a) Does the body have to agree on a common position or can it present a range of opinions held by members of the body? *Single entry*

Common position agreed by majority vote	<input type="checkbox"/>
Common position agreed through consensus	<input type="checkbox"/>
No common position – full range of opinions communicated to those requesting advice	<input type="checkbox"/>
Other	<input type="checkbox"/>
Don't know	<input type="checkbox"/>

Comments:

b) How is advice delivered to those requesting it?

- Advice presented in final form to policy-makers
- Dialogue between advisory body and policy-makers
- Other
- Don't know

Comments:

c) What type of advice is delivered?

Technical standards	<input type="checkbox"/>
Policy recommendations	<input type="checkbox"/>
Forecasts	<input type="checkbox"/>
Risk assessments	<input type="checkbox"/>
Other	<input type="checkbox"/>

Comments:

29. Does the body disseminate advice beyond those originally requesting the advice? Yes

If yes, how is this done?

- The media (e.g. press releases etc.)
- Information leaflets/publications
- Academic journals
- Website
- Other
- Don't know

Comments:

30. Is there a formal requirement for a policy response to the advice delivered?

Yes

Comments:

31. Is there any formal assessment of the operation and impact of the body (this refers to the advisory function of the body)

Yes

Where Yes, who conducts the assessment?

The body itself	<input type="checkbox"/>
A sponsoring organisation	<input type="checkbox"/>
Other	<input type="checkbox"/>

Please comment:

Where assessments are made are do they lead to any further action (e.g. changes in the operation of the body etc.)? Yes/No

Please comment:

32. Can you give any recent examples where the advice of the body has had an impact (e.g. on policy formulation, on the profile of debates in the media etc.)?

Comments:

33. Has advice generated by the body been taken up and used by either advisory bodies in other countries or international advisory bodies?

Yes

34. Have there been any recent (in the last 5 years) changes in these structures/processes?

No

Institutional changes

Administrative changes

Changes to scope/mission

Other

Don't know

Comments:

35. Would a European electronic library of scientific advisory bodies and scientific advice, which would allow for widespread dissemination, and possible use, of the advice generated by advisory bodies be a useful resource Yes

Annex 2 – Country Reports

Austria

General Overview

2 Background

2.1 Introduction

Issues surrounding the use and the acquisition of scientific advice are only slowly being put on the agenda in Austria. There are no national policy documents or guidelines that set out how advice should be acquired by policy makers. Generally, scientific expertise is acquired through a combination of personal contacts, contract research, federal institutes and commissions that are set up to advise the ministries on specific issues. However, independent advice bodies are less common than in countries such as the UK.

The situation in Austria is currently changing shape and the next eighteen months could considerably change the advice landscape. New structures are being created that are addressing the advice issue. However, the motivation behind the establishment of such new bodies is not always obvious nor is the remit of the body itself well defined. For instance, the main motivation could be a focus on establishing increased control mechanisms rather than a focus on risk or transparency.

A recent examples of a structure created to provide advice in Austria is the Council for Research and Technological Development. This body was established in 2001 to provide advice on all aspects concerning the development of the national innovation system. Although its official remit is to support strategy and advise government, it now has considerable authority and is currently responsible for deciding on the allocation of approximately half the national research budget. This task was previously carried out by the two ministries involved in research policy.

When the Council was originally conceived it was considered to have no powers other than a non-binding advisory role. Its current decision making powers over the research budget have surprised many people due to the fact that its recommendations on research programmes are not legally binding. All the same, the finance ministry is only funding those programmes that have the Council's recommendations. The removal of decision making power from the ministries to the Council has been welcomed and criticised. It is now more transparent how research programmes are funded and on what basis. However, the eight members of the Council are not experts in all fields and the quality of the Council's decision making skills has been heavily criticised. It is not clear whether the Council will continue to perform this task in its current form or whether some decision making responsibilities will make their way back to the ministries.

A further example of a recently established advisory body is the new Food Standards Agency that will come into being in June 2002. This move follow several food scares in Austria. It

will amalgamate nineteen previously independent research and testing institutes from the Health and the Agriculture departments. The new agency will have more than 1200 employees. The main motivation behind the establishment of the new agency is to collect all federal institutes responsible for research and testing in the food industry together to ensure there are no gaps in quality control. There are doubts though from a number of NGOs and consumer groups as to whether the main problem lies in gaps in quality control. According to them, there are other issues that the structure of a new body should consider such as the lack of separation between producers and controllers. Whichever way it is looked at though, the new agency has more to do with the organisation i.e. how to ensure quality standards, than the uncertain nature of scientific advice.

2.2 Policy formulation

The Austrian policy process can be referred to as “corporatism” or “neo-corporatism”. It is built on an integrated system of institutional structures who determine the policy agenda and implementation in Austria. Several structural elements form the basis for this setting. After the war, the state bureaucracy developed the “Proroz” system whereby all civil servants were required to belong to either the social-democratic or the conservative party. It was initially intended to keep the Nazis from holding public office. It has entailed, however, that entire ministries belonged to one of the parties. Another central element of the Austrian corporatist system is the social partnership (described below).

The formulation of policy in Austria is therefore characterised more by the need for political consent than founded on an objective basis. The extent of the consensus needed means that decision making tends to be of an incremental and short term nature. Changes in direction are not possible and not desired. The number of actors involved in the policy process is small, the barriers to entry are high and the turnover of leading policy-makers low. (Ney and Schmidt 2001)

The policy making process in Austria is changing slowly. This is firstly due to external pressures including increasing competition and internationalisation which has led to a decrease in the influence of the social partners (see below). Secondly, the changes brought about by the current coalition government between the Austrian People’s Party (ÖVP) and the ultra-right Freedom Party (FPÖ) have also signalled a break with tradition. The elections in 2000 ended a coalition between the Social-Democratic Party of Austria (SPÖ) and the ÖVP that began in 1986.

2.3 The policy process

The government is the central policy making body in Austria. The head of government is the chancellor. He and the vice chancellor lead the government. There are two houses an upper house, the Federal Council (Bundesrat) whose members are chosen by the states and a lower house, the National Council (Nationalrat) that is directly elected.

Draft legislation can be submitted to the Nationalrat in three forms, by deputies of the Nationalrat (in the form of tabled motions), by one third of the members of the Bundesrat, or by the Federal Government (in the form of bills). The draft legislation is provisionally formulated by the Federal Minister concerned and then sent out for review by the federal states and the statutory representative bodies including the relevant fora of the social partnership who form official positions. The Federal Minister concerned may modify the draft legislation to take account of changes suggested during the review procedure, but he is not

obliged to make these changes. The Cabinet then agrees on the draft and it is submitted to the National Council. The Nationalrat and its committees can review and alter the proposal. Once agreed, the law is passed as the Bundesrat only plays a role if it disagrees.

Another channel of initiating legislation in Austria is in the form of a Popular Motion (Volksbegehren). A Popular Motion requires 100,000 signatures of members of the national electorate or one sixth of the signatures of the electorate in any three federal states, to be debated by the Nationalrat.

One criticism of the Austrian policy making system often brought by parties outside the government is the fact that although laws are passed by parliament, many regulations are passed by individual ministers and are not seen or ratified by the Nationalrat.

2.4 Regional policy making

Despite the fact that Austria has a federal structure similar to that of Germany, the regional level plays a relatively small role in the policy process and the main emphasis is placed on the federal ministries. However, in certain areas such as energy or environmental protection the regional level plays a large role in the implementation of such policies.

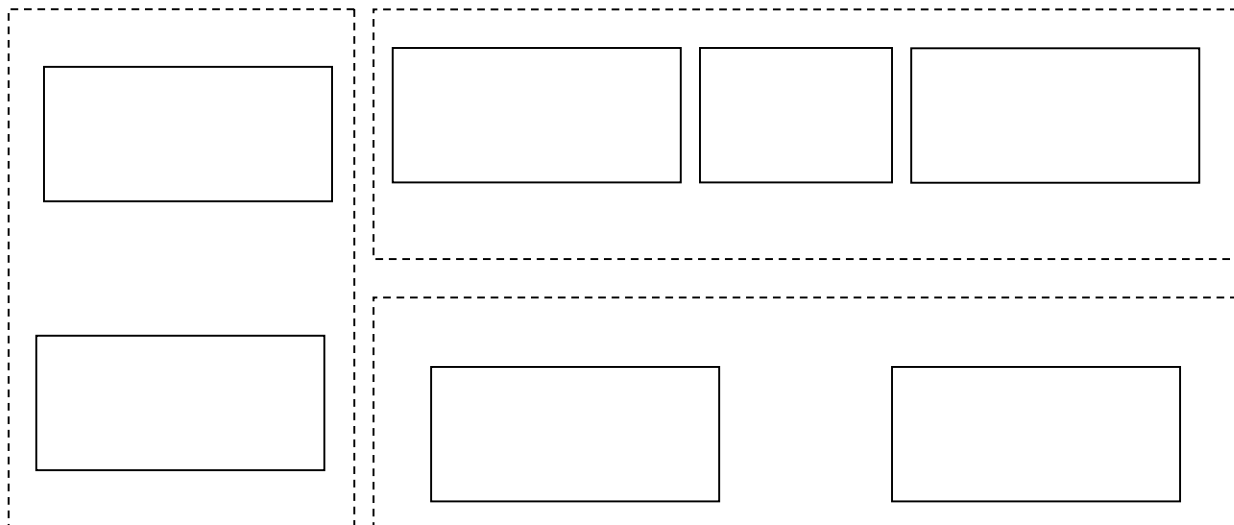
2.5 Influencing policy making

The Social Partnership is at the centre of Austrian policy making. This is an informal system of interest groups and professional bodies that represent different socio-economic classes: the Federation of Austrian Trade Unions, Federal Chamber of Labour, The Austrian Federal Economic Chamber, the Presidential Conference of the Chamber of Agriculture and the Federation of Austrian Industry all participate. In addition to regulating their particular professions, they are involved in policy making. In the past they have played a significant role in formulating income, economic, social and employment policy despite the fact that there is no legal basis or requirement to take them into account. It also allows the organisations to agree on policy and strategies between themselves before it becomes law. Although concentrating on the fields mentioned above the social partners formulate opinions on a wide range of issues.

Austria's entry into the European Union also reduced the influence of the Social Partners since decision making in many areas such as agriculture, competition and monetary policy where they were previously strong were taken on the EU level.

This form of partnership could not work unless the sections of the working population concerned did not belong virtually *en bloc* to their representative organisations. Membership of the chambers of commerce, labour and agriculture is obligatory.

Figure 1. Austrian Policy Making Structure



Currently there are eleven ministries. This combination was established after the ÖVP/FPÖ coalition came to power in early 2000. Several areas which previously had their own ministry or secretary of state were demoted including environment and women.

The current ministries:

Bundesministerium für auswärtige Angelegenheiten, Federal Ministry for Foreign Affairs

Bundesministerium für Bildung, Wissenschaft und Kultur - Federal Ministry for Education, Science and Culture

Bundesministerium für Finanzen - Federal Ministry of Finance

Bundesministerium für Inneres - Federal Ministry of the Interior

Bundesministerium für Verkehr, Innovation und Technologie - Federal Ministry for Transport, Innovation and Technology

Bundesministerium für Justiz - Federal Ministry for Justice

Bundesministerium für Landesverteidigung - Federal Ministry of Defence

Bundesministerium für Land- und Forstwirtschaft, Umwelt und Wasserwirtschaft - Federal Ministry for Agriculture, Forestry, Environmental Protection and Water Management

Bundesministerium für Soziale Sicherheit und Generationen - Federal Ministry for Social Security and Generations

Bundesministerium für öffentliche Leistung und Sport - Federal Ministry for Public Services and Sport

Bundesministerium für Wirtschaft und Arbeit - Federal Ministry for Economic Affairs and Labour

3 Scientific Advice Policy

3.1 Agriculture (+Fisheries)

Agriculture policy is located within the Federal Ministry of Agriculture, Forestry, Environment and Water - BMLFUW. The overall responsibilities of the BMLFUW are:

- Preparation of laws and regulations

- Advising the Minister
- Implementation of government decisions
- Co-ordinating the planning process
- Legal, administrative and economic verification of the areas in the ministry's competency
- Provision of the results to the ministry
- Analysis of the results of the verification
- Co-operation with the state provinces

Of the ministry's five directorates the directorates Sustainability and Rural Areas and Agriculture and Nutrition are responsible for agriculture policy.

The directorate is responsible for policy making and the development and implementation of legislation in a variety of areas including:

- Agricultural policy: research, testing, controlling and the development of rural areas.
- Internal market policy: including product regulation, quality classes and customs controls
- Import and export regulation
- Wine and Wine regulation
- The federal research and testing institutes
- Agricultural schools

3.2 Energy

Section IV, Energy and Mining, of the Federal Ministry of Economic affairs and Labour - BMWA is responsible for energy policy.

Austria's energy policy, based on the principles of the IEA/OECD, is laid down in the Energy Reports of the Austrian Government. Austria's energy policy objectives include security of supply, environmental compatibility and social acceptability. Priority is given to energy conservation, to increased use of renewable energy sources, and to a shift of emphasis from government interventions to market forces.

Legislation and administration (such as building codes and subsidisation for renewable energy sources) is primarily in the responsibility of these Bundesländer. Therefore, the Energy Reports and Concepts of the nine Bundesländer are important counterparts to that of the federal government, with which they all share the above mentioned priorities, in particular those of energy conservation and of renewables.

3.3 Transport

The Federal Ministry of Transport, Innovation and Technology - BMVIT is responsible for transport policy. The following sections deal with transport:

- Section II, Transport Policy and Transport Planning including Group A: cross-border traffic, intermodal transport issues, EU transport; Group B: specialised transport issues and legal issues, road safety, animal transport and transport of hazardous goods; Group C: railways (infrastructure, safety and environmental protection), cable cars and ski-lifts, navigation (legal, technical and administrative issues) civil aviation.
- Section III, Roads: planning, maintaining, road safety etc.

- Section IV includes the Transport-Labour Inspectorate and
- Section V, Innovation and Technology: including mobility and transport technologies

The principal transport objectives include:

- avoiding unnecessary traffic;
- switching traffic to environmentally friendly forms of transport;
- opening up regions to which access has previously been poor;
- involving the populations affected, in order to secure public acceptance of transport policy.

3.4 Environment

Policy making in the area of the environment falls under the responsibility of the Federal Ministry for Agriculture, Forestry, Environment and Water - BMLFUW. The ministry has five directorates Sustainability and Rural Areas, Agriculture and Nutrition, Forestry, General and Environmental Policy, Environmental Engineering and Waste Management and Water. The following directorates deal with environmental policy:

- Forestry policy: research, testing, controlling and avalanche prevention
- Water: management of public water system with the Ministry for Economic Affairs
- Environmental Policy: co-ordination of all areas of environmental protection, environmental impact assessment, research, measuring, testing and documenting for environmental control

The Ministry for Education, Science and Culture -BMBWK also plays a role in formulating policy through research budgets in the area of the environment. It decided to increase the emphasis on environmental themes and set up a number of research programmes. These included the Research Programme on Damage to Forests (Forschungsprogramm zu Waldschadenforschung) and the Cultural Landscape Programme (Kulturlandschaftsforschung - KLF).

3.5 Health and the consumer

The **Federal Ministry for Social Security and Generations (Bundesministerium für soziale Sicherheit und Generationen - BMSG)** is responsible for policy making in the areas of health and consumer affairs.

The **Health Directorate** consists of three divisions: general health care, health economics and social sciences and consumer health and veterinary issues. This last division has the section IX/9 that focuses on Gene- and Bio-technology.

3.6 Research

The responsibility for research policy is divided between three ministries. Industrial research, and non-university based research is the responsibility of Section V, Innovation and Technology in the Federal Ministry for Transport, Innovation and Technology (Bunderministerium für Verkehr, Innovation und Technologie – BMVIT). The university sector and the academy of sciences are the responsibility of the Federal Ministry for Education, Science and Culture Bundesministerium für Bildung, Wissenschaft und Kultur –

BMBWK) and applied research in the private sector is the responsibility of the Federal Ministry for the Federal Affairs and Labour (Bundesministerium für Wirtschaft und Arbeit – BWA). Other ministries are involved in formulating specific areas of research policy such as the BMLFUW in areas of environmental etc. research.

4 Scientific Advice

Scientific advice enters the Austrian policy making process on a number of different levels through mechanisms including federal institutes and agencies, contract research, informal networks and contacts and through commissions. The ministries are the main acquirer of advice.

Depending on the issue, the federal agencies and institutes play a large role in the provision of advice. Up until now state owned, many of them are currently in the process of being outsourced. The ministries also use a mixture of contract research and informal networking to gain advice. In general, this form of acquisition is performed by a limited number of actors who have close contact with the policy makers in their fields.

Another player in the provision of advice in Austria is the Academy of Sciences. They host the Clean Air Commission for example. Members of the Academy are also to be found on many of the other Commissions.

Commissions and other more formalised advice structures such as the **Bio-Ethics Commission** or the **Gene Technology Commission** have been established to provide advice to and inform the government or the chancellor's office on latest developments in the field. They bring together leading academics and industry representative in the field together.

Advice is also acquired by the National Council, the upper house, that uses parliamentary enquete commissions, Nationalrat committees and Enquete commissions to discuss related issues during the preparation of laws and decrees.

Listed below are the main ways in which advice is acquired in the individual sectors.

4.1 Agriculture

Scientific advice is normally acquired through the Ministry's various testing and research institutes of which there are a considerable number. In addition to their role in testing and controlling, they also advise the ministry on the development of research in their area and perform research projects in the area of their responsibility. For instance, the **Food Testing Institute** and the **Food Research Institute** advise on food analysis and technology and in the field of food law. However, as mentioned before these institutes are being amalgamated with those institutes under the Ministry of Health into the Food Standards Agency in June 2002. Others institutes that currently exist include:

- Federal Institute for Agrarian economics
- Federal Institute for Alpine Agriculture, Gumpenstein
- Federal Institute for Mountain Farming Questions
- Federal Institute for Dairy Farming
- Federal Office for Agrarian Biology

Federal Office for Wine Growing
Federal Office and Research Centre for Agriculture
Institute for Organic Farming and Bio-diversity

4.2 Energy

The **Commission for Electricity** is a body that advises the BMWA and is the Regulatory Body on issues concerning electricity policy. It also advises more specifically on issues dealt with by **the Elektrizität-Control GmbH** whose job it is to oversee the liberalisation of the electricity market in Austria.

Energie Verwertungs Agentur - E.V.A. is the Austrian Energy Research and Policy Institution. It is the principal partner of the federal government in its effort to attain its energy policy objectives. The federal and the provincial administration ("Bund" and "Länder" respectively) and some thirty important institutions and corporations from a variety of economic sectors co-operate in the E.V.A. The board of directors ("Präsidium") comprises the federal minister charged with environmental affairs, the federal minister charged with energy affairs and the chairman of the provincial governors. E.V.A. is the Austrian Member of the European Energy Network EnR.

4.3 Transport

The ministry has a number of its own smaller commission on specific areas such as the Commission on Civil Aviation or the Expert Commission on Railway Paragraph 48.

Other sources of expertise come from the social partners and from user groups.

The Section Transport, Traffic and Telecommunication in the Austrian Federal Economic Chamber also provides input.

4.4 Environment

There are three main ways in which the Ministry of the Environment obtains scientific advice: through the **Federal Environment Agency**, through commissioned research or through commissions that are established for a specific purpose.

Through institutes such as the Federal Environment Agency who in turn commission scientific reports. The ministry also commissions its own research through individual research contracts not through a tendering process but on an ad hoc basis. A further way is through setting up commissions for the analysis of specific policy areas or questions as was the case for developing the **National Environmental Plan** and for questions surrounding the issue of clean air, the **Clean Air Commission**.

4.5 Health and the Consumer

One of the main sources of advice drawn upon currently by the BMSG are the federal institutes. Although mainly responsible for testing and quality control in specific areas, they are important sources of information as many also carry out research activities.

- The health care division is supported by the 6 federal institutes for bacterial serological testing and the Federal Institute for Medicine.
- The consumer health and veterinary division is supported by the 5 federal veterinary institutes and the 5 food testing institutes.

The Ministry also establishes expert commissions on subjects where it needs expert advice on an issue that is contentious. For example the Expert Commission on the Development of Austrian Stem Cell Donation and Transplantation (Bone Marrow). It consists of five members from both the Austrian Society for Haematology and Oncology and the Austrian Society for Blood Group Serology and Transfusion”.

4.6 Research

The Council for Research and Technological Development that was established in 2001 advises the government, the ministers and local government on questions concerning science, technology and innovation. It is also responsible for the development of a long-term R&D strategy for Austria.

Country reports on database information

5 Advisory Bodies covered in database

Name of body	Policy areas covered	Who advised	Full/basic coverage	Nature of body	SOME CATEGORISATION ¹
Austrian Agency for Health and Food Agency	Agriculture Research Health	Ministry	Full	Statutory-permanent	
Bioethics Commission	Research Health	Head of Govt Ministry	Full	Statutory-permanent	100% Scientific advisory
Austrian Health Institute	Health	Ministry	Full	Statutory-permanent	
Federal Environment Agency	Agriculture Environment Health	Legislature Ministry	Full	Statutory-permanent	
Austrian Energy Agency	Energy Environment		Full	Statutory-permanent	
Electricity Control	Energy Environment	Legislature Ministry Agency	Full	Statutory-permanent	
Gene Technology Commission	Agriculture Environment Research Health	Head of Govt Ministry Agency	Full	Statutory-permanent	100% Scientific advisory
Commission for Clean Air Protection	Environment	Ministry	Full	Statutory-permanent	
Council for Science and Technology Development	Research	Head of Govt Ministry	Full	Statutory-permanent	100% Scientific advisory
Austrian Academy of Sciences	Agriculture Transport Environment	Legislature	Full	Statutory-permanent	

¹ On average those agencies whose main role is not scientific advice stated that they spend about 10-20% of their time providing advice (ad hoc, informal, studies). More exact assessment was not possible.

	Research Health Energy Fisheries				
Austrian Supreme Health Council	Health Research	Ministry	Full	Statutory-permanent	100% Scientific advisory
Austrian Scientists for Environmental Protection	Agriculture Transport Environment Research Energy	Ministry	Full	Statutory-permanent	
Federal Institute for Agricultural Engineering	Agriculture		Basic	Statutory-permanent	
Federal Institute for Agricultural Economics	Agriculture		Basic	Statutory-permanent	
Federal Research Centre for Forests	Agriculture Environment		Basic	Statutory-permanent	
Federal Institute for Medicines	Health		Basic	Statutory-permanent	

5.1 *General trends*

The small country syndrome, the fact that most experts and policy makers in a certain field know each other, means that the information exchange works very efficiently. Some interviewees commented on the fact that the introduction of new scientific advice bodies has added another layer of organisation but has not substituted the considerable informal networks that exists in Austria for providing advice to the policy making process. There are few type A scientific advisory bodies in Austria. And advice is acquired through a variety of routes using established bodies with expertise in specific areas. These include:

- informal contacts: civil servants contact researchers or experts from universities or research institutes on an ad hoc basis
- contract research: civil servants assign a university, research institute or individual to research a specific question or area and present it in the form of a written report
- regulators: contact with organisations who are responsible for the implementation and supervision of laws

However, over the last three years two new type A bodies have been established in Austria; the Austrian Bioethics Commission and the Council for Research and Technological Development. In comparison with bodies in other countries, these two new Austrian bodies are probably not the best examples of transparency and independence that exist. However, they do represent a definitive move towards developing more transparent structures for the provision of advice in Austria.

One considerable change in these new two type A bodies has been the exclusion of the social partners. Organisations such as the Chamber of Commerce, the Chamber of Agriculture and the Federation of Austrian Industry have up until recently played a considerable role in policy making. They, however, have no role in the policy making process that occurs between the new type of advisory bodies and the ministries. On the other hand, the establishment of such new bodies into the Austrian policy making process has also only been made possible due to the decrease in the role the social partners have played over the last few years.

These new type A bodies have been established on the one hand to facilitate the transparent input of scientific advice to policy making. On the other hand, they have been established in areas where there is a deficit in policy making. One such area is S&T which requires the co-ordination of ministries to implement policy. Another such area is biotechnology where there is a gap responsibilities in the policy making structures and decisions have been avoided or ignored. Whether or not these bodies will become permanent features of the Austrian policy landscape remains to be seen

There was also an interesting trend to be seen with a new type of B body. With the introduction of independent regulatory bodies in the energy sector, the competencies in the ministries have decreased in this area. The ministry is thus obliged to ask the regulatory bodies for advice on subjects related to energy and liberalisation. Although the primary responsibility of these bodies is regulation and monitoring, they are increasingly being drawn upon to advise the ministry.

5.2 *Structural issues*

5.2.1 *Secretariat*

All bodies (both A and B) involved in the provision of scientific advice have a secretariat. These secretariats undertake different tasks.

Type A bodies

The secretariats of type A bodies are small and have between 2-5 members. The main role of the secretariats of the type A bodies is the management and the organisation of the body. This includes the organisation of meetings (sending out agendas and taking minutes) and the organisation of any working groups. There are, however, two different types of secretariat for type A bodies; those which belong to bodies established before 1995 (Gene Technology Commission and the Supreme Health Council) and those which belong to bodies that have been established during the last few years (Bioethics Commission and the Council for Research and Technology Development).

The role of the secretariats of the new bodies has moved beyond pure administrative duties and they are considerably more active than those of old type A secretariats. In addition to the organisational tasks, the new ones are involved in preparing background documents and supporting the generation of advice. They also have a more active role in communicating the advice and/or strategies developed beyond the members and the receiver of the advice to a range of stakeholders including the general public.

The more active role played by these secretariats can partly be explained by the fact that they are not located directly within one of the ministries. Although they have close contact with civil servants in the relevant departments, the body itself is independent. This means that the expertise that can be directly drawn upon to form advice has to come either from the members or from the secretariat. The members are reliant on the secretariat for any additional input other than the expertise they themselves can provide. Thus, the secretariats of the new type A bodies are often asked to provide additional input on specific issues. For example, the secretariat of the Bioethics Commission has compiled reviews of other national approaches to decision making to be used as an input to forming Austrian policy. The secretariat of the Council for Research and Technological Development also played a considerable role in preparing the research programme documents to be reviewed by the Council. This was at a time when the Council was reviewing the funding of all research applications under consideration by the Ministry of Finance.

The secretariats of the older Type A bodies play a less active role in terms of supporting the generation of advice. Their tasks are limited to providing administrative support. However, the older type A bodies have a different structure to that of the newer ones. The bodies are not separate entities in their own right but, are part of the government department that has the responsibility for their specific subject area. Neither the body's budget nor personnel can be separated from that of the departments. For example, the secretariat of the Austrian Gene Technology Commission is part of the Gene Technology division in the Ministry for Social Security and Generations (BMSG). The individuals who work for the secretariat and

organise the Commission also have other tasks within the division. The demarcation between Gene Technology division and Commission secretariat is blurred. This has both advantages and disadvantages. On the one hand, it means that the body can draw on the expertise of the whole department if it needs additional information. It can exploit the synergies. There is also the possibility to be creative with the budget and additional resources can be allocated to the body if need arises. On the other hand, such links between the bodies and the advice receiver can lead to the perception of the body as an extended arm of the ministry. Such bodies are more dependent on the ministry and less able to select their own issues.

Type B Bodies

The role of the secretariats in type B bodies is almost entirely administrative. Most of the type B bodies have more than just the two categories of employees (members and secretariat). Type B bodies such as the Federal Environment Agency, the Austrian Agency for Health and Food Safety and the Austrian Health Institute have departments or sections that focus on a specific thematic area which are involved in a range of activities including research, controlling and testing, implementing and supervising laws and directives as well as the provision of advice. The secretariats in these organisations are not involved in providing background work or input as this type of activity is undertaken in these departments. Their activities are limited to supporting the administrative functioning of the institute or agency.

5.2.2 Membership

Size

Type A bodies in Austria have between 10 and 30 members. The newer type A bodies have fewer members (between 10 and 19) than the older ones. They also convene more frequently, sometimes as often as once a month compared to twice a year for the older bodies.

Type B bodies can have as few as 50 employees or as many as 1150 employees. The number of members does not appear to be an important factor concerning the provision of advice in type B bodies, as these bodies are not primarily advice bodies. The number of members (or employees) depends on the main tasks and responsibilities of the body. For example, the Austrian Agency for Health and Food Safety is the main body in Austria that oversees the regulation of the agricultural and food producing sector. The proportion of its activities that are spent on the provision of advice is around 10%. Most of its employees work for one of the Federal Agricultural or Veterinary Institutes that are part of the Agency. Another example would be the Austrian Academy of Sciences that is primarily a research organisation but whose members are often asked to input on an ad hoc basis to policy making.

Backgrounds

The backgrounds of employees of type B bodies depend on the type of organisation and the skills that are required. The Agency for Health and Food Safety employs mainly natural scientists and individuals with other technical qualifications. The Electricity Control, responsible for regulation in the electricity sector, employs a mixture of economists and engineers. The selection of employees is not primarily

made on the grounds of providing scientific advice, but on the skills needed to perform tasks related to the primary function of the type B body.

Members of the type A bodies are specifically chosen with reference to their ability to provide expertise to the process of providing advice. All the type A bodies have a selection procedure for members of one type or another which is set out by law. The selection procedure is either based on defining the range of disciplines that should be involved or on designating the organisations who are allowed to select the members.

In some cases, the law which establishes the body prescribes the disciplines and types of expertise that have to be included. The law establishing the Bioethics Commission sets out the types of disciplines that are required to participate. This mostly consists of natural scientists and medics but also includes other disciplines including law, theology and philosophy. The selection of the individuals who represent these disciplines is left to the Chancellor who is the main receiver of the advice. In Austria, it is often not necessary to define a post in more detail than defining the exact discipline as the number of experts in a given field is relatively small and can often be reduced a few individual. For this reason, it is also common to find an individual expert sitting on more than one body.

In other cases, the representation of different scientific disciplines and opinions is ensured through allowing different ministries or organisations to select members to sit on body. Who is allowed to select the members is laid out in the law which establishes the body. In the case of the Council for Science and Technological Development, the members are chosen by the two ministries involved in S&T; the Ministry for Transport, Innovation and Technology (BMVIT) and the Ministry for Education, Research and Culture (BMBWK). Each of the two ministries elects four members. The other two members are the ministers themselves who are only allowed to participate and do not have the right to vote. As is to be expected, both ministries choose members that reflect their own interests; the BMVIT elects members with an industrial or applied research background and the BMBWK elects members with a strong academic and basic research background. In the case of the Gene Technology Commission, a large number of organisations have the right to chose members. These include the Academy of Sciences, the Chambers of Commerce and Agriculture and the Federal Environment Agency. These organisations choose members who are most likely to reflect their own interests. Through finding the right constellation of organisations, a wide range of opinions can be ensured which will finally ensure a robust decision making process within the body.

Women

The proportion of women in type A bodies is still small. However, this is linked to the fact that the bodies consist predominantly of natural and physical scientists who have reached professorial status or a similar high level position. There are few women in such positions who would be able to participate in such advisory commissions. The same was the case for type B bodies that employed predominantly natural scientists. However, it was often not possible to collect the information on the number of women with academic qualifications in these organisations.

Foreign experts

There are few experts from other countries involved in type A bodies. The Council for Research and Technological Development has one Irish expert.

The bodies are aware of the work of other similar commissions across Europe and the Council for Science and Technological Development is involved in a network of other such organisations in the area of S&T. The language barrier would prove to be a problem in using foreign experts. Although much of the information drawn on is in English, the meetings are held in German and thus would only allow German nationals or other German speaking individuals to participate. Experts from Germany and Switzerland are involved in many types of organisations in Austria but, not at the moment in scientific advice bodies.

5.2.3 Budgets

With type B bodies it is very difficult to ascertain what proportion of the budget is used on advice. The overall budgets for type B bodies range according to the number of employees up to Euro one thousand million for the Health and Food Standards Agency. The size of the body or its budget do not have an influence on the role of the body as a provider of advice.

The budgets for the secretariats and for members expenses are funded by the ministries or by the part of the executive that has requested the advice. For example, the Federal Chancellery funds the Bioethics Commission.

The older type A bodies could also not say what resources are used by the secretariat and which are general resources for the division in the ministry. The two new type A bodies were also not able to say exactly what their budgets were established so recently that they have not properly established themselves and their budgets as yet. The Bioethics Commission is currently being funded through ad hoc measures and will only receive a permanent budget when the next budget is agreed on. The Council for Research and Technological Development has a permanent budget for members expenses and its staff of five, however, its recently assigned itself a research budget to fund small studies. This is partly due to the fact that its role vis-à-vis the competencies of the ministries has still not entirely been formulated.

5.3 Functional Issues

5.3.1 Scope of work

The type B bodies, which are the dominant form of advisory body in Austria, all have other roles that are primary to that of providing advice. For example, the Academy of Sciences is primarily a research organisation and the Federal Environment Agency responsible for collecting and compiling data on the state of the environment in Austria. The Academy of Sciences covers a very broad range of subject areas. It has

over sixty institutes and an academic membership organisation. Each of the institutes has its own links to the policy making process. The Academy is often, however, approached as an institution to supply experts on particular issues. The Federal Environment Agency has a less broad remit than the Academy, but still encompasses all areas of environmental protection. The Agency is no longer under direct control of the Ministry, but the law that established the Agency still defines their main tasks. One of these is to provide the basis for environmental decision making in Austria. Other type B organisations are similar in that they are focused on one policy area, but cover wide range of different questions within this area.

Although the Type A bodies are more focused in scope, the areas and the expertise that they draw on are wide. For example, the Council for Research and Technological Development is focused on S&T policy which would suggest it was relatively narrowly focused. However, when the body recently decided to look at the establishment of clusters in the areas of nanotechnology and biotechnology it had to look at these research areas in detail and needed to draw on further scientific and industry-based expertise to be able to formulate strategies.

5.3.2 Independence

The question of independence is difficult to answer as there is no blueprint for benchmarking the independence of a body delivering scientific advice. In Austria, it is not clear for example, what impact the involvement of policy makers in the bodies has on the independence of the advice. This was especially true for the new type A bodies

The relationship between policy maker and body is a complex one. In Austria, there are bodies where the policy makers are involved and others where they are not involved and others where they are involved but not allowed to vote on final decisions. It would take more detailed analysis to assess whether this influenced the independence of the decision making. In certain policy areas, it might make more sense to have the policy makers involved in the discussion as they are aware of the range of possibilities available for implementing change. In other areas it might make more sense to hold the discussions without any consideration for the practical implications of the decisions taken. These are two different approaches to the organisation of advice regarding the involvement of policy makers. The involvement of policy makers does not have to mean that the body is less independent as long as there are checks to ensure that they don't have more weight than other members of the body or have the power to influence the decisions taken.

All the bodies have a strong link to the organisation requesting the advice. Often this is for administrative or legal reasons. The employees are often employed by the ministry and the location of the offices is also within the ministry itself. However, the links between ministry and body are not restricted to this level of communication. The secretariats have close contact to the ministries and there is frequent exchange of communication with the ministry (or the relevant part of the executive such as the Chancellery).

One of the ways in which independence is achieved is to ensure a balanced debate on an issue. This entails the inclusion of scientists and researchers from a wide range of backgrounds. In Austria, this is achieved either through specifying by law which disciplines should participate or by laying down which organisations should suggest the members. The final decision on membership is in most cases in the hands of the minister or the Chancellor who is the receiver of the advice.

The issue of independence with the Type B bodies is a slightly different one. The main role of many type B bodies is the implementation and the supervision of laws. Their role as providers of advice is secondary. Their primary role is defined by law whereas their secondary role is performed on a more ad hoc basis. However, these bodies are often viewed as the only competent providers of advice in a certain field due to the expertise they have gained through supervising the implementation of laws. For example, the Electricity Control's main responsibility is the regulation and supervision of electricity provision. However, they are often called upon by the ministry to provide advice. On one occasion they refused to do this as it would have compromised their role as an independent regulator.

Another example is the Austrian Health Institute that is, amongst other tasks, responsible for collecting and updating data on the state of public health in Austria. They play an important role in the provision of advice in the health sector due to their expertise. The expertise is institute based and not located in a single individual.

Selection of own subjects and dissemination

Older type A bodies are reactive and have two basic modes of operation. They either concentrate on providing specific advice when and where it is needed or their main task is to review applications that concern the law they were set up to advise the implementation of. For example, the Genetechnology Commission concerns itself with issues such as applications for the release of GMOs or applications to use new forms of therapy in medicine.

Newer type A bodies are more active in trying to anticipate future issues that have the potential to become relevant for the receiver of advice. An example is the Council for Research and Technological Development. The Councils remit goes beyond the provision of scientific advice and it has been given the tasks of designing a long term RTD strategy for Austria, proposing programmes and initiatives and evaluating the implementation of the strategy.

5.3.3 Transparency

Code of practice

The type A bodies are all based on a detailed individual law that sets out exactly what each of their tasks are. These laws include how many members the body should have, how they should be chosen, how they should operate, There is no standard format. However, the laws establishing one body have been looked as a basis for establishing another.

All the type B organisations are also based on a law that governs their tasks and responsibilities. These mainly concern their key role and not their role in the provision of scientific advice.

Conflicts of interest

Conflicts of interest are not an issue for type B bodies. Within the type A bodies, there is a general awareness that individuals should not take part in discussions and decisions in which they could have a vested interest. However, there are few, if any, written documents stating how and where this should happen. Individuals are expected to inform the body if they feel that their position is compromised.

Confidentiality requirements

The older type A bodies have no public presence. They have no web site and have not considered it a high priority until recently to make their decisions known to the general public. The members are not strictly required to keep information confidential, however, there would seem to be a general acceptance within these two bodies that the information should be treated with confidentiality. On the other hand, both of the two bodies interviewed; the Genetechnology Commission and the Supreme Health Council stated that they were thinking about setting up a web site and that they needed higher public visibility.

The newer type A bodies have a higher public presence and it is seen as part of their responsibility to communicate the decisions and the opinions of the bodies beyond the receiver of the advice. This, however, only applies to the remit, to studies and to the final decisions.

None of the Austrian bodies release information on the decision making process or on the minutes. There are no meetings that are open to the public. The bodies have been established as expert bodies to provide specific scientific advice and therefore the public, or public opinion, has no role to play. The Bioethics Committee has attracted criticism through its lack of members from social groups.

5.3.4 *Generation, delivery and responses to advice*

Operation

In type B bodies, the information is generated through the continuous operation of the body itself. These bodies draw on their own work as an input for advice. The employees also contribute to the generation of knowledge through their own academic backgrounds. Type A bodies mainly draw on the expertise of the members. The members are carefully selected from a variety of backgrounds so that all necessary areas of expertise are covered. The newer type A bodies also draw on literature reviews and other small studies performed by or organised by the secretariats.

Public consultation does not play a major role. However, relevant NGOs, trade union bodies and other groups are often called upon to input into the discussion that lead to the formation of advice. For example the working groups of the Bioethic's Commission invite external individuals to express their views. Recently groups representing the disabled have been invited to participate. These are, however, not

allowed to join the main Commission sessions and their opinions do not have to be taken into account. The working groups of the Council for Research and Technological Development also draw on external expertise in the shape of experts from industry.

Types of advice

There are few trends to be seen concerning the types of advice generated and the use made of it. Some of the bodies ratify applications, other design strategies, whilst others produce opinions to specific questions asked by the executive. This does, to a certain extent, depend on the subject area. However, with only one main body in each area, it would be difficult in a small country like Austria to say whether this is country specific phenomenon or whether it is subject specific.

The country specific nature of the bodies was a point commented on during several interviews. The organisation and the remit of a body can depend, amongst other things, on the nature of the debate, the actors involved and the degree of controversy in a country.

For example, the establishment of the Council for Research and Technology Development was due to a lack of co-ordination and coherent strategy in the field of S&T. The advice is used in different ways. If the advice is in the form of a review, then the body's decision is normally accepted. However, the minister is under no obligation to accept the advice. If the advice is in the form of a position or an opinion on a controversial topic, then there is often no formal obligation for the policy making process to take it into consideration. The opinion of an expert based commission is taken as one input on which to base a decision. It can be ignored if there are other factors or pressures that are deemed to be more important. This occurred recently when the Bioethics Commission reached a decision on stem cell research in the European Union's Sixth Framework Programme. Even though the Bioethics Commission decided in favour (11 members in favour and 8 against) of a ratification of the EU's Framework Programme, the Government decided to vote against the Framework Programme.

5.3.5 Evaluation and impacts of advice

The only body in Austria that has undergone an assessment, or that is likely to do so in the future, is the Academy of Sciences.

The impact of advice that is provided from B bodies would make an interesting study in Austria. It was, not however, within the scope of this study to look at the numerous ways in which B bodies influence the policy making process. Most of the interviewees could only begin to point at possible influences. This was not quite the case with the A bodies. The older type A bodies have an influence as they are asked to deliver opinions on very specific issues such as the introduction of a new therapy. Their decision is normally implemented without the need for a formal response.

The influence of the new type A bodies is not as straight forward. The only concrete case where one of these bodies has had direct influence is when the Council for

Research and Technological Development had the responsibility for deciding on the allocation of a special research budget. However, both the Council for Research and Technology Development and the Bioethics Commission play a role in putting issues onto the political agenda and making sure that inter-ministerial issues do not get forgotten.

Most of the bodies have an idea about what is going on in other advice bodies in their field, but this is mostly achieved through documents and not through contact whether formal or informal. It is doubtful as to whether this could be called a network.

5.3.6 Changes in the advisory system

The Austrian advice system has seen considerable change. During the last two years two new bodies have been established that are considerably different to any bodies that previously existed. They are considerably more transparent and open in their operation. However, it remains to be seen how these will develop. They also represent a change in the way the decision making process works in Austria. The social partners have been excluded from the policy formulation process.

Belgium

General Country Overview

The report is based on an analysis of material published on the Internet by Belgian institutions. The list of scientific advisory bodies is therefore not exhaustive, because many of them are not large enough to have their own websites and because they may be too independent to appear on their related ministry/institution website.

After four institutional reforms that have occurred during the last three decades, the Belgian decision-making system is still undergoing dramatic changes. Consequently, some of the scientific advisory bodies considered in this document do not seem to have reached a stable form. Therefore, there may be changes in responsibilities and names assigned to the various institutions presented in this report.

This report is organised in two sections. The first section deals with the structure of decision-making in Belgium today and introduces the function of scientific advice. The second section presents the different policy areas, the competent decision-making institutions at the federal level and, when applicable, at the regional and community level, and a selection of scientific advisory bodies within each policy area.

6 Background

6.1 Political System

Belgium is parliamentary monarchy and a federal state made up of three communities (Dutch-speaking, French-speaking and German-speaking) and is organised in three regions; the Flemish region (Flanders – *Vlaanderen*) is mainly Dutch-speaking, the Walloon region (Wallonia – *Wallonie*) is mainly French-speaking, but includes the German-speaking community, and the Bruxelles-Capitale region (where all languages are spoken). The geographical boundaries of Regions and Communities do not necessarily match.

Decision-making power is not exclusively in the hands of the federal institutions but falls to several institutions, federal, regional or is related to communities, which exercise their competences independently in different fields. Regions and Communities have their own legislative body, parliament and government headed by a Minister-President and are relatively autonomous. However the federal State retains authority over important areas of competence such as defence, justice, finances, foreign affairs, social security, large sectors of public health and domestic affairs.

At each level (federal, regional and community), legislative and executive powers are split; the Executive is answerable to the Legislature.

At the federal level, two chambers share the legislative power; the Chamber of Representatives (lower chamber) has 150 deputies directly elected by all. The Senate (higher chamber) has 71 senators; 40 of them are directly elected by all (25 by the Dutch-speaking part of the population and 15 by the French-speaking part). 21 senators are appointed by the

Communities (10 by the Flemish Council, 10 by the Council of the French-speaking Community and 1 by the Council of the German-speaking Community). The remaining 10 senators, 6 of them Dutch-speaking and 4 French-speaking, are chosen by the former Senate. The Chamber of Representatives and the Senate form together the Federal Parliament. The King forms a government and appoints a maximum of 15 ministers but has no political responsibility.

The Flemish Government and the Flemish Parliament (both with members elected for 5 years) are the main political institutions for both the Flanders region and the Dutch-speaking Community. Respectively for legislative and executive powers, there are the Walloon Parliament and the Government of the Wallonia region, the Council and the Government for the Bruxelles-Capitale region and the Council and the Government of the German-speaking Community; all with members elected for 5 years. Finally for the French-speaking community, the Parliament is composed of the 75 members of the Walloon parliament in addition to the 19 French-speaking members of the Council of the Bruxelles-Capitale region.

6.2 Scientific Advice

Scientific advice by an independent body is a relatively new concept in Belgium. The function of forming scientific advice was formerly the role of research institutions. However, with the growing need for independent advice, the two latest decades have witnessed the creation of many advisory bodies, first at the federal level, then at the regional level. With the recent waves of institutional reforms (1970, 1980, 1989, 1993), much power has been handed over to regional and community authorities, and the function of scientific advice is gaining independence both at the federal level and in regions. Regions seem more eager than the recently created federal State to create their own scientific advisory bodies in what may be an attempt to gain more political influence. Therefore there seems to be more advisory bodies at the regional level than at the federal level. The situation though is far from being settled as planned advisory bodies have not all been created and more creation lies ahead.

In Regions (Flanders, Wallonia, and Bruxelles-Capitale) and Communities (German-speaking), scientific advice is organised within the Economic and Social Councils. The main purpose of the Economic and Social Councils is to organise discussions and negotiations between the social partners, i.e. the representative trade unions and the representative employers' associations. Half of the Councils members represent trade unions, while the remaining half represents employers' organisations. Councils embody the Belgian tradition of social dialogue and organise consultations between the social partners and with the regional government. However, they are also officially in charge of advising and issuing recommendations to the regional government in many areas where advice is required at the regional level; education, transport, environmental policy for example. The advice requested may be of scientific nature. In order to compensate for their lack of scientific competence and legitimacy, they have created a number of specialised commissions with various degrees of independence. They may be attended by external experts to guarantee the quality of the advice provided. Commissions usually share their secretariat with the Councils to reduce administrative costs. Commissions are autonomous and may decide to provide advice on their own initiative. Councils have the right to provide their own advice on questions submitted to the commissions. In the Flanders region, industry-based commissions have been created to organise negotiations between partners of specific industry sectors like goods traffic, health and welfare, building and woodworking among others. Requests for advice that are submitted

to the Economic and Social Council of the Flemish Region may be transmitted over to the industry-based commissions if they fall into their expertise domain.

Regional commissions may be created by laws passed by regional authorities or by regional economic and social council without any legal basis. Regional institutions, labour unions, corporate organisations, associations of citizens and local partners have the right to designate their representative as members of regional advisory commissions. In such cases, the commissions often have to rely on expert groups in order to provide scientific advice.

7 Policy Areas and Scientific Advisory Bodies

7.1 Cross Disciplinary Bodies

The four regional Economic and Social Councils (as presented in the Background section):

- Economic and Social Council of the Bruxelles-Capitale Region (*Conseil Economique et Social de la Région Bruxelles-Capitale – Economische en Sociale Raad voor het Brussels Hoofdstedelijk Gewest*)
- Economic and Social Council of Wallonia (*CESRW – Conseil Economique et Social de la Région Wallonne*)
- Economic and Social Council of Flanders (*SERV – Sociaal-Economische Raad van Vlaanderen*)
- Economic and Social Council of the German-Speaking Community (*WSR - Wirtschafts- und Sozialrat der Deutschsprachigen Gemeinschaft*)

7.2 Agriculture and Fisheries

Agricultural affairs are dealt with at the federal level by the Ministry of Small Enterprises, Traders and Agriculture, but the Flemish and Walloon government have now taken over most of the decision-making power since the law on regionalisation of agriculture was voted January 1st, 2002. The federal ministry will eventually disappear. Regional institutions in charge of those affairs are General Directorate for Agriculture (*Direction générale de l'Agriculture*) in Wallonia and Administration of Agriculture and Horticulture (*Administratie Land- en Tuinbouw*) in Flanders.

Fisheries are dealt with by the federal and Flemish institutions quoted above.

- Higher Walloon Council for Agriculture, Agri-Food and Food (*Conseil Supérieur Wallon de l'Agriculture, de l'Agro-alimentaire et de l'Alimentation*)
- Higher Walloon Council for Forests and Wood Sector (*CSWFFB – Conseil Supérieur Wallon des Forêts et de la Filière Bois*)

7.3 Energy

Energy policy remains a federal question. The federal institution in charge of this question in the Administration of Energy in the Ministry of Economic Affairs (*Administration de l'Energie, Ministère des Affaires Economiques – Bestuur Energie, Ministerie van Economische Zaken*). In the Walloon region, these matters are under the responsibility of the General Directorate of Technologies, Research and Energy (*DGTRE - Direction Générale*

des Technologies, de la Recherche et de l'Énergie) and in Flanders, under the responsibility of the Department of Natural Resources and Energy at the Ministry of the Flemish Community (*Afd. Natuurlijke rijkdommen en Energie - Ministerie van Vlaamse Gemeenschap*).

- Commission for Analysis of Electricity Production Modes and Redeployment of Energies (*Commission AMPERE – Commission pour l'Analyse des Modes de Production de l'Electricité et le Redéploiement des Energies*)

7.4 Transport

At the federal level, transport questions are under the responsibility of the Ministry for Communications and Infrastructure (*VICI – Ministère des Communications et de l'Infrastructure - Ministerie van Verkeer en Infrastructuur*). The federal ministry has kept much of the decision-making power over transport matters. However, regional government have their own institution for these questions like the Ministry of Equipment and Transport (*MET – Ministère de l'Équipement et des Transports*) in Wallonia.

- Regional Commission for Mobility (Bruxelles-Capitale) (*CRM – Commission régionale de la Mobilité de la region Bruxelles-Capitale*)
- Flemish Ports Commission (within SERV)(*VHC – Vlaamse Havencommissie*)
- Flemish Roads Commission (within SERV)(*VWC – Vlaamse Wegencommissie*)
- Flemish Commission for regional planning (*Vlaamse commissie voor ruimtelijke ordening*)
- Commission for Regional Planning of Wallonia (*Commission Régionale d'Aménagement du Territoire (Wallonie)*)

7.5 Environment

At the federal level, environmental matters are dealt with within the Federal Department of the Environment at the Federal Ministry of Social Affairs, Public Health and the Environment. However, decision-making power has been largely delegated to regions. Regional authorities in charge of environmental affairs are the General Directorate for Natural Resources and Environment (*DGRNE – Direction Générale des Ressources Naturelles et de l'Environnement*) of the Ministry of the Walloon Region, the Ministry in charge of Environment, Water policy, Nature Preservation, Public Cleanliness and Foreign Trade (*Ministre de l'Environnement et de la Politique de l'Eau, de la Conservation de la Nature et de la Propreté publique, et du Commerce extérieur*) of the Government Ministry of the Bruxelles-Capitale Region and the Administration of the Environment, Nature, Land and Water Management within the Department of Environment and Infrastructure in Flanders (*administratie Milieu, Natuur-, Land- en Waterbeheer – Departement Leefmilieu en Infrastructuur*)

- Federal Council for Sustainable Development (*FRDO-CFDD Federale Raad voor Duurzame Ontwikkeling – Conseil Fédéral du Développement Durable*)
- Environmental Council of the Region Bruxelles-Capitale (*CE – Conseil de l'Environnement de la Région Bruxelles-Capitale*)

- Environment and Nature Council of Flanders (*MiNa-Raad – Milieu- en Natuurraad van Vlaanderen*)
- Walloon Environmental Council for Sustainable Development (*CWEDD – Conseil Wallon de l’Environnement pour le Développement Durable*)
- Consultative Commission for Water (Wallonia) (*Commission Consultative des Eaux*)
- Regional Commission for Waste (Wallonia) (*Commission Régionale des Déchets*)
- Higher Walloon Council for Nature Preservation (*CSWCN – Conseil Supérieur Wallon de la Conservation de la Nature*)

7.6 Health and the Consumer

Health matters have remained mostly under the responsibility of the federal government. The institution in charge is the Ministry of Social Affairs, Public Health and the Environment (*Ministerie van Sociale Zaken, Volksgezondheid en Leefmilieu – Ministère des Affaires Sociales, de la Santé Publique et de l’Environnement*). However, regions have their own departments dealing with these questions: the General Directorate of Health in the Walloon region (*Direction Générale de la Santé*) and the Department of Welfare, Public Health and Culture in Flanders (*Departement Welzijn, Volksgezondheid en Cultuur*). All scientific advisory bodies listed below are federal bodies.

- Royal Academy of Medicine of Belgium (French Speaking)(*Académie Royale de Médecine de Belgique*)
- Royal Academy of Medicine of Belgium (Dutch Speaking)(*Koninklijke Academie voor Geneeskunde van België*)
- Higher Health Council (*CSH – Conseil Supérieur d’Hygiène*)
- Bioethics Consultative Committee of Belgium (*Comité consultatif de Bioéthique de Belgique – Aadgevend comité voor bio-ethiek van België*)
- Consultative Committee of the Federal Agency for the Safety of the Food Chain (*AFSCA-FAVV – Comité Consultatif de l’Agence Fédérale pour la Sécurité de la Chaîne Alimentaire – Raadgevend Comité van het Federale Agentschap voor de Veiligheid van de Voedselketen*)

7.7 Research

Research policy is under the responsibility of the Federal Office for Scientific, Technical and Cultural Affairs (*SSTC-DWTC – Services Fédéraux des Affaires Scientifiques, Techniques et Culturelles – Federale Diensten Wetenschappelijke, Technische en Culturele Aangelegenheden*) which reports to the Minister of Economy and Scientific Research (*Ministre de l’Economie et de la Recherche Scientifique – Minister van Economie en Wetenschappelijk Onderzoek*). The General Directorate of Technologies, Research and Energy (*DGTRE - Direction Générale des Technologies, de la Recherche et de l’Énergie*) is responsible for those questions in the Walloon region. In Flanders, it falls under the General Directorate of Higher Education and Scientific Research of the Ministry of the Flemish Community (*Directoraat-Generaal Hoger Onderwijs en Wetenschappelijk Onderzoek, Ministerie Vlaamse Gemeenschap*). In general, the Communities are responsible for research related to education, culture and health policy. The Regions are responsible for research

related to the economy, energy policy (excluding nuclear, for which the federal state is competent), public works, transport and the environment. The Inter-Ministerial Commission on Science Policy co-ordinates federal, regional and community research policies. Many federal or regional ministries manage research performed in their own areas of competence.

- Federal Council for Scientific Policy (*CFPS-FRWB – Conseil federal de la politique scientifique – Federale Raad voor Wetenschapsbeleid*)
- Flemish Council for Science Policy (*Vlaamse Raad voor Wetenschapsbeleid*)
- Walloon Council for Science Policy (*Conseil Wallon de la Politique Scientifique*)
- Advisory Council for Research and Development in Agriculture (*Conseil Consultatif de la Recherche et du Développement en Agriculture – Consultatieve Raad voor Onderzoek en Ontwikkeling in de Landbouw*)

Database report

8 Bodies covered in the database

Name of body	Policy areas covered	Who advised	Full/basic coverage	Nature of body	Type A or B
Federal Council for Sustainable Development	Environment Energy	Head of Govt (PM or Cabinet) Legislature Ministry	Basic	Statutory Permanent	
Federal Council for Science Policy	Research	Ministry	Basic	Statutory Permanent	
Commission for Analysis of Electricity Production Modes and Redeployment of Energies (Comm.AMPERE)	Environment Energy	Ministry	Basic	Statutory Fixed-term	
Environmental Council of the Region Bruxelles-Capitale	Environment	Head of Govt (PM or Cabinet) Legislature Ministry	Basic	Statutory Permanent	
Walloon Environmental Council for Sustainable Development	Environment	Head of Govt (PM or Cabinet) Legislature Ministry	Basic	Statutory Permanent	
Environment and Nature Council of Flanders	Environment	Head of Govt (PM or Cabinet) Legislature Ministry	Basic	Statutory Permanent	
Consultative Committee of the Federal Agency for the Security of the Food Chain	Agriculture Health	Head of Govt (PM or Cabinet) Legislature Ministry	Basic		
Higher Health Council	Health	Ministry	Basic		
Royal Academy of Medicine of Belgium (French Speaking)	Health	Head of Govt (PM or Cabinet) Ministry	Basic		
Royal Academy of Medicine of Belgium (Dutch Speaking)			Basic		

Economic and Social Council of the Bruxelles-Capitale Region	Agriculture Transport Environment Research Health Energy	Head of Govt (PM or Cabinet) Legislature Ministry	Basic		
Regional Commission for Mobility (Bruxelles-Capitale)	Transport	Head of Govt (PM or Cabinet), Ministry	Basic		
Flemish Commission for regional planning	Transport	Head of Govt (PM or Cabinet), Legislature, Ministry	Basic		
Economic and Social Council of Walloony	Agriculture Transport Environment Research Health Energy	Head of Govt (PM or Cabinet), Legislature, Ministry	Basic		
Commission for Regional Planning of Wallonia	Transport Environment	Head of Govt (PM or Cabinet), Legislature, Ministry	Basic		
Higher Walloon Council for Agriculture, Agri-Food and Food	Agriculture Health	Ministry	Basic		
Higher Walloon Council for Nature Preservation	Environment	Head of Govt (PM or Cabinet), Legislature, Ministry	Basic		
Regional Commission for Waste (Wallonia)	Environment	Head of Govt (PM or Cabinet), Ministry	Basic		
Consultative Commission for Water (Wallonia)	Environment	Head of Govt (PM or Cabinet), Legislature, Ministry	Basic		

Higher Walloon Council for Forests and Wood Sector	Agriculture Environment	Head of Govt (PM or Cabinet), Ministry	Basic		
Economic and Social Council of Flanders	Agriculture Transport Environment Research Health Energy Fisheries	Head of Govt (PM or Cabinet), Legislature, Ministry	Basic		
Flemish Ports Commission	Transport Fisheries	Head of Govt (PM or Cabinet) Legislature Ministry	Basic		
Flemish Roads Commission	Transport	Head of Govt (PM or Cabinet) Legislature Ministry	Basic		
Economic and Social Council of the German-Speaking Community	Agriculture Transport Environment Energy	Head of Govt (PM or Cabinet) Legislature Ministry	Basic		
Flemish Council for Science Policy	Research	Head of Govt (PM or Cabinet) Legislature Ministry	Basic		
Bioethics Consultative Committee of Belgium	Research Health	Head of Govt (PM or Cabinet) Legislature Ministry Agency	Basic		
Commission for Analysis of Electricity Production Modes and Redeployment of Energies	Energy	Head of Govt (PM or Cabinet) Legislature Ministry	Basic		
Walloon Council for Science Policy	Research	Head of Govt (PM or Cabinet) Legislature Ministry	Basic		

Advisory Council for Research and Development in Agriculture	Agriculture Research	Ministry	Basic		
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As only basic details were collected for the bodies in Belgium that have been covered in the study, further comments are not possible.

Cyprus

General Overview

9 Background

The Government of Cyprus was constituted according to the Constitution of 1960. Executive Article 1 provided that the Republic would have "a President who shall be Greek and a Vice President who shall be Turk, elected by the Greek and Turkish communities respectively". The Constitution stipulated further that the President would appoint seven Greek Cypriot Ministers and the Vice President three Turkish Cypriot Ministers.

The House of Representatives, consisting of 50 Deputies, 70% (35) elected by the Greek Cypriot community and 30% (15) by the Turkish Cypriot community, exercised the Legislative power.

The 1960 constitutional set up lasted for only three years. Following the Turkish Cypriot rebellion against the state in December 1963, the Turkish Cypriot leadership withdrew all members of the community from all the organs of the state.

The following changes have taken place since then, dictated by the law of necessity and the need for the smooth functioning of the state.

The executive branch ministerial portfolios increased to 11 with the addition of the Ministry of Education (and Culture) in 1965. All Ministers are Greek Cypriots and are appointed by the President of the Republic. The post of Vice President remains vacant.

In the legislative branch the Turkish Cypriot deputies also withdrew from the House in 1963 and their posts remain vacant up to this day. Under a special law the number of deputies in the House of Representatives were increased to 80 (56 Greek Cypriots, 24 Turkish Cypriots).

Changes have also taken place in the judiciary where, since 1965, all judges belong to the Greek Cypriot Community.

9.1 Main Actors

Cyprus is a Republic with a presidential system of government. Under the 1960 Constitution, executive power is vested in the President of the Republic, elected by universal suffrage for a five-year term of office. The President exercises executive power through a Council of Ministers appointed by him. Each Minister is the head of his/hers Ministry and exercises executive power of all subjects within that Ministry's domain.

Under Articles 47 and 48 of the Constitution the executive power exercised by the President inter alia consists of matters such as:

- Determining the design and colour of the flag of the Republic;
- Creation or establishment of the honours of the Republic;
- Appointment of the members of the Council of Ministers;

- Promulgation by publication in the official Gazette of the Republic of the decisions of the Council of Ministers;
- Promulgation by publication in the official Gazette of the Republic of any law or decision passed by the House of Representatives;
- Institution of compulsory military service;
- Reduction or increase of the security forces;
- Convening the meetings of the Council of Ministers, presiding at such meetings and taking part in the discussions thereat without any right to vote;
- Preparing the agenda of such meetings;
- Right of final veto on decisions of the Council of Ministers concerning foreign affairs, defence or security;
- Right of return of decisions of the Council of Ministers;
- Right of final veto on laws or decisions of the House of Representatives concerning foreign affairs, defence or security;
- Right of return of laws or decisions of the House of Representatives or of the Budget;
- Right of recourse to the Supreme Constitutional Court;
- Right of reference to the Supreme Constitutional Court.

The Council of Ministers consists of the:

- Minister of Foreign Affairs
- Minister of Finance
- Minister of the Interior
- Minister of Labour and Social Insurance
- Minister of Defence
- Minister of Justice and Public Order
- Minister of Education and Culture
- Minister of Commerce, Industry and Tourism
- Minister of Health
- Minister of Communications and Works
- Minister of Agriculture, Natural Resources and Environment

The Government structure is also complemented by specific Independent Offices:

- Planning Bureau
- The Audit Office
- The Educational Service Commission
- Office of the Commissioner for Public Aid
- Cyprus - E. U. Accession Negotiations

9.2 Local Government

There are two types of local authorities: Municipalities and Village Authorities. Municipalities account for about 60 % of the population, while 352 Village Authorities cover the rest of the population.

Law 111/1985 determines the function and corporate structure of the Municipalities. *Mayors* are elected directly by the citizens for a term of five years and are the executive authority of the municipalities. In performing their work Mayors are supported by the *Municipal Councils*, which are the policy-making bodies of the municipalities, elected directly by the citizens for a term of five years, but separately from the Mayor; the *Deputy Mayors*, who are elected from amongst the Council members by secret ballot during the first meeting of the newly elected Council; and the *Administrative Committee* whose members are appointed by the Council. The Council may also set up ad-hoc or standing committees, which have an advisory role and examine technical, cultural, environmental, personnel and other issues. The work and proposed action of these committees is always submitted to the Council for approval.

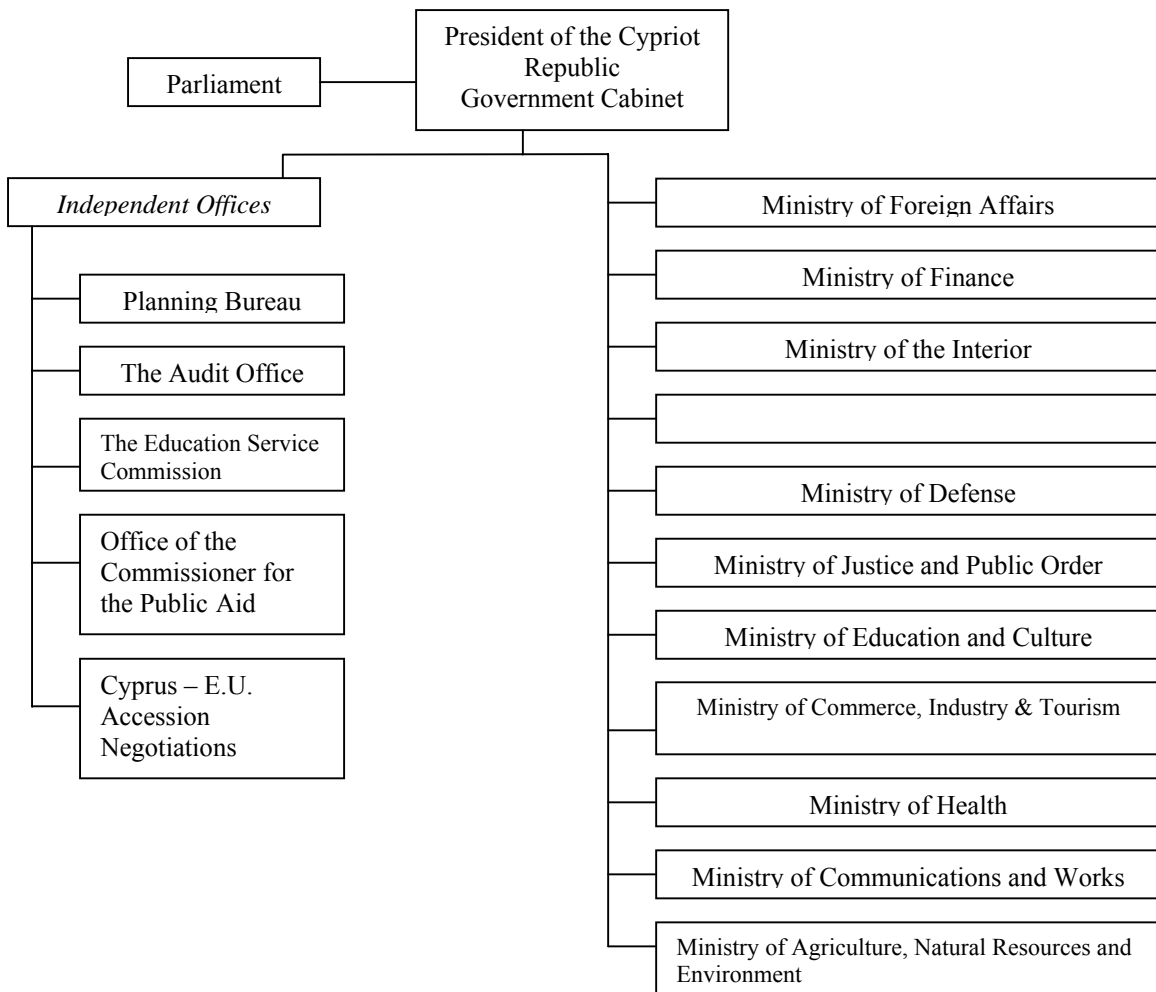
The municipalities' finances derive mainly from municipal taxes, fees and duties and to a lesser extent from state subsidies except in the case of major infrastructure projects. The latest amendment to the 1985 Law, however, expanded the municipalities' autonomy and is expected to increase municipal revenue, as municipal *Bye-laws* concerning taxes and fees no longer need to be approved by the Council of Ministers prior to enforcement.

The same law also provided for the establishment of new municipalities based on specific conditions. This resulted in the establishment of 17 new municipalities since 1986, thus making a total of 33 municipalities existing today.

Since the Turkish invasion of 1974 (and the subsequent occupation of the northern part of Cyprus by Turkey), nine municipalities (Famagusta, Kyrenia, Morphou, Kythrea, Karavas, Lapithos, Lefkonikon, Akanthou and Lyssi), although still maintaining their legal status, have been temporarily relocated to the free areas.

In addition, the European Charter of Local Self-Government of the Council of Europe was signed by the Council of Ministers of the Republic of Cyprus in October 1986 and was ratified by the House of Representatives in 1988. The principles of this Charter provide the guidelines for the modernization of local government legislation, particularly the Municipalities' Law.

The Cypriot Political System: Overview



10 Policy Areas

10.1 Agriculture, Fisheries & Environment

Agriculture, Fisheries and Environment are under the responsibility of the Ministry of Agriculture, Natural Resources and Environment.

The Ministry's main objectives are the improvement of the farmers' standard of living and the welfare of the rural world. This is achieved through special projects, plans and programmes. Using institutional, administrative, and financial measures the Ministry works systematically for the restructuring of agricultural production, the creation of financially viable units, and the introduction of modern technology and generally for the creation of conditions, which would contribute to the improvement, and increase of productivity.

The Ministry is divided in the following Departments:

Agriculture

- Crop and Livestock Production
- Veterinary Services

Fisheries

- Agricultural Research Institute
- Meteorological Service
- Water Development
- Geological Survey Department
- Mining-Quarrying
- Agricultural Insurance Organisation
- Land Consolidation

Environment

The Ministry of Agriculture, Natural Resources and Environment is also responsible for supervising organisations such as:

- Agricultural Research Institute (A. R. I.)
- Cyprus Forestry College

Policy directions and measures are suggested by the relevant Managers of the Departments within the Ministry, which are also supported by the above organisations in terms of scientific input and advice provision when specific needs arise, and the Minister makes the final decisions concerning policy formulation and implementation.

10.1.1 Agriculture

The policy for Agriculture aims at restructuring and upgrading the broad agricultural sector a) in order to be able to successfully cope with the conditions prevailing in the European Union and international competition, b) for further development of the sector and c) for exploitation of the opportunities created by the European Union orientation and the General Agreement on Tariffs and Trade (GATT). The most important elements of the agricultural development policy are the improvement of productivity and competitiveness, the further development of comparative advantages, the improvement of quality and structural and institutional modernisation.

More specifically the main objectives are:

- Increase of agricultural production and improvement of productivity of the broad agricultural sector, taking into consideration a balanced development of agricultural sub-sectors, with emphasis to competitive sub-sectors and products.
- Approaching agricultural holdings/areas/zones as integrated units and preparation and implementation of integrated development programmes based on common socio-economic, soil and climatic characteristics.
- Improvement of farmers' standard of living.
- Maintenance of a balance in the market (supply-demand) of agricultural products.
- Sustainable agricultural development, taking into consideration the preservation of the environment and minimisation of negative effects from agricultural activities on the environment.
- Harmonisation with the European Union, with basic reference points the Common Agricultural Policy and the Common Fisheries Policy.

In order to attain the above objectives, the government implements various programmes and projects. An essential component in many of these projects is the provision of agricultural credit, subsidies and other forms of assistance for encouraging the development of the agricultural sector through supplementing agricultural incomes.

10.1.2 Fisheries

The Fisheries Department is responsible for the sustainable development and management of marine and inland waters as well as the sustainable use of resources. This is put into effect mainly by the application of measures for the sound management of fishery resources and by enforcing the Fisheries Legislation. Moreover, within its scope of activities for the increase of fish production and productivity, technical and financial aid is granted to fishermen in order to develop fisheries. Aid is also given for the development of aquaculture. In 1996 a new 5-year Aquaculture Interest Loan Subsidy Plan has been introduced by the Fisheries Department for the encouragement of investments for the development of marine aquaculture.

Recent major activities of the Department include:

- The development of marine aquaculture
- The construction, improvement and maintenance of fishing shelters,
- Research and study of the marine environment in the sea around Cyprus and the Eastern Mediterranean covering inter alia the following:
- Monitoring and control of Marine Pollution, including the prevention and combating of oil pollution;
- Research in Physical Oceanography, understanding the hydrodynamic features of the Eastern Mediterranean Sea;
- Studies on fish population dynamics and stock assessment;
- Research in Marine Ecology with a particular interest on the distribution of benthic organisms (phytobenthos and macro fauna) in relation to their environment;

- The preparation and assessment of Environmental Impact Assessment studies on marine environment in relation to coastal development plans such as sewage, aquaculture, construction of breakwaters etc.;
- Conservation of endangered aquatic species and habitats and protection of endangered marine ecosystems.

10.1.3 Environment

The Ministry of Agriculture, Natural Resources and Environment is responsible for the rational management and sustainable use of natural resources apart from being the co-ordinating Ministry for the protection of the island's environment. The institutional framework for environmental management in Cyprus has at its apex the Council of Ministers, which has the overall responsibility for the formulation of the environmental policy. It also includes the Council for the Protection of the Environment, chaired by the Minister of Agriculture, Natural Resources and Environment, the Environment Committee, which deals with the formulation and determination of the environmental policy objectives and is chaired by the Permanent Secretary of the Ministry of Agriculture, Natural Resources and Environment, and the Environment Service.

The latter, is the co-ordinating agency for government programmes for the protection of the environment; heads the technical committee on the environmental impact assessment of projects; advises on environmental policy, and is mandated to ensure the implementation of the environmental policy.

Cyprus has endorsed the principles of sustainable development and has undertaken a process to integrate environmental considerations in its economic and social development policy. In this process, the country is guided by the principles adopted at the Rio Conference and the European Union's respective policies.

Among others, action has been taken in water use, water conservation, central sewerage systems and sewage treatment plants, reuse of treated effluent for irrigation, water development, water desalination, fertilisers and pesticides control, relocation of animal husbandry premises, control of groundwater pollution, good agricultural practices, air and water quality monitoring, industrial pollution control, industrial waste treatment, environmental impact assessment, protection of marine and river species, protection of wetlands, aquaculture management, holistic control of dangerous substances, combating sea and beach pollution, shoreline protection, cultural heritage preservation, environmental awareness and information, etc.

Worth mentioning also is the work initiated for the preparation of the Ecological Chart of Cyprus. The basic objective of this effort is to survey, study and map all the basic characteristics and parameters of the natural, biological and cultural resources, to identify the pressures threatening them and to put forward suggestions and programmes for the protection and enhancement of the ecological and cultural endowment of the island.

10.2 Energy and Consumer Protection

The Ministry of Commerce, Industry and Tourism is responsible for the formulation and implementation of the government policy in relation to commercial and industrial

development (including also the energy policy area), competition, consumer protection and tourism.

According to the new Development Plan the main strategic objectives of the government's policy on trade and industry are foreign markets and the acceleration of the harmonisation process with the conditions prevailing in the EU. Very important are also:

- The achievement of the highest possible rate of growth, while preserving, at the same time, conditions of macroeconomic stability;
- The restructuring of all the sectors of the economy, the modernisation and the technological upgrading of the productive units, the exploitation of the economy's comparative advantages, with a view to enhance the competitiveness of the Cyprus economy;
- The upgrading of the role of Cyprus as an international business centre and a service centre of high quality;
- The improvement of quality of life and the upgrading of the environment;
- The adaptation of the economy to the emerging information society;
- The reform and the modernisation of the public sector.

In the industrial sector the Ministry provides assistance to the local industry for sustainable development and in collaboration with other competent bodies it formulates and implements the environmental policy of the government in relation to the industry sector.

Moreover the Ministry through the Competition and Consumer Protection Service strives for the creation of competitive environment throughout the domestic market and the effective protection of health, safety and economic interests of consumers.

The Ministry of Commerce, Industry and Tourism is also responsible for supervising organisations such as:

- Cyprus Institute of Energy
- Applied Energy Centre

It is also very important to mention that the Ministry of Commerce, Industry and Tourism together with the Cyprus Chamber of Commerce & Industry and the Employers & Industrialists Federation were responsible for the establishment of the Cyprus Institute of Technology. The Institute's main mission is to promote the competitiveness and the technological upgrading of the Cyprus Manufacturing Industry.

Policy directions and measures are suggested by the relevant Managers of the Authorised services within the Ministry, which are also supported by the above organisations in terms of scientific input and advice provision when specific needs arise, and the Minister makes the final decisions concerning policy formulation and implementation.

10.3 Research

The research policy area is under the responsibility of the Planning Bureau, an Independent Office, which does not come under any Ministry. The Planning Bureau has the responsibility for the formulation and implementation of economic and social development policy in Cyprus from the very start of the establishment of the Republic of Cyprus, on the institution of indicative planning. According to the concept of indicative planning, economic activity is by large the domain of private initiative, whereas the government's role is concentrated on the

creation of the necessary economic and social infrastructure, the cultivation of a favourable entrepreneurial climate, and the simultaneous guiding of the private sector towards the desired directions, as well as the administration of social policy.

The basic characteristics of indicative planning are the following: (i) Strategy and basic objectives are formulated in close co-operation with the organised groups of the private sector and the social partners; (ii) The Development Plans prepared in exercising indicative planning do not have an imperative character; (iii) The instruments available to the government influence economic variables only indirectly.

Indicative planning in the case of Cyprus has been exercised through the Planning Mechanism, by which the role and responsibilities of the various government bodies in matters of planning are defined and the participation of the private sector in the formulation and follow up of development policy is ensured.

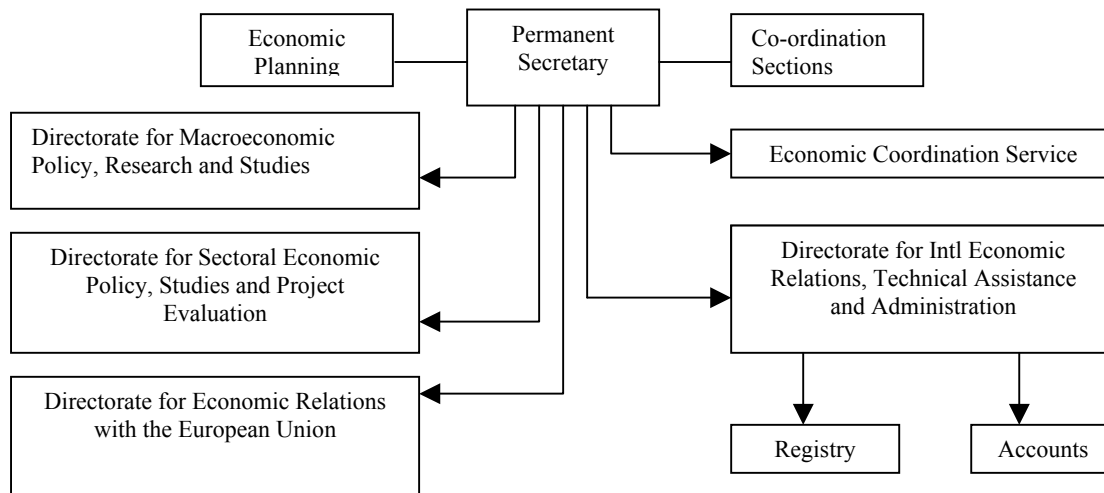
The medium-term development policy of the government is presented in the Development Plans, which include macroeconomic and sectoral policy, covering all economic and social sectors and activities of both the public and the private sector, always within the framework of indicative planning. The main instruments for the implementation of the Plan at the government level are the annual Development Budget, which reflects the investment and development expenditure programme of the public sector, and the appropriate macroeconomic and sectoral policies.

The main functions of the Planning Bureau, within its role as the economic and administrative arm of the planning mechanism, are:

- The preparation, on the basis of proposals by Ministries, of a Development Plan as well as other economic studies and development policy proposals for submission to the Minister of Finance and the promotion, co-ordination and monitoring of their implementation.
- The preparation, on the basis of proposals by Ministries, of a Development Budget, which once accepted by the Minister of Finance, is submitted for approval to the Council of Ministers and the House of Representatives, as well as for the co-ordination and monitoring of its implementation.
- Participation in various committees set up to provide advice to decision makers and/or monitor the implementation of plans/projects/programmes.
- The co-ordination of foreign technical assistance matters and the handling of intergovernmental economic relations.
- The preparation of economic studies and the co-ordination of activities of the various ministries/departments domestically regarding the relations of Cyprus with the European Union.
- The provision of advice in the exercising of macroeconomic management and sectoral policy, in its role as a consultative economic government institution, whereby the recommendations made are consistent with the overall development strategy.

In order to exercise its role effectively, the Planning Bureau is organised in two sections, the Economic Planning, the Co-ordination Sections and five directorates, under a Permanent Secretary.

CHART OF THE PLANNING BUREAU



The research policy area lies specifically under the Directorate for Macroeconomic Policy, Research and Studies of the Planning Bureau. The responsibilities of the Directorate for Macroeconomic Policy, Research and Studies, are:

- Preparation of the macroeconomic part and composition of the Medium and Long-Term Strategic Development Plans.
- Annual evaluation of progress and preparation of specialised studies and policy proposals on the macroeconomic sphere.
- Preparation of models of the Cyprus economy for forecasting and assessing the effects of policy changes.
- Preparation of annual publications (Economic Outlook, Economic and social Indicators).

The Directorate for Macroeconomic Policy, Research and Studies is also responsible for the operation of the Research Promotion Foundation, which was established at the initiative of the Government of the Republic of Cyprus, to promote the development of the scientific and technological research in Cyprus due to the fundamental importance of research in contemporary societies.

10.4 Transport

The Ministry of Communications and Works is responsible for the formulation and implementation of the government development programme in the sectors of communications, transport, public works and antiquities.

The Ministry's priorities include the creation of conditions of road safety and the construction and maintenance of government buildings. It is also in charge of the improvement and extension of the port and airport premises and the design and supervision of construction of coastal protection works and fishing shelters.

Moreover it exercises overall supervision on inland transport, public works, postal services, civil aviation and merchant shipping. Its jurisdiction extends also to the Telecommunications Authority and the Cyprus Ports Authority.

Regarding air transport, the Civil Aviation Department is responsible for air transport activities within Cyprus FIR. It also formulates and continuously adapts its air charter policy within the framework of the general economic interests of the republic and co-ordinates civil aviation matters with various international organisations.

In relation to road transport the Ministry's main activities are the design, supervision of construction and maintenance of main road works, as well as of many other primary and secondary roads, design and construction of anti-flood works, government refugee housing and self-housing estates.

The preservation of Cyprus' cultural heritage is entrusted to the Department of Antiquities. The Department carries out excavations in the major archaeological sites, conducts restoration work and takes care of the archaeological remains and monuments of Cyprus.

The Ministry is also responsible for monitoring the following authorities:

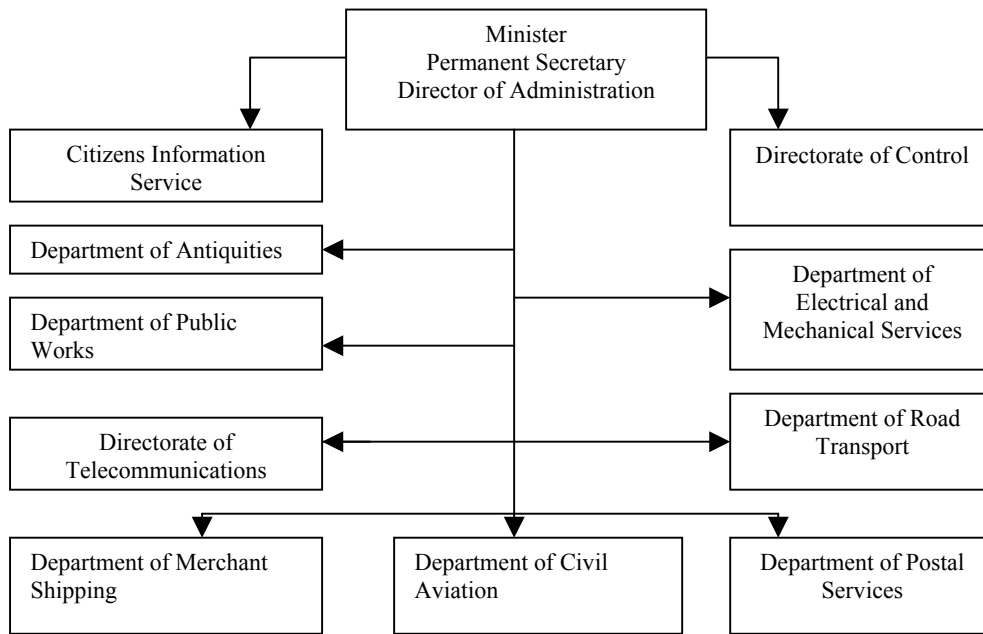
- Council for the registration of Contractors
- Licensing Review Authority
- Cyprus Ports Authority
- Cyprus Telecommunications Authority
- Licensing Authority

Policy directions and measures are suggested by the relevant Managers of the Authorised services within the Ministry, which are also supported by the above organisations in terms of scientific input and advice provision when specific needs arise, and the Minister makes the final decisions concerning policy formulation and implementation.

As far as consultancy services and advice on scientific and technology matters are concerned, these are obtained from the private sector on a “when needed” basis. In the case of the department of Road Transport, the following bodies are addressed in order to provide advice sometimes:

- The vehicle manufacturers
- The Cyprus Professional Engineering Association
- The Department of Electrical and Mechanical Services of the Ministry
- International Experts who are appointed by the Department as counsellors on specific matters (e.g. Legislation for ADR, LIFE policy options)

CHART OF THE MINISTRY OF COMMUNICATIONS AND WORKS



10.5 Health

The main objective of the Ministry of Health is the constant improvement of the people's health standard. This is achieved by means of providing an efficient system of medical care for all and of safeguarding the right of every person to opt for the doctor or hospital of their choice.

The Ministry is divided into various departments, which are entrusted with the task of achieving the objective of the amelioration of the country's health standard. These departments are: Medical and Public Health Services, Mental Health Services, Dental Services, Pharmaceutical Services and General Laboratory.

The medical needs of the Cyprus population are met through three systems of health services: the government health sector, the private health sector, and a number of schemes covering specific sections of the population.

The reform of the health care sector is a high priority of government's health policy. The present system of health care has for long been criticised for the fragmentation of services, the lack of co-ordination between the public and private health sector, the lack of equity in its financing and in general its inability to respond to the expectations of the population.

On 20 April 2001, the House of Representatives enacted a law for the introduction of a National Health System (NHS), which will provide health care free at the time of delivery. It will be universal as regards population coverage and will be financed by contributions from the state, the employers, the employees, the self-employed, the pensioners and all those who have non-employment incomes.

The Health Insurance Organisation, a public law body managed by a tripartite Board, will administer the NHS. The Organisation will purchase health services from the Government and private medical institutions and services.

Policy directions and measures are suggested by the Managers of the various Departments, who are also supported by the committees, constituted by Ministerial Decrees and the research centres supervised by the Ministry, in terms of scientific input and advice when there are specific needs. The General Director or the Minister depending on the significance of the issue makes the final decisions concerning policy formulation and implementation in question.

11 Scientific advice

11.1 General background

Scientific advice and its associated systems of delivery form an issue at the national level in Cyprus because there are no formal scientific advisory structures in the country. As a result of this, all the scientific advisory bodies are multifunctional, although in most of the cases they are the only organisations providing with scientific advice the respective ministries and public authorities.

The general practice in delivering scientific advice to policy-makers is firstly by exploiting the internal expertise located either within the respective Ministry Departments/ Directorates or within the research institutes and committees that the Ministry supervises (internally). In either case ('internal' or 'external' scientific advice provision) the inter-ministerial committee or the respective Department/ Directorate is responsible for delivering the scientific advice to the Minister, who is the one to take the final decisions about the use of the scientific input and its impact on policy making. Also, the Committees tend to perform often researches. In case the necessary expertise is not found internally then external experts are addressed in research institutions, university departments, etc, outside the Ministry or even abroad (externally). Public consultation is also used for the formation of scientific advice by some organisations.

When issues emerge for examination at an inter-ministerial level there are specific permanently established committees composed by the relevant 'functionaries' of the Ministry, which undertake the responsibility to examine the issue and present the outcome to the Minister. These committees are considered permanent and fall under the supervision of the responsible Ministry but they operate on an ad-hoc basis. In case the necessary expertise is not found internally then external experts are addressed in research institutions, university departments, etc, outside the Ministry or even abroad (externally). Also, they tend to conduct regular meetings as well as required or on request from others.

Regarding the institutions, research organisations, university departments, etc. that assist the Ministries in cases of need for scientific advice, most of them provide information and scientific advice concerning mainly research issues. They are statutory permanent public organisations with a broad scope of work and multifunctional characteristics that enable flexibility in their operations. Finally most of them are governed by Codes of Practice² and formal guidelines.

11.2 Advice provision in relevant policy areas

According to the law in Cyprus, there are 'functionaries' in each Ministry, each one of them shouldered with the responsibility of a specific policy sub-area within each policy area.

² The organisations that participated in this study stated that have Codes of Practice having in mind the Memorandums of Association, as these Memorandums tend to encompass articles that refer to the methods of operation of the body, i.e. to whom it shall refer to, how the reports drafted are going to be published, the confidentiality retained by its members, methods of selection of the Executive Board, etc.

When issues emerge for examination at an inter-ministerial level there are specific permanently established committees composed by the relevant ‘functionaries’ of the Ministry, which undertake the responsibility to examine the issue and present the outcome to the Minister. These committees are considered permanent and fall under the supervision of the responsible Ministry but they operate on an ad-hoc basis.

In case the necessary expertise is not found internally then external experts are addressed in research institutions, university departments, etc, outside the Ministry or even abroad (externally). Public consultation is also used for the formation of scientific advice by some organisations.

In either case (‘internal’ or ‘external’ scientific advice provision) the inter-ministerial committee or the respective Ministry Department/ Directorate is responsible for delivering the scientific advice to the Minister, who is the one to take the final decisions about the use of the scientific input and its impact on policy making.

The Ministries (or the Planning Bureau) have the ability to commission research either to the research organisations under their supervision (internally) or to outside research bodies, university departments or individual experts (externally). Commissioning research is realised through *open calls* (for the participation of external experts) or through *immediate allocation* (to organisations supervised by the Ministry/ Planning Bureau or to external organisations) and may concern the conduction of new research, the reviewing of previous research results and the preparation of specific studies.

This is the common practice for all the policy areas examined. However, in the case of research, the Research Promotion Foundation that was established in 1996 plays a major role in the development of a research pattern in the country.

It was established at the initiative of the Government of the Republic of Cyprus, to promote the development of the scientific and technological research in Cyprus due to the fundamental importance of research in contemporary societies.

The foundation is an independent organisation governed by a twelve-member board of Directors, appointed by the Council of Ministers for a five-year period. The Foundation’s core objective is the promotion of scientific and technological research in Cyprus. The scientific objectives and priorities defined by the Foundation’s Statute and the decisions of its board of Directors are as follows:

- To monitor and co-ordinate the scientific and technological research in Cyprus;
- To identify the appropriate thematic areas for conducting demand-driven research, taking into consideration the development needs in Cyprus;
- To provide funding for the implementation of research projects;
- To promote the participation of Cypriot organisations or individual researchers for carrying out research programmes;
- To evaluate the potential of organisations or individual researchers for carrying out research;
- To advice the government on research issues;
- To upgrade the infrastructure for research activities;
- To promote awareness of the Cypriot public for the importance of research in contemporary societies.

The Foundation has developed a wide range of activities, the most important of them being:

- The launching and monitoring of an annual programme for financing of research projects, which covers a wide spectrum of topics in different thematic areas;
- The development and monitoring of a programme for the support of young researchers;
- The promotion of the participation of Cypriot researchers in the 5th and 6th Framework Programme for Research, Technological Development and Demonstration Activities;
- The participation in programmes within the 5th and 6th Framework Programme, aiming at the promotion of networking between the research community of Cyprus and the European Community;
- The promotion of the participation of Cypriot researchers in the European Programme COST, which aims at the co-operation of European researchers in the field of scientific and technical research;
- The administration in Cyprus of the EUMEDIS programme, which aims at the Euro-Mediterranean co-operation in the field of information technology applications;
- The preparation and implementation of the bilateral agreement between Cyprus and Greece in the field of research and technological development;
- The promotion of activities aiming at strengthening the research infrastructure in Cyprus;
- The promotion of the upgrading of research activities and skills within the educational system of Cyprus;
- The development of databases concerning the research community in Cyprus.

In the case of the environment policy area, apart from the relevant ‘functionaries’, representatives of relevant NGOs can also participate in the inter-ministerial committees formed.

In the case of the Ministry of Health, however, the scientific advice provision, most of the times and for most of the issues examined, comes from ad hoc committees, which are formed from experts from the Cypriot Public and Private sector (not from the University because there is no Medicine School) and also academic experts from other countries, e.g. from Greece. In addition to that, there are also specific permanent committees authorised to confront certain issues concerning health that are constituted by Ministerial Decree.

In the case of the Ministry of Agriculture, Natural Resources and Environment there are eleven policy area Departments that are authorised to provide scientific advice based on their expertise. Whenever the internal expertise is not enough the Ministry may seek co-operation with external experts, mainly universities from abroad (e.g. Greece).

11.3 Conclusions

The general practice in delivering scientific advice to policy-makers is firstly by exploiting the internal expertise located either within the respective Ministry Departments/Directorates or within the research institutes and committees that the Ministry supervises (internally).

In case the necessary expertise is not found internally then external experts are addressed in research institutions, university departments, etc, outside the Ministry or even abroad (externally).

In either case ('internal' or 'external' scientific advice provision) the inter-ministerial committee or the respective Department/Directorate is responsible for delivering the scientific advice to the Minister, who is the one to take the final decisions about the use of the scientific input and its impact on policy making.

Database report

12 Advisory Bodies covered in database

Name of body	Policy areas covered	Who advised	Full/Basic coverage	Nature of body	Some Categorisation
CIT (Cyprus Institute of Technology)	Research	Ministry of Commerce and Industry & Chamber of Commerce	Full	Statutory Permanent	B
ARI (Agricultural Research Institute)	Agriculture, Environment, Research	Ministry of Agriculture, Natural Resources and Environment, Foreign countries/organisations	Full	Statutory Permanent	B
Applied Energy Centre	Research, Energy	Head of the Government, Public & Private bodies, etc.	Full	Statutory Permanent	B
CIE (Cyprus Institute of Energy)	Research, Energy	Head of the Government, Legislature, Ministries, Agencies, other advisory bodies, etc.	Full	Statutory Permanent	B

All the scientific advisory bodies in Cyprus were categorised as type B organisations because there are no formal scientific advisory structures in the country. As a result of this, all the scientific advisory bodies are multifunctional, although in most of the cases they are the only organisations providing with scientific advice the respective ministries and public authorities.

12.1 General trends

All the organisations are statutory permanent and the policy areas they cover are in direct relation to the body they are providing advice for. In more detail, the organisations that participated in this study stated that they provide information and advice to the respective Ministries, to the legislatures and the Head of the Government. Even though these scientific advisory organizations provide scientific advisory services to the public authorities, they are categorised as type B, because the scientific advice provision is not their primary role. When issues emerge for examination at an inter-ministerial level there are specific permanently established committees composed by the relevant ‘functionaries’ of the Ministry, which undertake the responsibility to examine the issue and present the outcome to the Minister. These committees are considered permanent and fall under the supervision of the responsible Ministry but they operate on an ad-hoc basis. In case the necessary expertise is not found

internally then external experts are addressed in research institutions, university departments, etc, outside the Ministry or even abroad (externally).

The general practice in delivering scientific advice to policy-makers is firstly by exploiting the internal expertise located either within the respective Ministry Departments/ Directorates or within the research institutes and committees that the Ministry supervises (internally). In either case ('internal' or 'external' scientific advice provision) the inter-ministerial committee or the respective Department/ Directorate is responsible for delivering the scientific advice to the Minister, who is the one to take the final decisions about the use of the scientific input and its impact on policy making.

Regarding the time of establishment, there is no obvious pattern between the organisations, as ARI was established in 1962, CIT in 1992, Applied Energy Centre in 1984 and CIE in 2000.

12.2 Structural issues

12.2.1 Secretariat

All the organisations have a secretariat, which mainly performs administrative work and provides secretarial support to the scientists of the body. Almost 30% of a body's members is occupied in its secretariat.

Regarding the authorities and operations of the secretariats, none of the organisations uses the secretariat as a mean to perform background work. The purpose of the secretariats is to control and monitor the smooth operation of the body rather than interfere with the execution of researches or provision of background material.

12.2.2 Membership

The majority of the organisations tend to employ between 7 and 13 people, with the exception of ARI that employs 40 scientists.

In general, the bodies tend to be dominated by 'academic experts in natural and physical sciences'. Again, ARI is the exception to the above general trend, as it is completely occupied by civil servants oriented towards agricultural sciences. Even though the scope of their members educational background may be fairly restricted, half of the organisations stated that the remit of their body is broad. In more detail, regarding the composition of the bodies, ¼ of ARI's employees work in other countries as well, while the directors of two Cypriot organisations have their directors working in international advisory bodies as well.

The methods used for the selection of the members are similar amongst the type B organisations, as they all use advertisements and open applications, which in some cases is followed by written and oral examinations performed by a national agency responsible for the execution of such events.

In terms of the gender of the members, in all cases almost 50% of the positions within the organisations were occupied by female employees. It should be notated at this point that in

most organisations, the secretarial posts of the bodies are occupied by female employees, and since the secretariats consist 30% to 40% of the entire employees' number, the results could be skewed by this phenomenon.

12.2.3 Budgets

The budgets of the Cypriot organisations are provided mainly by government, while a percentage is obtained by the performance of researches for public or private organisations.

They all use their budgets to cover the wages of their full-time and part-time employees, while 3 of them cover in addition the costs of their members' expenses and the costs of commissioning research.

Regarding the strictness of these budgets, two of the bodies stated that their budget depends to a large extent on the amount of external researches and studies that will be performed for national and international organisations (especially through the participation in European programmes), while the others (ARI and the Applied Energy Centre) noted that funding may arise if research needs are documented and that every year the budget is discussed and decided by the Minister of Economics and the Minister of Industry, respectively.

The vast majority of the bodies' budgets are not large, between 173,000 € and 364,000 €, but 100% of these money are paid for the provision of scientific advice. On the other hand, even though ARI has a larger budget of 6,150,000 €, only 35% of these money (2,150,000€) are spent on scientific advice.

As expected, the costs of the secretariats are not easy to ascertain, as various types of costs are consisting the amount spent by the department (wages, overhead costs, etc.). However, the Applied Energy Centre estimated the amount spent by its secretariat to be around 10% of its overall budget.

12.3 Functional Issues

12.3.1 Scope of work

As mentioned above, half of the Cypriot bodies tend to be focused in their scope, while the other half tend to be broad. The ones that stated that their remit is narrowed, presented limited activities, while the ones with a broader spectrum had a larger variation of activities.

In more detail, the bodies with the broad remit mainly performed researches and education and training, are responsible for raising public awareness and for regulation and licensing, as well as a variety of other activities, such as promotion and enhancement of cooperation between Cyprus and the EU, etc. On the other hand, the focused bodies (ARI and Cyprus Institute of Energy) stated that their main activities are research performance, update review on – state – of – the – art, education and training, legislation and raising public awareness.

Finally, all the scientific advisory bodies of Cyprus have a practical and environmental orientation, that is reflected by the scientific background of their members. Therefore, the education of their members is in total relation with the scope and the operations of the organisations they work for.

12.3.2 Independence

All the type B organisations prefer the method of advertisement/ open application for the selection of their members, which in some cases is followed by written and oral examinations held by the respective national agency.

Regarding whether the bodies can select the subjects that will provide scientific advice for or whether they can only discuss issues brought by ministries or public agencies, half of the scientific advisory bodies have stated that are purely reactive, one selects on its own the subjects and one is a mixture of these two methods.

With respect to the outcome that is being delivered to the state, only one type B body gives to the state its opinion in final form, while the other two are engaged in dialogue before producing the final report. Finally, one body uses a mixture of the above methods, depending on the case examined.

After the creation of the final reports, half of the scientific advisory bodies disseminate the information to the public through media, their website or other publications, while the Applied Energy Centre delivers the final report to the Ministry, which then decides the dissemination and the method that will be utilised for that purpose.

12.3.3 Transparency

All the organisations stated that they operate under a code of practice that has been created and signed by the respective Minister. These codes of practice tend to cover the structural and professional issues of the body, the methods used for the selection of employees, the composition and selection of the members of the Board, etc.

None of the members of the type B organisations have to declare any potential conflicts of interest.

Concerning the confidentiality, the majority of the type B bodies are obliged to retain the material and discussions of the bodies confidential, with the exception of ARI where its members are not bound to such restrictions.

ARI's advice and activity reports are published, while the others keep their agendas, minutes of meetings and advice reports confidential, even though their remit is usually available on their sites. Finally, half of the organisations publish their annual activity reports.

Although none of the organisations stated that it holds meetings that are open to the public, the Applied Energy Centre and the Cyprus Institute of Technology stated the following: the Applied Energy Centre declared that it will perform meetings that will be open to the public in the near future, while the Cyprus Institute of Technology stated that it holds workshops and infodays that are open to the general public.

12.3.4 Generation, delivery and responses to advice

The type B scientific advisory bodies usually have, apart from regular meetings, meetings on own initiative, and meetings on request. They usually formulate sub-groups in order to perform certain studies and researches, while half of them stated that they delegate work to other bodies and organisations.

They usually use the expertise of their members, national consultation to perform their own researches when it comes to produce scientific advices either for public or private agencies. Also, the vast majority seeks public consultation (although seldomly) through focus groups (CIT), consensus conferences (Applied Energy Centre), and Internet dialogues (CIE).

The type of advice generated by the type B organisations is usually in direct relation to the activities and the scope of the respective body. In more detail, the finalisation of the advice is achieved mainly through consensus of opinions, CIT delivers its advice after common position is agreed by majority vote. It is interesting to note that in CIE there is allocation of one person to each study, therefore such issues do not arise.

With respect to the requisit of formal policy response, half of the organisations stated that they do not expect a formal policy response, although any is welcomed. On the other hand, the Applied Energy Centre does require a formal policy response, which is then publicly available.

12.3.5 Evaluation and impacts of advice

Half of the organisations in Cyprus stated that there is no formal assessment of their operation and impact of their advisory function, although CIT stated that its members of the Board conduct the assessment of the operation of the body which is then formally published and used only internally. The purpose of the assessment is to alter the processes and structures of the organisation in order to comply with the European standards and to ensure the effectiveness and efficiency of the operation of the body.

Most of the type B bodies stated recent examples where the advice they generated has had an impact on the state or policy formulations, which are available at their websites. Half of the bodies were aware that their scientific advice had been utilised by other domestic or international advisory bodies, while one was unaware. One stated that its advice has not been used since the body is so new (Cyprus Institute of Energy).

12.3.6 Changes in the advisory system

Only one out of the four interviewed bodies (ARI) underwent administrative changes during the past 5 years. It should be noted here that ARI was established in 1962; therefore, the change in its administrative scope was bound to take place at some point sooner or later.

Czech Republic

General Overview

13 Background

Policy making in the Czech republic is currently influenced by the changes being brought about through bringing legislation in line with the „acquis communautaire“ of the European Union. This is affecting many areas of legislation including justice and home affairs, environment, regional policy, agriculture, fight against organised crime and a number of other fields. The last few years have seen considerable change in the Czech political landscape. This includes the establishment of new regional government structures and the restructuring of individual ministries in order to oversee the implementation of new legislation. One such example is the new Agency established to oversee the implementation of the EU's agricultural and rural development (SAPARD) programme³. The Agency requires the interaction of six ministries and a variety of regional and sectoral development organisations. Many bodies are therefore new or have had their competencies recently extended.

Another interesting aspect concerning the delivery of advice in the Czech Republic are bodies that have been established to examine cross-border issues and whose members come from more than one country. These bodies are often bilateral agreements and are not international or pan-European organisations. One such example is the Commission for the Temelin Nuclear Power Plant which has members from the Czech Republic, Germany and Austria.

13.1 Policy making process

The Czech Republic is a parliamentary republic.

13.1.1 Parliament

The Czech Republic has a bicameral Parliament that consists of the Senate (81 seats; members are elected by popular vote to serve six-year terms; one-third elected every two years) and the Chamber of Deputies (200 seats; members are elected by popular vote to serve four-year terms).

13.1.2 The government

The government is the central policy-making and executive body. It consists of the Prime Minister, deputy prime minister and ministers. The ministers are appointed and dismissed by the President on the proposal of the Prime Minister.

³ SAPARD has a budget of MEURO 22 for 2000-2006 for the Czech republic.

13.1.3 Policy making

Under the Constitution, the right of legislative initiative belongs to members of parliament, groups of parliamentary deputies, the senate, the government, and representatives of the highest self-governing body.

Most laws are initially drafted on the Ministry level and are developed through an intra-governmental process which also draws on expert opinion from external sources. The Ministry is not required to take all opinions into account but has to justify not including them. Before the draft is put before government it goes before several advisory bodies who review it. The government then either accepts the draft and puts it before parliament or rejects it and sends it back to the Ministry to redraft.

The government can also issue decrees as secondary legislation without having concrete authorisation in primary legislation. The decrees have to be signed by the Prime Minister and the government member concerned. The ministries and other bodies authorised to do so by law, can also issue decrees.

13.1.4 Czech Ministries

- Ministry of Foreign Affairs.
- Ministry of Home Affairs.
- Finance Ministry.
- Ministry of Industry and Trade.
- Ministry of Education, Youth and Sports
- Ministry of Health.
- Ministry for Regional Development.
- Ministry of Environment.
- Ministry of Transport and Communications
- Ministry of Agriculture
- Ministry of Culture
- Ministry of Defence
- Ministry of Justice
- Ministry of Labour and Social Affairs

13.1.5 Advice and Governmental co-ordinating bodies

There are a number of Governmental Commission established to facilitate inter-ministry policy making mainly on cross-cutting issues such as social and economic strategy, privatisation, research and development, state information, human rights and Rom community affairs. The following Government Commissions relevant to this study:

- Governmental Council for Research and Development
- Inter-ministerial Anti-Drug Commission
- Central Commission on Epidemics

- Governmental Commission on Nuclear Accidents

13.1.6 Local Government and Decentralisation

The decentralisation process has been progressing since January 2001 when 14 self-governing regional authorities and regional offices were established. The first regional elections took place in November 2001. Following the elections, several important laws came into place including the *Acts on Regions, District Offices, and Budgetary rules*. The EU's 2001 *Regular Report On The Czech Republic's Progress Towards Accession* remarked that "the regions are still in the process of taking up the new competencies attributed to them, (education, regional development, social affairs, transport, culture, environment, health); in particular, the financial arrangements remain to be settled".

14 Policy areas

14.1 Agriculture (fisheries⁴)

The Ministry of Agriculture is the central authority of state administration responsible for agriculture. Its responsibilities also include the agricultural land fund, water management, preservation of natural water accumulation, preservation of water sources and preservation of water quality, and food industry regulation. It is also the central state authority responsible for forests, hunting and gamekeeping and fisheries outside territory of national parks.

The Ministry of Agriculture is also the governmental authority that regulates trading in agricultural and forestry products and oversees veterinary and plant-care, protection of animals against cruelty, and new plant varieties and breeds of animals.

The Ministry of Agriculture administrates a number of bodies that have regulatory, testing and advice roles. These include the *Czech Agricultural and Food Inspection*, the *State Veterinary Board*, the *State Board of Plant-Care*, the *Central Inspection and Experimental Institute of Agriculture*, and the *Czech Inspectorate for the Improvement and Breeding of Farming Animals*.

A new department for the milk sector was established in the Ministry of Agriculture in January 2001. A decision was also taken in September 2001 to establish the *Classification Agency for slaughter animals* as of January 2002.

The Ministry of Agriculture is also responsible for the implementation of the EU SAPARD Programme (agriculture and rural development programme). The *SAPARD Agency*, established 2001, is located at the Ministry.

- is responsible for the building of institutions that are necessary for the implementation of the SAPARD Programme in the Czech Republic,

⁴ Activity in this sector is largely confined to aquaculture and is not significant in the Czech Republic

- took part in the drafting of the programme document for the SAPARD Programme – the Agriculture and Rural Development Plan of the Czech Republic for the period 2000-2006,
- is responsible for the use of state budget finance allocated for the SAPARD Programme in the area of agriculture.

The SAPARD Agency (SA) has a Monitoring Committee and a Selection Committee both are comprised of a selection of ministry, expert, trade and regional organisations

The members of the National SAPARD Monitoring Committee are representatives of the following Ministries:

- Ministry of Agriculture,
- Ministry of Finance,
- National Fund,
- Ministry of Foreign Affairs
- Ministry for Regional Development,
- Ministry of the Environment,
- Ministry of Labour and Social Affairs,
- Director of the Department for SAPARD Programme Implementation and Control of the SAPARD Agency,
- Director of the Payments Department of the SAPARD Agency,

and representatives of the following organisations:

- Union of Towns and Communities of the Czech Republic,
- Association for Rural Renewal,
- Agrarian Chamber of the Czech Republic,
- Economic Chamber of the Czech Republic,
- Federation of the Food and Drink Industries of the Czech Republic,
- Managing and Co-ordinating Committee,
- Association of Private Farming of the Czech Republic,
- Young Farmers Union of the Czech Republic,
- Forestry Association of the Czech Republic,
- Union of Agricultural Co-operative Farms and Companies,
- State Veterinary Administration of the Czech Republic,
- Czech Union of Nature Conservationists,
- The County Association,
- Bohemia-Moravian Union of agricultural businessmen.

The National SAPARD Selection Committee is composed of the representatives proposed by the relevant ministries and institutions and they are appointed by the Minister of Agriculture of the Czech Republic in accordance with the Minister for Regional Development of the Czech Republic. Regular members shall be representatives of following ministries:

- Ministry of Agriculture,
- Ministry for Regional Development,
- Ministry of Finance

- Ministry of the Environment,
- and representatives of following institutions:
- Town Council of Prague and representatives of all 13 regions (at a level of regional officials),
- Central Land Authority,
- State Veterinary Administration of the Czech Republic.

The Ministry of Rural Development is also involved in drafting and implementing the plan and the Ministry of the Environment in supervising the implementation with respect to aspects of environmental protection.

14.2 Energy

In its transition from a centrally planned economy to a market economy, the Czech Republic has thoroughly reformed its energy policies and regulatory framework and restructured its energy sector. A new energy regulator was established in 2001 and adopted a schedule for opening its electricity and gas markets to competition. The effective introduction of competition, however, will depend on regulatory details and the privatisation of the state energy companies that still dominate the internal market. The schedule for phasing in third party access to electricity starts with the largest users and will eventually cover all customers by the end of 2006.

The energy policy section in the Ministry of Trade and Industry is part of the Metallurgy, Energy and Construction Division. The Section includes divisions for nuclear energy, electric power and heat production. The Section for Industry Privatisation is also involved in energy policy and liberalisation.

On January 1, 2001 a new *Energy Regulatory Authority* began operating in the Czech Republic. The authority is a state regulatory body funded from a separate chapter of the state budget, with an annual budget of €1.6 million. Its responsibilities include determining rates that customers will pay for energy and setting up the framework for third party access to the electrical grid. The ERO has the right to improve the regulatory framework by passing secondary legislation. Its competencies include the granting of market licenses, setting market rules and regulating prices.

The State Office for Nuclear Safety (SUJB) is the regulatory body responsible for governmental administration and supervision in the field of nuclear energy and radiation and of radiation protection. It supervises nuclear safety and nuclear facilities, physical protection of nuclear facilities, radiation protection, and emergencies.

14.3 Transport Policy

The Czech Ministry of Transport and Communications is responsible for transport policy.

Its responsibilities include the creation of transport and telecommunications policy and legislation and execution of state technical supervision of all modes of transport, postal services and telecommunications.

14.3.1 Road Transport

The field of activities of the road transport department is to ensure the functioning and supervision of all aspects of road transport and especially according to the Act on Road Transport No. 111/1994 Coll. and to ensure international relations in the field of road goods and passenger transport.

14.3.2 Railway Transport

The basic fields of activities of the Railroads and Railway Transport Department are to ensure the functioning and the supervision of matters concerning Railroads and Railway Transport, especially under the Act on Railways No. 266/1994 Coll. and under the Act No. 50/1976 Coll., on area planning and building code (Construction Law).

14.3.3 Water Transport

The main responsibilities of the water transport department are:

- inland navigation and state supervision over monitored waterways and operation on them
- execution and supervision in matters of maritime navigation
- methodical guidance and activity assessment of the State Navigation Authority and the Directorate of the Waterways of the Czech Republic

14.3.4 Transport, International Relations and Environmental Department

Transport Policy International Relations and Environmental Department ensures cross-sectional activities for all transport modes. The department guarantees publication of the magazine TRANSPORT, annual statistical publication TRANSPORT YEARBOOK, available also on the Ministry web site and other special occasional publications. The department has four sections which cover the following responsibilities:

Other departments include:

- Air Transport
- State Fund of Transport Infrastructure
- Public and Combined Transportation
- Telecommunications (Legislation, Policy, Digital Radio and Television Broadcasting, UMTS, International Relations)
- Postal Services
- Research and Development
- Road Traffic Safety (BESIP)
- Crisis Management Matters
- Information Systems Department

The Ministry of Transport and Communications is also involved in the EU ISPA programme, one of the three financial instruments to assist the candidate countries in the preparation for accession. The programme focuses on financing the development of infrastructure in the areas of transport, water, waste water and solid waste. The co-ordination is with the Ministry for Regional Development with involvement from the Ministry of the Environment on environmental issues.

14.4 Environment

The Czech Ministry of the Environment is responsible for environmental policy.

The environmental policies of the second part of the 1990s and the early twentyfirst century have been largely driven by accession requirements of the European Union.

As regards **administrative capacity** at central level, the Ministry of Environment established an inter-ministerial commission on reporting in April 2001, in line with the reporting directive.

The administrative reform, and in particular the creation of 14 regions as of January 2001, will have important implications for the environment field, as competences are being transferred to the regions and municipalities. In the past year, 50 persons from the Ministry of Environment and 19 from the District Offices were transferred to the regional authorities. In total, an average of five staff members work in the environment department of the regional authorities.

Organisations run by the Czech Ministry of the Environment

- Czech Environmental Inspection Agency
- Czech Environmental Institute
- Czech Hydrometeorological Institute
- Agency of Nature Protection and Landscape Conservation of the Czech republic
- State Environmental Fund of the Czech republic
- Czech geological Institute
- Geofund of the czech Republic
- Administration of Protected Landscape Areas of the Czech Republic
- T. G. Masaryk Water Management Research Institute

14.5 Health and the Consumer

The Ministry of Health is responsible for the preparation of health care legislation, health and medical research, for the licensing of pharmaceuticals and medical technology, and for the management of two institutes for postgraduate education and training of health professionals.

Overall competence in the area of consumer protection lies with the Ministry of Industry and Trade. The market surveillance mechanism is divided between several bodies, with the majority of supervisory activity conducted by three organisations: the Czech Agricultural and

Food Inspectorate (CAFI) and the State Veterinary Administration are active in specified areas of food control, whilst the Czech Trade Inspectorate (CTI) conducts much of the supervision of non-food products and the protection of the economic interests of consumers.

14.6 Research

The Ministry of Education, Youth and Sports is the central authority of the State administration for overall strategy, educational policy and the preparation of appropriate legislative standards and executive and operational activities. It establishes upper secondary and special schools. It distributes the financial resources from the State budget and develops the general scientific research and development policy as well.

The organisation with the main responsibility for research policy is the Research and Development Council of the Government of the Czech Republic. It is the main professional and advisory body on R&D issues of the Government. Its main competencies are:

- comment on legislative supporting documents relating to R&D, which are to be submitted to the Government,
- prepare the draft state budget for the sphere of R&D, i.e. to compile the proposal for the allocation of targeted and institutional means from the state budget for R&D support,
- consider the draft budget of the Grant Agency and documents on the state of the research and development submitted by the central bodies, the Grant Agency and other entities prior to their discussion by the Government,

15 Scientific Advice

Access to external advice and expertise is formalised in the case of the most important issues of governmental policy. This can be through government councils such as the Governmental Council for Research and Development or the Governmental Commission on Nuclear Accidents. It can also be through commissions that can be set up by individual ministers such as the Inter-ministerial Anti-Drug Commission or the Central Commission on Epidemics.

Advice can also come from executive agencies such as the State Office for Nuclear Safety and the Governmental Council for Road Traffic Safety. The heads of these bodies (offices) are not members of the government, but are appointed by it.

Many of the government departments have institutes that they turn to for advice. Academy of Sciences such as the Nuclear Research Institute or the Environmental Institute.

Increasingly independent commissions are being established to provide advice in the areas of ethics, bio-ethics and gene technologies.

Database report

16 Advisory Bodies Covered in the Database

Name of body	Policy areas covered	Who advised	Full/basic coverage	Nature of body	Type A or B
Research and Development Council of the Government of the Czech Republic	Research	Ministry	Full	Statutory Permanent	
State Office for Nuclear Safety	Energy		Full	Statutory Permanent	
The Academy of Sciences of the Czech Republic (ASCR)	Agriculture Environment Research	Legislature Ministry	Full	Statutory Permanent	
Central Commission for Animal Welfare	Agriculture Transport Environment Fisheries Research Health	Legislature Ministry	Full	Statutory Permanent	A
Czech Environmental Inspectorate	Environment	Ministry Other advisory body	Full	Statutory Permanent	B
The Czech Commission for the Use of Genetically Modified Organisms and Products	Agriculture Environment Health	Ministry	Full	Non- statutory permanent	A
Institute of Health Information and Statistics of the Czech Republic	Health	Legislature Ministry Agency Other advisory body	Full	Statutory Permanent	B
Czech Environmental Institute	Environment Research	Ministry	Full	Statutory Permanent	B
Czech Hydrometeorological Institute	Environment Research	Ministry	Basic	Statutory Permanent	B

16.1 Structural issues

16.1.1 Secretariat

All the Advisory bodies covered in the study of the Czech Republic had secretariats. While their primary function may be administrative, most of the secretariats also have wider functions such as preparing materials and communicating between the body and a ministry. Background work by the secretariat is one of the sources of information used in the generation of advice, although it does not tend to be one of the more important ones.

16.1.2 Membership

The type A bodies covered in the study appear to follow a committee type structure with around 20 members. For type B bodies the membership is more varied – from 84 members up to 800. There is no real pattern concerning the backgrounds of the members of the advisory bodies. Two of the type B bodies have large number of civil servants, reflecting the fact that they are institutes with staff employed by the state. It may be that a number of these civil servants could be from scientific, social scientific etc. backgrounds.

16.1.3 Budgets

For the few bodies where it is specified, the annual budgets range from €34,000 (a type A body) to €10,000,000 for the Czech Environmental Inspectorate.

16.2 Functional issues

16.2.1 Scope of work

The work of four of the bodies studied is focused in a particular area. The Research and Development Council of the Government of the Czech Republic has a broader scope while, The Academy of Sciences of the Czech Republic (ASCR) is free to examine any issues that it chooses.

16.2.2 Independence

All of the advisory bodies studied are established in law and most have links with ministries, who are the main users of advice. Members are generally selected through a mixture of appointment and open advertisement. Apart from Institute of Health Information and Statistics of the Czech Republic, which is purely reactive, the bodies do have some freedom to select the subjects that they examine.

16.2.3 Transparency

Where it is specified, all the bodies are governed by a code of practice. The form of these varies and includes, for example, related legislation, decree, rules of procedure issued by a ministry. For most bodies their remit appears to be available on the web, although in two cases, the Czech Environmental Inspectorate and the Institute of Health Information and Statistics of the Czech Republic, it is available on request. In general, advice reports are also available on the web, although again, those of the Institute of Health Information and Statistics of the Czech Republic are only available on request. For those bodies where it is specified, it is only the Research and Development Council of the Government of the Czech Republic for which agendas are confidential, with other bodies having them available on request. However, only in two cases, for Czech Environmental Institute and the Institute of Health Information and Statistics of the Czech Republic are meeting minutes available on request. Only for two bodies is it specified that members have to declare any potential conflicts of interest. Members of all the bodies, except for the Czech Environmental Institute, are required to keep materials used in discussions confidential, with this body and the Institute of Health Information and Statistics of the Czech Republic being the only ones that do not require members to keep the contents of discussions confidential. The Czech Commission for the Use of Genetically Modified Organisms and Products and Czech Environmental Institute hold meetings that are open to the public.

16.2.4 Generation, delivery and response to advice

The bodies tend to use a range of sources in generating their advice but the most important source is the expertise of the members themselves. National expert consultation also figures prominently. With respect to finalising advice, two of the bodies reach a common position through a majority vote, although in one of these cases efforts will first be made to reach consensus, while three others agree the final form of a report through consensus. In delivering the advice, only the Research and Development Council of the Government of the Czech Republic engages in a dialogue with policy-makers, with other bodies presenting their final advice. Only for the Czech Commission for the Use of Genetically Modified Organisms and Products is there a formal requirement for a policy response to the advice they deliver.

16.2.5 Evaluation and impacts of advice

Two of the bodies studied undergo formal assessment. These assessments are undertaken by the body themselves and the sponsoring body and they are formally published. For all the bodies noticeable impacts on policymaking can be discerned. For example, the Czech Commission for the Use of Genetically Modified Organisms and Products has played an important role in the development of new legislation on the use of GMOs that will enter into force in 2003, while the Czech Environmental Institute has been involved in drafting a national sustainable development strategy for the Czech Republic. In three cases advice has been taken up by bodies from other countries – in particular other candidate countries.

16.2.6 Changes to the advisory system

Most bodies have undergone some recent changes, including changes to their scope and mission, institutional changes and administrative changes.

Denmark

General Overview

17 Background

The political system of Denmark is based on a parliamentary model of governance. The legislative power is executed by the one-chamber parliament (Folketinget) that is elected every fourth year through a public vote. Formally, the monarch is the highest representative of the executive power, but in reality the cabinet of ministers exercise this power. The monarch, considering the parliamentary situation, appoints the Prime Minister. The governing cabinet is dependent on the support of the parliament. The constitution states that all ministers have to have the confidence of the parliament. In a case of a vote of censure towards the Prime Minister the whole cabinet has to resign.

Denmark is an example of cabinet government, but combined with a strong position for individual ministries. The cabinet makes major decisions collectively, but a large proportion of executive power is also delegated to individual ministries. The cabinet at the moment consists of 18 ministers and the Government office consists of 18 ministries that both prepare decisions and, to a large extent, implement policy. The ministries are:⁵

- Ministry of Economic Affairs, Business and Trade
- Ministry of Foreign Affairs
- Ministry of Finance
- Ministry of Employment
- Ministry of Justice
- Ministry of Culture
- Ministry of Refugees, Immigration and Integration
- Ministry of Taxation
- Ministry of Transport
- Ministry of Science, Technology and Innovation
- Ministry of Food, Agriculture and Fisheries
- Ministry of Defence
- Ministry of Environment
- Ministry of the Interior and Health
- Ministry of Ecclesiastical Affairs
- Ministry of Education
- Ministry of Social Affairs
- Ministry of Gender Equality

The general principle of the Danish system of public administration on the central level is that of the traditional bureaucracy. The Danish system can primarily be characterised a traditional hierarchical system of governance. In most policy areas the general principle is that the central administration is organised within the ministry, that is a hierarchical

⁵ Information from April 2002.

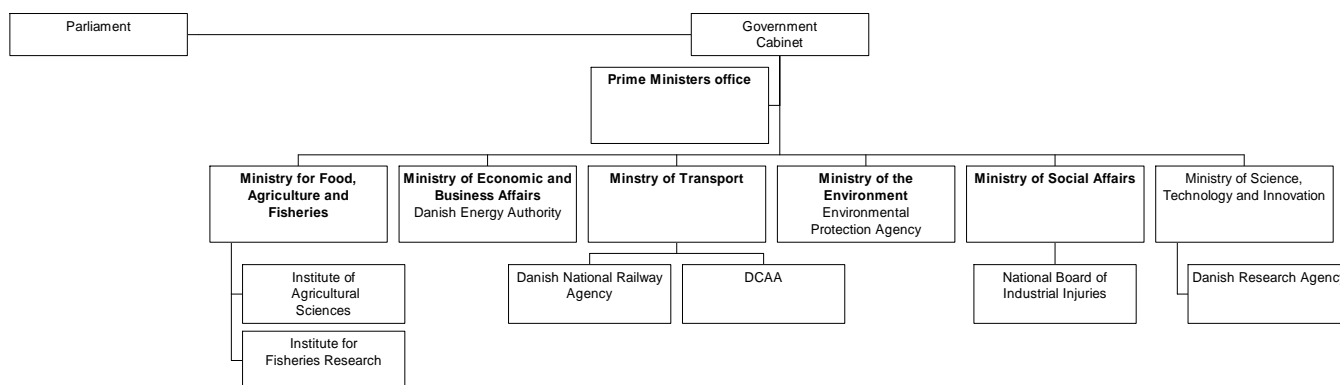
organisation divided into departments, directorates and boards.⁶ The Department is the political level of the organisation, and is responsible for the overall management of the sectors under the Ministry. It also assists the Minister as a secretariat in matters where the Minister is involved. Different directorates and boards are responsible for implementation.

In reality there are variations within this ministerial structure. Firstly most ministries have, in different extents, some boards and councils that are placed outside the ministerial hierarchy that have independent roles in policy formulation and implementation. Secondly directorates and boards within the ministry do in most cases have a relatively independent responsibility for implementation tasks, while the departments has the responsibility to work with formulating political objectives and acting as staff units for the ministers. Thirdly some ministries differ in most respects from the general principle, and are also formally organised in a ministry agency structure (Hansen 1999).

As the other Nordic countries Denmark is a unitary political system, combined with a significant local self-rule. Even if, as in the other Nordic countries, the state has imposed great responsibilities on these municipalities, Denmark is often defined as a more decentralised political system than for example Sweden. Local authorities have a lot of responsibilities within areas such as social health care, tax collection and environmental regulation.

As the other Nordic countries Denmark is furthermore often characterised as a corporative political system. In Denmark this is, for example, expressed in a large number of permanent councils and committees with, primarily, representatives from different interest organisations. This system is, however, going through changes at present time. Some councils have, for example, been abolished.

Structure of Government in Denmark



⁶ This system can be compared with, for example, the Swedish system of public administration where ministries primarily are staff bodies to the ministers, and the responsibility for implementation is in the hands of relatively autonomous boards and agencies.

17.1 Policy areas

17.1.1 Agriculture

This area is the responsibility of the Department for Food and the Environment within the Ministry for Food, Agriculture and Fisheries (Fødevareministeriet). The department is divided into four sub-departments that handles consumer policy, food policy, and environmental issues in the field of agriculture as well as environmental coordination. It also deals with the legislative work within the entire food sector and the prevention and combating of diseases among livestock and in non-animal production. The Department for Industry and Market Relations within the same ministry deals with the market policy within the EU and the overall co-ordination of the Ministry's EU policy on foodstuffs and agriculture

Other important actors are for example the Danish Plant Directorate that is responsible for the quality and health of agricultural produce and the control of the EU agricultural subsidy schemes, and the Danish Institute of Agricultural Sciences (DIAS) that deals with a wide area of research within agricultural and food production.

17.1.2 Fisheries

This policy area is the responsibility of the Department for Fisheries (Fiskeriafdelingen) within the Ministry for Food, Agriculture and Fisheries. The implementation of policy by control and inspection is the responsibility of the Directorate of Fisheries.

17.1.3 Energy

Energy policy is primarily the responsibility of the Ministry of Economic and Business Affairs that works to provide better conditions for the Danish trades and industries. The Ministry consists of a department and 10 different boards. Within the department there is an office that handles energy policy. The responsibility for implementation is in the hands of the Danish Energy Agency (Energistyrelsen), a rather independent board within the Ministry.

The Danish Energy Authority focuses on the production, supply, and consumption of energy and ensures, on behalf on the State, the responsible development of energy in Denmark from the perspectives of society, the environment, and security of supply.

The Danish Environmental Protection Agency is also involved in energy related policy issues.

Energy policy is also to a large extent a responsibility for local authorities.

17.1.4 Transport

The Minister of Transport has the task of endeavouring to implement the Government's policy within this area, including drafting the required legislation etc. The daily administration and handling of tasks and assignments are carried out by the institutions,

executive agencies, corporations, councils and boards (compared to other Danish ministers this one is relatively small with a staff of about 165 people).

The implementation of transport policy is mainly handled by a number of relatively autonomous agencies, for example the Danish National Railway Agency and the Civil Aviation Administration. The Danish National Railway Agency is a government corporation, which operates and develops the government railways, but also handles a number of regulatory tasks on behalf of the Ministry of Transport. The Danish Civil Aviation Administration (DCAA) is an agency under the Ministry of Transport that is tasked with handling regulatory functions relating to the Danish air transport sector.

17.1.5 Environment

The Ministry of Environment has the overall responsibility for environmental policy in Denmark. The Ministry is led by a department and has three agencies and three independent research institutes within its organisation.

The Danish Environmental Protection Agency spheres of activity are concentrated on preventing and combating water, soil and air pollution. The agency has the main responsibilities for, together with other agencies and local government, implementing environmental policy.

Also other ministries are dealing with environmental policy, for example the Ministry for Food, Agriculture and Fisheries and the Ministry of Transport.

17.1.6 Health and the Consumer

The most important ministries in this area are the Ministry of the Interior and Health (responsible for health issues, medical issues etc.), the Ministry of Social Affairs (with an overall responsibility for social policy), and Ministry for Food, Agriculture and Fisheries.

The National Board of Health (Sundhedsstyrelsen) is an independent board under the auspices of the Ministry of the Interior and Health. It has the following fields of authority:

- to monitor health and follow developments within health issues
- to advise the Ministry of the Interior and Health and other public authorities
- to supervise health care professionals

Important institutions under the auspices of the Ministry of Social Affairs the National Board of Industrial Injuries (Arbejdsskadestyrelsen) and the Danish National Institute of Social Research (Socialforskningsinstituttet).

17.1.7 Research

Research is the responsibility of several ministries but the Ministry of Science, Technology and Innovation handles the overall research policy. The object of the ministry is to promote

the interaction of trade and industry, centres of research and education and to strengthen coordination in pursuance of industry and research policy.

A number of institutions and commissions are associated with the Ministry of Science, Technology and Innovation, including the universities and the Danish Research Agency (Forskningsstyrelsen). The Danish Research Agency is an independent institution under the Ministry of Research. The agency houses the secretariats for the Board of Danish Research Councils (Forum), The Danish Research Councils (SHF, SJVF, SNF, SSF, SSVF, STVF), The Danish Research Training Council (FUR), The Central Scientific Ethical Committee (CVK), The Danish Committees on Scientific Dishonesty (UVVU) and different programme committees.

In Denmark there are also a large number of governmental research institutes that play important roles in producing applied research in several areas.

18 Scientific advice

18.1 General Background

As in the other Nordic countries ad-hoc committees (usually called commissions) play important roles in providing scientific advice into the policy process. In Denmark the parliament, a single minister or the cabinet appoints these committees (compare with Sweden where the cabinet appoints these kinds of committees). The number of ad-hoc committees is however not as large as in Sweden and Finland, and the number has also decreased significantly during the last two decades (Hansen 1999, s. 90, Pedersen 1999, s. 143).

In general the committee system in Denmark is not as formalised as in Sweden and Finland. It is more common with informal working groups of different kinds. Furthermore the referral system is not institutionalised in the same way as in Sweden.). An interesting observation is also that the number of committee members from the research community has increased during the 1990s (Gunnarsson & Lemne 1998).

In Denmark there are, as was pointed out earlier, a large number of permanent committees, councils etc., with advisory functions. These bodies are important sources of influence for interest groups of different kinds. Some bodies have also explicit functions as scientific advisory bodies, for example the Danish Council for Research Policy and the Danish Council on Nutrition. An important group of advisory bodies are the research councils. These councils have explicit functions as advisory bodies to the Government in their specific fields.

The Danish Government research institutes have played important roles in producing mission-oriented research for the ministries. Mission oriented research is primarily executed by research institutes under the auspices of different ministries, not as in Sweden where a large part of the sectorial research is produced by the universities.⁷ The research institutes cover about 25 percent of the total public sector research. These institutes are also important providers of expert advice to ministries as well as other actors. The institutes, as well as university researchers, are also often involved in evaluations of public programs.

⁷ In the last two decades the Danish universities have, however, become more involved in application oriented issues.

Due to the strong positions of the ministries in the Danish system, informal networks and temporary working groups dominated by civil servants play an important role in providing advice. Scientific advice is in many areas to a large extent provided through informal channels, but normally involving different expert institutions, such as sectorial institutes or universities (Gunnarsson & Lemne 1998; Daugbjerg 1999).

Danish government has recently investigated the research funding system, the research advisory system, and the sectorial research system.

18.2 Advice provision in relevant policy areas

18.2.1 Agriculture

Important bodies with advisory functions are the Danish Institute of Agricultural Sciences (DIAS) that deals with a wide area of research within agricultural and food production, and the Advisory Committee on Agriculture, Fisheries and Food Research.

18.2.2 Fisheries

Important bodies that provide the Ministry with scientific advice in this area is the Danish Institute for Fisheries Research (DIFRES) and the Danish Institute of Agriculture and Fisheries Economics (FØI). There are also frequently ad-hoc committees working with aspects concerning fisheries.

18.2.3 Energy

The Minister for Energy has appointed a committee (the Advisory Committee for Energy Research) with the main task to give advice to Energistyrelsen (Danish Energy Authority) on the administration of the Energy Research Programme and furthermore give general advice on energy research priorities. Members come from industry, research institutions and universities.

18.2.4 Transport

The Danish Transport Research Institute functions as an advisor to the ministry, and is participating in different ministerial working teams. There are also other advisory bodies, although not primarily scientific, in this area.

18.2.5 Environment

The National Environmental Research Institute (NERI) is an independent research institute under the Danish Ministry of Environment and Energy. NERI's mission is to provide a sound and informed scientific basis for making environmental decisions at the political, administrative and commercial levels.

A number of councils have important advisory functions as, for example, the Danish Advisory Committee on Pesticide Research and the Pesticide Board.

18.2.6 Health and the Consumer

Important advisory bodies are:

- The National Board of Health (Sundhedsstyrelsen) and different bodies connected to it (for example the Centre for Evaluation and Health Technology Assessment)
- The Danish National Institute of Social Research (Socialforskningsinstituttet),
- The Public Health Institute
- The Advisory Committee on Health Care Research (Sundhedsministeriets rådgivende forskningsudvalg).
- Different committees connected to the Danish Medicines Agency
- The Danish Council on Nutrition

According to sources at the ministries scientific advice is usually organised in ad-hoc committees and working groups.

18.2.7 Research

Within the department of research, that is responsible for research policy within the Ministry of Science, Technology and Innovation, there are an Analyses and Strategies Division that carries out strategic analyses of Danish research.

The Danish Council for Research Policy (Danmarks Forskningsråd) was established in 1996. The Council is an advisory body to the Minister for Science, Technology and Innovation. Advice may be given on request or on the Council's own initiative. The parliament and any minister may request the advice of the Council.

Other important actors are the the Danish Institute for Studies in Research and Research Policy, the Danish Research Agency, and different advisory committees connected to sectorial ministries (se below).

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Database Report

20 Advisory Bodies covered in database

	Name of body	Policy areas covered	Who advised	Full/basic coverage	Nature of body	
<i>Type A1 (committee at ministry level)</i>	The Danish Council for Research Policy	Research	Legisl. Ministry	Full	Statutory-permanent	
	The Advisory Committee on Agriculture, Fisheries and Food Research	Agri. Environ. Fisheries Health	Ministry Agency	Full	Statutory permanent	
	The Danish Council of Ethics	Health Research	Legisl. Ministry	Full	Statutory permanent	
<i>Type A2 (committee at agency level)</i>	The Danish Council on Nutrition	Health Agri.	Ministry Agency	Basic	Statutory permanent	
	The Advisory Council on Energy Research	Energy Research	Agency	Full	Non-statutory permanent	
	The Pesticide Board	Agri. Environ. Health	Agency	Full	Statutory permanent	
	Advisory Committee on Pesticide Research	Agri Environ. Health Research	Agency	Full	Statutory permanent	
	The Scientific Advisory Board of the Danish Centre for Evaluation and Health Technology Assessment	Health	Agency	Full	Statutory permanent	
	The Danish Pharmacopoeia Commission	Health	Agency	Basic	Statutory permanent	
	Committee on Adverse Drug Reactions	Health	Agency	Basic	Statutory-permanent	
	<i>Type B1 (Research council)</i>	The Board of Danish Research Councils	Research	Legisl. Ministry	Full	Statutory-permanent

*Type B2
(Gov.
Institute)*

The Danish Agriculture and Veterinary Research Council	Agri. Research	Legisl. Ministry	Full	Statutory-permanent
The Danish Research Council for the Humanities	Research	Legisl. Ministry	Full	Statutory-permanent
The Danish Natural Sciences Research Council	Research	Legisl. Ministry	Full	Statutory-permanent
The Danish Technical Research Council	Research	Legisl. Ministry	Full	Statutory-permanent
The Danish Social Science Research Council	Research	Legisl. Ministry	Full	Statutory-permanent
The Danish Medical Research Council	Research	Legisl. Ministry	Full	Statutory-permanent
The Danish Transport Research Institute	Transport	Ministry	Basic+ relevant questions in other sections	Statutory-permanent
The Danish Institute for Fisheries Research	Fisheries	Ministry	Basic+ relevant questions in other sections	Statutory-permanent
The Danish Environmental Research Institute	Environ.	Ministry	Basic+ relevant questions in other sections	Statutory-permanent
The National Institute for Public Health	Health	Ministry Agency	Basic+ relevant questions in other sections	Statutory-permanent
The Danish Centre for Evaluation and Health Technology Assessment	Health	Ministry Agency	Basic+ relevant questions in other sections	Statutory-permanent

20.1 General trends

This analysis is based on data about a selection of permanent scientific advisory bodies in the Danish political system. A scientific advisory body is defined as a governmental body established to, as the single or one of its major tasks, give scientific advice to decision makers in the Government (executive or legislature).

The bodies have been divided into two groups: type A and type B bodies. Type A-bodies are committee-structured bodies with scientific advice as the major function. The type B-bodies are governmental bodies with multiple functions. There are two sub groups of A-type bodies: committees and councils at the Ministry-level (A1) and committees and councils at the agency level (A2). The B-type bodies have also been divided in two sub groups: research councils and research institutes. The main objective of the councils is research funding, but they also have advisory and dissemination objectives. The institutes are not only research performing organisations, they also have broader roles as expert bodies within their fields. The Danish Centre for Evaluation and Health Technology Assessment is an example of an Evaluation centre that also functions as an advisory body.

The identification of scientific advisory bodies was made in three steps. First by identifying bodies mentioned at the web sites of the relevant ministries. Secondly by asking officials at the relevant governmental ministries to identify the *major* national bodies with scientific advisory functions. Thirdly by a snowball method, asking respondents of identified bodies to identify other important scientific advisory bodies in their field. In areas with many advisory bodies, such as in the health policy area, a selection of typical bodies was made.

Not all bodies identified have been studied in depth in this investigation. What concerns type A1 (committees/councils at the Ministry level), type B1 (research councils) and type B2 (governmental research institutes) bodies, all major bodies have been selected. However, at the agency level there exists a large number of advisory bodies (type A2). In this sub group advisory bodies from four different types of agencies have been selected, with the ambition to show the variety of structures at this level.

All type A1 bodies, except the Advisory Council of Energy Research that is set up by a Minister, are established by law. The type A2 bodies are also established by law, but connected to specific governmental agencies.

In the A1 committees the primary objects of advice are the Ministry and, in most cases, also the parliament. The primary objects of advice in the type A2 bodies are different agencies. The type B1 bodies advise both the Ministries and the Parliament, while the B2 bodies primarily give advice to the ministries.

A large number of bodies are related to the policy areas of health and research. There are no permanent type A bodies have been identified within the policy area of Transport (although there might be ad-hoc committees or working groups). The Danish Council of Transport, which was an advisory body, was abolished in 2002.

Most bodies were established during the 1980s and 1990s.

20.2 Structural issues

20.2.1 Secretariat

Among the type A1 bodies the secretariat function is provided by a specific secretariat (in three cases) or by the Ministry (in one case). In this group the secretariats are either placed outside the ministerial structure, or, in the case of the Danish Council for Research Policy,

within the Ministry of Science, Education and Innovation. These bodies have secretariats of 1-6 persons. The secretariat function for the Research councils (type B1 bodies) is provided by a specific institution: the Danish Research Agency, an independent agency under the auspices of the Ministry of Science, Education and Innovation.

The function of the secretariats is often not only to prepare meetings, but also to prepare decisions. In many cases the members of the secretariat are highly qualified civil servants, or even scientific experts. In almost all A bodies and B1 bodies “background work of the secretariat” are one of the, major or minor, inputs to the advice of the bodies. It is minor in the Research Councils and the committees closely connected to the ministries.

20.2.2 Membership

The type A committees do usually have between 10-20 members. The research councils have around 15 members. For the B-type bodies the membership numbers depends on what is counted. If the organisation as a whole is considered then the membership are between 15 (the Danish Transport Research Institute) to over 500 (the Danish Environmental Research Institute). However, if the top decision making body within these organisations are considered then the numbers are similar to type A bodies.

The type A bodies and the B1 bodies (the Research Councils) are dominated by academic experts, especially in natural and physical sciences (about 60% of the total number of members). Rather few type A bodies have “academic experts in social scientists” as members (six). There is also a rather high share of members from NGOs and from the Industry. There are no parliamentarians represented in the type A bodies. This is in line with a Danish political tradition of not mixing preparation and decision-making in the policy process. There are also few experts from other countries represented in the type A bodies. In most type A and B1 bodies 30-50 % of all members are women. No body has less than two women among its members.

20.2.3 Budgets

The budgets of the type A1 bodies are between 100 000 and 500 000 Euros. The budgets of these bodies are decided on by the parliament (in three cases) or by the Minister (in one case). The budgets of the type A2 bodies are provided by the agency that the body is connected to, and is therefore difficult to estimate. The budgets in these committees are primarily spent on the secretariat function and expenses for the members, although a few also have possibilities to commission investigations (after a request to the responsible ministry).

20.3 Functional Issues

20.3.1 Scope of work

Most of the type A bodies covered in this study are focused in their scope. There are however a couple of broader bodies at the Ministry level. The research councils are also considered as bodies with a more focused scope, while the institutes are relatively broad in their scope.

Some type A bodies are working with information and communication with the public (the three councils at ministry level), but the ones closer to ministries or to specific agencies are more focused on advice to the decision makers. The type B1 bodies have research funding and information as important objectives, while the type B2 bodies also work with research performance, information etc.

20.3.2 Independence

There are three examples of type A bodies that have a rather strong formal status: the Danish Council for Research Policy, the Danish Council of Ethics and the Danish Council of Nutrition. They are all established by law, they all have their own secretariats, they in general are active in selecting their own areas for advice, and they have active communication policies. These bodies do also work more with final statements than with dialogue. The Council of Ethics and the Council of Nutrition are also independent of the ministerial structure. The other type A1 bodies have a weaker formal status. Most of them are established by law, but the Ministries or specific agencies provide their secretary functions, and they are usually more reactive than active. In all type A bodies the responsible minister appoints the members, except in the Council of ethics where the Parliament appoints half of the number of members.

The type B bodies all have a rather independent status. They are established by law, and have large resources (money and personnel). This especially holds for the type B2 bodies, but also the research councils have a strong formal status.

20.3.3 Transparency

The A1 bodies are governed by instructions from the Government, by specific laws or internal working forms, but not really any code of practice. Some type A2 bodies, concerned with medicines and environmental issues, do however have some code of practice. The reasons are, for example, industrial secrecy or personal integrity. In these cases there are also demands about conflict of interest, and some documents and discussions are confidential.

No bodies do have meetings in public, but some arrange conferences, seminars, hearings etc., that can be categorised as communication with the public.

20.3.4 Generation, delivery and responses to advice

The bodies operate with either a consensus decision-making model, or present a number of options. Just a few of the bodies works with a majority vote system (although this can in some cases formally be an option). Most bodies at the Ministry level work with both dialogue and present final statements, while the ones at the agency level work more with final statements.

The most important sources for the advice are the expertise of the members and the background work of the secretariat, although many also consult national or, in a few cases, international external expertise. The type A2 bodies are more reliable on the expertise of the

members than the type A1 bodies. Bodies with a broader mandate rely more on the background information of the secretariat and sometimes on external experts. The major type A1 bodies work more with policy formulation and priority setting, while the minor type A2 bodies work more with risk assessment and technological standards.

There are a no cases where a policy response is required.

20.3.5 Evaluation and impacts of advice

For most bodies it is hard to give concrete examples of impact. It is often a matter of impact on a process or the development within a specific policy area. What concerns impact on the work of other countries or of international bodies there are also few examples; these concern medical and ethical issues. In these cases it seems to be a international network, due to common legislation and on going discussions about, for example, gene technology. Some representatives of bodies also mention that there are cases of organisational diffusion.

20.3.6 Changes in the advisory system

In Denmark the general trend seems to be less reliance on committees and councils, many are abolished, but the critique seems primarily to be directed towards the corporative aspect of decision making (the dominance of interest groups in these councils and committees), not the scientific advisory function. There are also examples of rather new councils with broad advisory mandates (advising decision makers as well as other organisations), for example concerning Nutrition and Ethics, which also has equivalents in other countries.

EU

General Overview

21 Background

The European Union is built on an institutional system that is the only one of its kind in the world. The Member States delegate sovereignty for certain matters to independent institutions that represent the interests of the Union as a whole, its member countries and its citizens. The Commission traditionally upholds the interests of the Union as a whole, while each national government is represented within the Council of the European Union, and the European Parliament is directly elected by citizens. Democracy and the rule of law are therefore the cornerstones of the structure. This "institutional triangle" is flanked by two other institutions: the Court of Justice and the Court of Auditors. A further five bodies make the system complete.

- European Parliament
- Council of the European Union
- European Commission
- Court of Justice
- Court of Auditors
- European Central Bank
- Economic and Social Committee
- Committee of the Regions
- European Investment Bank
- European Ombudsman

21.1 Decision-making in the European Union

Decision-making at European Union level is the result of interaction between various parties, in particular the "institutional triangle" formed by the European Parliament, the Council of the European Union and the European Commission. The Court of Auditors, the Economic and Social Committee, the Committee of the Regions, the European Central Bank and the Economic and Financial Committee also intervene in many specific areas. The rules for this decision-making procedure are laid down in the Treaties and cover every area in which the European Union acts. Even though there are certain areas, where specific arrangements apply, in general, there are three main procedures which, depending on the case, govern decision-making on the legislative front: co-decision; assent; consultation.

The choice of decision-making procedure depends on the legal basis of the initiative. It is up to the European Commission to determine the legal basis when it draws up a proposal. The choice must be based on objective criteria that are open to judicial review.

This choice is very important when it comes to defining the border between, say, a measure coming under the consultation procedure (e.g. in the area of agriculture) and a measure calling for co-decision (e.g. in the context of the internal market). It is not possible to combine several legal bases requiring different decision-making procedures.

As the above example illustrates, the choice of legal basis mainly concerns the relative powers of Parliament and the Council, with Parliament merely giving its opinion in the case of consultation but acting as a genuine co-legislator in the co-decision procedure.

21.1.1 The co-decision procedure

The co-decision procedure was introduced by the Treaty on European Union (Maastricht Treaty, 1992) and is governed by Article 251 of the Treaty establishing the European Community. It was simplified and its field of application extended by the Treaty of Amsterdam (1997). It provides for two successive readings, by Parliament and the Council, of a Commission proposal and the convocation, if the two co-legislators cannot agree, of a "conciliation committee", composed of Council and Parliament representatives, with the participation of the Commission, in order to reach an agreement. This agreement is then submitted to Parliament and the Council for a third reading with a view to its final adoption.

21.1.2 Assent

The assent procedure was introduced by the Single European Act (1986). It means that the Council has to obtain the European Parliament's assent before certain very important decisions are taken. Parliament can accept or reject a proposal but cannot amend it.

21.1.3 Simple consultation

Under the consultation procedure, the opinion of the European Parliament is sought. Once it has received this opinion, the Commission can amend its proposal accordingly. The proposal is then examined by the Council, which can adopt it as it is or amend it first. However, if the Council decides to reject the Commission proposal, this must be a unanimous decision. The areas covered by this procedure are:

- Police and judicial co-operation in criminal matters (Communitarisation)
- Revision of the Treaties
- Enhanced co-operation (launch)
- Discrimination on grounds of sex, race or ethnic origin, religion or political conviction, disability, age or sexual orientation
- EU citizenship (implementation arrangements, new rights)
- Agriculture
- Visas, asylum, immigration and other policies associated with the free movement of persons
- Transport (principles likely to have a significant impact on the standard of living and employment in certain regions and the exploitation of transport facilities)
- Competition rules
- Tax arrangements
- Economic policy (changing the protocol on the excessive deficit procedure)

21.2 Main Actors

21.2.1 The European Parliament

Elected every five years by direct universal suffrage, the European Parliament is the expression of the democratic will of the Union's 374 million citizens. Brought together within pan-European political groups, the major political parties operating in the Member States are represented. The European Parliament has steadily acquired greater influence and power through a series of treaties. These treaties, particularly the 1992 Maastricht Treaty and the 1997 Amsterdam Treaty, have transformed the European Parliament from a purely consultative assembly into a legislative parliament, exercising powers similar to those of the national parliaments. The Parliament has three essential functions:

1. It shares with the Council the power to legislate, i.e. to adopt European laws (directives, regulations, decisions). Its involvement in the legislative process helps to guarantee the democratic legitimacy of the texts adopted;

The normal legislative procedure is co-decision. It puts the European Parliament and the Council on an equal footing and leads to the adoption of joint Council and European Parliament acts. Through the co-decision procedure, many more Parliament amendments find their way into Community laws and no text can now be adopted without the formal agreement of the European Parliament and the Council of the European Union. Co-decision is now one of Parliament's most important powers. The co-decision procedure applies to the free movement of workers, creation of the internal market, research and technological development, the environment, consumer protection, education, culture and health. It was used, for example, when the European Parliament adopted the 'television without frontiers' directive prohibiting sporting events from being broadcast only in encrypted form. This procedure also allowed Parliament to secure much stricter rules on fuel quality and motor oil from the year 2000, as a means of making drastic cuts in atmospheric pollution. Although co-decision is the standard procedure, there are important areas, such as tax matters or the annual farm price review, in which Parliament simply gives an opinion.

It shares budgetary authority with the Council, and can therefore influence EU spending. At the end of the procedure, it adopts the budget in its entirety;

This is a significant power, which allows the European Parliament to assert its political priorities. The European Parliament adopts the Union's budget for the following year each December. The budget does not come into force until it has been signed by the President of the European Parliament, giving the Union the financial resources it needs for the following year.

Since the 1970 and 1975 Luxembourg Treaties which created the Community's own resources, the European Parliament and the Council have become the two arms of the budgetary authority - in other words, they share the power of the purse.

Parliament has the last word on spending on the regions (European Regional Development Fund), the fight against unemployment, particularly among young people and women (European Social Fund), cultural and educational programmes, such as Erasmus and Socrates, and it can increase expenditure within a ceiling agreed with the Council and Commission. It

uses its powers to increase the funds for humanitarian aid and refugee programmes. When it comes to spending on agriculture, Parliament can propose modifications but it is the Council which has the final say.

Where Parliament and the Council fail to agree on the amount of expenditure after two readings of the draft budget, between May and December, Parliament has the right to reject the budget as a whole and the procedure has to begin again. It is the President of Parliament's signature that makes the budget enforceable.

Having adopted the budget, Parliament also monitors the proper use of public funds through its Committee on Budgetary Control. In specific terms, this means that it scrutinises the management of funds, acts continually to improve the prevention, detection and punishment of fraud, and sees whether the best possible results have been obtained from Community spending. Parliament gives an annual assessment of the Commission's use of the funds before granting it a 'discharge' on the implementation of the budget. In 1999, Parliament refused to grant the Commission a discharge for 1996 on the grounds of mismanagement and a lack of transparency.

2. It exercises democratic supervision over the Commission. It approves the nomination of Commissioners and has the right to censure the Commission. It also exercises political supervision over all the institutions.

Parliament exercises democratic supervision over all Community activities. This power, which was originally applied to the activities of the Commission only, has been extended to the Council of Ministers, the European Council and the political co-operation bodies which are accountable to Parliament. The European Parliament can also set up committees of inquiry. It has done so on several occasions, particularly on 'mad cow disease', which led to the establishment of a European Veterinary Agency in Dublin. It was also Parliament that secured the creation of the European Anti-Fraud Office (OLAF) in budgetary matters.

The European Parliament is the only Community institution that meets and deliberates in public. Its debates, opinions and resolutions are published in the *Official Journal of the European Union*.

21.2.2 The Presidency, the Bureau and the Conference of Presidents

The President represents Parliament on official occasions and in international relations, presides over its plenary sittings and chairs meetings of the Bureau and the Conference of Presidents.

The Bureau is the regulatory body that is responsible for Parliament's budget and for administrative, organisational and staff matters. In addition to the President and fourteen vice-presidents, it includes five quaestors, who deal in a consultative capacity with administrative and financial matters relating to Members and their statute. The members of the Bureau are elected for a term of two-and-a-half years.

The Conference of Presidents comprises the President of Parliament and the political group chairs and is the political governing body of Parliament. It draws up the agenda for plenary

sessions, fixes the timetable for the work of parliamentary bodies and establishes the terms of reference and size of parliamentary committees and delegations.

21.2.3 The Committees

In order to prepare the work of Parliament's plenary sessions, Members participate in 17 standing committees.

- AFET - on Foreign Affairs, Human Rights, Common Security and Defence Policy
- BUDG - on Budgets
- CONT - on Budgetary Control
- LIBE - on Citizens' Freedoms and Rights, Justice and Home Affairs
- ECON - on Economic and Monetary Affairs
- JURI - on Legal Affairs and the Internal Market
- ITRE - on Industry, External Trade, Research and Energy
- EMPL - on Employment and Social Affairs
- ENVI - on the Environment, Public Health and Consumer Policy
- AGRI - on Agriculture and Rural Development
- PECH - on Fisheries
- RETT - on Regional Policy, Transport and Tourism
- CULT - on Culture, Youth, Education, the Media and Sport
- DEVE - on Development and Cooperation
- AFCO - on Constitutional Affairs
- FEMM - on Women's Rights and Equal Opportunities
- PETI - on Petitions

In addition to these standing committees, Parliament can also set up subcommittees, temporary committees, which deal with specific problems, or committees of inquiry.

- FIAP - on foot and mouth disease
- GENE - on human genetics and other new technologies of modern medicine
- ECHE - the ECHELON interception system
- ESB2 - to monitor action taken on BSE recommendations
- ESB1 - of inquiry into BSE (bovine spongiform encephalopathy)
- TRAN - of inquiry into the Community transit regime

21.2.4 Council of the European Union

The Council is the EU's main decision-making body. It is the embodiment of the Member States, whose representatives it brings together regularly at ministerial level. According to the matters on the agenda, the Council meets in different compositions: foreign affairs, finance, education, telecommunications, etc. The Council is presided over for a period of six months by each Member State in turn, in accordance with a pre-established rota. The key responsibilities of the Council are:

- It is the Union's legislative body; for a wide range of EU issues, it exercises that legislative power in co-decision with the European Parliament;
- It co-ordinates the broad economic policies of the Member States;
- It concludes, on behalf of the EU, international agreements with one or more States or international organisations;
- It shares budgetary authority with Parliament;
- It takes the decisions necessary for framing and implementing the common foreign and security policy, on the basis of general guidelines established by the European Council;
- It co-ordinates the activities of Member States and adopts measures in the field of police and judicial co-operation in criminal matters.

Where the Council acts as legislator, the right of initiative lies with the European Commission, which submits a proposal to the Council. The proposal is examined within the Council, which may amend it before adoption. In the acts which it adopts, the Council may confer implementing powers on the Commission.

The European Parliament takes an active part in the legislative process. For a wide range of issues (internal market, consumer protection, trans-European networks, education, health, etc.), Community legislation is adopted jointly by the Parliament and the Council under a "co-decision" procedure. The European Community's budget is also approved by the European Parliament and by the Council.

The "social partners" and other interest groups — via the Economic and Social Committee — and local and regional authorities — represented on the Committee of the Regions — are consulted in a number of fields.

The Treaties lay down that, depending on the case, the Council acts by a simple majority of its members, by a qualified majority or unanimously. In the Community sphere, a large proportion of legislative decisions are taken by qualified majority on a proposal from the Commission.

In the framework of the Treaty establishing the European Community, Council acts may take the form of regulations, directives, decisions, recommendations or opinions. The Council may also adopt conclusions of a political nature or other types of act such as declarations or resolutions.

The Council's work is prepared by the Permanent Representatives Committee (COREPER), consisting of the Permanent Representatives of the Member States in Brussels and of their Deputies, which meets every week. This Committee also oversees and coordinates the work of some 250 committees and working parties made up of civil servants from the Member

States who prepare at the technical level the matters to be discussed by COREPER and the Council.

21.2.5 European Commission

The European Commission embodies and upholds the general interest of the Union. The President and Members of the Commission are appointed by the Member States after they have been approved by the European Parliament.

The Commission initiates Community policy and represents the general interest of the European Union.

The Commission fulfils three main functions. Because of its right of initiative, the Commission is charged with making proposals for all new legislation. It does so on the basis of what it considers best for the Union and its citizens in general rather than on behalf of sectoral interests or individual countries.

These activities are laid down in the Treaty and range from trade, industry and social policies to agriculture, the environment, energy, regional development and development co-operation.

Before it issues an item of draft legislation, the Commission carries out extensive preliminary soundings and discussions with representatives of governments, industry, the trade unions, special interest groups and, where necessary, technical experts. It tries to take account of these often-competing interests when it prepares its proposals.

The Commission takes the principle of subsidiarity into account in its proposals, initiating legislation only in areas where the European Union is better placed than individual Member States to take effective action. Subsidiarity is enshrined in the Treaty on European Union.

Once a Commission proposal has been submitted to the Council of Ministers and the European Parliament, the three institutions work together to produce a satisfactory result. In agreement with the Commission, the Council can amend a proposal by a qualified majority (if the Commission does not agree, the change requires unanimity). The European Parliament shares the power of co-decision with the Council in most areas and has to be consulted in others. When revising its proposals the Commission is required to take Parliament's amendments into consideration.

The Commission acts as the guardian of the EU treaties to ensure that European legislation is applied correctly.

In its second function, the Commission acts as the guardian of the EU treaties to ensure that EU legislation is applied correctly by the Member States and that all citizens and participants in the single market can benefit from the level playing field that has been created.

Where necessary, it takes action against those in the public or private sector who fail to respect their treaty obligations. It can, for instance, institute legal proceedings against Member States or businesses that fail to comply with European law and, as a last resort, bring them before the European Court of Justice.

The Commission is responsible for vetting subsidies paid by national governments to their industries and practices likely to distort competition in the single market. In the case of serious infringements, the Commission can impose fines on the public authorities or companies concerned.

As the Union's executive body, the Commission manages policies and negotiates international trade and co-operation agreements.

In its third function, the Commission is the executive body of the Union responsible for implementing and managing policy. One of its executive functions is managing the Union's annual budget, and running its Structural Funds, whose main purpose is to even out economic disparities between the richer and poorer parts of the Union.

In some areas like competition, agriculture and trade policy, the Commission has considerable autonomy to take decisions without submitting proposals to the Council of Ministers, either because of its specific powers under the Treaty or by delegated authority from the Council.

It also negotiates trade and cooperation agreements with outside countries and groups of countries on behalf of the Union. More than 100 countries around the world have such accords with the European Union. The Lomé Convention linking the European Union with developing countries of Africa, the Caribbean and Pacific (ACP) is considered a model of North-South cooperation. The Commission also negotiated the Uruguay Round trade liberalisation accord and the creation of the new World Trade Organisation (WTO) on the Union's behalf.

The limits of the Commission's authority are clearly defined. Legislative decisions are taken by the Council and the Parliament. Although it has the right of initiative, the Commission does not take the main decisions on EU policies and priorities. This is the responsibility of the Council of the European Union, whose members are ministers from member governments, and (in most cases) of the European Parliament as well.

The Commission consists of 36 directorates-general and specialised services. They are each headed by a director-general, who is equivalent in rank to the top civil servant in a government ministry. The directors-general report to a Commissioner, each of whom has the political and operational responsibility for one or more DGs.

GENERAL SERVICES

European Anti-Fraud Office
Eurostat
Press and Communication

Publications Office
Secretariat General

POLICIES

Agriculture
Competition
Economic and Financial Affairs
Education and Culture
Employment and Social Affairs
Energy and Transport
Enterprise
Environment
Fisheries

Health and Consumer Protection
Information Society
Internal Market
Joint Research Centre
Justice and Home Affairs
Regional Policy
Research
Taxation and Customs Union

EXTERNAL RELATIONS

Development
Enlargement
EuropeAid - Co-operation Office

External Relations
Humanitarian Aid Office - ECHO
Trade

INTERNAL SERVICES

Budget
Financial Control
Group of Policy Advisers
Internal Audit Service

Joint Interpreting and Conference
Service
Legal Service
Personnel and Administration
Translation Service

"The Commission", as a political body, consists of the 20 Commissioners (or Members of the Commission) at its head. The Commissioners are men and women who have held high office in their home countries. The Commission is appointed for a five-year term, which is the same as the life of the European Parliament but starts six months later.

The Commission meets once a week to adopt proposals, finalise policy papers and take other decisions required of it. Routine matters are dealt via simplified written procedures. When necessary, the Commission may hold special sessions in addition to its weekly meetings. At its meetings, each item is presented by the Commissioner responsible for the policy sector in question. Decisions are taken where necessary by a majority vote; when a decision has been adopted, it becomes Commission policy. It then has the full support of all Commissioners.

In addition to the staff of the directorates-general for which they are responsible, each Commissioner has his or her own private office or "*cabinet*". This consists of six officials who serve as the bridge between the Commissioner and the DGs. But they also function as eyes and ears to brief their "boss" on issues he or she might want to raise concerning policy papers and draft proposals prepared by other Commissioners. The work of the Commission is co-ordinated by its Secretariat-General.

The Maastricht and Amsterdam Treaties have given the Commission more democratic legitimacy. The President of the Commission is chosen by EU Heads of State or Government

meeting in the European Council. This choice has to be approved by the European Parliament. The other 19 members of the Commission are nominated by the governments of the 15 Member States in agreement with the new Commission President. The President and the other members-designate are subject to a collective vote of approval by the European Parliament.

In the management of EU affairs, the Commission has developed dynamic relations with the other institutions. Given its central position in the structure of the European Union, the Commission has special links with each of the other institutions. As we have seen, it works most intensively with the Council of Ministers and the European Parliament in drafting EU legislation, and accordingly attends Council and Parliament meetings.

In addition, the President of the Commission participates alongside the Heads of State or Government of the Member States at the twice-yearly meetings of the European Council. He also participates as a representative of the Union as a whole at the annual economic summits of the Group of Seven (G7) leading industrialised nations.

The Commission is answerable to the European Parliament, which has the power to dismiss it by a vote of censure or no confidence. The Commission attends all sessions of the European Parliament and must explain and justify its policies if so requested by members of the house. It must reply to written or oral questions put by MEPs.

The Commission's functions regularly involve the European Court of Justice, which is the final arbiter of European law. On the one hand, the Commission refers cases to the Court where directives or regulations are not being respected by governments or companies. But on the other hand, the Court is where firms and the Member States themselves go when, for instance, they want to appeal against fines imposed by the Commission.

The Commission's management of the EU budget is scrutinised by the Court of Auditors, whose task it is to examine the legality and regularity of revenue and expenditure and ensure the sound financial management of the EU budget. The common goal of both institutions is to eliminate fraud and wastage. On the basis of the Court of Auditors' reports, it is the European Parliament that gives the Commission final discharge for the execution of each annual budget.

Finally, the Commission works closely with the Union's two consultative bodies, the Economic and Social Committee and the Committee of the Regions, and consults them on most items of draft legislation.

21.2.6 European Economic and Social Committee

The European Economic and Social Committee represents the views and interests of organised civil society vis-à-vis the Commission, the Council and the European Parliament. The Committee has to be consulted on matters relating to economic and social policy; it may also issue opinions on its own initiative on other matters which it considers to be important.

21.2.7 Committee of the Regions

The Committee of the Regions ensures that regional and local identities and prerogatives are respected. It has to be consulted on matters concerning regional policy, the environment and education. It is composed of representatives of regional and local authorities.

21.2.8 Court of Justice

The Court of Justice ensures that Community law is uniformly interpreted and effectively applied. It has jurisdiction in disputes involving Member States, EU institutions, businesses and individuals. A Court of First Instance has been attached to it since 1989

21.2.9 Court of Auditors

The Court of Auditors checks that all the Union's revenue has been received and all its expenditure incurred in a lawful and regular manner and that financial management of the EU budget has been sound.

21.2.10 European Central Bank

The European Central Bank frames and implements European monetary policy; it conducts foreign exchange operations and ensures the smooth operation of payment systems.

21.2.11 European Investment Bank

The European Investment Bank (EIB) is the European Union's financial institution. It finances investment projects that contribute to the balanced development of the Union.

21.2.12 European Ombudsman

All individuals or entities (institutions or businesses) resident in the Union can apply to the European Ombudsman if they consider that they have been harmed by an act of "maladministration" by an EU institution or body.

21.3 Policy areas

21.3.1 Agriculture

The agricultural policy falls under the responsibility of DG Agriculture, which is also responsible for the implementation of rural development policy in conjunction with the other DG's that deal with structural policies. DG Agriculture is made up of eleven Directorates dealing with all aspects of the CAP including market measures, rural development policy, financial matters, environment and forestry policies as well as international relations relating to agriculture.

21.3.2 Fisheries

DG Fisheries is the Directorate-General responsible for the Common Fisheries Policy (CFP), which covers all fishing activities, the farming of living aquatic resources, and their processing and marketing, on the legal basis of Article 33 (ex 39) of the Treaty establishing the European Community. Since the first decisions adopted in 1970, the CFP has been through many changes, and its current form centres on four main areas: the conservation and management of marine resources, relations and agreements with non-member countries and international organisations, structural measures, and the common market organisation for fishery and aquaculture products.

In line with the basic principles of the CFP, DG Fisheries represents the Community on the international scene, prepares legislation, implements management policy and monitors compliance with Community law in this field, by means of discussions, analyses and studies. The DG is also responsible for running a scientific research programme for fisheries as part of the Community's framework research programme.

Involving consulting and informing, the socio-professional bodies of the fisheries sector and the non-governmental organisations concerned is a major preoccupation of DG Fisheries. It is also responsible for carrying out various information and communication initiatives on the Common Fisheries Policy for the public at large.

Internally, the DG performs its duties in collaboration with the other Directorates-General and departments of the European Commission, and with the other Community institutions and bodies (the Council, European Parliament, Committee of the Regions, Economic and Social Committee, etc). It also performs the budgetary and financial management tasks and administrative operations.

21.3.3 Energy and Transport

The Directorate-General for Energy and Transport is responsible for developing and implementing European policies in the energy and transport field.

Its mission is to ensure that energy and transport policies are designed for the benefit of all sectors of the society, businesses, cities, rural areas and above all of citizens. The energy and

transport sectors are pivotal to the European way of life and to the functioning of our economy; as such their operation has to be responsible in economic, environmental, safety and social terms.

The Directorate-General for Energy and Transport carries out these tasks using legislative proposals and programme management, including the financing of projects.

The policy areas concerned are:

- Conventional Energies
 - Internal market on Electricity/Gas
- Energy Demand Management
- New and Renewable Energies
- GALILEO: Satellite Navigation System
- Intelligent Transport Systems (ITS)
- Inland Transport
 - Road Transport
 - Rail Transport
 - Inland Waterways
- Air Transport
- Maritime Transport
- Clean Urban Transport
- Intermodal Freight Transport
- European Energy and Transport Forum
- Enlargement and international relations
 - EU-Russia energy partnership
- Environment
- Green Paper: "Towards a European strategy for the security of energy supply"
- White Paper: "European transport policy for 2010: time to decide "
- Transport Infrastructure Charging

The major planks in Community policy in these areas are aimed at:

1. Finally completing the internal market for energy and transport

- Having the directives in force on the liberalisation of the electricity and gas markets implemented, preparing a new package of measures for the creation of a fully integrated internal market.
- Continuing the gradual opening up of the railway market in Europe.
- Ensuring that port services are opened up.

2. Ensuring that there is sustainable development in transport and energy

- Reviewing the organisation of transport modes and making intermodality a reality. Placing users at the heart of a more efficient system in terms of safety and public service (White Paper).
- Expanding the use of more accessible, more competitive and cleaner forms of urban transport.
- Implementing the Green Paper's guidelines and measures concerning the dependability of supplies, which will have received an adequate consensus following a well-organised, wide-ranging debate.

- Putting forward practical ways of managing energy (buildings, biofuels, etc...) and continuing to promote the use of renewable energy sources.

3. Deploying the major networks within Europe

- Revising the guidelines on the trans-European transport and energy networks by giving priority treatment to funding the removal of bottlenecks.
- Connecting the major trans-European networks to the projects in progress in the applicant countries.
- Covering the networks by intelligent traffic management systems in order to ensure fluidity and safety.
- Developing a new approach towards assigning the cost of building and using the major infrastructures.

4. Space management

- Setting up a single airspace in order to reform air traffic management and remove congestion from European skies.
- Ensuring that the Galileo programme's political and economic conditions are brought together.

5. Boosting safety

- Establishing the European Agencies for safety in the air and safety at sea.
- Having the measures intended to boost maritime safety provided for in the Erika I and Erika II packages adopted.
- Preparing for action on providing a European forum for railway safety.

6. Making enlargement work

- Appropriate initiatives will be developed in order to verify and support the actual adoption of the Community's transport and energy "acquis" by the applicant countries. Particular attention will be brought to bear on the aspects of safety, social standards, the development of infrastructures and the safety of nuclear facilities.

7. Expanding practical international cooperation

- Strategic partnership with Russia concerning energy.
- Euro-Mediterranean policy: action on interlinking transport and energy networks and the management of safe transport by sea.
- Negotiating a framework for the transatlantic civil-aviation routes.

21.3.4 Environment

The mission of DG Environment is:

- To maintain and improve the quality of life through a high level of protection of our natural resources, effective risk assessment and management and the timely implementation of Community legislation.
- To foster resource-efficiency in production, consumption and waste-disposal measures.
- To integrate environmental concerns into other EU policy areas.
- To promote growth in the EU that takes account of the economic, social and environmental needs both of our citizens and of future generations.

- To address the global challenges facing us notably combating climate change and the international conservation of bio-diversity.
- To ensure that all policies and measures in the above areas are based on a multi-sectoral approach, involve all stakeholders in the process and are communicated in an effective way.

The policy areas concerned are grouped in the following environmental themes:

- Climate Change (Climate Change, Ozone layer protection)
- Air (Air quality, Emissions of air pollutants, Transport & Environment)
- Land (Environment and Agriculture)
- Waste (Waste, Waste incineration, Environmental issues of PVC)
- Water (Water Quality, EU focus on clean water)
- Urban environment (Sustainable Cities, Noise Policy, Non motorised transport, Environment and Transport, European Car Free Day)
- Nature protection and biodiversity (Nature protection, Integrated Coastal Zone Management, Wildlife Trade/Convention on International Trade in Endangered Species (CITES), The European Community Clearing House Mechanism - EC CHM)
- Industry and Product Policy (Eco-industries, Eco-label, Integrated Product Policy, Chemical Accident Prevention, Preparedness and Response, Protection of laboratory animals, Eco-Management and Audit Scheme (EMAS) Helpdesk, Pollution from industrial installations, Small and medium-sized enterprises (SMEs) and environment, Volatile organic compounds, The greening of public procurement)
- Chemicals (Chemicals Policy, Dangerous Substances, Plant Protection Products, Chemical Accident Prevention, Preparedness and Response, Dioxin exposure and health, Endocrine disrupters, Volatile organic compounds,
- Biotechnology
- Enlargement
- Environmental assessment
- Environmental economics (Environment and Employment, Environmental economics, The role of Financial Services in Sustainable Development, EU focus on green jobs)
- Environmental governance
- Environmental law
- Education and training
- Radiation Protection
- Civil protection

In pursuing its mission DG Environment works with representatives of relevant sectors (e.g. responsible for air pollution) with national, regional authorities and NGOs, as well as with other relevant EU services (DGs, European Environment Agency) and advisory groups such as the Advisory Committee on the control and reduction of pollution caused by oil and other harmful substances discharged at sea (ACPH) (helping the civil protection unit). This Advisory Committee, known as ACPH and created in 1980, not only provides valuable advice on Commission proposals but its members - who are high-level government experts - act as the interface between the services of the Commission and the corresponding National Administrations.

21.3.5 Health and Consumer Protection

The mission of DG "Health and Consumer protection" is to ensure a high level of protection of consumers' health, safety and economic interests as well as of public health at the level of the European Union.

1. Consumer health and safety protection

- Propose and monitor legislation in the areas of veterinary, animal feed and phytosanitary matters in order to protect the consumer;
- Manage the European scientific committees concerned with consumer health whose work is based on the principles of :
 - Excellence (eminent scientists are chosen)
 - Independence of their advice (independence must be declared)
 - Transparency (easy access to information on the work of the Committees and to their advice);
- Carry out inspections within the EU and outside to ensure that in the food chain the rules on hygiene and food safety are respected;
- Evaluate and assess possible risks to consumer health in a forward looking way;
- Contribute to the safety of consumer products and services in the European Union.

2. Protection of economic interests

- Propose and monitor legislation to protect the consumer;
- Reinforce market transparency;
- Ensure that the interests of consumers are given due consideration in the development of other European Union policies;
- Improve consumer confidence, especially by more complete and effective information and education;
- Develop a system of dialogue consumer organisations and industry;
- Ensure that consumer organisations are better represented in all decision-making processes.

3. Public health

- Assure a high level of human health protection in the development of all Community policies;
- To take actions to improve public health in the European Union, to prevent human illness and diseases and to obviate sources of danger to human health.

The main areas of activity include:

- Food safety, covering the entire food production chain, ranging from animal health and plant health to the labelling of food products, as well as animal welfare.
- Public health (health promotion and monitoring, AIDS and other communicable diseases, cancer, rare diseases, injury prevention, pollution related diseases, drug abuse)
- Consumer affairs (Access to justice & Injunctions, Fair commercial practices, Comparative and misleading advertising, Door-to-door sale, Enforcement, Consumer credit, Euro, Consumer education, Financial services, Guarantees, Contract Law, Labelling, Dangerous imitations, Package travel, Distance selling, Price indication, E-Commerce & Information society, Product liability, Safety of Products and Services, Environmental, nutritional, health and ethical claims, Services of General Interest, Unfair contract terms, Time sharing)

21.3.6 Research

The Research Directorate General's mission is evolving as work on the European Research Area (ERA) continues. It can be summarised as follows:

- To develop the European Union's policy in the field of research and technological development and thereby contribute to the international competitiveness of European industry;
- To co-ordinate European research activities with those carried out at the level of the Member States;
- To support the Union's policies in other fields such as environment, health, energy, regional development etc;
- To promote a better understanding of the role of science in modern societies and stimulate a public debate about research-related issues at European level.
-

The relevant policy areas concerned are:

European Research Area	
Agriculture, Fisheries & Forestry	Measurements & Testing
Aeronautics	Mobility
Energy	Science & Society
Environment	Space
Industrial Research	Surface Transport and
Information Society	Other transport research
Intellectual Property	Women and Science
Life Sciences	Women in Industrial Research

In carrying out the various tasks the Directorate General works closely with other Commission departments such as the Joint Research Centre, which also falls under the responsibility of Commissioner Busquin, the Directorates General for the Information Society, Energy and Transport, the Environment, Enterprise, and Agriculture and Fisheries.

One of the instruments used for the implementation of this policy area is the multi-annual Framework Programme, which helps to organise and financially support co-operation between universities, research centres and industries - including small and medium sized enterprises.

In designing the Framework Programme, DG Research is supported by 17 External Advisory Groups / Ad hoc expert groups. EAGs are small groups of high level people in active employment set up to advise the European Commission on research carried out under the key actions of the Fifth Framework Programme (FP5). This includes providing input to the drafting of the detailed work programmes for the specific programmes of FP5 (including the programming of the calls for proposals and the criteria to be used for evaluating project proposals), establishing, whenever possible, quantified or testable objectives for attaining the aims of the key action. Thus, the EAGs advise on any reorientation necessary during the course of the implementation of the specific programmes. The groups cover all the key actions of FP5, although some groups cover more than one key action.

External Advisory Groups

Programme	Key action or group of key actions to be covered by an advisory group
Quality of life and management of living resources	"Health, food and environmental factors" "Control of infectious diseases" "The cell factory" "The ageing population" "Sustainable agriculture, fisheries and forestry, including integrated development of rural areas"
User-friendly information society	<i>Information society (comprising the following key actions:</i> "Systems and services for the citizen"; "New methods of work and electronic commerce"; "Multimedia content and tools" ("Essential technologies and infrastructures")
Competitive and sustainable growth	"Innovative products, processes and organisation" "Sustainable mobility and intermodality" "New perspectives for aeronautics" "Land transport and marine technologies"
Energy, environment and sustainable development	"Sustainable management and quality of water" and "Sustainable marine ecosystems" "Global change, climate and biodiversity" "The city of tomorrow and cultural heritage" "Cleaner energy systems" and "Economic and efficient energy"
Euratom	"Controlled thermonuclear fusion" "Nuclear fission"
Improving human research potential and the socio-economic knowledge base	"Improving the socio-economic knowledge base"

The EAGs give particularly important advice to the Commission on the implementation of the new "problem solving" concept embodied in the Framework Programme, by which science and technology are viewed as tools for reaching certain socio-economic objectives, rather than as ends in themselves.

Members are high level industrialists, academic researchers, users of research, members of regulatory bodies and representatives of other socio-economic spheres connected with research. Each EAG usually has around 20 members chosen in a balanced way from these constituencies with an appropriate balance of geographical backgrounds. Normally, members are citizens of the Member States of the European Union or of countries associated to the Framework Programme. Members of EAGs are appointed in a personal capacity, i.e. they do not "represent" their organisation or country.

As the EAGs' purpose is to provide advice to the Commission, the Commission chooses the members of the groups. The chairman and vice-chairman of each EAG are chosen by the Commission, which has to ensure the general balance among its members. Names of members are made public.

In July 1999, the size of the EAGs was increased to include experts from countries associated to the FP (EEA countries and Israel). In February 2000, a second enlargement took place, in order to permit the participation of experts from countries negotiating to join the EU.

It is intended that the EAGs should follow the development of the key actions throughout FP5. The members' mandate has a maximum duration of two years, and can be renewed once. The main reports and summaries of the EAGs' deliberations are made public.

In addition, four additional "ad hoc expert groups" have been set up, with an advisory function similar to that of EAGs, in relation with areas of generic research activities.

Ad Hoc Expert Groups

Programme	Ad Hoc Expert Group
Quality of life and management of living resources	I. Chronic and Degenerative Diseases – Genomes – Neurosciences
	II. Public Health Research, Disabilities, Bioethics, Socio-economics
Competitive and sustainable growth	III. Measurements and Testing
Competitive and sustainable growth	IV. Expert group on Intelligent Manufacturing Systems

22 Scientific Advice

22.1 General background

Expectations of science and technology are getting higher and higher constantly. In addition, there is an increase of the number of special interest groups providing opinions on scientific activities, which are sometimes contradictory. The importance of the provision of efficient, effective and timely scientific advice to policy makers is therefore greater than ever before.

Scientific advisory committees are used by the European Union at supra-national level and are of special interest for two main reasons: they are widely used as a well-recognised effective forum for bringing independent expertise, and on the other hand such committees tend to lead to specific sets of recommendations on policy matters. According to the opinion of Anne Stein⁸ “...they represent a mechanism for opening governmental decision-making to direct input from the scientific community. In other words, scientific advisory committees can be viewed as a democratic extension to executive government, by bringing scientists in to participate in decision-making processes”.

The European science advisory system is shown schematically in the Figure 1.

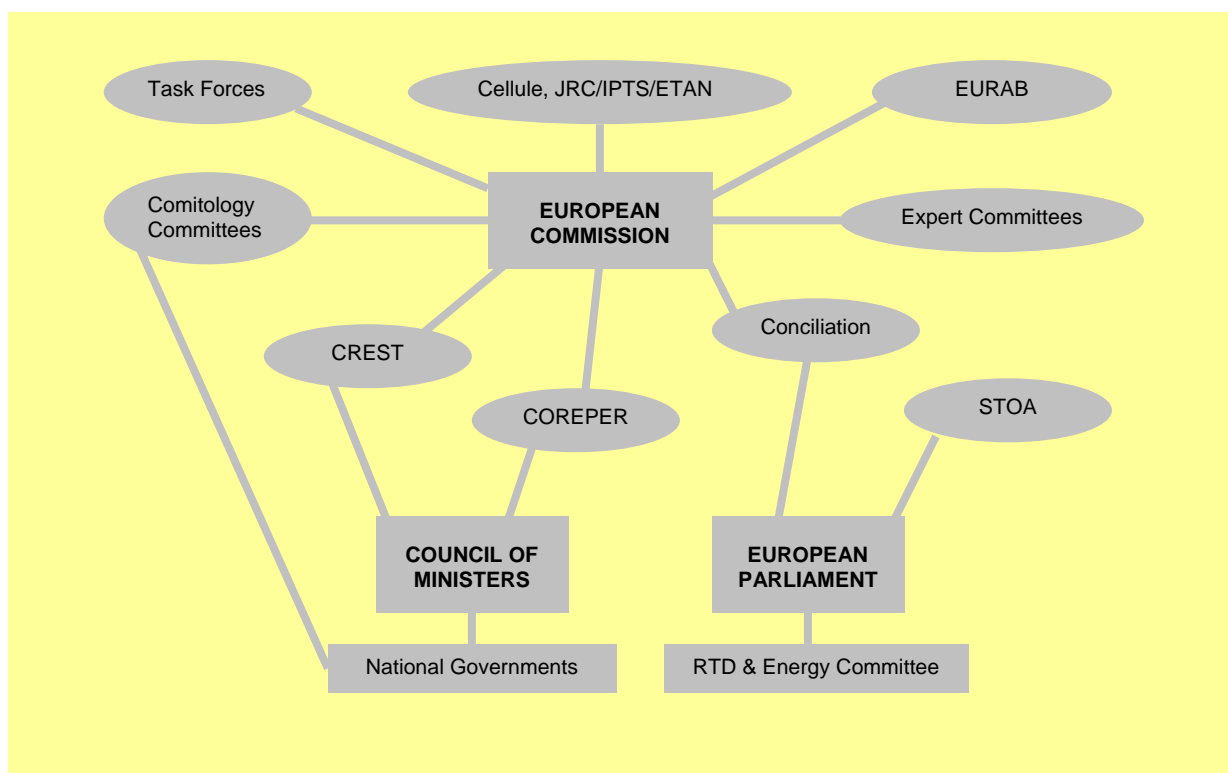


Figure 1: European Science Advisory System⁹

Key: Cellule [Cellule de Prospective (Forward Studies Unit), European Commission], COREPER [Committee of Permanent Representatives], CREST [Comite Scientifique et Technique], ETA [European Science and Technology Assembly], ETAN [European Technology Assessment Network], IPTS [Institute for Prospective Technological Studies], EURAB [European Research Advisory Board],

⁸ Josephine Anne Stein, University of East London/PREST : “Openness in Scientific Advisory Committees”, The IPTS Report, No. 39-November 1999.

⁹ Josephine Anne Stein, University of East London/PREST : “Openness in Scientific Advisory Committees”, The IPTS Report, No. 39-November 1999.

As we can observe from the above figure, the links to the Parliament, the wider policy community and the public are limited, and most of the times refer to publications of final reports, special discussion meetings and occasional European Policy Forums.

22.2 . Scientific Advice Provision per European Institution and policy area

22.2.1 Scientific Advice Provision to the Council of the European Union

The Council of The European Union in order to co-ordinate the national policies and projects of interest to the Community in the field of science and technology established a Scientific and Technical Research Committee (CREST). The creation of CREST was the outcome of the need to introduce a legal basis for Community policy on Research and Technology Development (RTD), which increased the need for a precise definition of the scientific and technical objectives of Community RTD programmes. CREST is a high level advisory committee to the Council and the Commission, based on a Council Resolution, and it is a Statutory Permanent body governed by Codes of Practice set by the European Council. It has a focused scope of operation, as its main activities concern the provision of advice on the European Research and Technology Development.

The specific character of CREST (chaired by the Commission, advising both Commission and Council, containing high-level representatives of research authorities of the Member States as well as EFTA/EEA, and in the future, associated candidate country observers) makes this body potentially a very valuable instrument of strategic advice on RTD policy, both in the preparation and execution of EC Framework Programmes and in the wider context of the realisation of the European Research Area.

CREST' s main policy area is research and advises the Head of Government (i.e. the European Council), Ministries (i.e. the European Council on issues relating to Research and Competitiveness) and the European Commission. The body can select its own subjects for examination, and regarding the confidentiality the members of CREST are required to retain the material used in generating scientific advice, as well as their discussions, confidential. Confidentiality is restricted only to the extent required by the nature of the information and the subject; the general principle is transparency and this is proved by the fact that CREST' s documents are available to the public through the Council' s website.

Regarding its mode of operation, CREST conducts regular meetings and forms sub-groups, while the information used for formulating scientific advice is often retrieved from the expertise of its members, national and international expert consultation and from the European Commission. Finally, the body has not performed any changes in its structures or processes in the last five years.

The Committee of Permanent Representatives (COREPER) groups together the ambassadors of the Member States to the European Union. They have a preparatory role in the Council, making preliminary examination of the subjects, which are submitted to the different ministerial Councils and working out most of the agreements. In more detail, it occupies a pivotal position in the Community decision-making system, in which it is at one and the same time a forum for dialogue (among the Permanent Representatives and between

them and their respective national capitals) and a body that exercises political control (by laying down guidelines for, and supervising, the work of the expert groups). It is in fact divided in two to enable it to deal with all the tasks it has to carry out:

- **COREPER I:** Committee of Deputy Permanent Representatives. The deputies make up COREPER I and preside over the so-called ‘technical’ Councils, including the Environment, Social Affairs, the Internal Market, Transport, Fisheries, Consumer Protection, Education, and Culture.
- **COREPER II:** Committee of Permanent Representatives (ambassadors). The ambassadors compose COREPER II, and they handle the more sensitive political files, working mainly to prepare the monthly General Affairs Councils. This also closely involves them in recurrent or on-going negotiations covering budgetary packages, structural and cohesion funds, accession, and association agreements to name a few.

Since 1962, COREPER has been bifurcated according to a functional division of labour. COREPER is a de facto decision-making body at the institutional and cognitive interface between the national and Community levels. As such, COREPER has evolved into an important feature in the EU’s unique version of supranationality.

Another advisory body used less often than CREST by the European Council for receipt of scientific advice is the European Co-operation In The Field Of Scientific And Technical Research (COST), which is a multi-functional body. COST, was established in 1971 by 19 European States, and is a co-operation framework for European concerted research Actions, referred to as COST Actions, with the support of the European Union.

COST aims to co-ordinate pre-competitive research or activities of public utilities financed at national level in Europe. There are at present about 150 COST Actions in 20 research fields, each lasting for an average of 3-4 years. Working to a bottom-up approach, the co-operation is initiated by the participants themselves at national level. The member countries may choose to participate in Actions depending on their national research priorities. COST’s main policy areas are Agriculture, Transport, Environment, Research, Health, Energy, Fisheries, and is employed by 30.000 people.

Even with the growth of the Community framework programmes on RTD, and the launch of EUREKA in 1985, COST continues to play a substantial role in the development of scientific and technical co-operation in Europe as an important pillar in the European Research Area.

22.2.2 Scientific Advice Provision to the European Parliament

Today many of the issues coming before the European Parliament have a scientific or technological component. They may be proposals directly relating to research or innovation policy, or measures concerning the many ways in which science and technology impact on society, the economy or the environment.

The European Parliament defines its position on these issues through reports prepared by its Committees. When Committees decide that it would be helpful to their policy-making role to seek out expert independent assessments of the various scientific or technological options in the policy sectors concerned, they have a resource at their disposal: the Parliament’s own Scientific And Technological Options Assessment unit, STOA, which is a Statutory

Permanent body governed by Codes of Practice, and which Rules of Procedure are in harmony with the Rules of Procedure of the European Parliament. In more detail, the political bodies, i.e. Panel and Bureau, are regulated by the Rules of the Procedure of STOA, the general Rules of Procedure of the European Parliament and whatever code of conduct is of application to the members of the European Parliament. The administrative body (the secretariat), on the other hand, is subject to the common practices of the General Secretariat of the European Parliament, and its' staff is governed by the Staff Regulations for the officials and other agents at the service of the European Communities.

Although STOA is an official organ of the European Parliament, and therefore an internal unit, it commissions its assessment studies from external experts. These are individual researchers, research institutes or laboratories, to whom contracts are given to prepare specific studies. STOA also organises meetings at which Members of Parliament and invited scientific experts can jointly participate in the analysis of current issues.

STOA consists of 40 members. The STOA Panel, which carries the political responsibility for STOA's work, is composed of Members of the European Parliament nominated to serve on the Panel as the official representatives of the permanent Committees of the Parliament. The members of the Panel are not appointed on the basis of the d'Hont rule; therefore the representation of MEPs in the Panel does not reflect political proportionality, ensuring a sort of political "neutrality" consistent with the nature of its work.

The Panel draws up an annual Workplan for STOA after receiving proposals from the various Committees. Projects must be directly linked to the legislative or budgetary work of the Parliament. The Panel meets to review progress. All Members of Parliament may participate, but only Panel Members vote. The meetings are regular and public. Also, the body is in continuous operation and delegates work to other bodies and groups. Its secretariat implements the decisions, guidelines the work of other bodies and groups and also is the sole responsible for the management of the process ensuring, through its statutory competence, the independence from any political partisan views.

Operational responsibility is with the STOA Unit, in the Directorate-General for Research, working in Brussels and Luxembourg. Its main policy areas are agriculture, research, environment, health, fisheries, transport, and energy. It mainly provides scientific advice to the Legislature body of EU (European Parliament). In more detail, work is requested by the committees of the European Parliament and therefore the whole breadth of their competencies is covered, usually though requests are performed on a basis of planned legislative work or other EP duties.

STOA has a focused scope of work as it provides high-quality, independent, up-to-date and accurate advice on matters related to science and technology, translating complex scientific issues into understandable terms before which, the MEPs, as democratic representation of European citizens, can make informed choices, in the light of their specific political philosophy and principles. STOA can select its own subjects for examination but this is not done often up-to-present. The information the body uses for formulating scientific advice often is derived from the expertise held by its members, review of existing literature, background work performed by its secretariat and the performance of researches.

During the past five years, the body has only performed administrative changes (re-organised its secretariat).

STOA is committed to co-operation with the best and most up-to-date expertise in Europe and elsewhere. Members of the Unit have been drawn from all the EU Member States, plus the United States, Russia, and the Czech Republic. As well as its external contractors, STOA has established good relations with relevant Directorates-General of the Commission and the Joint Research Centre, especially the Institute for Prospective Technological Studies in Sevilla, and with bodies such as WHO, UNEP and OECD.

Furthermore, STOA is an active member of the EPTA Network (European Parliamentary Technology Assessment). The other partner organisations are the national parliamentary Technology Assessment bodies of Denmark, Finland, France, Germany, Greece, Italy, Netherlands and United Kingdom. EPTA holds an annual conference and issues a regular Newsletter.

22.2.3 Scientific Advice Provision to the European Commission

The European Commission is served by innumerable committees that provide advice on science and technology. These committees are categorised as “upstream committees”, providing advice on the development of legislation, and “downstream committees”, providing advice on the development of the implementation of legislation.

Scientific advisory committees are made up of independent experts and are often used to advise the European Commission on “upstream” policy development. However, recently the European Commission has taken a number of initiatives concerning its scientific advisory committees. The July 1997 Decision established a set of eight Scientific Advisory Committees and a Scientific Steering Committee to advise DG-XXIV on consumer health and food safety. Also, in June 1998 the Commission formed 17 new research advisory groups to provide advice and insight on the research to be carried out through the “key actions” of the 5th Framework Programme, and also announced a proposal for a Council Decision to update the 1987 “comitology” Decision¹⁰.

Advice is provided to the European Commission by the Group of Policy Advisers, who ensure timely, informed and impartial advice to the President and Commissioners on issues relating to the future policy of the European Union. It is a horizontal and internal service of the European Commission, attached directly to the President.

The Advisers role is to concentrate on issues that are multi-disciplinary and tend to have longer time horizons than those commonly dealt with by Commission services. Typically such issues have several dimensions, including political and institutional, economic, social, scientific and technological ones. Because of increasingly long lead times between policy development and implementation and the sometimes irreversible effect on future generations of decisions taken today, a longer term perspective will often be required.

The Group of Policy Advisers focuses on the earlier stages within the policy development cycle that is the collection of information, analysis and the development of policy options for consideration by the President and Commissioners. As such, the activities of the Group are

¹⁰ Josephine Anne Stein, University of East London/PREST : “Openness in Scientific Advisory Committees”, The IPTS Report, No. 39-November 1999.

clearly distinguished from operational and policy implementation activities. It plays the role of a catalyst of new ideas emerging within the Commission.

Practically the work concentrates on four different fields:

- Economic and Social issues
- Political and Institutional issues
- External Relations
- Dialogue with Religions and Humanisms

The Group of Policy Advisers has also launched a high level working group principally focussed on economic topics: Group of Economic Analysis and organises the "European Lectures" on topical issues of economics and politics.

It also provides the secretariat of the European Group on Ethics in Science and new Technologies (EGE). This Group is an independent, pluralist and multidisciplinary body, which advises the European Commission on ethical aspects of science and new technologies in connection with the preparation and implementation of Community legislation or policies.

This Group was set up in December 1997 by the European Commission to succeed the Group of Advisers on the Ethical Implications of Biotechnology (GAEIB 1991-1997). During its first mandate the EGE (1998-2000) provided Opinions on subjects as diverse as human tissue banking, human embryo research, personal health data in the information society, doping in sport and human stem cell research, etc. At a specific request of the President of the Commission, Romano Prodi, the Group also wrote the Report on the Charter on Fundamental Rights related to technological innovation.

On 24 April 2001 the Commission has appointed twelve Members for the period 2001-2004 and amended the EGE remit in order to strengthen the role of the Group (EGE 2001-2004).

The task of the Group shall be to advise the Commission on all ethical questions relating to sciences and new technologies, either at the request of the Commission or on its own initiative. The Parliament and the Council may draw the Commission's attention to questions, which they consider of major ethical importance. The Commission shall, when seeking the opinion of the Group, set a time limit within which such opinion shall be given.

The members of the Group shall be appointed by the Commission. Each member of the Group shall be appointed for a term of four years. This term shall be renewable once. The Group shall elect a chairperson and a vice-chairperson from among its members for the duration of the term of office.

The Group's regular working meetings shall not be open to the public. For the purposes of preparing its Opinions and within the limits of the available resources for this action, the Group:

- May invite experts either from a Member State of the Union or from outside to take part in its proceedings on a given topic on the agenda.
- May initiate studies in order to collect all necessary scientific and technical information
- May set up working groups to consider specific issues
- May organize public Round Tables in order to promote dialogue and improve transparency

- May establish closer links with representatives of the various ethics bodies which exist in the European Union and in the applicant countries.

Every opinion shall be published immediately after its adoption. Where an opinion is not adopted unanimously, it shall include any dissenting point of view. A report on the Group's activities shall be produced under the responsibility of the chairperson before the end of its term of office. The report shall be published.

Fisheries policy area

The scientific advisory body that has been created for providing scientific advice to the European Commission and the European Community on fishery issues is the Scientific, Technical and Economical Committee for Fisheries (CSTEP) established in 1979. Scientific advice is also retrieved by the International Committee on the Exploration of the Sea (ICES), established in 1902, which is an international committee and not a committee of the specific DG.

The policy areas that these committees cover are: fisheries, environment and research. They mainly advise the European Commission, the Ministries and seldom agencies on respective issues. CSTEP is statutory permanent, established by EU Decision and governed by Codes of Practice; on the other hand, ICES is a non-statutory fixed term inter-governmental agency not governed by Codes of Practice.

Regarding their scope of operation, both of them are focused and mainly reactive. Information for the formulation of scientific advice is mainly derived from the expertise of their members, reviews of existing literature, national and international experts consultation. Concerning their mode of operation they both conduct regular meetings and form sub-groups. Also, ad-hoc committees can be created for the confrontation of specific issues.

Finally, no changes have occurred in the past five years in the CSTEP committee, while ICES has performed in the same time institutional and administrative changes.

Energy and Transport policy area

As reported by the Directorate General for Energy and Transport there are no scientific advisory structures any longer. When issues arise they usually turn to other scientific advisory bodies of other DGs, or invite external experts and form ad hoc committees.

For example, in some cases scientific advice is provided by the European Energy and Transport Forum and the European Rail Research Advisory Committee (ERRAC), which are illustrated in detail below.

European Energy and Transport Forum

The European Commission decided on July 11 2001 to create a consultative committee to be known as the "European Energy and Transport Forum".

The decision to set up a European Energy and Transport Forum comes in response to a request from the Transport Council of 20 September 2000 to set up a "transport" forum and, the necessity to replace the Energy Consultative Committee, whose mandate lapsed in February 2001. The Forum will fulfil the need to bring energy and transport policies into line

by establishing dialogue with both sectors and to have a single body to deal with interrelations between the two policies.

The Forum's mission is to provide opinions on any Commission initiative in the field of energy and transport policy (particularly on the avenues of approach and proposals generated by the Green Paper on the security of the energy supply and the forthcoming White Paper on the future of the common transport policy). It also serves as a monitoring centre for energy policy (all energy sources) and transport policy (all forms of transport). It offers its views on competitiveness and structural adjustments in these sectors, incorporating environmental, social and safety concerns.

This new Forum should help reconcile energy and transport policies and bring them more into line, thereby fulfilling the Directorate-General for Energy and Transport's mission statement, and provide added value in policy development by taking greater account of the concerns of those sectors.

The Forum will comprise 34 members covering a wide range of areas of activity within the energy and transport sectors: operators, infrastructure and networks, users and consumers, trade unions, representatives of environmental protection and safety, especially in the field of transport.

In the interests of transparency, members will be selected following the publication of a call for applications in the Official Journal of the European Communities. This will not include the members representing trade unions, who will be covered by a different procedure whereby the European Trade Union Confederation will nominate 6 members to represent the energy and transport sectors.

Regarding requirements for confidentiality, its members are restricted to retain the material used for generating advice as well as their discussions confidential, according to the provisions of Article 287 of the EC Treaty, that states that the members of the Forum shall not divulge any information they obtain through their work in the forum or its working groups, where the Commission informs them that a particular opinion or matter is confidential. In such case, only members of the Forum and Commission representatives may attend the meeting.

The Forum has a broad scope of work as it acts as a monitoring centre for energy and transport policy, particularly on competitiveness and structural adjustments in these sectors, while having due regard for environmental, social and safety concerns. It also, if necessary, examines any matters of topical interest which may arise in the areas of energy and transport.

It can select its own subjects for examination, but also provides opinions at the request of the Commission. Concerning its mode of operation, it conducts meetings on request and formulates sub-groups. Also, the Forum may set up ad hoc working parties.

European Rail Research Advisory Committee (ERRAC)

ERRAC, launched by the Research Commissioner on November 2001, is a joint initiative by all stakeholders from the European rail sector, European institutions, Member States, transport users, and generally all parties concerned by rail transport. It comprises high-level decision makers of Member States, the European Commission, the manufacturing industry,

operators, and infrastructure managers; but also research establishments and academia, environmental and urban planning organisations, and transport users groups. The aim is to develop a common strategy for European rail research in order to speed up the emergence of a single European railway system.

The policy areas that are covered by the body are transport and energy, and mainly advises the Commission and notably DG TREN, RTD, ENTR, INFSO.

It is occupied by 45 members, and it is a non-statutory fixed term body. It is governed by formal guidelines and codes of practice, which are the terms of reference.

It has a focused scope of work, as it performs research on the rail issue with a time horizon of the year 2020. ERRAC sets its own agenda and priorities, and performs regular meetings and forms sub-groups. Information for formulating scientific advice often derives from the expertise of its members, national external expert consultation, public consultation (through consensus conferences, stakeholder dialogues and internet dialogues), background work by secretariat, and performance of own research.

The partners of ERRAC have made a long-term commitment to make railways an attractive, affordable, clean, safe, competitive and reliable mode of transport on a European scale.

In this perspective, ERRAC's primary mission is to establish and carry forward a strategic research agenda, setting research goals for the next two decades and guiding all European stakeholders in the planning and co-ordination of research efforts. Its key objectives will be to:

- Respond to the objectives fixed by the European Commission's White Paper on transport policy, which is to achieve a better balance between modes of transportation by revitalising rail transport,
- Strengthen the leadership of the European rail industry - one of the most innovative and competitive industrial sectors in Europe, a strong net exporter, and a provider of crucial services to the economy and the citizens,
- Maximise synergies between European, national and private rail research - thus materialising the concept of the "European Research Area" in this field,
- Improve response to society's needs and users' demands,
- Reinforce the evolution towards generalised sustainable transport across the continent,
- Provide concrete answers in a number of crucial areas - efficiency and interoperability, limitation of noise and pollutants, increase of infrastructure capacity, rail safety, innovation and industrial competitiveness in the e-economy.

Health and Consumer Protection Policy Area

High quality scientific advice for the drafting and amendment of Community rules regarding Consumer protection in general and Consumer Health¹¹ in particular is of utmost importance. This is also underlined in the April 1997 Commission Communication on Consumer Health and Food Safety.

¹¹ Consumer Health is defined as including matters on consumer health in its strictest sense, animal health and welfare, plant health and environmental health.

Many issues relating to consumer health are of a multidisciplinary nature and require input from various scientific disciplines.

A July 1997 Decision, mainly in response to the BSE crisis, established a set of eight Scientific Advisory Committees and a Scientific Steering Committee to advise DG-XXIV on consumer health and food safety. These nine downstream committees have unprecedented provisions for openness in the European science advisory system.

- Scientific Steering Committee (former MDSC)
- Scientific Committee on Food
- Scientific Committee on Animal Nutrition
- Scientific Committee on Animal Health and Animal Welfare
- Scientific Committee on Veterinary Measures relating to Public Health
- Scientific Committee on Plants
- Scientific Committee on Cosmetic Products and Non-Food Products intended for Consumers
- Scientific Committee on Medicinal Products and Medical Devices
- Scientific Committee on Toxicity, Ecotoxicity and the Environment

The scientific advice by these Committees is made available without undue delay following a request by the Commission for a scientific advice or opinion on a new development that may cause concern for consumer health. The advice and opinions, in the interest of consumers and industry, are based on the principles of excellence, independence and transparency.

Their main policy areas are: health, research and less environment and agriculture. They all provide advice to the Community Legislature and to the European Commission.

They are all statutory fixed-term advisory bodies and governed by Codes of Practice and formal guidelines. In more detail, the Scientific Committees shall adopt harmonized rules of procedure in collaboration with the Scientific Steering Committee. These rules of procedure ensure that the Scientific Committees perform their tasks in the best possible way, in compliance with the principles of excellence, independence and transparency, whilst having regard to legitimate requests for commercial confidentiality. They shall be made public.

Concerning their scope, all of them are focused and purely reactive. The Committees perform regular meetings, create sub-groups and invite external experts. In agreement with the Commission, the Scientific Committees and the sub-committees may invite specialized external experts to participate in their work. The information for formulating scientific advice is mainly derived from the expertise of their members, the review of existing literature and background work performed by their secretariats.

Finally, since all the Committees were established in 1997, none has performed any changes in the last 5 years.

Although these recent changes the scientific advice process under DG SANCO is still under restructuring and further changes are expected. Other changes are also expected such as the creation of European Food Safety Authority (EFSA).

The mission of the European Food Safety Authority will be focused on risk assessment. One of its core tasks will be to provide independent scientific advice and support. It will also set up networks for close co-operation with similar bodies in Member States, scientifically assess

risks related to the food chain and give the general public information about food risks. It will provide early warning of emerging risks to health in the food supply by constantly monitoring scientific information and data from around the world. Although its main 'customer' will be the Commission, the Authority may also respond to scientific questions from the European Parliament and Member States or initiate its own work independently.

The Authority will have a broad remit, allowing it to make scientific assessments of any matter which may have a direct or indirect effect on the safety of the food supply including matters in relation to animal health, animal welfare and plant health. This is essential to avoid repeating the failure to identify in a timely manner emerging risks as was the case with BSE. The Authority will also give scientific advice on non-food/feed GMOs and on nutrition. It will therefore cover all stages of production and supply, from primary production, safety of animal feeds, right through to the supply of food to consumers.

The European Food Safety Authority will be a Community agency with its own legal identity, funded from the Community budget but operating independently of the Community institutions. It will be comprised of 4 separate components:

- I) A Management Board,
- II) An Executive Director and staff,
- III) An Advisory Forum,
- IV) A Scientific committee and 8 panels.

It will act in close collaboration with the Member States by networking and adding a European overview, where appropriate to food safety matters.

In the area of risk assessment, the Authority will assume the responsibilities presently covered by eight existing Scientific Committees which address scientific issues in relation with the safety of the food chain: the Scientific Steering Committee, advising on BSE and TSEs, multi-disciplinary questions, and the Scientific Committees on Food, Animal Nutrition, Veterinary measures relating to Public Health, Plants, Animal Health and Welfare, Cosmetic Products and Non-Food products intended for Consumers, Medicinal Products and Medical Devices and Toxicity, Ecotoxicity and the Environment.. These existing Scientific Committees are composed of independent scientists appointed on the basis of an open call for interests. The Authority's Scientific Committee and Panels will take over the tasks of these Scientific Committees as soon as their members are nominated. This will minimise the possibility of any disruption to the provision of scientific advice to the Community. The members of the Scientific Committee and Panels will continue to be independent scientists selected through an open process based on a call for expression of interests. The Authority's permanent Scientific Committee and Panels shall be responsible for providing the scientific opinions of the Authority, each within their own spheres of competence. The Scientific Committee will be responsible for general co-ordination. It will provide opinions on multi-disciplinary issues falling within the competence of more than one Scientific Panels, and on any issue which may fall outside of the immediate remit of the Panels. It will be composed of the Chairpersons of the Scientific Panels and 6 independent scientific experts who do not belong to any of the Scientific Panels. The Authority will establish 8 Scientific Panels:

- The Panel on food additives, flavourings, processing aids and materials in contact with food;
- The Panel on additives and products or substances used in animal feed;
- The Panel on plant protection products, their residues and plant health;
- The Panel on genetically modified organisms;

- The Panel on dietetic products, nutrition and allergies;
- The Panel on biological hazards;
- The Panel on contaminants in the food chain;
- The Panel on animal health and welfare.

In accordance with the Regulation, until these Committee and Panels are established scientific advice on matters falling within the competence of the Authority will continue to be provided by the existing scientific committees established by Commission Decisions and supported by the Commission's civil servants.

Furthermore, central to the success of the Authority will be an Advisory Forum comprising a representative from the competent body in each Member State undertaking similar tasks to the Authority. This Forum is considered to be key in harnessing the support and collaboration of the Member States in the scientific work of the Authority and in this respect will contribute to its success. It is not a policy group but rather a scientific and technical advisory group linking the Authority with similar bodies in the Member States.

Even before the Regulation forming the legal basis for the Authority was adopted, the Commission called together an embryonic group called the Interim Scientific Advisory Forum to help with the practical planning and development of scientific and technical networks, which will enable the Authority to get off to a flying start. The Interim Scientific Advisory Forum was launched by Commissioner Byrne on May 7, 2001. The ISAF is meeting on a tri-monthly basis until the definitive Advisory Forum will have been established.

Research Policy Area

The scientific advice provision in the Research policy area is provided through scientific and technical committees, external advisory groups and ad-hoc working parties. A complete list of all the advisory scientific committees is presented at the end of this document, while more details on each one can be retrieved from the database created in this project.

These committees provide scientific advice on issues such as: research, environment and health. They mainly advise the European Commission on relevant issues, and most of them are non-statutory fixed term organisations.

The Committees are governed by Codes of Practice and formal guidelines of operation, and all members are required to retain most of the times the material used for the generation of scientific advice as well as their discussions undisclosed. The Committees have declared that they can select their own subjects for examination, and all have a focused scope of operation. Regarding their mode of operation, they stated that they primarily hold regular meetings and form sub-groups, while the information utilised for the creation of scientific advice is often acquired from the expertise of their members and background work performed by their secretariats, while seldom they review on existing literature as well.

Finally, most of them have not performed any changes in their structures or processes in the last five years.

Agriculture policy area

As reported by DG Agriculture, there are no scientific advisory structures any longer. When issues arise they usually turn to other scientific advisory bodies of other DGs, such as DG SANCO or DG Environment.

Environment policy area

The Directorate General of Environment is strongly committed to a knowledge based policy-making process and collects scientific advice using both internal and external expertise, depending on the environmental area concerned. However, no formal scientific committee is set up to give advice to DG Environment. When using internal Commission expertise, the Directorate General either is consulted by DG SANCO's scientific committees (Toxicology, Ecotoxicology and the Environment-CSTEE-, or Scientific Committee on Plants –CSP- committees) or by the Joint Research Centers (for instance the European Bureau of Chemicals, or the IPPC bureau). When external expertise is necessary, DG Environment, on an ad hoc basis, requests scientific opinion from, or commissions studies to, competent organisations such as WHO, ICES etc.

Scientific background documents are produced either in the form of position papers from working groups, with expert representatives from Member States. External expertise is also collected in the form of reports from separate studies or contracts or workshops - with representatives from different disciplines - when specific issues have to be addressed. Specialised scientific bodies like ICES or WHO are often involved. This information often serves as an important input to the DG in the development of policies.

Database Report

23 Advisory Bodies covered in database

Name of body	Policy areas covered	Who advised	Full/basic coverage	Nature of body	Some Categorisation
CREST (Scientific and Technical Research Committee)	Research	Head of Govt & Ministry & Agency	Full	Statutory Permanent	Type A
STOA (Scientific and Technological Options Assessment)	Agriculture, Environment, Health, Fisheries, Transport, Research, Energy	Legislature (European Parliament)	Full	Statutory Permanent	Type A
COST (European Co-Operation In The Field of Scientific and Technical Research)	Agriculture, Transport, Environment, Research, Health, Energy, Fisheries	Council of the European Union, Other (forum for international European research cooperation)	Basic		Type A
ERRAC (European Rail Research Committee)	Transport, Research	European Commission (DGTREN, RTD, ENTR, INFOS)	Full	Non-Statutory Fixed-term	Type A
EURAB (European Research Advisory Body)	RTD Policy	European Commission	Full	Statutory Fixed-term	Type A
European Energy and Transfer Forum	Transport, Energy	DG Transport and Energy	Basic		Type B
CSTEP (Scientific, Technical and Economic Committee for Fisheries)	Environment, Research, Fisheries	Ministry, European Commission	Full	Statutory Permanent	Type A
EAG Priority 5 “Food Quality and Safety”	Agriculture, Environment, Health, Fisheries, Research	European Commission	Full	Non-Statutory Fixed-term	Type A
EGE (European Group on Ethics)	Agriculture, Environment, Research, Health	European Commission	Full	Non-Statutory Fixed-term	Type A

ICES (International Council for the Exploration of the Sea)	Environment, Research, Fisheries	Ministry, Agency	Full	Non-statutory Permanent	Type B
Scientific Steering Committee	Health, Research	Legislature, European Commission	Full	Statutory Fixed-term	Type A
SCF (Scientific Committee on Food)	Health, Research	Legislature, European Commission	Full	Statutory Fixed-term	Type A
SCAN (Scientific Committee on Animal Nutrition)	Agriculture, Environment, Research, Health	Legislature, European Commission	Full	Statutory Fixed-term	Type A
SCAHAW (Scientific Committee on Animal Health and Animal Welfare)	Agriculture, Fisheries, Research, Health	Legislature, European Commission	Full	Statutory Fixed-term	Type A
SCVMPH (Scientific Committee on Veterinary Measures relating to Public Health)	Health, Fisheries	Legislature, European Commission	Full	Statutory Fixed-term	Type A
SCP (Scientific Committee on Plants)	Agriculture, Environment, Research, Health	Legislature, European Commission	Full	Statutory Fixed-term	Type A
SCCPNFP (Scientific Committee on Cosmetic Products and Non-Food Products intended for Consumer)	Health	Legislature, European Commission	Full	Statutory Fixed-term	Type A
SCMPMD (Scientific Committee on Medicinal Products and Medical Devices)	Research, Health	Legislature, European Commission	Full	Statutory Fixed-term	Type A
SCTEE (Scientific Committee on Toxicity, Ecotoxicity and the Environment)	Environment, Health	Legislature, European Commission	Full	Statutory Fixed-term	Type A
Scientific and Technical Consultative Committee of Euratom	Research, Energy	European Commission	Full	Statutory Permanent	Type A
EGLS (European Group on Life Sciences)	Agriculture, Environment, Research, Health, Fisheries	Commissioner for Research	Full	Non-statutory Fixed-term	Type A

ACARE (Advisory Council for Aeronautics Research in Europe)	Research	Ministry, Agency	Full	Non-Statutory Fixed Term	Type A
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23.1 General trends

- Most of the scientific advisory bodies covered in this report are type A organisations, meaning that they are core scientific advisory bodies, as they were established to assist different bodies in the formulation of policies through the provision of scientific advice.
- The majority of all scientific advisory organisations that provided input about their nature stated that are statutory, and mainly of fixed term. The policy areas that they cover are in direct relation to the body or directorate general they are providing advice for.
- Most of the type A and B¹² EU organisations provide scientific advice to the European Commission as well as local and other European ministries, agencies and legislatures.
- The vast majority of all scientific advisory bodies were established between 1995 and today.

23.2 Structural issues

23.2.1 Secretariat

The vast majority of all type A and type B bodies originating from the EU replied that have a secretariat, which usually consists of 1 to 10 people, with the exception of the European Energy and Transfer Forum that stated that its secretarial activities are undertaken by the Commission.

Generally, the secretariats undertake functions such as general administrative backing for the body, providing members with relevant documentation, producing minutes of meetings, holding responsibility for the international and public relations of the body, etc. However, STOA's secretariat is also responsible for the whole study management process, i.e. in-house or outside studies; drafting projects specifications and calls for tenders, evaluating proposals, selecting contractors, liaising with this contractor along the life-cycle of studies, etc.

Half of the entire population stated that they use the background work performed by their secretariat when formulating scientific advice, and more specifically the vast majority of the respective bodies tend to use this work rather often than seldom. In particular, an EAG that participated in the study noted that it often uses the background work of its secretariat during the generation of scientific advice.

¹² Type A bodies are the ones which primary role is to provide scientific advice, while Type B bodies are the ones that provide scientific advice but it is not their primary operation.

23.2.2 Membership

In general, the bodies tend to be dominated by ‘academic experts in natural and physical sciences’ or they have members of a fairly broad spread of backgrounds (although the natural and physical scientists may be the largest group).

The EU type A organisations employ, in their vast majority, between 10 and 30 members, with the exception of CREST that employs about 100 people. The members of type B may be larger in number, depending on what is counted (the overall amount of the members, or the top decision making body within these organisations).

It is worth mentioning that the vast majority of all type A and B EU organisations tend to be focused in their scope, while the bodies that have more broad and open remits tend to include within their staff social and other scientists or representatives as well; for example, the European Energy and Transfer Forum has a broad remit and thus includes within its personnel, apart from academic experts in natural and physical sciences, industry representatives, lay people and others. The exception to the above pattern is CREST as almost 80% of its members are civil servants.

The number of female employees is very limited. In more detail, amongst the EU scientific advisory bodies, the ones that did provide with insight to this question estimated the amount of women employees to be around 25% to 30% of the total number of employees. Beyond this overall breakdown there does not appear to be any specific trends regarding the gender of the members.

Concerning the composition of the bodies, almost half of all EU organisations have experts who work in other countries or are members of international advisory bodies.

With respect to the procedures followed by the EU organisations for the selection of their members, almost half of the population advertises the position or makes an open application, while 1 in 3 makes an appointment.

23.2.3 Budgets

All scientific advisory bodies of DG SANCO did not provide insight about their budgets, stating that it depends on a number of parameters, such as the number of their meetings, etc. However, they did state that their budget is funded by the European Commission. Regarding the remaining bodies, their budget varies from 400,000 € and 600,000 €, while only ICES, which is an international scientific advice organisation, had higher budget (3,330,000 €). Only CSTEP and ICES provided information on the budget spend for their secretariat: CSTEP which annual budget is 400,000 €, spends half of its money for its secretariat, while 90% of ICES’s money are spend on its secretariat. Concerning the amount of budget spent for scientific advice, most of the organisations that reported their budget noted that they spend their entire budget for the generation of scientific advice, with the exception of ICES, which is a type B organisation and thus not expected to spend its entire budget for scientific advice.

23.3 Functional Issues

23.3.1 Scope of work

Regarding the core scientific advisory bodies (Type A) of EU, all of them are focused while amongst the Type B organisations, one was of broad scope (European Energy and Transfer Forum).

No obvious pattern can be spotted between the scope of the body and the activities it undertakes, neither for type A nor for type B EU organisations, although the vast majority of all organisations undertake activities that seem to be rather focused, since they deal mainly with updating reviews on state-of-the-art and raising public awareness.

23.3.2 Independence

With respect to the procedures followed by the EU organisations for the selection of their members, half of all organisations use the method of advertisement/open application, while the second most used method is the appointment. Regarding whether the bodies can select subjects or if they are purely reactive, no core conclusion could be drawn due to divergence of opinions.

Concerning the outcome that is being delivered to the body requesting advice, the vast majority of all EU bodies stated that they give their opinions in final form to the policy-makers, while 15% of the organisations noted that they perform dialogue between themselves and the policy makers. However, even though the majority of the organisations stated that they provide their advice in final form to the policy makers, many added that they engage themselves in conversations with the policy makers before the delivery of the final report.

After the creation of the final reports, the vast majority of the core scientific advisory as well as multifunctional bodies of EU stated they disseminate the information to the public mainly with the use of the media, their website or other publications.

23.3.3 3.3 Transparency

Almost 80% of all EU organisations noted that they operate under a code of practice that has been created and signed by the respective public authority. These codes of practice tend to cover the structural and processional issues of the body, the methods used for the selection of employees, the composition and selection of the members of the Board, etc.

Concerning conflicts of interest, the majority of all scientific advisory EU bodies reported that their members declare them, while 30% of all interviewed organisations did not provide input to this issue.

With respect to the confidentiality requirements, most of the type A and half of the type B EU bodies are restricted to retain the material used in the discussions along with the minutes

produced in their meetings confidential. For example, the Scientific Committee on Fisheries is obliging its members to retain confidential, after request, the discussions of the body.

The information that EU scientific advisory bodies have available on their websites usually involve the remit of their body, their advice reports (on specific issues), their agendas and the minutes of their meetings and again the most used method was the web.

The majority of EU bodies do not hold meetings that are open to the public. The organisations that do hold open meetings tend to perform conferences or workshops for the public or specified categories of citizens.

23.3.4 Generation, delivery and responses to advice

Since the size of the core scientific advisory bodies in EU tends to be fairly small, the majority of the organisations meet regularly and at request of the respective public authority. They also prefer to form sub-groups in order to execute the required tasks; for instance, the scientific advisory bodies of DG SANCO and their sub-committees are permitted to invite external experts to participate in their work.

The information utilised for the generation of scientific advice usually derive from the expertise held by the members of the scientific advisory bodies, the review of existing literature and the background work performed by the secretariat. Regarding public consultation, the majority stated that they do not perform, while amongst those that do perform public consultation the most used method is the stakeholder dialogues as well as the Internet dialogues.

The type of advice generated by the type A and B organisations is usually in direct relation to the activities and the scope of the body. Regarding the finalisation and delivery of the advice to the requesting body, the majority of all types of organisations stipulate consensus of opinions. The type of advice delivered to the policy makers is usually risk assessments, while second in rank are the policy recommendations. Forecasting scientific advice or other types are not so popular types of scientific advice delivery amongst the EU bodies.

With respect to the requisite of formal policy response most of the organisations did not provide input whether they requisite it or not. Amongst those that did provide input, only 22% stated that they prerequisite it (CSTEP, ERRAC and the Scientific and Technical Committee for Euratom) and that it concerns proposals of the European Commission, at least for the case of CSTEP although ERRAC stated that since its members are members of the European Commission and Member States, it is a rational outcome rather than a requisite to have feedback and policy response regarding their scientific advice provision. The policy responses for their scientific advice are publicly available in the first two cases. On the other hand, although EURAB did not state whether there is a formal policy response for their scientific advice or not, they noted that the Commission has to provide regular information on the possible follow-up actions undertaken, while regarding the scientific advisory committees of DG SANCO all of them stated that the scientific advises they produce are utilised by risk managers in the formulation of policies.

23.3.5 Evaluation and impacts of advice

As reported above, the vast majority of all types of scientific advisory organisations stated that there is no formal policy response for their provision of scientific advice. With respect to formal assessment, the pattern is the same, either for type A or B EU bodies, meaning that there is not usually formal assessment, although when there is this involves their operation and scientific advisory function and is usually conducted by a sponsoring organisation.

26% of all EU scientific advisory bodies were aware that their advice has had an impact on policy formulation or on the profile of debates, etc., while the remaining bodies did not provide insight either because it was too early, with respect to their establishment year, or because of other reasons.

Concerning whether their scientific advice has been utilised by international advisory bodies or in general by advisory bodies in other countries, only 40% of all bodies were aware of such dissemination, and amongst them 70% stated that these assessments lead to further actions (e.g. changes in the operation of the body).

23.3.6 Changes in the advisory system

70% of all scientific advisory bodies of the EU (both type A and B) did not undergo any changes during the last 5 years, while only 5% underwent some kind of change (e.g. administrative changes, scope changes, etc). This phenomenon is justified by the fact that 48% of the entire population was established between 1995 and 1999 and 22% after 2000, thus the relative question of the questionnaire did not apply to them.

Finland

General overview

24 Background

The political system of Finland is a mix between a parliamentary and a presidential system, and has sometimes been characterised as a semi-presidential system. The people elect the parliament in a popular vote (proportional system). After the election the head of state, the president, appoints the Prime Minister who in turn appoints ministers to the cabinet (statsrådet). The cabinet has to have the confidence of and is accountable to the parliament. The power of the president, who is elected in a popular vote, has had a stronger position than in an ordinary parliamentary system. He has had an executive role in certain areas of government (most profoundly in foreign policy), has had the possibility to present proposals to the parliament, appoints higher public officials (in consultation with the cabinet), and has had the possibility to dissolve the parliament. Through informal and formal changes the general trend is however that the presidential role has decreased during the last decade. After a constitutional reform 2000 the country can, to a large extent, be characterised as a parliamentary political system (Nousiainen 2001).

Finland provides a relatively clear-cut case of cabinet government. The cabinet as a collective body is (in consultation with the president in some areas) the head of the government. The cabinet (that at the moment consists of 17 ministers) prepares decisions in all areas, also the ones where the president is decisive, and controls the public administration. All major government decisions in the cabinet are, after a Swedish model, made collectively. Hence most matters are prepared and signed by concerned ministers, but the final decisions are made by the cabinet in plenum. However, unlike the situation in Sweden, the ministers have some limited possibilities to make certain political decisions. The ministries of the Government office are:¹³

- The Ministry for Foreign Affairs
- The Ministry of Justice
- The Ministry of the Interior
- The Ministry of Defence
- The Ministry of Finance
- The Ministry of Education
- The Ministry of Agriculture and Forestry
- The Ministry of Transport and Communications
- The Ministry of Trade and Communications
- The Ministry of Social affairs and Health
- The Ministry of Labour
- The Ministry of the Environment

The relationship between the cabinet and the public administration is a mix between a separate, Ministry-Agency structure based on a Swedish model, and a more hierarchical

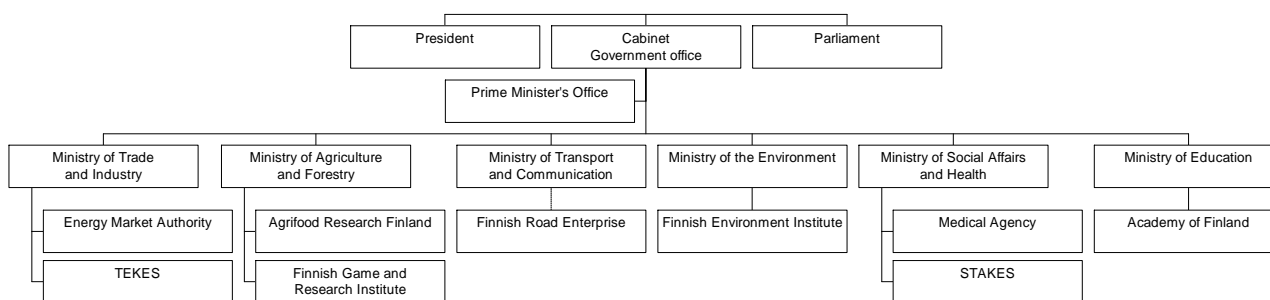
¹³ Information from April 2002.

structure. The Government office consists of 13 ministries and the Prime Ministers office. Traditionally the ministries primarily functioned as staff-bodies to the ministries, and policy implementation was primarily overseen by a large number of rather independent agencies and boards. Each body was formally under the auspices of a ministry, but the ministries exercised no direct control over the implementation process. During the 1990s the executive function has, however, undergone essential changes. In many areas the central agencies and boards have lost influence or been abolished. The consequences have been that regulative power partly has been centralised from the central agencies to ministries, and partly decentralised to the regional bodies. In most areas there have, however, also been created different new bodies to handle expert- and research functions (centraler). This was called the “one-step administration reform”. As in many other countries a large number of state-owned companies has been privatised (Selovuori 1999).

Finland can furthermore be characterised as unitary political system, that is sovereignty lies exclusively with the central government, but is also combined with a relatively strong tradition of local self- government. The regional level is not important at a political level, but increasingly at the administrative level.

The policy process in Finland is perhaps more than the other Nordic countries characterised by consensus building and corporate structures (Pettersson 2000, s. 175 f., Hague & Harrop 2001, s. 162). National labour market organisations and agriculture organisations have been strongly involved in the policy making process. As in Sweden the committee institution has played an important role in this respect. In Finland the interest groups’ involvement have however to a higher extent been channelled through permanent committees connected to the ministries. The tense situation for Finland during the cold war, due to its “special relation” with the Soviet Union, and a constitution that on many issues demanded a qualified majority also fostered a consensus orientation among the political parties. This political system is now, due to international and constitutional changes, changing, and are to a large extent converging with the development in the other Nordic countries (Pettersson 2001, s. 176).

Structure of Government in Finland



STAKES= the National Research and Development Centre for Welfare and Health (Forsknings- och utvecklingscentralen för social- och hälsovård)

TEKES= The National Technology Agency (Teknologiska utvecklingscentralen)

24.1 Policy areas

24.1.1 Agriculture

Agriculture policy is the responsibility of the Ministry of Agriculture and Forestry (Jord- och skogsbruksministeriet). In this policy area the ministry has a direct responsibility both for preparing legislation and implementing policy. The Ministry is responsible for the preparation of legislation, the financing of support measures and the monitoring of implementation, as well as the direction and support of research and advice.

Under the auspices of the ministry there are a number of independent units, mainly connected to research and expert functions, for example *Agrifood Research Finland* (Forskningscentralen för jordbruk och livsmedelsekonomi).

24.1.2 Fisheries

This policy area is also the responsibility of the Ministry of Agriculture and forestry. As in agriculture the ministry is both responsible for formulation of policy proposals as well as implementing laws and regulations.

24.1.3 Energy

Energy policy is primarily handled by the Ministry of Trade and Industry (Handels- och industriministeriet), but also the Ministry of the Environment is an important actor in this area.

Important public actors in this area are also, for example, the Energy Market Authority (Energimarknadsverket) and the National Technology Agency (TEKES, Statens tekniska utvecklingscentral).

24.1.4 Transport

The Ministry of Transport and Communication (Kommunikationsministeriet) is the responsible governmental body for preparing and implementing decisions.

The policy area is however dominated by a number of large governmental enterprises and agencies, working relatively independent from the ministry, for example the Finnish Road Enterprise and the Telecom Administration Center.

24.1.5 Environment

The Finnish Ministry of the Environment is both responsible for preparing and implementing decisions. It formulate policies, carries out strategic planning, implement decisions and sets binding standards.

To a large extent the implementation tasks are in the hands of regional bodies (Regionala miljöcentraler).

24.1.6 Health and the Consumer

Ministry of Social affairs and Health directs and guides policy on social security, social welfare, and health care. The Ministry defines the main lines of the policy, prepare legislation, and supervise legislation. Social and health care policy is however first and foremost implemented by local and regional authorities.

Important bodies under the auspices of the Ministry are the Medical Agency (Läkemedelsverket) and the National Research and Development Centre for welfare and Health (Forsknings- och utvecklingscentralen för social- och hälsovård, STAKES).

The National Food Agency operates under the Ministry of Agriculture and Forestry. The task of the National Food Agency is to direct, plan and develop national food control and to conduct control measures in some areas.

24.1.7 Research

Research is primarily the responsibility of two Ministries: the Ministry of Education and the Ministry of Trade and Industry. Also the other ministries have research budgets, but these two dominates. Together these ministries control more than 80 percent of the governmental funds for research and development. The ministry of Education also has a co-ordinating role for the research policy within the government.

Research funding is primarily in the hands of two major agencies: the Academy of Finland (Finlands akademi) under the auspices of the Ministry of Education, and the National Technology Agency (TEKES) under the auspices of the ministry of Trade and Industry). Another significant player is the Finnish National Fund for Research and Development (SITRA) SITRA is a relatively autonomous organisation that is subordinate to the Finnish Parliament. Research in the public sector is mainly performed by the universities and the state sector institutes.

25 Scientific Advice

25.1 General Background

In Finland (as in Sweden) the committee institution has played an important role as a structure for scientific advice. When an issue arise on the agenda, or when the cabinet wants to prepare legislation, the cabinet or the minister usually appoints a committee. This committee system is however not as institutionalised as in Sweden, and there are also several different kinds of committees that have been used for this purpose over time. Finland does not have a institutionalised referral system in the same way as in Sweden, but it has been more and more common that ministries send out the committee report to relevant interest groups and experts for comments (Helander & Johansson 1998, s. 95-108).

In Finland the primarily source of expertise in these ad-hoc committees has been the members. Compared to Sweden these committees have to a large extent been dominated by civil servants. Members of parliaments and representatives from interest groups have been less important members. About 10 percent of the members of committees during the last 10 years have been representatives of research institutes. In Finland representatives from research organisations are members, and not only, as often in Sweden, external experts. In Finland it has also been less common that committees have commissioned external research or investigations (Helander & Johansson 1998).

During the 1980s and 1990s the committee system in Finland have undergone significant changes. To make the policy formulation process more flexible, the number of committees have decreased. Instead investigations have to a higher extent been delegated *to working groups* or *projects* that are established for shorter time periods, and are dominated by civil servants, but also often include representatives from research institutes or universities. As in Sweden, it has also become more common with one-man investigations. Another change that can be observed is that the use of *seminars* as a way to acquire knowledge became more important during the 1980s (Helander & Johansson 1998, s. 108).

In Finland the committee system also include a large number of permanent committees and councils. Historically the main function of these bodies has been to integrate different interest groups in the work of the government. Today a number of bodies do also have objectives that more explicitly concerns scientific advice. One obvious example is the *Science and Technology Policy Council of Finland* (Statens vetenskaps- och teknologiråd) that has a central role as an advisory body for the whole cabinet in different advisory issues, apart from its role as a specific advisory body to the Ministry of Education and the Ministry of Trade and Industry. Another example is *The Consultative Committee on Road Safety* that is an expert body giving advice to the Ministry of Transport and Communications.

It is also important to stress that the Finnish systems sectorial research institutes play important roles as providers of scientific research. This is partly done within different kinds of committees and working groups, but also through research projects commissioned by the Ministries, and by informal contacts. It is important to point out that these institutes do not only have the role as knowledge producers, but are also expert agencies within their policy fields. The institutes are also involved in research oriented evaluations of different public programs.

In the parliamentary arena the members of parliament use hearings to get information from different actors. The Committee for the Future is a specific parliamentary committee working with future studies and technology assessment.

Overall the process of scientific advice in the Finnish system seem rely on a number of sources, and the possibilities for civil servant at different level to initiate investigations seems to be rather extensive. The process is however less open to public scrutiny, and more dominated by civil servants, compared to the Swedish system. The general trend is also that informal working groups are replacing formal committees in preparing political decisions. The institutes play important roles in many projects and committees.

25.2 Advice provision in relevant policy areas

25.2.1 Agriculture

The Ministry of Agriculture and Forestry (Jord- och skogsbruksministeriet) has the main responsibility for the direction and support of research and advice.

Under the auspices of the ministry there are a number of independent units, mainly connected to research and expert functions, for example *AgriFood Research Finland* (Forskningscentralen för jordbruk och livsmedels ekonomi).

25.2.2 Fisheries

The important provider of scientific advice in this policy area is the Finnish Game and Fisheries Research institute (Vilt- och fiskeriforskningsinstitutet).

25.2.3 Energy

Advice is to a large extent provided through ad-hoc working groups. Important providers of advice in this area are also the Energy Market Authority (Energimarknadsverket) and the National Technology Agency (TEKES, Statens tekniska utvecklingscentral).

25.2.4 Transport

There is a research department within the Ministry of Transport and Communications.

There are generally several committees and working groups that have important functions as advisory bodies in this area, both ad-hoc and permanent. The National Technology Agency (Teknologiska utvecklingscentralen, TEKES), provides the area with expert advice.

25.2.5 Environment

The Finnish Environment Institute (Finlands miljöcentral) produces research, administrative data bases and has an advisory function in relation to the Government and the public. There are also ad-hoc committees with advisory functions.

25.2.6 Health and the Consumer

Important actors are the Medical Agency (Läkemedelsverket) and the National Research and Development Centre for Welfare and Health (Forsknings- och utvecklingscentralen för social- och hälsovård, STAKES) and the National Food Agency. The National Veterinary and Food Research Institute also conduct research that concerns this policy area.

25.2.7 Research

The Science and Technology Policy Council is, as has been pointed out earlier, an important advisory body in this policy area. The Council assists the Government and its ministries to, among other things, direct Science and Technology policy and make it nationally coherent, and to prepare relevant plans and proposals for the Government.

Also the Academy of Finland and TEKES has important roles as providers of scientific advice.

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Database report

27 Advisory Bodies covered in database

	Name of body	Policy areas covered	Who advised	Full/basic coverage	Nature of body
<i>Type A1 (committee at ministry- level)</i>	The Science and Technology Policy Council of Finland	Research	Ministry	Full	Non-statutory permanent
	The National Advisory Board on Research Ethics	Research	Ministry Agency	Full	Statutory permanent
	The National Advisory Body for Biotechnology	Environ. Health Research	Ministry	Full	Statutory permanent
	The National Advisory Board on Health Care Ethics	Health	Ministry	Full	Statutory permanent
	The Advisory Committee on Nuclear Energy	Environ. Energy Research	Ministry	Full	Non-statutory permanent
	Finland's Advisory Committee on Chemicals	Environ. Health	Legisl. Ministry Agency	Full	Non-statutory permanent
	The Advisory Committee on Health Effects of Chemicals	Health	Legisl. Ministry	Full	Statutory Permanent
	Finnish Scientific Committee on Health Effects of Chemicals	Health	Ministry	Full	Statutory permanent
<i>Type A2 (committee at agency- level)</i>	The Advisory Committee on Nuclear Safety	Environ. Energy	Agency	Full	Statutory permanent
	The Committee on Safety, Efficacy and Quality of Medicines	Health	Agency	Full	Statutory permanent
<i>Type B1 (Research council)</i>	Academy of Finland	Research	Legisl. Ministry	Full	Statutory-permanent
<i>Type B2 (Gov. Institutes)</i>	The Finnish Game and Fisheries Research Institute	Fisheries	Ministry	Basic+ relevant questions in	Statutory-permanent

			other sections	
The Finnish Environment Institute	Environ.	Ministry	Basic+ relevant questions in other sections	Statutory-permanent
The National Research and Development Centre for Welfare and Health	Health	Ministry Agency	Basic+ relevant questions in other sections	Statutory-permanent
Agrifood Research Finland	Agri. Health	Ministry	Basic+ relevant questions in other sections	Statutory-permanent

27.1 General trends

This analysis is based on data about a selection of permanent scientific advisory bodies in the Finnish political system. A scientific advisory body is defined as a governmental body established to, as the single or one major objective, give scientific advice to decision makers in the Government (executive or legislature).

The bodies have been divided into two groups: type A and type B bodies. Type A-bodies are committee-structured bodies with scientific advice as the major function. The type B-bodies are governmental bodies with multiple functions. There are sub groups within the group of type A bodies: committees and councils at the Ministry-level (A1) and committees and councils at the agency level (A2). The type B bodies have also been divided into two sub groups: research councils and the research institutes. The main objective of the councils is research funding, but they also have advisory and dissemination objectives. The main objectives of the institutes are research performance, but they also to different degrees have advisory functions.

The identification of scientific advisory bodies was made in three steps. First by identifying bodies mentioned at the web sites of the relevant ministries. Secondly by asking officials at the relevant governmental ministries to identify the *major* national bodies with scientific advisory functions. Thirdly by a snowball method, asking respondents of identified bodies to identify other important scientific advisory bodies in their field. In areas with many advisory bodies, such as in the health policy area or the research policy area, a selection of typical bodies was made.

The type A bodies in this study are either established by law, or established by decision of the Government (the cabinet). Most of the type A bodies are, however, connected to a Ministry. There is one type B1 body (research council) represented here, the Academy of Finland, which controls a large part of governmental research funding in Finland. The Academy of Finland is a governmental agency, established by law with an independent status under the Ministry of Education. The type B2 bodies are research institutes, with broad tasks within their respective policy areas. Their main task is research performance, but there are also large expert bodies, acting as knowledge producers for governments within their respective fields.

Most bodies give advice to ministries, but it is also important to note that quite a few also give advice to the parliament. Just a couple of the bodies identified here give advice to agencies, which is a result of the “one step reform” in Finland during the 1980s and 1990s, where many independent governmental agencies, outside the ministries, were abolished.

The type A bodies are related to the policy areas of health, research, the environment and energy. In the areas of agriculture and fisheries the type B2 bodies (research institutes) are more important as advisory bodies. In the policy area of transport no scientific advisory bodies has yet been identified.

A large part of the bodies are fairly new; most of them were established during the 1980s and 1990s. However, they have also often had predecessors with similar objectives.

27.2 Structural issues

27.2.1 Secretariat

The type A bodies do often have secretariats that are provided by the ministries, and they are usually rather small. Some have 1-2 people on the staff, and for some of them the secretariat function is provided by ministerial personal that also have other tasks. The secretariats primary function is to prepare meetings, but in some cases the members of the secretariat also act as experts.

The type B bodies have much larger resources. The Academy of Finland has a large secretariat with a staff of over 100 people. This secretariat works with project administration and preparation of council meetings, but also with, for example, policy analysis and information.

27.2.2 Membership

The type A committees do usually have between 10 and 20 members. For the type B bodies the membership numbers depends on what is counted. If the organisation as a whole is considered then the membership are between 100 (the Academy of Finland) to over 900 (Agrifood Finland). However, if the top decision making body within these organisations are considered then the numbers are similar to type A bodies.

The type A bodies and the B1 bodies (the Academy of Finland) are dominated by two groups: “academic experts in natural and physical sciences” (over 40% of the total number of members) and civil servants (almost 30% of the total number of members). The large number of civil servants is an indication of the close relation between ministry and advisory body. Only a couple of bodies have representatives from the group “academic experts in social sciences”, while there are quite many representatives from the industry. There are also few experts from other countries represented; the examples are often members from similar bodies in other Nordic countries. In most type A and in the Academy of Finland, between 40 and 50 % of the members are women. Exceptions are the committees connected to nuclear energy and safety, where about 20 % of the members are women.

27.2.3 Budgets

The budgets of the type A bodies can be estimated to between 10 000 and 50 000 Euros. In reality these figures are difficult to estimate since the secretariats most often are closely connected to a ministry.

The budgets in the type A bodies are mostly spent on the secretary function and expenses for the members. In a few bodies the chairman is working part time. Most of the type A bodies are funded within the budgets of specific ministries or agencies. The two councils established by law (one type A1 and one type A2) are funded by specific grant decided on by the parliament.

27.3 Functional Issues

27.3.1 Scope of work

Most type A bodies are fairly focused, while the type B bodies are broader in scope. There do not seem to be a relationship between scope and membership. Most type A bodies are focused but most are also broad; one would perhaps expect the opposite correlation. However, the pattern, based on a small material, is probably a result of a strong consensus culture in Finland; co-operation, co-ordination, and dialogue are more important than formal advice. One important type A body is fairly open in Scope: the Science and Technology Policy Council of Finland

Some of the type A bodies are working with active information to the public. As mentioned before, the main objective of the Academy of Finland is research funding, but they are also working with, for example, research dissemination and evaluations. The main objective of the research institutes is research performance, but they also often work with, for example evaluation and information.

27.3.2 Independence

Most type A bodies are established by law, but usually closely attached to a ministry or an agency. The National Advisory on Health Care Ethics is established by law, but also works actively with information and education, although it's secretariat is closely attached to a ministry. The Government formally appoints the members of the type A bodies and the Academy of Finland. Most type A bodies at least have the possibility to select their own subject. Their task is however primarily focused on dialogue and reactive advice.

The type B bodies are established by law and have a stronger formal status than the type A bodies. They also have large staffs, present independent advice reports, and often have an active communication with other actors.

27.3.3 Transparency

The type A1 bodies are governed by instructions from the Government, but not really any code of practice. One A2 body, connected to the Medical Products Agency does have some

code of practice. In this case, as well as within the bodies connected to nuclear issues there are also demands about conflict of interest, and some documents and discussions are confidential.

Due to the openness of the Finnish system, most public documents are open to the public unless there is specific legislation stating secrecy. Advisory and activity reports of the type A1 bodies are sometimes published on the web site. In some cases agendas and minutes of type A bodies are also published on the web.

No bodies do have meetings in public, but some arrange conferences, seminars, hearings etc., that can be categorised as communication with the public.

27.3.4 Generation, delivery and responses to advice

Most of the bodies operate with either a consensus decision-making model, or present a number of options. Only one has a majority vote decision-making model. Most bodies work with both dialogue and present final statements. The most important sources for the advice are the expertise of the members and the background work of the secretariat.

Bodies with a broader mandate rely more on the background information of the secretariat and sometimes on external experts. The major type A1 bodies work more with policy formulation and priority setting, while the minor type A2 bodies work more with risk assessment and technological standards.

There are a couple of cases where a policy response is required, but this is not the overall trend.

27.3.5 Evaluation and impacts of advice

For most bodies it is hard to give concrete examples of impact. It is often a matter of impact on a process or the development within a specific policy area. What concerns impact on the work of other countries or of international bodies there are also few examples; these concern medical and ethical issues. In these cases it seems to exist an international network, due to common legislation and on going discussions about, for example, gene technology. Some representatives of bodies also mention that there are cases of organisational diffusion.

27.3.6 Changes in the advisory system

During the 1980s and 1990s the committees in Finland have become less important as advisory bodies. The scientific advisory function is to a high extent concentrated to the large research institutes. These bodies supply the ministries with research reports, supply temporary working groups and projects with expertise, and function as the producer of applied research in respective policy area.

France

General Overview

In France, scientific advisory bodies are always official public structures, and these have grown more numerous and more specialised with the years. Scientific advice is strictly regulated by law and can therefore be studied as a process. This report is hence relatively synthetic; it is structured around three sections. First, we give an overview of the French political system and introduce historical and general considerations of scientific advice in France. The second section analyses operating modes, and the third gives a selection of scientific advisory bodies categorised by policy area.

28 Background

28.1 Political System

The political system in force in France is the 5th Republic, a parliamentary democracy based on the 1958 Constitution. The Constitution is based on two important principles. First, the three powers (Executive, Legislature and Judiciary) must be kept separated and second, the Government is answerable to the Parliament. The three main institutions are as follows:

- The President of the Republic (Head of the State) is elected by direct vote for all for five years. He appoints the Prime Minister (who practically must be from the political party which has a majority in the National Assembly), chairs the weekly Council of Ministers and can dissolve the National Assembly. He is the chief of armies and organises the foreign policy. He can consult the people by referendum.
- The Government is composed of a Prime Minister (Head of the Government) and between 20 and 40 Ministers (important) and State Secretaries (less important). The Government shares the executive power with the President. Prime Minister and President may be from two different, even opposite, political parties; this special case is called cohabitation. The ministries of the current government – elected in 2002 – are:
 - Ministry of Home Affairs
 - Ministry of Economy, Finances and Industry
 - Ministry of Agriculture, Food, Fishing and Rural Affairs
 - Ministry of Health, Family and Disabled
 - Ministry of Ecology and Sustainable Development
 - Ministry of Social Affairs, Work and Solidarity
 - Ministry of Infrastructure, Transportation, Housing, Tourism and the Sea
 - Ministry of Youth, Education and Research
 - Ministry of Justice
 - Ministry of Foreign Affairs
 - Ministry of Defence
 - Ministry of Public Office, State Reform and Regional Planning
 - Ministry of Culture and Communication
 - Ministry of Overseas Territories

– Ministry of Sports

- The two chambers form the Parliament: the National Assembly (lower chamber) is composed of 577 deputies that are elected for five years by a direct vote for all, and the Senate (higher chamber), composed of 321 senators, elected for nine years by a college formed by deputies, regional, departmental and city representatives. A third of the Senate is elected every three years.

Policy making in France is then the result of collaboration between these three institutions. Government and Parliament are closely linked together; the Parliament must trust the Government or else laws suggested by the Government may not be passed by the Parliament and the Government may be forced to resign. In another hand, the President is rather independent. He appoints the Prime Minister and chooses ministers with him, but isn't answerable to the Parliament like the Government is.

29 Scientific Advice

29.1 Origins of Scientific Advice

Scientific advice has been historically assigned in France to the Academies, especially the Academy of Sciences and the Academy of Medicine. For instance, the *Académie des Sciences* was created in 1666 as a simple, though official, gathering of national and foreign scholars that could be summoned by the government about any general purpose question in relation to city affairs like the conveyance of drinkable water, the choice of hospital location or street lighting. The Academies, together with certain consultative committees created during the 19th century that still exist today, often after having been renamed (like the Higher Council of Public Health – *Conseil Supérieur d'Hygiène Publique*), have retained a great deal credit and prestige.

Political institutions have more recently created a large number of specialized consultative bodies to address the growing complexity of inquiries submitted. These creations have mostly occurred during the past two decades, with the growing importance of public safety and health questions as a key driver¹⁴. The importance attached to ecology and sustainable development issues by the previous government is shown by the multiplication of highly specialised advisory bodies in the environment policy area during the second half of the 1990's (for example, the Committee on Prevention and Precaution (1996), the French Agency for Environmental Safety (2001), the Committee for French Coral Reefs Initiative (2000), etc.).

When it comes to the nature of scientific advice, the role of the expert should be to provide knowledge and not to provide decisions (Roqueplo, 1996). Thus science advisory bodies should not take part in the political decision-making process, but are to produce formalised scientific knowledge to be integrated within a decision process. However, it must be underlined that scientific advisory bodies often deliver advice and recommendations for action too.

¹⁴ The contamination of hundreds of persons by AIDS through blood transfusion in the late 1980's led to the reinforcement of public health surveillance (Law 'on the reinforcement of public health surveillance and of the control of the safety of the products concerning humans', passed on 1 July 1998).

Scientific advisory bodies are created and regulated by law with a considerable amount of detail (number of members, election mode, role and power distribution...) and are thus far more easily created than reformed or dissolved, not to mention the custom of fixing a temporary problem by creating a permanent body. There are no ad-hoc committees. The resulting landscape is a complex superposition of bodies from several generations with various natures and statuses and partially overlapping areas of responsibility;¹⁵ from old and prestigious institutions with a large scope to recent advisory bodies with a limited and specialized scope.

The public research organisations – like the INSERM (French Institute for Health and Medical Research) for health issues, the INRA (*French Institute for Agronomical Research*) for issues related to food for example – can of course still deliver scientific advice, but most of the time they are not summoned for this purpose. One can however mention the ‘Collective Expertise’ procedure (created in 1992) by which INSERM produces knowledge on a specific issue at the request of a ministry.¹⁶ In return, some members of advisory bodies are chosen among scientists of public research organisations. For those reasons, we have chosen not to include the public research centres in this study specifically dedicated to advisory bodies.

In spite of the recent decentralisation efforts, France remains a country where the political structure is highly centralised. The regional aspect of scientific advice is marginal and has therefore not been investigated in this study.

In France, a person sitting on the board of a scientific advisory body is not necessarily a scientific expert but can be an administrator (member because of his/her position within another institution). S/he can be either elected by peers or appointed by a governmental institution. It must also be underlined that some advisory bodies, like the Parliamentary Office of Assessment of Scientific and Technological Choices, is not made up of scientists; but its advice is based on the work of a Scientific Committee (composed of fifteen leading scientists). As a matter of fact, the nature of scientific advice rendered in France is not only scientific, but may as well contain administrative and legal, and sometimes social, economic and technical aspects. Thus a scientific advisory body can alter the scientific aspect of the knowledge produced by a commissioned research centre.

The problematical nature of scientific advice is illustrated by the case of the National Consultative Committee of Ethics on Health and Life Sciences, created by a decree in 1983. Its 40 members are eminent personalities chosen for their philosophical opinions or their scientific competencies. Their advice is requested by public actors or institutions on ethical issues related to medical practices, for instance, in 2000, on the extension of maximum pregnancy duration for which abortion is legal. However the Committee does not consider itself as a scientific advisory body. The French Commission on Sustainable Development takes a similar stand and considers itself as a political advisory body.

¹⁵ For example the overlap between the competencies of the old High Council for Public Hygiene in France and the recent French Agency for Safety of Food created in 1998. A decree concerning the High Council has made clearer the new sharing of competencies.

¹⁶ “In response to a request from the public or private sector, INSERM gathers a multidisciplinary group composed of scientific and medical experts, who review the relevant world literature and write a summary report. Recommendations are then made to enable the institution that requested the report to make fully informed decisions.” (Barré Rémi, Esterlé Laurence, Charlet Vincent, *Science and Governance*, Observatoire des Sciences et des Techniques, Paris, 2000, p. 16).

A decree¹⁷ issued in 1983 specifies the general operating conditions of advisory bodies linked to the authorities or to public administrative institutions. Its main guidelines are:

- Members of advisory bodies must receive a written notice to attend a session at least five days before the session and must be provided with the necessary documents.
- If not specified otherwise, at least half of the members must be present for the rendered advices to be valid.
- Members that may have a personal interest in the debated question are required not to attend the session.
- An official report containing the list of all attending members (name and function), the examined questions and the rendered decisions is written. Members that disagreed with the majority can request their opinion to be written on the official report.
- When an advisory body whose consultation is mandatory did not give its opinion within a reasonable time, the authority that is to make the decision can force the head of the advisory body to arrange a session and to invite all body members to examine the question. If no advice is provided within a time span decided beforehand by the authority, the authority has the legal right to make a decision without any advice from the body.

29.2 Typology of Scientific Advice in France

Scientific advisory bodies are created by and for the governmental authorities. Therefore, they often benefit from administrative support from their related ministries. They may also find useful resources within other organisations, especially research organisations, attached to their ministry.

Providing scientific advice to political institutions may not be the only assignment of these bodies. They may also be in charge of performing some research on their own, of constituting a repository of information and knowledge about the topics they are in charge of, of diffusing knowledge and communicating with the public. Furthermore, they may be involved in evaluating initiatives and policies of their related ministry.

Because of its very official and regulated nature, French scientific advice can be examined as a process in three steps: the request (origin); the types of scientific advisory bodies questioned; the responses (types of advice).

29.2.1 The origin of the request

Although there are a number of channels through which scientific information of various importance and scope can find its way from scientists and research institutions to different decision centres within relevant ministries in fairly informal ways¹⁸, we will concentrate on advice that is formally requested by a political institution.

Political bodies requesting scientific advice may be part of the Executive, namely:

¹⁷ Decree 83-1025, 28 november, 1983.

¹⁸ It is for instance the case of the advice given by the scientists that are civil servants within a Ministry.

- The President of the Republic
 - For instance President of the Republic asked the Academy of Sciences to write some proposals for the political choices on digitisation of knowledge, knowledge on Earth and environment, knowledge on living beings.
- The Prime Minister
 - For example, the Prime Minister asked a member of Parliament to examine the issue of the development of coastal traffic (*Davantage de camions sur les navires et moins sur les routes?*, by F. Liberti, 5 avril 2002).
- The ministries, which are relevant for the seven selected domains - Ministry of Agriculture, Food, Fishing and rural Affairs; Ministry of Economy, Finances and Industry; Ministry of Infrastructures, Transports, Housing, Tourism and Sea; Ministry of Ecology and Sustainable Development; Ministry of Health, Family and handicapped persons; Ministry of Youth, Education and Research.

Alternatively, request for scientific advice may arise from the Legislature, i.e.:

- The National Assembly (Lower Chamber)
- The Senate (Higher Chamber)
- The regional, general (i.e. departmental) and municipal councils (rarely)

29.2.2 *Who to request scientific advice from and by which procedures?*

Political institutions may request scientific advice from different kinds of persons or bodies selected according to their competences or positions. Procedures for requesting scientific advice are regulated by legislation, linked either to the type of issue, to the status of the required expert or politician, or to the missions of the advisory bodies.

One can observe three main types of procedures and four main sorts of advisory bodies:

- A detailed letter (“*lettre de mission*”) given by the authorities to an individual expert. An expert may be consulted individually on the basis of either his/her experience or function. The report is the result of his /her own consultation.
 - Example : at the end of 2000, the Prime Minister asked Maurice Godelier, an eminent French anthropologist, to write a report on the status of Human and Social Sciences in France (*L'état des Sciences de l'Homme et de la Société en France et leur rôle dans la construction de l'Espace Européen de la Recherche*)

Members of Parliament can also be requested to write reports on various topics that may include scientific content. S/he or they get a detailed letter for a parliamentary mission, defined by the article LO 144 of the Electoral Statute Book.

- The *obligation mentioned by a law*: for some issues, the law specifies that some advisory bodies *must be consulted*. Those bodies are *agencies, committees or councils under the responsibility of one or several ministries*, which generally have authority over a limited domain.
 - Example: the High Council for Public Hygiene in France must be consulted on every project concerning improvement of the sanitation. It must also be questioned on vaccinations.

- Example: the French agency for safety of food, created by law in 1998, must be consulted on every bill related to areas of its competence. These obligations are specified in statute book (Code rural, Code de la consommation et Code de la santé publique).
- Example: The General Council of Mines is consulted under the Mining Law

For some questions, the law simply indicates that some advisory bodies *can be* consulted.

- When not mandatory, the authorities may want to refer a question to a scientific advisory body. In this case, the head of a political institution (e.g. a Minister) issues a detailed letter (lettre de mission) in which s/he officially submits a request for advice. Those advisory bodies are either agencies or councils dedicated to very specific issues or Academies.
 - The first mission of the Academy of Medicine is to answer the questions raised by the Government on Public Health issues. The recent Academy of Technologies, created in December 2000 from the Academy of Sciences, “examines questions submitted by the government and social actors”.
 - Example: in July 2001, the Academy of Technologies rendered to the Prime Minister an advice on the intellectual property of software (*avis sur la brevetabilité des inventions mises en œuvre par ordinateur*).

One must finally underline that most of scientific advisory bodies are entitled by law to study a specific question and to submit a report to the authorities whenever they consider it necessary. The latter is called *auto-saisine*.

29.2.3 Forms of scientific advice

Laws and decrees concerning advisory bodies generally mention the form of advice. Four forms can be distinguished as follows:

- A report (rapport). Contains a state-of-the-art study on a specific question
- An opinion (avis). Contains the opinion of the body concerning a debated question
- A recommendation (recommandation). Contains a list of proposed actions
- Pieces of advice of different forms may be found in a single report.

29.3 Provision of scientific advice in the various policy areas¹⁹

As explained in the second section, most French scientific advisory bodies, although independent consultative bodies, are directly linked to the ministries. Some of them are subject to double (or more) administrative supervision, when the questions they are in charge of are related to several policy areas (it is particularly the case with issues concerning health, environment and agriculture)²⁰; scientific advisory bodies with a large scope are often linked to the Prime Minister. Most of the time, advisory bodies are supported (administrative and financial support) by a single Ministry. It is specified whenever more than one ministry support the listed advisory body.

¹⁹ We must first specify that the French government has just changed (in may 2002). The names and the competences of the ministries have changed as well. We have tried to bring updated information when it was available on the web.

²⁰ However, when it is the case, they are listed only once.

29.3.1 Cross Disciplinary Bodies

Some organisations have very large competencies in several policy areas. Although they may be linked to a specific Ministry, their opinion is often required by other Ministries.

- General Office for Planning (*Commissariat Général du Plan*). Operating under the authority of the Prime Minister, its mandate is to inform public policy-making. It is composed of six departments; one of them is dedicated to Energy, Environment and Agriculture.
- General Council of Mines (*Conseil Général des Mines*). Linked to the Ministry of Economy, Finances and Industry. (Competencies for Energy, Transport, Environment...)
- Parliamentary Office for evaluation of Scientific and Technological Options (*Office Parlementaire d'Evaluation des Choix Scientifiques et Technologiques*). Special delegation within the Parliament.
- Higher Council of Meteorology (*Conseil Supérieur de la Météorologie*). Can be consulted for questions related to transportation, agriculture, fishing and environment. Linked to the Ministry of Infrastructure, Transportation, Housing, Tourism and the Sea.

29.3.2 Agriculture and Fisheries

Responsibility for Agriculture and Fisheries policy lies with the Ministry of Agriculture, Food, Fishing and Rural Affairs (*Ministère de l'Agriculture, de l'Alimentation, de la Pêche et des Affaires rurales*). All questions specifically related to fisheries are dealt with within the Ministry by the Department of Fisheries and Aquaculture (*Direction des Pêches Maritimes et de l'Aquaculture*).

The Ministry has five main missions:

- Food quality and safety control
- Preservation of the environment
- Responsibility for agricultural education
- Development of employment in rural areas
- Economic development of agriculture and agribusiness

The law for guidelines in agriculture passed in July 1999 emphasises two notions: quality of production and preservation of environment. It explains that some advisory bodies dedicated to Health or Environment are also placed within the Ministry of Agriculture.

Scientific advisory bodies:

- General Council for Agriculture, Forestry and Environmental Engineering (*Conseil Général du Génie Rural, des Eaux et des Forêts*).
- General Council for Veterinary Affairs (*Conseil Général Vétérinaire*).
- Commission for Bio-molecular Engineering (*Commission du Génie Biomoléculaire*).
Linked to the Ministry of Agriculture and Ministry of Ecology.

- National Council for Food (*Conseil National de l'Alimentation*). Linked to the Ministry of Agriculture and the Ministry of Health.

29.3.3 Energy

Energy related questions are under the responsibility of the Ministry of Economy, Finances and Industry (*Ministère de l'Economie, des Finances et de l'Industrie*), more exactly the Minister in charge of Industry. Within the Ministry, these issues are under the responsibility of the General Directorate for Energy and Raw Materials (DGEMP). The DGEMP defines and implements the national energy policy and mineral raw materials supply policy. Its missions can be grouped in six fields:

- Liberalisation of energy markets, especially electricity and gas
- Follow-up of key sectors of energy and raw materials
- Supervision of public establishments and state-owned companies
- Controls and inspections
- Work at the international and Community level
- Economic expertise

Within the DGEMP, the three following departments are particularly active for questions related to energy:

- DIREM – the directorate for energy and mineral resources (supply questions)
- DIDEME – the directorate of demand and energy markets (demand questions)
- The Observatory of Economy of Energy and Raw Materials

In addition, the Conseil Général des Mines (classified by us as a cross-disciplinary advisory body) is one of the scientific advisory bodies at the minister's disposal.

Scientific advisory bodies:

- Higher Council for Safety and Nuclear Information (*Conseil Supérieur de la Sûreté et de l'Information Nucléaire*)
- French Committee of Dams (*Comité Français des Grands Barrages*)
- Technical Committee for Electricity (*Comité Technique de l'Electricité*)
- National Commission for Evaluation (of sites where nuclear waste may be disposed) (*Commission Nationale d'Evaluation*)

29.3.4 Transport

All questions related to transport are dealt with by the Ministry of Infrastructure, Transportation, Housing, Tourism and the Sea (*Ministère de l'Équipement, des Transports, du Logement, du Tourisme et de la Mer*). The ministry deals with questions of very different nature and is highly decentralised. The main directorates are:

- The Directorate for land transportation (*Direction des Transports Terrestres*) is in charge of implementing policy for transportation of persons and goods. The directorate deals

with all kinds of transportation questions related to roads, railways, rivers and public transportation systems in cities. In addition, it supervises state-owned companies like SNCF (French Railways), RATP (Public Transportation Systems of Paris) and others.

- The Roads Directorate (*Direction des Routes*) is in charge of planning, building and maintaining the roads infrastructures.
- The Directorate for road circulation and safety (*Direction de la Sécurité et de la Circulation Routières*) is in charge of controlling all causes for accidents on roads. It does its job at three different levels: drivers, vehicles and roads.
- The Directorate for sea transportation, harbours and coastal zones (*Direction des transports maritimes, des ports et du littoral*) is in charge of managing the French coastline, while keeping a balance between protection and development. It is as well in charge of controlling the navigation and improving the harbour infrastructure.
- The Directorate-General of civil aviation (*Direction Générale de l'Aviation Civile*) is in charge of security of air transportation, air control, airport policy, supervision of state-owned companies (airlines like Air France and airplane manufacturing companies) and technical control of flying vehicles.

Its important to mention that there are many advisory bodies in this area that are not scientific: three examples are Higher Council for Commercial Aviation, Higher Council for Commercial Navigation and Higher Council for Aerial Infrastructures and Navigation.

Scientific advisory bodies:

- National Transportation Council (*Conseil National des Transports*)
- National Council of Bridges and Roads (*Conseil Général des Ponts et Chaussées*)

29.3.5 Environment

The Ministry of Ecology and Sustainable Development (*Ministère de l'Ecologie et du développement durable*) is in charge of environmental affairs. However, many questions are often dealt with in collaboration with other ministries (e.g. transport, industry, health...). Its missions are:

- Protection of natural sites and landscapes
- Control and management of hunting and fresh-water fishing
- Control of quarries exploitation
- Protection, control and management of water
- Preservation of air quality and management of actions against greenhouse effect
- Coordination of actions related to prevention of natural or technological hazard
- Design and implementation of policies for rational use of energy resources, for the promotion of renewable sources of energy and for safety of nuclear energy together with the ministry of economy, finances and industry. The latter includes questions about transportation of radioactive materials.
- Design and implementation of various policies together with other ministries in the domains of urban planning, transportation, infrastructure, rural affairs, health as far as the environment is concerned.

- Support to any industry and services related to environmental protection
- Information of citizens about environmental matters

Scientific advisory bodies:

- French Agency for Environmental Safety (*Agence de sécurité sanitaire environnementale*). Linked both to the Ministry of Ecology and to the Ministry of Health.
- National Council of Noise (*Conseil National du Bruit*) (Also related to health matters).
- Committee on Prevention and Precaution (*Comité de la Prévention et de la Précaution*). (Also related to health matters)
- Biovigilance Committee (*Comité de Biovigilance*). Linked both to the Ministry of Ecology and to the Ministry of Agriculture.
- Committee for French Coral Reefs Initiative (*Comité de l'Initiative Française pour les Récifs Coralliens*). Linked to the Prime Minister, governed both by Minister of Ecology and the Minister for Overseas Territories.
- National Committee for Water (*Comité National de l'Eau*)
- Higher Committee of Assessment of Volcanic Risks (*Comité Supérieur de l'Evaluation des Risques Volcaniques*)
- Committee on Assessment of Ecotoxicity of Chemicals (*Commission d'Evaluation de l'Ecotoxicité des Substances Chimiques*).
- Commission of Genetic Engineering (*Commission du Génie Génétique*)
- French Commission on Sustainable Development (*Commission française du développement durable*). Linked to the Prime Minister and supported by the Ministry of Ecology.
- National Consultative Commission of Captive Wildlife (*Commission Nationale Consultative pour la Faune Sauvage Captive*)
- Higher Commission of Sites, Perspectives and Landscapes (*Commission Supérieure des Sites, Perspectives et Paysages*)
- National Council of Hunting and Wildlife (*Conseil National de la Chasse et de la Faune Sauvage*)
- National Council for the Air (*Conseil National de l'Air*).
- National Council for Nature Preservation (*Conseil National de la Protection de la Nature*)
- National Council for Landscapes (*Conseil National du Paysage*)
- Higher Council for Classified Sites (industrial sites with risk of nuclear, biological, chemical hazard) (*Conseil Supérieur des Installations Classées*)
- Control Authority for Airport Noise Pollution (*Autorité de Contrôle des Nuisances Sonores Aéroportuaires*)

29.3.6 Health and the Consumer

This policy area is the responsibility of the Ministry of Health, Family and handicapped persons (*Ministère de la Santé, de la Famille et des personnes handicapées*), particularly the Directorate-General of Health (DGS). The DGS is composed of 5 sections: populations' health, healthcare system and care quality, medical control and diseases watch, pharmacy and healthcare professionals. A special division is in charge of AIDS related questions.

The Law 'on the reinforcement of public health surveillance and of the control of the safety of products concerning humans', passed on July 1, 1998, is the source of the new organisation of scientific expertise; it explains the creation of several new advisory bodies.

Scientific advisory bodies concerning food

- French Agency for Food Safety (*Agence Française de Sécurité Sanitaire des Aliments*)

Scientific advisory bodies concerning health:

- Academy of Medicine (*Académie de Médecine*)
- High Committee for Public Health (*Haut-Comité de la Santé Publique*). The Committee will be soon replaced with a Higher Council of Health (Journal Officiel , 5 march 2002).
- High Council for Public Hygiene in France (*Conseil Supérieur d'Hygiène Publique de France*)
- National AIDS Council (*Conseil National du SIDA*)
- French Observatory for Drugs (*Observatoire Français des Drogues et Toxicomanies*). (French focal point for the REITOX)
- National Institute for Prevention and Health Education (*Institut National de Prévention et d'Education pour la Santé*)

29.3.7 Research

Research policy in France is under the responsibility of the Ministry in charge of Research and New Technologies (part of the Ministry of Youth, Education and Research (*Ministère de la Jeunesse, de l'Education nationale et de la Recherche*), especially the Directorate of Research and Directorate of Technology. The Directorate of Research is in charge of:

- Designing public research, training by research, scientific employment policies
- Supervise public research institutions
- Manage public funds dedicated to research
- Organise and finance doctorate studies
- Implement a policy for the diffusion of scientific and technical information and culture
- Encourage women in scientific studies and careers

The Directorate of Technology is in charge of:

- Enhancing use of results derived from public research and developing technological partnership with companies
- Supervising public institutions dealing with technologies
- Taking part in the design of technological research and development programs financed by the European Commission and controlling their carrying-out.

- Designing public policy for financing industrial research and supporting innovation
- Facilitating the use of IT within the education system

Scientific advisory bodies:

- Academy of Sciences (*Académie des Sciences*)
- Academy of Technologies (*Académie des Technologies*)
- Advisory Committee for Technological Development (*Comité Consultatif du Développement Technologique*)
- National Council for the Coordination of Human and Social Sciences (*Conseil National de Coordination des Sciences de l'Homme et de la Société*).
- National Council of Science (*Conseil National de la Science*).
- High Council for Research and Technology (*Conseil Supérieur de la Recherche et de la Technologie*)
- Strategic Council for Information Technologies (*Conseil Stratégique des Technologies de l'Information*). Linked to the Prime Minister
- National Council of Archaeological Research (*Conseil National de la Recherche Archéologique*). Linked to the Ministry of Culture

30 References

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Database report

31 Advisory bodies covered in the database

Name of body	Policy areas covered	Who advised	Full/basic coverage	Nature of body	Type A or B
Biovigilance Committee	Agriculture Transport Environment	Ministry	Basic		
National Commission of Evaluation of Chemicals Ecotoxicity	Environment Health	Ministry	Basic		
National Council for Air	Environment Research Health	Legislature Ministry	Basic	Statutory Permanent	
French Commission for Sustainable Development	Agriculture Environment Research Health Energy	Ministry	Full	Statutory Permanent	A
Committee of Prevention and Precaution	Environment Health	Ministry	Full	Statutory Permanent	A
National Committee for Water	Environment Health	Ministry	Basic		
Higher Committee for Public Health	Health	Ministry	Basic		
Conseil National des Transports	Transport	Ministry	Full	Statutory Permanent	A
National Council for Landscape	Environment	Ministry	Basic		
High Committee for the Assessment of Volcanic Risks	Environment	Ministry	Basic		
National Council of Archaeological Research	Research	Ministry	Basic		
Committee of French Coral Reefs Initiative	Environment	Ministry Other	Basic		

National AIDS Council	Health	Head of Govt (PM or Cabinet) Legislature Ministry	Full	Statutory Permanent	B
National Council on Noise	Environment	Ministry	Basic		
Advisory Committee for Technological Development	Research	Ministry	Basic		
Commission of Biomolecular engineering	Agriculture Health	Ministry	Basic		
Committee of Prevention and Precautionary	Environment Health	Ministry	Full	Statutory Permanent	
Academy of Medicine	Health	Head of Govt (PM or Cabinet) Ministry	Basic		
Higher Council for Public Hygiene in France	Health	Ministry	Full	Statutory Permanent	A
National consultative Commission of captive wild life	Environment	Ministry	Basic		
Commission of Genetic Engineering	Agriculture Environment Research Health	Ministry Other	Basic		
French Agency for Food Safety	Agriculture Health	Ministry	Full	Statutory Permanent	B
National Council of Science	Research	Ministry	Basic		
Strategic Advisory Board on Information Technologies	Research	Ministry	Basic		

Academy of technologies	Transport Environment Research Health Energy	Head of Govt (PM or Cabinet) Ministry	Basic		
National Council for the Coordination of Human and Social Sciences	Research	Ministry	Basic		
National Council for Food	Agriculture Health Fisheries	Ministry	Basic		
Parliamentary Office for evaluation of Scientific and Technological options	Environment Research Energy	Legislature	Basic		
General Council of Mines	Environment Energy	Ministry	Basic		
French Agency for Environmental Safety	Environment Health	Head of Govt (PM or Cabinet) Ministry	Basic		
National Institute for Prevention and Health Education	Health	Ministry	Basic		
French Observatory for Drugs	Health	Other	Basic		
National Council of Bridges and Roads	Transport	Ministry	Basic		
Higher Council for Research and Technology			Basic		
Higher Council for Classified Sitesres	Environment Health	Ministry	Basic		

Control Authority for Airport Noise Pollution	Transport	Ministry Other Advisory body Other	Basic		
Higher Council for Safety and Nuclear Information	Environment Health Energy	Ministry	Basic		
General Office for Planning		Head of Govt (PM or Cabinet)	Basic		
Higher Council of Meteorology	Agriculture Transport Environment Health	Ministry	Basic		
Technical Committee for Electricity	Energy	Ministry	Basic		
French Committee for dams	Environment Energy	Other Advisory body	Basic		
National Council for Nature Preservation	Environment	Ministry	Basic		
Academy of Sciences		Head of Govt (PM or Cabinet) Ministry	Basic		
Higher Commission of Sites, Perspectives and Landscapes	Environment	Ministry	Basic		
National Council of Hunting and Wildlife	Environment	Ministry	Basic		
General Council for Agriculture, Forestry and Environmental Engineering	Agriculture Environment Fisheries	Ministry	Basic		

31.1 Structural issues

31.1.1 Secretariat

Bodies in France do tend to have secretariats and, in general these appear to be provided by the relevant Ministry. The primary role of the secretariat is in a logistical support role, organising meetings etc. and do not have a prominent role in aiding the generation of advice through background work.

31.1.2 Membership

The number of members of advisory bodies that have been covered in detail varies considerably. Some of the type A bodies correspond to the committee type structure, with membership numbers between 19 and 31. However, two type A bodies have much larger membership. The National Transportation Council has 193 members, consisting of parliamentarians, local authorities, transportation industry representatives, State representatives, users etc., while the Higher Council for Public Hygiene in France has 115 members, all scientists, divided across 5 relevant areas.

31.1.3 Budgets

The budgets that have been specified vary from 82 million euro, for the type B Agency for Food Safety, to 120,000 euro. Further analysis is severely limited by lack of information but those bodies studied, two type A bodies do not pay members and indications are that the type A bodies do not have budgets independent of their parent organisation. The functioning budget, excluding costs of employing civil servants, of the National Transport Council is paid by transportation companies. For the Agency for Food Safety, 60% of the budget is spent on employing members.

31.2 Functional issues

31.2.1 Scope of work

The scope of work is only specified for 4 bodies. Both the National AIDS Council and the Committee of Prevention and Precaution (which works on environmental health matters) are focused on specific issues. As one would expect the type B Agency for Food Safety has a broader remit, as does the type A Higher Council for Public Hygiene in France.

31.2.2 Independence

The type A bodies in France are established in law but do appear to maintain close links with the relevant Ministry. Generally members to advisory bodies are appointed, however, the range of bodies inputting into these appointments can be large – it is not necessarily the

decision of a Minister. For example, for the National AIDS Council, members are appointed (for a duration of four years) by the President of the Republic, the President of Parliament, the President of the Senate, the Prime Minister, The minister in charge of labour, the President of the Economic and Social Council, the National Advisory Ethics Committee, the National Union of Family Associations, the Human Rights Advisory Commission, the French medical Association, the Standing Conference of University Deans, and the Data Protection Commission. The Agency for Food Safety, in addition to appointments, also has uses peer nomination/election to select members.

With regards to the subjects that the bodies can deal with in their discussions, there is a mixture of bodies that select their own topics and those that are purely reactive. Those bodies that are reactive can bring issues to the attention of a Minister but it would require that Minister to then ask them to examine the issue – they would not just do so themselves. For the other bodies, subjects can be suggested by members or can arise in discussions.

31.2.3 Transparency

In general the bodies are not governed by a detailed code of practice, although they may be governed by some rules concerning ethics. However, it should be noted that all the bodies are established in law. It is impossible to draw any conclusions regarding the need to declare interests. For the two cases where this issue is addressed, one body does require any declaration while for the other members are required to complete a declaration of interest when they are appointed. If there are then any potential conflicts members can be excluded from discussions and votes.

The remits of the advisory bodies are generally available on the internet, as are the advice reports that the bodies produce. It does not appear that it is common practice to publish agendas and minutes of meetings.

The Committee on Prevention and Precaution does hold meetings that are open to the public.

31.2.4 Generation, delivery and response to advice

The type A bodies all have regular meetings, generally about once a month, and it is common for sub-groups of the main body to be formed to examine specific issues in more detail.

The advice provided by the body tends to be generated from three sources: the expertise of the members themselves; a review of existing literature; and through consultation with national experts. For one of the bodies studied in detail, the National Transportation Council, international expert consultation is also used.

In finalising advice, it is most common for type A bodies to reach a common position through consensus. However, in one case, the National AIDS Council, a common position is agreed by a majority vote. For all the cases studied the advice report was presented to policy-makers in its final form.

31.2.5 Evaluation and impacts of advice

It does not seem that the advisory bodies in France undergo formal assessment. Impacts are always difficult to measure although it can be observed in a number of cases that ministers have, to some degree, based their positions on information supplied by advisory bodies. The use of advice internationally is difficult to assess, however it does seem that in some cases at least, advice does enter into discussion in other French speaking countries.

31.2.6 Changes to the advisory system

In some cases changes reflect the introduction of new structures, such as the creation of the Agency for Food Safety seeing food being removed from the remit of the Higher Council for Public Hygiene in France. Other changes, perhaps reflect new approaches in the governance of science and technology, such as the use of citizen's conferences by the French Commission for Sustainable Development.

Germany

General Overview

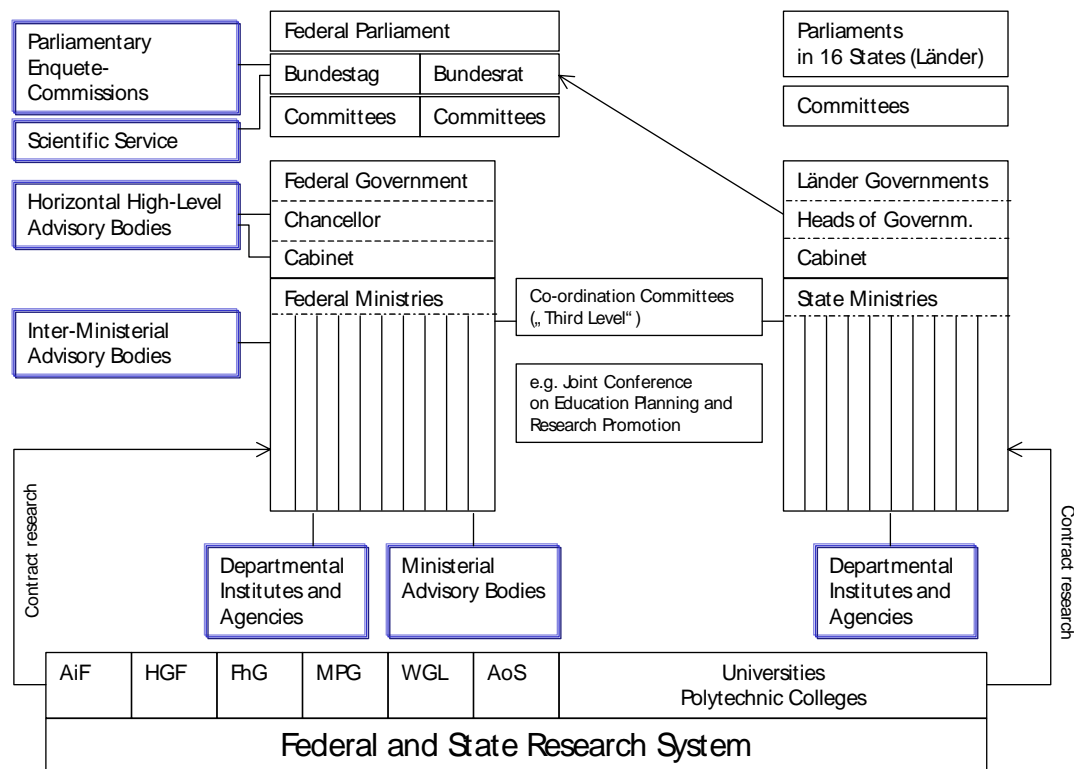
32 Background

The German political system is generally referred to as being a consensus-oriented multi-level system. In the context of policy advice systems this is highly significant, since consensus creation builds on good arguments and draws heavily on scientific or "technical" advice. Consensus orientation in the German system has two major structural reasons. First, German society is highly organised and corporatist groups are strongly integrated in the political process as such. Since the late sixties the political culture of the country has developed into being negotiation- rather than conflict-oriented. The electoral system traditionally leads to coalition governments necessitating permanent consensus building between divergent parties and their constituencies. Labour unions and industrial federations are highly autonomous in defining wages and labour conditions. Interest groups interact with administrations within the policy formulation process and societal subsystems - like the science system - are largely "self-governing" and show a high degree of autonomy which requires negotiation and consensus building both within the subsystem as well as between the subsystem and the government.

This complexity is further reinforced by the federal structure of the governmental system. There is a constitutionally guaranteed existence of 16 states (*Bundesländer*) with their own competencies and political administrations. The last forty years have seen an increasing competency of the federal government to the detriment of the state. However, this shift has been accompanied by a heightened necessity to negotiate and find consensus between the two layers of government, both through inter-parliamentary negotiations between *Bundestag* (first chamber) and *Bundesrat* (second chamber) and through additional negotiation systems between federal government and state governments, requiring consensus building among the states themselves (so-call "third level"). Therefore, the German system is characterised by constant multi-dimensional negotiations that demand a high degree of technical expertise in order to compensate for the low level of hierarchical power of the federal government.

The centre of political power at the federal level is the Chancellor who sets out the guidelines of policy and appoints ministers. Within his rather small administration (chancellery) he can utilise so-called shadow offices in order to enable constant information flows to the ministries and in order to improve co-ordination. In recent years the Chancellor has increasingly set up issue-specific advisory structures that overarch ministerial structures (see below). Figure 1 gives a rough overview of the most important cornerstones of the German system, including the major types of advisory bodies discussed in chapter 2.

Figure 1 The German Political and Advisory System: overview²¹



Legend:

- AIF: Association of Industrial Research Institutes
- HGF: Helmholtz Association
- FhG: Fraunhofer Society
- MPG: Max-Planck Society

32.1 Policy Areas

In order to understand the policy-making and administration in the issue areas of interest in this study, it has to be emphasised that these issue areas are not exactly mirrored by ministerial organisations at the federal level.²² The responsibility for **agriculture, fisheries and consumer protection** are bundled within the Federal Ministry of Consumer Protection, Food and Agriculture. On the other hand, the responsibility for **research** is split among two ministries, the Federal Ministry of Education and Research and the Federal Ministry of Economics and Technology, while the responsibility for **energy** lies within a special branch of the Ministry for Economics and Technology. **Health, environment and transport** are administered in their own ministries, with the Federal Ministry of **Health** being a single issue ministry, while **transport** is administered jointly with housing policy in the Federal Ministry of Transport, Building and Housing and **environmental** policy is defined rather broadly, including nuclear safety and nature conservation.

²¹ The major advising structures are framed in bold.

²² State to the multitude of different country administrations in this report concentrates on the responsibilities of the federal level.

Within the parliament, the committees mirror to some extent the ministerial organisation, with a slightly higher degree of differentiation in the first chamber than in the *Bundesrat* (second chamber).

This structure is further complicated by the existence of ministries for all issue areas at the state level²³, no matter how autonomous the states are in the various issue areas. In addition the portfolios of the state ministries are defined rather differently in the various states, as a rule the states tend to integrate related policy areas even more than the federal government.²⁴

This structure means that there is a high level of vertical and horizontal interaction, with no clear rules of the game for the different policy areas. Rather, the interdependencies of policy formulation and policy implementation in this system depend on the specific issue at stake and might vary even within one policy area.

32.1.1 Agriculture

The Federal Ministry of Consumer Protection, Food and Agriculture administers the federal agricultural policy. Due to mounting pressures in the context of the "mad-cow disease" crisis in 2001, the Ministry was re-designed in order to combine agricultural and consumer protection aspects, with consumer protection up-graded to major importance.²⁵ This crisis has also led to a major shift in agricultural policy called the "agricultural turn" towards more sustainability. Agricultural policy in Germany is characterised by well organised agricultural interest groups and - as in other European countries – to a high degree dependent on the Common Agricultural Policy at the European level. Therefore, while the states administer regional support programmes and issue own agricultural and consumer labels etc., the federal ministry is the major player.

32.1.2 Fisheries

The fishery policy is administered within a branch of the Federal Ministry of Consumer Protection, Food and Agriculture, reflecting the relatively low importance of the fishery industry in Germany. The same holds true for both chambers of parliament, where fishery is dealt with within the committees for agriculture. Fishery policy under the current administration is largely formulated within the framework of sustainability (fish stocks and water environment), as well as consumer orientation and therefore has an important linkage to environmental policy.

²³ Except for fisheries, where there are only ministerial responsibilities in three German states (Lower Saxony, Schleswig Holstein and Mecklenburg-Vorpommern).

²⁴ A discussion of each state administration cannot be put forward in the context of this study, which thus focuses on the federal level.

²⁵ This is symbolised in the fact that the official short version of the ministry reads: "Ministry of Consumer Protection" rather than agricultural policy. Formerly "consumer" had been part of the Health Ministry.

32.1.3 Energy

In Germany there is no Ministry of Energy, the main responsibility for energy policy lies within the Federal Ministry for Economics and Technology. This structure is also applied in most states and within the parliamentary committees. Since energy policy interferes with environmental policy, there is a constant communication and need for consensus building between the Federal Ministry of Economics and Technology on the one hand and the Federal Ministry of Environment, which is mainly responsible for nuclear safety and therefore for the nuclear industry, on the other.

32.1.4 Transport

Transport is dealt with in the broad Federal Ministry of Transport, Building and Housing, mirrored by a committee in the first chamber of parliament, while in the second chamber there is a specific committee on transport. The state governments have organised transport policy very differently, many have integrated transport with energy. The function of the Federal Ministry of Transport has shifted quite substantially in the last decade due to privatisation of the national railway, handing over the operative and strategic management of the railway into private hands. The transport policy for roads is limited, too, since only the motorways and some major national freeways are financed and administered by the federal government, while the vast majority of roads falls under the competence of state and local governments. The same holds true for public short-distance transportation. Therefore, there are numerous interfaces between the various levels in almost all transport policy issues.

32.1.5 Environment

Environmental policy in Germany is a rather young policy area, institutionalised after the Chernobyl disaster and having gained importance in the 1980s and 1990s. It is administered in the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety, mirrored in both chambers of the parliament. Unlike the federal government, many state governments have integrated transport and environmental policy.

32.1.6 Health and the Consumer

Health policy is mainly administered in the federal government, where the systematic regulations for health insurance and drug regulations and the pharmaceutical market are formulated. Health policy requires enormous supervisory capabilities which are split between state institutions and federal supporting agencies. An important feature of health policy is the high degree of integration of lobby groups into the policy-making process, both for the pharmaceutical industry and the medical professional societies. Consumer policy is formulated and implemented in the recently designed Federal Ministry of Consumer Protection, Food and Agriculture. It has gained enormous attention through some recent crises, with re-designing responsibilities, new advisory structures and new priorities. The new design is reflected in the first chamber of the parliament also, however, there is no committee for consumer protection in the second chamber.

32.1.7 Research

The structure of the responsibilities in research policy is the most complicated. At the federal level, the Ministry for Economics and Technology is responsible for all innovation policy and industry-related research, supervising not only specific innovation programmes, mainly geared towards SMEs, but also a couple of industry-oriented research institutes. The Federal Ministry of Education and Research, on the other hand, is mainly responsible for the federal science and research policy, administering most federal research institutes, co-financing many institutes jointly with the state, and responsible for all kinds of research and science supportive schemes. It also has a say for the framework regulation of universities. The demarcation between these two ministries is not clearly defined, many issues are dealt with in both ministries. Currently, both ministries prepare a joint policy paper.

All states have a science and technology policy of their own, often shared by two ministries, similar to the structure at the national level. The states have the main competency for the organisation of state universities. In many cases, state programmes mirror federal approaches; there is no clear division of labour between the two levels, as well as between these two levels and the European level.

33 Scientific Advice

33.1 General Background

The high degree of interaction and consensus finding on various dimensions of the German political system means less "hierarchical" power of the state and a high importance of the argumentative dimension. Thus the demand for "technical", i.e. scientific advice for the system is high. This is reinforced by the increasing complexity and interdependence of issue areas. Therefore, deliberation is a major feature of the German system, and it has become increasingly important for the very highest level of government in order to enable it to formulate cross-area policy guidelines. This is especially true with the change in government 1998 that has led to a more explicit reliance on external ideas and expertise "to make things better" (Saretzki et. al. 1999).

The German advisory system is highly institutionalised albeit in a very complex, intransparent way. There are no general guidelines as to advisory structures and processes. Ad hoc and permanent structures co-exist and unlike in some other countries, there are in general no issue-oriented intermediary structures that organise advice and research. Each level has its own structures.

The dominant modes of advice are *contract research*, *departmental research institutes* and *Ministerial Advisory Bodies*, mainly scientific councils at the Ministries (see also Krevert 1993).²⁶ The main feature of the advisory system is that all ministries – except for the Federal Ministry of Education and Research – have their own *departmental research institutes* that in many cases have multiple functions. They deliver ad hoc analysis on demand as well as independent, basic research, they integrate the implementation and deliberation functions. The degree of independence of course varies, depending on personalities on both sides as well as on the degree of research that can be done by the institutes themselves. The functional

²⁶ In the following, contract research is not dealt with, since it is one central, ordinary aspect of the research and consultancy system.

demarcation line between departmental ministerial institutes and "ordinary" institutes of the science system is blurry, with scientific institutes of all sorts also conducting contract research for the government on all levels and departmental institutes also doing independent research.²⁷ The departmental institutes have a share of 10 % of all research done by the public research system (without universities). In the context of research that is commissioned through specific programmes, a multitude of ad hoc expert groups accompany research programmes and projects.²⁸ Finally, there are numerous institutions dedicated to the collection and documentation of data that provide information on demand and complement the scientific advice of experts.

In addition to these institutes and agencies, many ministries have statutory scientific councils, either to sub-issues or as general policy area adviser. In addition, of course, there are numerous ad hoc expert groups, some of them inter-ministerial, some of them responsible for selected issue areas within a ministry.

A relatively recent development is the set up of thematic high level advisory bodies that span across ministries and report directly to the cabinet or to inter-ministerial committees. For example, the Council for Sustainable Development²⁹, the Council on Innovation, the Council on Education and the National Ethics Council³⁰ all are supplementary high level advisory bodies that integrate various stakeholders, are highly visible and interact directly with the Chancellor. Generally, these bodies are administered by the ministry with the most thematic overlap-

Parliament, i.e. Bundestag, traditionally has a differentiated internal advisory organisation labelled "scientific service". It is organised in two sections and several sub-sections in order to serve the various committees in the Bundestag. The scientific service delivers scientific advice and information on demand as well as pro-actively in newsletters etc.. It is obliged to neutrality and scientific working standards. Most of its work is to bring together current results of research done elsewhere, sometimes, however, the service also performs research-like activities.³¹ In addition to this permanent structure, there are joint "Enquete-Commissions" that have gained relevance in the last two decades, both as for the quantity and the public visibility. Such Enquete-Commissions are mostly proposed by the Parliamentary committee in charge of the issue at stake and is approved by the Parliament. Enquete-Commissions consist of members of the Parliament and external scientific, industrial and societal experts. Currently, five such commissions are in place³²

²⁷ This varies enormously across the institutes, some institutes only have 10% of their expenses dedicated to genuine research work, others dedicate almost all their budget to research (BMBF 2000, p. 419). This study will concentrate on those institutes that are attached to and directly financed by the various ministries. For the detailed data on departmental research institutes, see BMBF 1998, pp. 330-351.

²⁸ The multitude of expert bodies set up for individual lines of research that is commissioned in the ministries (e.g. Salz 1994) will not be covered in this study, mainly since these bodies are very limited in scope and mostly rather short term institutions.

²⁹ <http://www.Nachhaltigkeitsrat.de/>

³⁰ <http://www.nationalerethikrat.de/>

³¹ Schick, Rupert; Hahn, Gerhard (2000): *Wissenschaftliche Dienste des Deutschen Bundestages; Referat Öffentlichkeitsarbeit des Deutschen Bundestages*: Berlin.

³² Energy policy, globalisation, medical and ethical aspects of genetics, demographic change, civil engagement.

33.2 Advice Provision in Relevant Policy Areas

33.2.1 Agriculture

The advisory system in agriculture policy is very much dominated by well established departmental research institutes and agencies on the one hand and by a bulk of single-issue, programme-related ad hoc expert groups on the other hand. There are 11 departmental institutes under the auspices of the Federal Ministry for Consumer Protection, Food and Agriculture³³. A few of them deal with agricultural issues in a broader sense, many are specialised in specific food (milk, wheat, meat etc.), while only a minority provide expertise on health protection. This latter, consumer-oriented institute, however, has attached to it numerous advisory committees for single product lines, indicating a mixed structure, with an institutional core and flexible committees around it. Moreover, the new focus on consumer protection in the joint Federal Ministry for Consumer Protection, Food and Agriculture has led to the establishment of two new institutes in order to provide analysis and support on risk management and risk communication/assessment. This points to a peculiarity of the German system, i.e. the relatively flexible, need-oriented establishment of departmental research agencies.

Despite new activities for consumer protection, the Ministry is currently dedicated to downsizing this advisory structure and to integrate parts of it into the ordinary, non-departmental public research system. Agricultural policy has a very highly institutionalised advisory structure and currently no prominent, visible ad hoc committees and statutory expert groups beyond programme-related committees. For half a decade, there has been one horizontal scientific advisory body, the permanent Scientific Council. However, this body resigned in late 2001 due to the restructuring of the Ministry's mission. At this point, it is planned to install two new bodies, one for agricultural policy, sustainable cultivation and rural development and another one for consumer and nutrition policies.

Finally, there is the prominent horizontal body "Council for Sustainable Development", which mainly deals with a range of environmental issues, many of which also impinge upon agricultural issues. Therefore, also agricultural experts - albeit non-scientific - are members of this body. As the Council is not attached to the Ministry, the advice is mainly effective through publication and through highest governmental and inter-ministerial discussion (cabinet etc.).

33.2.2 Fisheries

As fisheries form - a minor - part within the Federal Ministry for Consumer Protection, Food and Agriculture, the scientific advisory structures are very much like those for agriculture. The horizontal structures in the Ministry are also competent in the fields of fishery whenever issues touch upon this area. In addition, there is one important departmental research institute, the Federal Research Institute for Fishery. Its mission is dedicated to the "political aims of the ministry". Its main function is to monitor the stock of fish available and to advise the Ministry in its international negotiations on fish quotas. The second most important pillar of its advisory work is in the area of environmental protection of aquatic biotopes. Apart from

³³ This number is given by the latest Federal Research Report (BMBF 2000), see also <http://www.bmvel-forschung.de/>, where the Ministry provides links to all institutes.

advice based on research, the institutes also assist in implementing and monitoring regulations.

33.2.3 Energy

Similar to fisheries, energy also is a sub-area within a larger ministry (Ministry for Economics and Technology), while at the same time some energy issues, mainly nuclear energy, are dealt with in the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety.

This policy advice structure points to the fact that scientific advice in Germany for energy policy is largely determined by the issue of environmental impact of energy policy and safety issues relating to nuclear energy. The most important bodies for energy matters are horizontal ones that deal with environmental issues in the broadest sense. They are neither appointed by one of the two Ministries nor do they report directly to them. However, there is of course high interaction between the bodies and the two Ministries as the bodies report to the government.

Currently, the major advisory body, with two academic members - one of whom is a scientist - is the Council for Sustainable Development. While this body focuses on the sustainability strategy for the World Summit in 2002 in Johannesburg, energy is one of the major issues. The scientific expert in this body is a specialist in energy matters. The body formulates guidelines that will be the major input for the governmental strategy in order to reach its environmental, and especially energy, objectives as laid down in the Kyoto protocol.

Another horizontal body covering environmental and energy aspects is the Scientific Council of the Federal Government on Global Environmental Change. The administrative responsibility for this body, which is fully independent in agenda setting and advice delivery, alternates between the Federal Ministry for Education and Research and the Federal Ministry for Environment, Nature Conservation and Nuclear Safety. It reports to the cabinet as such and the energy matters dealt with are thus prominently placed and highly visible.

In contrast to most other policy areas, there is no departmental energy research institute. In formulating strategic policy papers, the Federal Ministry for Economics and Technology draws heavily on expertise from industry federations, environmental groups and, most of all, "ordinary" research institutes that do research on its behalf.

The only departmental research institute is the Federal Agency for Radioactive Protection which is attached to the Ministry for Environment, Nature Conservation and Nuclear Safety. It deals with matters of nuclear safety and nuclear crisis prevention. There are two other committees dealing with radioactive protection and with the safety of nuclear plants. Both of the latter committees are expert bodies with personally appointed members that report to the Environmental Ministry as well and have a number of sub-committees on highly specialised issues. The most recent one is a large new expert working group on the question of finding appropriate locations to store nuclear waste in Germany which has been set up by the new Green Minister for Environment.

Finally, there is an Enquete Commission on energy policy and energy supply in the German Bundestag, consisting of members of Parliament and external (scientific) experts. Its main

task is to analyse the possible tracks to achieve sustainable energy policy in line with the objectives of the Kyoto process.

33.2.4 Transport

The advisory structure for transport is characterised by a double structure. There are five departmental research institutes, respectively governmental agencies, that analyse and research transport matters and at the same time support the Ministry on delivering all kinds of services and assisting in implementing transport regulations. The issues covered by these partly scientific bodies are road systems, hydrology, naval transport, goods transport, hydraulic engineering, weather forecasting and research and air transport safety.

Besides these issue-oriented agencies and research bodies, there is a horizontal advisory body on transport matters in general, the "Scientific Council at the Federal Ministry for Transport, Building and Housing". This body was institutionalised more than 50 years ago, it is interdisciplinary in nature, consists of 16 members and has a very general mission, i.e. to integrate scientific knowledge in the federal transport policy.

33.2.5 Environment

The advisory structure for the environment is highly institutionalised and the advisory bodies are maybe the most highly visible of all policy areas. First of all, the high level, horizontal bodies already mentioned (Council for Sustainability, Scientific Council for World Climate Change) focus on environmental matters across the board and give environmental issues extra legitimacy in inter-ministerial negotiations, although it must be stressed that they are neither attached nor responsible to the Ministry for Environment, Nature Conservation and Nuclear Safety.

Secondly, there are scientific councils that are institutionalised not within the context of departmental institutes, but as an independent expert body. The highly visible German Council of Environmental Advisors (SRU) appointed by the Ministry, is the major policy advisor, providing both regular and special expertise (Rehbinder 1997, Merkel 1997). The Scientific Council of the Federal Government on Global Environmental Changes, already introduced in the context of energy policy, is another major scientific advisory committee on environmental issues and has major responsibility in placing environmental issues high on the agenda. A third scientific council – on soil protection – was introduced in 1998. This body, consisting only of scientific experts, directly advises the Minister on environment. The major reason for implementing it was the introduction of a new law on soil protection. This body therefore is an example of how a new policy focus in the Social Democratic / Green government tends to be accompanied by new expert groups.

Finally, there are the departmental institutes of the Ministry that are all more or less hybrid organisations, which deliver advice, assist in implementation of programmes and represent Germany in international environmental bodies. The main departmental institute is the Federal Environmental Agency, which is mainly a service and implementation agency, but also supports the Ministry with scientific knowledge and current data and assists in international negotiations and the implementation of international environmental treaties. Half of the staff has an academic education. The second important body is the Agency for

Nature Conservation, the tasks of which resemble those of the Environmental Agency. The focus is also on scientific advice and data, while recently the tasks of implementing conservation programmes have widened. A couple of departmental commissions related to nuclear safety complete the departmental advisory structure.³⁴

33.2.6 Health and the Consumer

The advisory structure in the field of health and the consumer is shaped by the existence of several departmental research institutes (PEI, BfArM, RKI, BzgA, BgVV) and numerous more or less small scientific expert groups convening on different issues like drugs and addiction, AIDS, law and ethics in modern medicine. There are also some permanent commissions like the Expert Committee for Concerted Action in the Health Care System and the Joint Scientific Committee within the Federal Ministry of Health. The committee members stem predominantly from the respective disciplines.

The present-day duties of the Paul Ehrlich Institute (PEI) are the granting of marketing authorisations and the batch control of (immuno-)biological and hematological drugs as well as research in these fields. The Federal Institute for Drugs and Medical Devices (BfArM) has the following main tasks: (1) authorisation of finished medicinal products, (2) registration of homeopathic products, (3) recording and assessment of risks, (4) control of legal marketing of narcotic drugs and starting materials, (5) activities in connection with medical and technical safety, suitability and performance of medical devices according to national and European regulations. The mandate of the Robert Koch Institute (RKI) is the observation of the occurrence of diseases and relevant health risks in the population and the scientific explanatory statement of the relevant measures to be undertaken to protect society. The Federal Centre for Health Education (BZgA) has to prevent health risks and to support health-promoting life-styles. In addition, a shift is presently taking place in the understanding of health and prevention. Against this background, health education – as a permanent communicative process – must aim at enabling people to determine and take responsibility for their own health. The goal of the Federal Institute for Health Protection of Consumers and Veterinary Medicine (BgVV) is to improve the health protection of consumers on the national, European and international levels and to offer a consistently high level of protection in all areas in line with the state-of-the-art scientific findings.

33.2.7 Research

The advisory structure for research policy is not as straightforward as in other policy areas. This is mainly due to the fact that there is no clear demarcation between research institutes that act within the normal research system and those mainly advising the Federal Ministry for Education and Research (BMBF) and the Federal Ministry for Economics and Technology (BMWi). Both ministries have departmental research institutes; however, these do not advise the government in their operative or strategic research policy, rather they are foreign outposts of German science (e.g. historic institutes abroad) or act as reference bodies in technological research (e.g. reference materials). While especially the BMBF finances many research institutes at least partly through basic funds, there are no institutes that are – via their mission – responsible to advise the government. It is a tradition in the German system that advice on

³⁴ These committees relate to energy and therefore have been mentioned in chapter 2.2.3.

research policy is obtained through research that is commissioned in the country's research institutes, mainly through open tenders. While there are only a couple of institutes that regularly deal with research policy matters, no institute can be singled out as being primarily responsible.

However, there is institutionalised advice on three levels. First, and in line with the aim to set up highly visible, horizontal bodies directly attached to the highest level of government, a new Council on Innovation has been set up in 2001. This body is administered by the BMBF. It has the mission to advise the government on topics of future importance, especially about the ability of German industry and society to innovate. This function is integrated into a large effort to set up nation-wide discourses on future innovation matters.³⁵ Second, for specific issue areas, that sometimes are integrated into programme lines, there are expert groups – so-called steering committees – institutionalised to accompany the process of setting up and administrating these programme lines. Thirdly, there are numerous very specific advisory groups that accompany single programmes or deal with very specific issue areas on a more or less permanent basis.

In contrast to most other policy areas, research policy has, indirectly, an additional important scientific advisory body institutionalised in the German Parliament. The Office of Technology Assessment (TAB) at the German Bundestag is an independent scientific institution created with the objective of advising the German Bundestag and its committees on matters relating to research and technology (Petermann 1994). TAB is operated by the Institute for Technology Assessment and Systems Analysis (ITAS) at the Karlsruhe Research Centre. TAB's task is to design and implement technology assessment (TA) projects and to monitor and analyse important scientific and technological trends and the associated social developments. TAB is a member of the European Parliamentary Technology Assessment (EPTA) Network.

As the German administration for research is highly fragmented, there are co-ordinating bodies that at the same time deliver advice for the administration. The most important of these bodies is the "Scientific Council" (Wissenschaftsrat), in which representatives of the major German research institutions together with federal and state administrators jointly formulate comments and deliberate on all sorts of research policy issues, mainly for the institutional structure. While these opinions certainly play a major role in the process of research policy formulation, since they have been negotiated among administrators already, the Scientific Council cannot be considered to be an ordinary advisory body.

Similarly, the German Research Foundation is a self-governing body of the German sciences and certainly plays some role in advising the government. However, it is also an interest organisation for the sciences and in delivering advice it is at the same time not neutral. Last but not least, there are several programme implementing institutions, that help to administer projects within certain programme lines. These bodies are to be considered as important service organisations rather than scientific advisers.

³⁵ The dialogue is called "Futur", see www.futur.de. Similar bodies have been established in the area of "education" and "sustainability".

34 References

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Database report

35 Advisory Bodies covered in database

Name of body	Policy areas covered	Who advised	Coverage	Nature of body	Type
Federal Research Agency for Agriculture *	agriculture	ministry	short	stat.-perm.	B
Federal Agency for Nutrition *	agriculture	ministry	short	stat.-perm.	B
Federal Research Agency for Forestry	agriculture	ministry; gen. publ.	short	stat.-perm.	B
Scientific Committee for Consumer and Nutrition Policy	agriculture, consumer, environment, health	ministry	full	stat.-perm.	A
Federal Institute for Health Protection and Veterinary Medicine*	agriculture, health/consumer	Ministry; general public	full	stat.-perm.	B
Federal agency for fishery *	fisheries	ministry general publ.	short		B
Commission for Sustainable Energy Supplies in View of Globalization and Liberalization	energy	legislature	full	stat.-fixed	A
Scientific Council at the BMVBW	transport	ministry	full	stat.perm.	A
Federal Highway Research Institute*	transport	ministry, general public	full	stat.perm.	B
Council on Sustainability	environment, agriculture, transport	head of govt., ministry, legislature	full	non-stat.-perm.	A
German Advisory Council on the Environment	environm., agricult., transport, health, energy	Head of govt., ministry, general public	full	stat.-perm.	A
Scientific Advisory Board of the Federal Government on Global Change	environment	cabinet, ministry	full	stat.-perm.	A
Commission for the Protection against radiation	environment / energy	ministry	short	stat.-perm.	A
Commission on the Safety of Nuclear Reactors	environment (energy)	ministry	full	stat.-perm.	A
Federal Agency for the Environment	environment	ministry, gen. public	short		B
Federal Institute for Drugs and Medical Devices*	health and consumer	ministry, gen. public	full	stat.-perm.	B
Advisory Council for the Concerted Action in the Health System	health	ministries, head of govt.	full	stat.-perm.	A
Common Scientific Council at the Federal Ministry for Health	health	ministry	short		A
Innovation Council	all (horizontal)	head of govt., ministries	full	non-stat. perm.	A
Scientific Council	research	head of govt., federal and state ministries, other advisory bodies	short	stat.-perm.	B
TAB	research	legislature	short	stat.-perm.	B

- * Ministerial Research institute or agency that advises preliminarily the ministry, however, the advice given sometimes is directly delivered to the Federal government as such, the legislature, other bodies and the general public.

35.1 General trends

As highlighted in the country overview for Germany, deliberation in Germany has become deeper and broader in the last couple of years due to growing complexity and interdependence of issue areas. However, there was no major re-structuring of advisory body system. The constant feature of the German deliberation system are still ministerial advisory institutes, that all work under the jurisdiction of the related ministry, and high-level, rather small-scale ministerial advisory bodies. Thus the twin structure of ministerial agencies – that are almost exclusively Type B bodies – and advisory bodies (mostly Type A) – has been preserved. The new leftist-green government that took office in 1998 did not aim for major changes.

However, some changes and trends are obvious. First, there is a tendency to have high-level, cross-departmental bodies that advise the cabinet directly rather than a single ministry. Most importantly, the Council for Innovation has been established to advise the government on issues that impinge upon the ability of the German system to innovate. These bodies are by nature Type A bodies.³⁶ Second, the advisory structures have been adjusted to the structural changes in a few ministries, above all the enlargement of the Ministry for Agriculture with competencies for consumer protection. Third, there seems to be more flexibility and dynamism in Type A bodies. Some of the bodies analysed are rather young, indicating that targeted scientific advice is increasingly important and increasingly utilised to support policy and policy change.

The following discussion will always differentiate between type A and type B bodies. As the bodies of type B are much more homogenous, they are described more shortly, at the beginning of each of the sections. The analysis reflects the three type B bodies and the 9 type A bodies that are covered fully in the database.

35.2 Structural issues

35.2.1 Secretariat

All bodies covered have a secretariat. For the majority of Type B bodies – ministerial institutes or agencies – this is staff providing all kind of administrative support. In addition, size B bodies have a supporting staff of junior scientists or students.

Type A bodies generally also have secretariats, but with very diverse size and functions. In a few cases the advisory body is administered and supported by civil servants of the related – or most relevant – ministry. For example, the administrative secretariat of the Council on Innovation consists of one civil servant from the Federal Ministry for Education and Research. The same is true for the Scientific Committee for Consumer and Nutrition Policy, however, the staff of the related Ministry (Agriculture, Nutrition, Consumer

³⁶ That means they have the exclusive function to advise the government on very specific issues, however, the advice delivered is a mixture of scientific advice and stakeholder involvement.

Affairs) considers themselves to be an organisational service provider rather than a full secretariat. Anyway, the functions of these civil servants range from sending out invitations to meetings to writing minutes, revising reports and organising press conferences.

As a rule, however, Type A bodies have a rather big secretariat of their own that does much more than simply organising. This is especially true, the more activities the bodies undertake (see below) and the more the bodies are related to issues that cut across ministries rather than advising one single ministry. For example, the Council for Sustainable Energy Supply has 10 people in its secretariat, the same is true for the Enquete Commission. These secretariats not only organise and administer but gather scientific input and support the bodies with scientific background work. In a few cases the secretariats even perform research and draft reports and statements that are then revised by the body.

35.2.2 Membership

The membership differs enormously between type A and type B, as type B bodies tend to be large agencies or institutes, while type A bodies are very specific, one-purpose committee-like bodies. The type B bodies, therefore, employ hundreds of people and the numbers vary considerably. The type A bodies, in contrast, have an average of 15 members, ranging from 7 to 18, with one significantly larger body (Commission for Sustainable Energy Supplies in View of Globalisation and Liberalisation, 26 members).

Scientific advice in Germany is only very rarely given by bodies that only contain natural scientists and/or engineers, in almost all cases there are also social scientists involved. This is true both for Type A and Type B bodies. However, the type A bodies are much more heterogeneous than type B bodies. In many of these bodies the share of social scientists is bigger than in type B bodies, and, more importantly, many A bodies bring together scientific advice and stakeholders. It is fair to say that scientific advice in Germany is often at the same time a consensus-finding process that tries to integrate a broader spectrum of actors.

Women are under-represented in almost all of the bodies. While in the big institutes of type B this represents the average share of women in science in general, the advisory bodies that are specifically appointed also tend to select less women. A few of the bodies have no women at all on board, which sometimes (e.g. Commission on the Safety of Nuclear Reactors) reflects a specifically low representation of women in the related scientific area. However, even in large bodies integrating a broad spectrum of people the representation of women is extremely low, which is especially interesting in the case of an advisory board set up within the Federal Parliament (Commission for Sustainable Energy Supplies in View of Globalization and Liberalisation).

In Germany, scientific advice to the government is still a very national endeavour, there is no case in the database where a regular member of a type A body is a foreigner (in type B institutes this is slightly different, due to size and institutional context). Apparently, the confidential nature of many of the issues discussed inhibits foreign involvement. The international dimension comes into play indirectly, as in most of the bodies covered the German members are highly reputed representatives of the scientific community, who are members of various international disciplinary and also advisory bodies. In addition, some

of the bodies have started to join the international federation of advisory bodies, namely in the area of environmental advice (sustainability, global change).

35.2.3 Budgets

As to budgets, the difference between A bodies and B bodies are very clear. For the B type bodies, there is a yearly budget to run the institutes of up to 1,100 employees. The majority of the small scale type A advisory bodies, in contrast, have very small budgets, and only a minority have a clear budget dedicated to them. The budgets of the secretariat cannot be defined, however, in some cases the secretariat is financed by the ministry. For three out of eight bodies a total number was given, two of them (environmental bodies) had a budget of 1.5 m euro, one (Health) had a budget of somewhat more than half a million euro. Five bodies of type A only refund the expenses of their members. In one case the members are provided with a budget to be used for a scientific assistant, in another case the members get a fixed lump sum that, however, is not sufficient to pay for scientific assistance. Interestingly, only a minority of bodies covered have a budget to actually do research of their own.

35.3 Functional issues

35.3.1 Scope of the work

By definition, the bodies of type B cover a very broad scope of *issues*³⁷ and perform a broad range of *activities*. They provide a full range of services to the government, which reflects their size and functionally differentiated membership. Since almost every ministry has one or several large B type bodies, it is fair to say that the German government can utilise a broad scientific infrastructure. Their major task is to perform research activities and to update reviews on state-of-the-art. All of the three type B bodies covered fully are also active in standard-setting and regulation, two of the bodies also see their task in raising public awareness. However, as these bodies are not fully independent, this awareness-building – as almost all of the activities – is to some extent under the control of the government (see below).

The scope of issues dealt with and activities performed is much more diverse with the type A bodies. All of these bodies stick to their *issue* area, there is no type A body that is fully open in the selection of issues, but only two of them understand themselves as being narrowly focused on the specific issue they deal with (Commission for Sustainable Energy Supplies in View of Globalisation and Liberalisation, Commission on the Safety of Nuclear Reactors).

As for the activities performed, one must distinguish between those activities that directly contribute to the input of the advice (research performance and funding and update review), and other activities that relate to functions beyond advising (such as licensing

³⁷ The Federal Highway Research institute claims to be open on the issues dealt with. However, the interviewee from this body wanted to highlight the fact that his body is rather independent in which issues they want to deal with, but the issues selected are always within the remit of the body which is road transportation.

etc.). Since the main function of the A bodies is to give up-to-date advice, the activities to improve input are most common. Most importantly, the update of reviewing current literature and knowledge is an activity of all but one body (Innovation Council, see below). Therefore, all the bodies with the exclusive task to advise do so not only by inserting the members' knowledge, but also by screening relevant studies and literature. This is done by the members themselves, more often, though, by the secretariat respectively by scientific assistance. In addition, half of the A type bodies covered fully in the database also draw on external research that they can fund. However, the budgets for this are rather small, the bodies are not meant to set up additional structures of contract research in their issue areas. Interestingly, only one body claims to perform research itself, which is done by the secretariat and scientific assistants rather than by the members themselves.

In general, type A bodies do not perform activities that are not related to functions beyond advising, i.e. they do not contribute to licensing, standard-setting or regulation. The only exception to this rule, and this is true for almost all of the type A bodies, is to raise public awareness. Apparently, the advisory system in Germany is understood not only as giving specific advice to the government, but also as a major endeavour to provide the general public with information on current policy issues. The link to the general public is reflected by the membership of the body, which is in many cases not only academic but involves other stakeholders also. The extreme example is the Innovation Council, which includes 5 academics and 7 non-academics, the function is rather to combine academic advice and stakeholder consensus-building.

35.3.2 Independence

The question if the bodies are independent is hard to answer. The bodies which not only advise, but also support the ministries in other work operate under the jurisdiction of the ministries. Therefore, at the end of the day, most of them are institutionally dependent on the ministry in various ways. They are financed directly by the ministry, other funding sources are the exception. Secondly, whenever these bodies conduct a study or write a comment for the ministry, it is the ministry that decides about the appropriateness of having it published. Thirdly, while the staff is recruited on the job market, the top level of the institutes are appointed by the related ministry. This might be the most important leverage for the ministries as far as influence on the bodies themselves is concerned. On the other hand, the bodies are not only re-active, they define much of their work themselves and thus influence the agenda-setting or the decision-making process indirectly. They are integrated in the general discourse of the issue and present in the media and in scientific publications. In that sense, the bodies have some room to manoeuvre. Finally, the results of the work are not only delivered in official reports, but also in personal contacts between the staff of the bodies and the ministries. However, this means more or less independence depends on personalities rather than structures. The publication policy of these B type bodies is very broad, just like any other public research institute, they use any channel to diffuse their findings and recommendations. However, it has been reported that the institutes are not independent in deciding what they publish, the administration has a veto.

As for the type A bodies, independence – again – is diverse. First of all, for all bodies the members are appointed on a personal basis by the ministry that is advised, respectively the chancellor (Innovation Council). In some cases, this has meant a re-appointment of

members after a change of government in 1998, while in other cases new bodies with directly appointed members have been set up. Therefore, it is up to the minister to include members who have shown in the past that their views might be highly critical. Moreover, members appointed are often suggested by other institutions, like, for example, Parliament, trade unions or industrial federations; however, these suggestions are not binding for the minister. Independence in the sense that some inter-institutional committee or independent selection mechanism comes into play is not given, at least in the cases covered in the database. Secondly, seven out of the nine type A bodies deliver their opinion and findings also in some sort of personal discourse. In some cases there is an institutionalised discourse between the Council and the administration. For example, the Council on Sustainability holds regular plenary sessions with members of the administration in order to discuss findings and future activities. As stated above, there are cases in which ministerial bodies are actually organised from within the administration rather than by an external secretariat. Although organisational dependence does not mean dependence as to the content, the close working relationship with the administration might – at least – hinder the body to fully define its scope of work independently and to be pro-active as the support of a secretariat is lacking.

Moreover, a certain independence of the bodies can be derived from the fact that most of them allow dissenting votes, there is no formal requirement for consensus and also there is in general no suppression of dissenting minority votes. Representatives from 6 out of 9 type A bodies explicitly stated that in principle minority votes are allowed, however, these are very rare, as the bodies tend to find consensus as a consensual vote is more influential. Finally, the large majority of the bodies of type A publish their reports and opinions widely, including possible dissenting opinions.³⁸

35.3.3 Transparency

Type B bodies tend to have formal guidelines, i.e. a statute of basic principles and structures (*Geschäftsordnung*). Therefore, the task and the general activities as well as the degree of integration into the administration are transparent. However, it is obviously not transparent to which degree the administration influences the policy of the institutes to tackle certain questions and to issue a report. The publication policy of the type B bodies is such that they publish the remit, the advice reports as well as the activity reports on the Web.

Type A bodies have various forms of guidelines. For five out of the nine bodies there is a formal decree of establishment, in some cases combined with a code of practice. For the parliamentary Enquete commissions there is a special law that rules their establishment and practice. The ministerial decrees state the remit, selection process and objectives of the body. Moreover, in those cases in which the secretariat of the body is external to the administration rather than provided by the administration, there is an institutional provision for public relations work. In these cases the information on the work of the body is much more easily accessible, as this is at the same time legitimation for the secretariat itself. Apparently, one of the most important functions of the secretariat is exactly the establishment of transparent structures and a discourse with the general public. As regards

³⁸ Only the Scientific Committee for Consumer and Nutrition Policy does not actively aim at the general public, however, its advice reports are also put on the Web.

the material used and the content of the discussions, all bodies are highly confidential. Any information that is not meant to be included in official documents is dealt with rather restrictively, although individual members may issue opinions via the media that might be more or less connected to what has been discussed within the body. Therefore, while the remit (all bodies), the advice reports (all bodies), and the activity reports (four bodies) are available as documents or on the Web, or at least can be requested any time, the agenda and especially the minutes of the meetings are dealt with restrictively. The general rule is transparency for output beyond those that are advised, confidentiality for internal work. This might be assessed not as limited transparency, but as the prerequisite for open discussion and independence.

35.3.4 Generation, delivery and responses to advice

The mode of operation of the type B bodies is determined by their structure as big, differentiated and specialised bodies. Type B bodies analysed in the database operate permanently, on demand and on self-defined issues. They use all kinds of inputs to generate their knowledge, most importantly – and next to the personal knowledge of the members of the body and the review of existing literature – they perform own research and commission research. Moreover, most of these bodies are well integrated into national and international scientific networks and thus integrate external expert knowledge through various channels. What is rather seldom, however, is the integration of input from the general public, there are in general no hearings, stakeholders are included in a limited fashion through semi-public conferences.

Given the size and remit of the type B bodies and the differentiated working structures, the kind of advice given to the government is extremely broad. All three federal institutes claim to give policy recommendation in form of policy formulation, policy implementation and impact assessment. Even broader are the activities concerning risk assessment, very little activity is done for forecasting as a form of advice. All this indicates that one of the major purposes of these ministerial advisory bodies (type B) is to accompany the policy, to safeguard and to assess it rather than develop policy visions. The mode of delivery of the advice differs slightly, there are project reports, reports on request as well as annual and activity reports.

Type A bodies operate less permanently, but still in a highly flexible way. All bodies meet regularly, that means there are no bodies – out of those covered in the database – that *only* meet on request. The majority of the bodies (6 out of 9) build sub-groups in order to discuss specific issues in more detail, however the sub-groups do not appear as single bodies in public, they insert their findings back into the main body. Although the bodies meet and operate rather flexibly, the majority of them does not meet on request (only 2 out of 9) or “as required” (3 out of 9), which means they do not play the role of troubleshooter or ad hoc consultants, rather their role is more medium-term oriented. Interestingly, there are no electronic meetings practised just now.

The most important intellectual input into the body stems – by definition – from the members themselves. In addition, almost all bodies integrate further external knowledge indirectly, by consulting literature – or directly, by inviting experts?? to plenary meetings and sub-group sessions. Six bodies also rely on the background work of the secretariat, and six bodies integrate representatives from stakeholder groups into their work through semi-

public consultation. It is in general not the task of the bodies to perform own research, whenever this is done (Commission on the Safety of Nuclear Reactors, Council on Sustainability, Commission for Sustainable Energy Supplies in View of Globalisation and Liberalisation), the research is performed by the secretariat and/or scientific assistants who are paid from the body's budget. As for public consultation, all but three bodies (Advisory Council for the Concerted Action in the Health System, Scientific Council at the BMVBW, and the Scientific Committee for Consumer and Nutrition Policy) invite focus groups, the system is not closed. Stakeholder involvement is further enabled through organised stakeholder dialogue (four bodies). Interestingly, the two bodies utilising the broadest range of information sources are the two on sustainability, apparently this issue is dealt with in Germany with high intensity and broad involvement.

While the *mode* of advice is similar for each body (as stated above, all bodies deliver written reports, and 7 out of 9 also discuss matters directly with the administration), the *type* of advice differs significantly. All bodies claim to give policy recommendations, which is no surprise. However, while 7 bodies (out of the 9 type A bodies covered in detail) recommend a certain policy, only 5 bodies give input to impact assessment of policy, only 4 bodies advise the government in implementing the policy and only two bodies recommend policy for crisis management. Only three bodies claim to advise the government on risk assessment, while this was a major feature with the type B bodies. In contrast, four bodies give input to the government as regards future developments (forecasts), while type B bodies in general do not.

A highly interesting finding for the German system of scientific advice is that for only 2 out of the 12 bodies that were looked at in detail is there a formal requirement to respond. The conclusions of the German Advisory Council on the Environment are debated in the Federal Parliament (Bundestag) and the "upper house" (Bundesrat) and an official statement by the Ministry for the Environment is requested and publicly available. The conclusions of the Advisory Council for the Concerted Action in the Health System must be commented on by the Ministry for Health, this response is targeted towards the Federal Parliament (Bundestag).

35.3.5 Evaluation and impacts of advice

Although the German research system is evaluated very often and in depth, the scientific advisory bodies are not. None of the 12 bodies has been officially evaluated, only one body (Scientific Advisory Board of the Federal Government on Global Change) intends to do some sort of self-assessment. While in some cases this has to do with the changing nature of structures, it is still remarkable that not even *ex post* evaluation has been conducted, in order to learn for the future. Therefore, it is hard to tell which impact the bodies actually have.

For the type B bodies the impact is, on the one hand, quite obvious as they are the most important source of scientific advice across the issue areas of the ministries. On the other hand, there is no policy to trace this impact, as the responsibility for the policy lies exclusively in the hand of the ministries and the advisory bodies operate in the background. In addition, some of the type A bodies have a very indirect but nevertheless important impact in changing awareness of policy-makers and stakeholders. For example, the Parliamentary Enquete Commission for Sustainable Energy Supplies in View of

Globalisation and Liberalisation cannot claim to have contributed to daily politics, however, it has certainly influenced the framing of environmental policy in parliament and in the public opinion. More concrete impact can be attributed to a couple of other type A bodies, such as the redrafting of the German strategy on sustainability and biodiversity (Council on Sustainability, Scientific Advisory Board of the Federal Government on Global Change), approval of intermediate storage facilities for nuclear waste (Commission on the Safety of Nuclear Reactors), strengthening of prevention and quality assurance in the health system (Advisory Council for the Concerted Action in the Health System) and the formulation of four “lead visions” for the future research strategy of the country (Innovation Council). However, due to the lack of neutral evaluation, in most cases the assessment has to rest on the statements made by the bodies themselves.

35.3.6 Changes

For the bodies covered in the database and this report, changes in the last couple of years were small. For the type B bodies, there are almost no changes at all, definitely not concerning the general structure. As for type A bodies, there were two major new creations, Council on Innovation and Scientific Committee for Consumer Affairs and Nutrition. The former reflected the attempt of the newly elected government to tackle the issue of the innovativeness of the German innovation system in a broad and integrative manner, combining advice and stakeholder involvement. The latter reflected the new ministerial task of consumer protection in the former Ministry for Agriculture and Nutrition. The Parliamentary Enquete Commission for Sustainable Energy Supplies in View of Globalisation and Liberalisation was also created at the beginning of the last legislature in Germany 1998 and only lasted until the end of this legislature 2002. Next to the creation or closure of bodies, appointment policy is the second major means to influence the advisory system. One example has been a total change of membership within the Commission on the Safety of Nuclear Reactors after the 1998 election.

As for general trends in the institutionalisation of bodies, it seems obvious that for each policy area sound scientific advice is becoming more and more important. While the double structure of type A and type B bodies is retained, the type A appears increasingly relevant. Advice provided by type A bodies is often linked to the raising of public awareness and to the involvement of stakeholders. Consensus-building and expert input are thus combined. As to the issue areas, it is obvious that the ministers of the Green Party in Germany (Environment, Agriculture/Consumer Affairs) have been most active in adjusting the advice to their specific needs.

Greece

General Overview

36 Background

The Hellenic Republic is a parliamentary democracy with a 300-member house, the Parliament, headed by the Prime Minister. Parliamentary sessions normally last for four years, followed by elections held on the basis of direct, secret, and universal ballot.

The head of the Greek State is the President, who is elected by the Parliament. The President, who has limited political powers, may hold office for a maximum of two five-year terms.

The latest major change in the country's political system took place in 1974 when after a nationwide referendum the monarchy was abolished and the constitution took its present form.

36.1 Main Actors

The main actors in terms of policy formulation and implementation are the Prime Minister's Office, the Cabinet, and the Ministries.

The Prime Minister's Office, which has been given increased authority and responsibilities during the last 15 years under the Socialists' governments and especially under A. Papandreou is currently structured into the following departments:

Legal Advisor: Monitoring of all stages of the legislative task, monitoring, study and recommendation to the Prime Minister of all subjects regarding the legitimacy of the government function as well as of specialised subjects concerning the government's legislative policy.

Military Advisor: Monitoring of the defence policy as well as of other subjects that lie within the competence of the Ministry of Defence.

Strategic Planning Office: Within the responsibilities of the Strategic Planning Office lies the elaboration of proposals concerning the accomplishment of the strategic targets of the government policy.

Economic Office: Within the responsibilities of the Economic Office lies the monitoring of the realisation of the government policy regarding economy and growth matters, as well as the elaboration of relevant proposals.

Organisation and Administration Office: Within the scope of responsibilities of the Organisation and Administration Office lies the employment and responsibility for the administrative condition of the personnel of the Political Office, as well as the regulation of matters regarding the personnel, the co-ordination and supervision of administrative and economic matters concerning the operation of the Political Office, the responsibility and maintenance of the general protocol, and the representation of the Prime Minister to official ceremonies.

Office for the Quality of Life: Within the responsibilities of the Office for the Quality of Life lies the monitoring of subjects regarding the upgrading of the quality of life of citizens, as well as the elaboration of relevant proposals.

Diplomatic Office: Among the responsibilities of the Diplomatic Office lies the monitoring of matters that fall within the competence of the Ministry of Foreign Affairs, the elaboration of relevant proposals, as well as the responsibility for the organisation on a diplomatic level of the Prime Minister's visits abroad.

The Cabinet, consisting of the Ministers of the different Ministries, is the core of the executive authority for the implementation of the government's policy. The Ministries existing today are the following:

- Ministry of the Interior Public Administration and Decentralisation
- Ministry of National Defence
- Ministry of Foreign Affairs
- Ministry of Economy and Finance
- Ministry for Development
- Ministry for the Environment, Physical Planning and Public Works
- Ministry of Education and Religious Affairs
- Ministry of Agriculture
- Ministry of Labour and Social Affairs
- Ministry of Health and Welfare
- Ministry of Justice
- Ministry of Culture
- Ministry of Mercantile Marine
- Ministry of Public Order
- Ministry of Macedonia and Thrace
- Ministry of the Aegean
- Ministry of Transport and Communications
- Ministry of Press and Mass Media

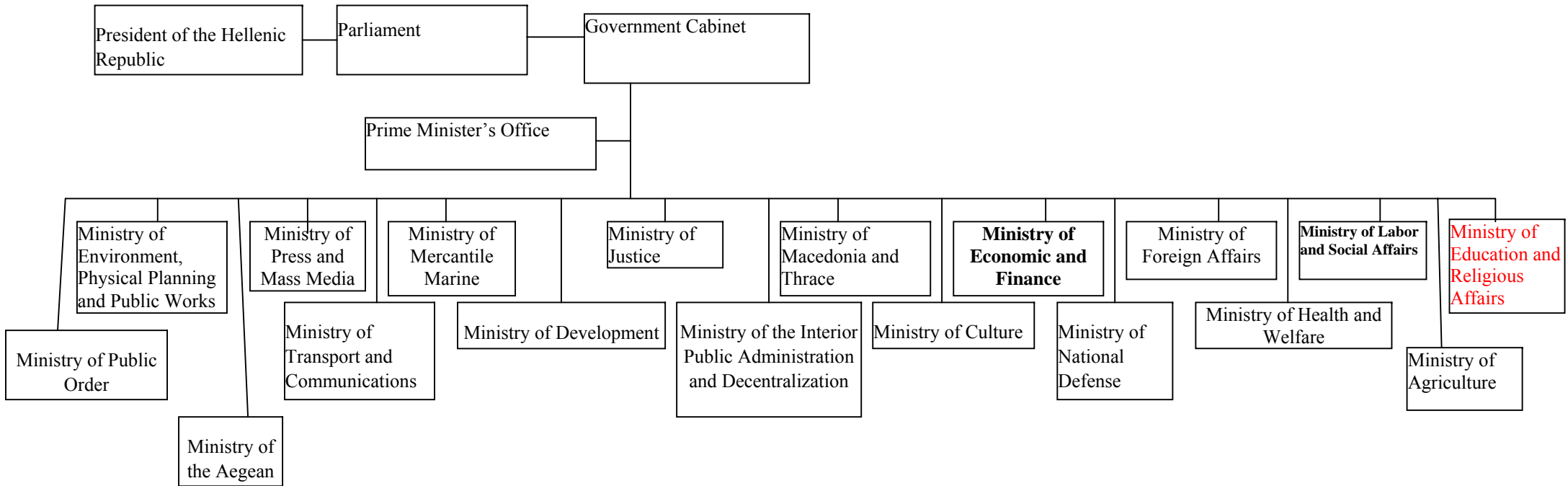
36.2 Regional / Local Government

The country is divided into 13 administrative regions (9 mainland and 4 insular). These are further subdivided into 51 Prefectures, each with an elected Prefect.

It has to be noted that decentralisation was given significant emphasis in the last twenty years and this is reflected in the inclusion of the relevant policy under the responsibilities of a specific Ministry (of the Interior Public Administration and Decentralisation) and in the existence of two separate Ministries (Ministry of Macedonia and Thrace, Ministry of the Aegean) shouldered with the implementation of the government's policy in these specific regions.

The current government's decentralisation policy has led to greater political influence for the regions. The latest outcome of the government's decentralisation policy was the plan 'Kapodistrias' (Law 2539/1997) which resulted in the re-organisation of the whole country's municipalities and communes.

Greek Political Structure: Overview



36.3 Policy areas

36.3.1 Agriculture & Fisheries

Both the agriculture and the fisheries policy areas are under the responsibility of the Ministry of Agriculture.

The most important responsibilities of the Ministry for Agriculture are the following:

- Promotion of the development of the countryside;
- Promotion of the agro-tourism;
- Organisation and administration of agricultural stations, model farms of special zootechnical, wine-making, olive-growing, dairy and water management stations and agricultural chemical factories;
- Promotion of agricultural training and education;
- Establishment of agricultural police and police of the plant diseases;
- Monitoring and maintenance of hedgerows, gardens, etc;
- Promotion of informatics and use of computers for the improvement of the agriculture.

In terms of executive and policy functions, the Ministry is divided in separate General Secretaries and Directorates that help design and implement policy. There is a Secretariat for Agricultural Policy and International Relations and a Council of Agricultural Policy, as well as the Fisheries General Directorate under another General Secretariat.

The Ministry of Agriculture also is responsible for supervising organisations such as:

- The National Agricultural Research Foundation (N.AG.RE.F)
- The Hellenic Organisation for Standardisation
- The Agricultural Bank of Greece S.A.
- The Hellenic Milk Organisation
- The Union of Young Farmers

Policy directions and measures are suggested by the relevant General Directorates and Secretariats, which are also supported by the above organisations in terms of scientific input and advice provision when specific needs arise, and the final decisions concerning policy formulation and implementation are made by the Minister.

36.3.2 Energy

The policy area for energy is under the responsibility of the Ministry of Development and specifically under the General Secretariat of Energy and Natural Resources.

The main responsibilities of the General Secretariat of Energy and Natural Resources are the following:

- Support of activities for the awareness of the Greek Society in energy saving and renewable energy sources;
- Promotion of the international co-operation in energy issues in both country and organization level;
- Representation of Greece to the respective agencies of the EU;

- Setting the necessary standards for energy matters according to the international standardisation.

The General Directorates that are under the General Secretariat of Energy and Natural Resources control several decentralised Directorates with responsibilities concerning the management of resources, administration support, policy making, renewable energy sources, emergency policy planning (for administration matters), etc.

36.3.3 Research

Research is under the responsibility of the Ministry of Development and more specifically under the General Secretariat for Research and Technology.

The responsibilities of the General Secretariat for Research & Technology are the following:

- Support research activities of research and production organisations in important sectors for the Greek economy and the improvement of the citizen's life through research and technology Programmes;
- Support the transfer and diffusion of previous technologies for the production activities of the country succeeding the immediate use of the research product;
- Contribution and support to the research workforce of the country;
- Representation of the country in the respective agencies of the EU, and also harmonisation of the research and technology activities with the demands of the international community;
- Promotion of the co-operation in research and technology issues with other countries and international organizations;
- Establishment of institutes and technological organizations in high priority sectors for the further development of the Greek economy;
- Supervision, funding of the 'overhead costs', and dynamic support for 32 of the most acknowledged research and technology organizations of the country;
- Promotion and diffusion of research and technology information in national scale by using technological means;
- Support of activities for the awareness of the Greek society in research and technological issues.

The General Secretariat of Research and Technology (GSRT) has a very important role in the research policy system of the country as it also supervises the operation of almost all the major public research centres and technology agencies of the country (except NAGREF which is supervised by the Ministry of Agriculture, the hospitals and health institutions supervised by the Ministry of Health and the universities supervised by the Ministry of Education). In more detail the responsibilities of GSRT regarding the bodies under its supervision are:

- The promotion of the legislative settings and administration concerning the operation of these bodies and the changes in their personnel;
- The monitoring of their research activities;
- The development of evaluation mechanisms, the monitoring of the evaluation procedures and the assessment of their work as well as the taking up of measures for facilitating their operation;

- The monitoring of their budget execution and the approval of their financial situation;
- The funding of their operation from the ‘Regular Budget’ line;
- The support of their scientific activities and the funding of a significant part of their research work.

Policy directions and measures are suggested by the relevant General Directorates (mainly the DG for Planning and Scheduling), which is also supported by the supervised research bodies in terms of scientific input and advice provision when specific needs arise, and the final decisions concerning policy formulation and implementation, are made by the Minister.

36.3.4 Transport

The policy area for transport is under the responsibility of the Ministry for Transportation and Communications.

The main responsibilities of the Ministry concern the following issues:

- Saving Energy (fuels) in all the organisations operating under the Ministry (Hellenic Railways Organisation, Hellenic Telecommunications Organisation, etc);
- Coordination of all the units that work under the Ministry;
- Scheduling all administrative details;
- Assessment of the quality of the administration results based on its results and the economic and organizational costs (based on the respective law for authorisation);
- Specification of the governmental policies (concerning the specific policy area) and provision of alternative suggestions for the selection and organisation of the administration means for their implementation;
- Improvement of the communication and cooperation between the administration services of other Ministries, other entities of the Public sector that make such policies and also with private sector organisations that are operating in the respective area.

Policy directions and measures are suggested by the relevant General Directorates and Secretariats to the General Secretaries while the final decisions concerning policy formulation and implementation, are made by the Minister.

36.3.5 Environment

The environment policy area is under the responsibility of the Ministry of Environment, Physical Planning and Public Works.

There are General Secretaries for the various decentralised functions within the Ministry that contribute to the policy-making.

The main targets of the Ministry are the following:

- To unite the environment with the economy and to integrate the principles, the values, the specificities and the priorities of the ecology for sustainable development;
- The implementation of the zoning and the town planning and the completion of the National Cadastre;

- To improve the civil environment with basic aim to face the atmospheric and sound pollution in the big cities and also to achieve complete and rational management of the city waste together with the industrial toxic waste and to adopt the recycling of raw material and their final disposal in special places for medicaid burial;
- To preserve and to renew the equilibrium, the harmonisation and the diversity of the Greek nature and the ecosystems, the Greek Chart for the Bio-diversity, to develop and implement management plans for the protection of national forests, sea parks, seashores and monuments of the nature as well as sensitive areas;
- To have rational and complete management together with the control and protection of the water resources;
- To develop environmental education – information and evolvement of ecological sensitivity and conscience;
- To cooperate with entities and ecological, environmental and quality of life organizations in order to and to urge citizens in creative interventions and activities.

The Ministry of Environment, Physical Planning and Public Works also supervises the operation of specific organisations (for Urban Planning & Housing, Cadastre & Cartography, etc) and collaborates with the major research centres of the country (e.g. Demokritos) and universities in conducting specific activities like measuring pollution.

Policy directions and measures are suggested by the relevant General Directorates and Secretariats, which are also supported by the organisations and bodies that the Ministry supervises or collaborates with in terms of scientific input and advice when there are specific needs, and the final decisions concerning policy formulation and implementation are made by the Minister.

36.3.6 *Health and the consumer*

The policy area for health and the consumer falls under the responsibility of both the Ministry for Health and Welfare (and especially under the Directorate for Public Hygiene) and the Ministry of Development (specifically under the General Secretariat for the Consumer).

The main responsibilities of the Ministry of Health and Welfare are the following:

- the promotion, protection, preservation and amendment of the physical, mental healthiness of the people and the society as a whole;
- the equal provision of the higher possible level of health & welfare services and goods (to the society) according to the needs of each person;
- the protection of the personal and social rights in the services of health and welfare;
- the environmental protection, the examination of goods and services that affect health, and also taking measures for the improvement of the quality of life;
- the definition, training, examination and promotion of the 'health & welfare occupations', in addition to the definition and the examination of production, dealing and consumption of 'health goods' for covering the needs of the society;
- informing the society about the protection and preservation of health, and healthy way of life, together with avoiding and facing diseases and disabilities, and the procedures for rehabilitation of people to the society;
- drafting of reports explaining the measures taken (for the completion of the Ministry's aims) to the Government;
- informing the members of the Greek Parliament;
- representing Greece in the EU and in other countries, in International Organizations, etc, in issues concerning the Ministry;
- cooperating with the other Ministries, Agencies and Organizations for the implementation of a common social policy in the sector of health and welfare.

Especially concerning the General Secretariat for the Consumer the responsibilities undertaken are the following based on the basic guidelines of the OECD for the protection of the consumer for both commerce and electronic commerce:

- ensure the transparency and the efficient protection of the consumer;
- ensure that the legal procedures referring to commerce, advertising and market research are being implemented;
- ensure that there is diffusion of information to the companies;
- ensure that there is information for the goods and services provided;
- ensure that there is exact and precise information concerning the transactions;
- educate / train the consumers on their rights;
- protect the privacy of the consumer (especially for e-commerce);
- make available all the respective laws and agreements;
- make available all the alternative ways for resolving the differences between the consumer and the seller, other than legal /court proceedings.

Policy directions and measures are suggested by the relevant Directorates and General Secretariats, which are also supported by the organisations and bodies that the two Ministries supervise in terms of scientific input and advice when there are specific needs, and the final decisions concerning policy formulation and implementation are made by the Minister.

37 Scientific advice

37.1 General background

Scientific advice and its associated systems of delivery form an issue at the national level in Greece. Most Ministries, except for the policy areas of research, agriculture, health and the consumer, and energy, are not supported by statutory scientific advisory bodies per se, but they usually address the research centres and organisations they supervise, form committees of experts, or turn to other ‘external’ research bodies, and consultancy agencies on an ‘ad hoc’ basis depending on the needs that occur substantially. Specifically for the policy areas of agriculture, energy, health and the consumer, there is usually a specific organisation/institute that the Ministry addresses when in-house expertise is not enough.

The provision of scientific input and advice from ‘external’ sources is supported by a special legal framework for sub-contracting (after the adoption of EU Directive 92/50). This was prompted by the need for facilitating the use of external expertise in resolving certain issues.

Most of the scientific advisory bodies in Greece are statutory permanent legal entities under Public Law, governed by Codes of Practice and formal guidelines³⁹. They mostly provide information and advice to the Ministry of Development and its general secretariat, as well as to other Ministries, to the legislatures and the Head of the Government. They tend to have a broad scope of work and the main policy areas that they cover are health, and to a lesser extend, research and environmental issues. Concerning their mode of operation they mostly hold regular meetings and formulate sub-groups.

Half of the scientific advice provision organisations in Greece were established during the 80’s and the other half during the 90’s; therefore no major changes have occurred in their structure in the last years. They often use, as a source of information for generating scientific advice, the expertise of their members and more rarely reviews of existing literature or conduct own researches.

Finally, regarding their confidentiality, only a proportion of them is forced to retain the material used in generating the scientific advice and/or their discussions restricted.

37.2 Advice provision in relevant policy areas

In most cases, except for the policy areas of research, agriculture, health and the consumer, and energy, the Minister or the respective General Secretariat addresses the Directorates of the Ministry for scientific advice (internally, top-down) or whenever an issue occurs necessary to be examined, a relevant report is prepared and submitted to the Minister (internally, bottom-up). An inter-ministerial committee is then usually composed for managing and monitoring the proceedings and for setting the standards to be taken under consideration.

At first, efforts are made to resolve the issue utilising the expertise within the Directorates of the Ministry or within the control organisations and research institutes that the Ministry

³⁹ The organisations that participated in this study stated that have Codes of Practice having in mind the Memorandums of Association, as these Memorandums tend to encompass articles that refer to the methods of operation of the body, i.e. to whom it shall refer to, how the reports drafted are going to be published, the confidentiality retained by its members, methods of selection of the Executive Board, etc.

supervises (internally). In case they lack ‘internal’ expertise, they address ‘external’ expertise in research institutions, university departments, consultancy agencies, etc. outside the Ministry.

When the requested expertise is found, the respective ‘external’ experts, depending on the issues examined, may be asked either to form an ‘ad hoc’ scientific advisory committee, under the supervision of the respective Minister or General Secretariat, or they may be commissioned to carry out research, and deliver the requested input to the Ministry.

The Ministry/each General Secretariat has the ability to commission research either to the research organisations under their supervision (internally) or to outside research bodies, university departments, consultancy agencies, or individual experts (externally). Commissioning research is realised through *open calls* (when the budget allocated is above a specific amount) or through *immediate allocation* (when the budget allocated is below a specific amount) and may concern the conduct of new research, the reviewing of previous research results and the preparation of specific studies.

In either case (‘internal’ or ‘external’ scientific advice provision) an inter-ministerial committee or the respective General Secretariat is responsible for delivering the scientific advice to the Minister, who will make the final decisions about the use of the scientific input and its impact on policy making.

Specifically for the policy areas of agriculture, energy, health and the consumer, and research there is a differentiation from the system described above in the sense that it is usually a specific organisation/institute that the Ministry addresses when in-house expertise is not enough. This organisation/institute is one of the bodies that the Ministry supervises.

In the Ministry of Agriculture, for instance, in case the inter-ministerial expertise does not fulfil the specific case’s requirements, it is mainly the National Agricultural Research Foundation (NAGREF - the most important research centre for agricultural research in the country) that is addressed, whose experts are called to form ‘ad-hoc’ scientific advisory committees and provide input directly to the Minister. These committees may include also ‘external’ experts from other organisations, outside the Ministry of Agriculture, but usually they consist of the experts from the institutes of NAGREF.

In the case of the energy policy area (General Secretariat for Energy and Natural Resources) CRES (Centre for Renewable Energy Sources), and RAE (Energy Control Authority), which have multidisciplinary role and therefore are not considered as core scientific advisory bodies, are the main advisory bodies on energy issues in Greece.

For the Ministry of Health and Welfare scientific advice is usually sought, depending on the issue examined each time, from the organisations and health institutes operating under the responsibility of the Ministry such as the National Drug Organisation (EOF) providing advice on issues of health, suitability of drugs and test methods, etc.

For the consumer policy area and especially in relation to food safety, it is the Hellenic Food Authority (EFET – under the Ministry of Development) that is usually addressed and the General Chemical Lab of the State (under the Ministry of Finances). Also, there is established the National Consumer Council, which role is to protect the rights of the consumers and represent them during decision making procedures.

The only policy area supported by an eminently statutory scientific advisory body, thus differing from the general structure presented above, is research. When issues emerge that call for scientific advice, the General Secretariat of Research and Technology usually addresses the National Council for Research and Technology (NCRT), which is shouldered exclusively the provision of scientific advice on issues concerning research and technology. Apart from NCRT, GSRT may also use the expertise located within the research organisations it supervises, depending on the research field in question, such as the Greek Atomic Energy Commission, the Industrial Property Organisation (OBI), the Hellenic Institute of Metrology (EIM), the Hellenic Organisation for Standardization (ELOT), the Technical Chamber of Greece (TEE), the Institute for Economic and Industrial Studies (IOBE), the Academy of Athens with all its various departments, the National Telecommunication and Post Commission (EETT), the National Committee on Radio and Television (ESR) and the National Space Committee, the Bioethics Committee (Under the supervision of the General Secretariat for Research and Technology) and the National Bioethics Commission (Independent advisory body).

Finally, the Parliament has created its own scientific advisory bodies designated as Parliament's Scientific Service and the Parliamentary Technology Assessment Committee.

37.3 Conclusions

The general practice in delivering scientific advice to policy-makers is firstly exploiting the internal expertise located either within the respective Ministry Directorates and General Secretariats or within the research institutes and control organisations that the Ministry supervises (internally). In case the necessary expertise is not found internally then external experts are addressed in research institutions, university departments, consultancy agencies, etc. outside the Ministry. These 'external' experts, depending on the issues examined, may be asked either to form an 'ad hoc' scientific advisory committee, under the supervision of the respective Minister or General Secretariat, or they may be commissioned to carry out research through *open calls* or *immediate allocation*, to deliver the requested input to the Ministry.

In either case ('internal' or 'external' scientific advice provision) an inter-ministerial committee or the respective General Secretariat is responsible for delivering the scientific advice to the Minister, who is the one to take the final decisions about the use of the scientific input and its impact on policy making.

The only policy area supported by an eminently statutory scientific advisory body, thus differing from the general structure presented above, is research. When issues emerge that call for scientific advice, the General Secretariat of Research and Technology address the National Council for Research and Technology (NCRT) which is shouldered exclusively with the provision of scientific advice on issues concerning research and technology.

Database Report

38 Advisory Bodies covered in database

Name of body	Policy areas covered	Who advised	Full/Basic coverage	Nature of body	Some Categorisation
NCRT (National Council for Research and Technology)	Energy, Health, Research	Ministry of Development & GSRT (General Secretariat for Research and Technology)	Full	Statutory	A
GAEC (Greek Atomic Energy Commission)	Energy, Health	Ministry of Development	Full	Statutory	A
Bioethics Committee	Health, Research	Ministry of Development & GSRT	Full	Statutory	A
National Bioethics Commission	Agriculture, Environment Health, Research	Ministries of: Health, Environment, Agriculture, Development (GSRT) Justice, & Head of Government, & Legislature	Full	Statutory Permanent	A
Parliament's Scientific Service			Basic		A
EIM (Hellenic Institute of Metrology)	Measuring of any kind	Head of Govt & Legislature, etc.	Full	Statutory Permanent	A
NAGREF (National Agricultural Research Foundation)	Agriculture, Environment, Fisheries, Research, Energy	Ministries	Basic		B
CRES (Centre for Renewable Energy Sources)	Energy	GSRT & Ministries for: -Development - External Affairs -National Economy.	Full	Statutory	B

EOF (National Drug Association)	Health,	Ministry of Health	Basic		B
National Space Committee			Basic		B
National Consumer Council	Health	Legislature & Ministry of Commerce	Basic		B
OBI (Industrial Property Organisation)	Agriculture, Environment, Health, Fisheries, Transport, Research, Energy	Ministry of Development (GSRT) & other Ministries that require technical advice & Universities, Industries and enterprises	Full	Statutory Permanent	B
TEE (Technical Chamber of Greece)	Transport, Research	Head of Govt	Full	Statutory Permanent	B
TAC (Technology Assessment Committee)	Health	Legislature & Ministries	Full	Statutory Fixed-term	B
IOBE (Institute Of Economic and Industrial Studies)	Research	Legislature	Basic		B
Academy Of Athens			Basic		B
(ESYD) Hellenic Accreditation Council		Ministry of Development	Basic		B
EETT (National Telecommunications & Post Commission)		Legislature	Basic	Statutory Permanent	B

It should be noted at this point that some of the organisations that have been inputted in the database mainly as type B bodies, have stated that they do not think themselves as scientific advisory bodies. However, since these organisations were the exclusive providers of scientific opinions to the state, we have included them in the database. These organisations are: EOF, NATIONAL SPACE COMMITTEE, IOBE, ACADEMY OF ATHENS, ESYD and the EETT.

38.1 General trends

All the organisations that provided insight about their nature stated that are statutory. Amongst them, the majority are permanent while one is statutory fixed term. The policy areas that they cover are in direct relation to the body they are providing advice for. In more detail, type A organisations provide information and advice to the Ministry of Development and its General Secretariat, to other Ministries as well as to the legislatures and the Head of the Government. In general, most Ministries are not supported by statutory scientific advisory bodies per se, but they usually address the research centres and organisations they supervise.

The Ministry /each General Secretariat has the ability to commission research either to the research organisations under their supervision (internally) or to outside research bodies, university departments, consultancy agencies, or individual experts (externally). Specifically for the policy areas of agriculture, energy, health and the consumer, there is usually a specific organisation/institute that the Ministry addresses when in-house expertise is not enough. This organisation/institute is one of the bodies that the Ministry supervises. This can be seen also in the above table, where it is presented that all the type A and B organisations that provide scientific advice to the respective ministries, are under the supervision of those public agencies.

Half of the type A organisations were established during the 80's and the other half during the 90's. With respect to the type B bodies, the vast majority was established during the 80's, three (ESYD, TAC and EETT) during the 90's, the National Consumer Council in 2002, and the others were established decades ago (IOBE in 1975 and TEE in 1926!).

38.2 Structural issues

38.2.1 Secretariat

Half of the type A bodies have a secretariat of between 1 (NCRT, EIM, National Bioethics Commission) and 10 people (GAEC). In more detail, in the case of NCRT the secretariat is provided by the GSRT (General Secretariat for Research and Technology), while in the case of GAEC, National Bioethics Commission and EIM the secretariat is part of the body. In the case of the type B organisations, three of them have one secretariat, while OBI and TEE do not have a central secretariat, but a secretariat for each of their departments. The organisations that have a secretariat tend to employ around 2 or 3 people. However, in the case of OBI the secretariat is staffed with 30 people, while TEE could not estimate the number of people employed in the secretariats. .

The secretariats tend to undertake functions such as general administrative backing for the body, providing members with relevant documentation, producing minutes of meetings, it is responsible for the international and public relations of the body, etc. This applies not only to type A organisations, but to type B as well, with the exception of GAEC and OBI respectively, where the secretariat consists of scientists and secretarial people that perform background work as an input into the generation of advice. These secretariats undertake all the necessary operations and researches to back up the work performed by the secretariat.

38.2.2 Membership

Almost the number of members of all type A bodies tends to be between 9 and 49 people. Regarding type B bodies: three have less than 20 people as their personnel, four have between 60 and 800 and one has almost 90.000 members as a whole (TEE). As we can see, the members of the bodies tend to be similar on average, although type B may be larger depending on what is counted (the overall amount of the members, or the top decision making body within these organisations).

In general, the bodies tend to be dominated by ‘academic experts in natural and physical sciences’ or they have a fairly broad spread of backgrounds (although the natural and physical scientists may be the largest group). The Greek database has two exceptions and they both are type B organisations: CRES and the Technology Assessment Committee that consist exclusively of scientific researchers (CRES) and parliamentarians (TAC).

It is worth mentioning that the vast majority of all type A and B organisations that have physical and natural academics tend to be focused in their scope, while the commissions that have more broad and open remits tend to include within their staff social and other scientists or representatives as well (e.g. National Bioethics Commission, EIM, etc.).

The number of female employees in the type A and B Greek organisations is very limited, usually between 1 and 9 people. However, since the number of members in type A organisations is smaller than that of type B bodies, the female ratio (female ratio: female employees/total number of employees) is higher on average in comparison to the type B’s average, for example EIM has 9 female over 17 employees in total. Beyond this overall breakdown there do not appear to be any specific trends regarding the gender of the members.

Concerning the composition of the bodies, the vast majority of the type A organisations in Greece have members that are employed in other domestic advisory bodies. The exception to this is the National Bioethics Commission where some of its members are working, besides domestic advisory bodies, in other countries and also for international advisory bodies. On the other hand, it seems quite unusual for Type B organisations to have experts that work either for other domestic advisory bodies or in other countries in general. However, there were cases noted where this does happen, and members work for national institutions, (e.g. the case of the National Consumer Council where its members work for regional consumer councils), or in committees of the European Union (e.g. the case of EOF where 45 people are working as representatives in committees and working groups of the European Union and Council of Europe).

38.2.3 Budgets

Almost none of the type A in Greece provided insight on their budgets per annum, either for the entire body or the secretariat exclusively, except for EIM that estimated to be around 1.100.000 € per annum. Amongst the type B organisations, only two could estimate their annual budgets: OBI that estimated around 3.514.000 € and TEE to be around 29.347.028 €. On other hand, TAC stated that since it operates through parliamentarians it could not have any incomes from the state. In more detail, OBI spends 50% on scientific advice generation, TEE 20% and while EIM spends 100% on scientific measurements. Also OBI does not have a fixed budget, since its earnings come from the production of studies and reports for private organisations as well, while EIM’s budget consists of money that partially are obtained by the

state and partially by reports that produces for other organisations. TEE's incomes derive from **εισφορές μελών** and the execution of various reports, researches and studies.

38.3 Functional Issues

38.3.1 Scope of work

Regarding the core scientific advisory bodies (Type A) of Greece, three have a broad range of scope, and one is focused and one is open. The Type B organisations showed a variation in their answers as two of them have a broad scope, one is focused and one is open.

No obvious pattern can be spotted between the scope of the body and the activities it undertakes, neither for type A nor for type B organisations, although the vast majority of type A organisations undertake activities that seem to be rather focused, since they deal mainly with research performance, raising public awareness and education and training. Type B organisations mainly perform the same activities as type A organisations, although they perform a mixture of other activities for private organisations and industries, depending on the needs of the customer.

38.3.2 Independence

The majority of type A organisations in Greece have stated that they use the method of appointment for the selection of their members, while GAEC uses a mixture of peer nomination/election, advertisement and appointment with respect to the position that the new employee will occupy and one advertisements and open applications. The vast majority of the type B organisations prefer the method of advertisement, the next most preferred method is appointment, and the last one is a mixture of the aforementioned methods.

Regarding whether the bodies can select the subjects that will be tackled or they are purely reactive, the majority of the core scientific advisory bodies and the multifunctional ones have stated that are a mixture of these two scopes. They are reactive to the issues provided by the Greek state, however they have the partial freedom of choosing subjects they think are important and to bring them into the scope of the legislatures or the public in general.

About the outcome that is being given to the state, three type A bodies give to the state their opinions in final form, while the others are engaged in dialogue before producing the final study, and the same pattern is observed among type B organisations, as most of them present the advice produced in final form to the policy makers. However, before the final outcome, the bodies tend to engage themselves in conversations with the policy makers about their results, to discuss them and produce reports that include all the points of interest to the state.

After the creation of the final reports, the vast majority of the core scientific advisory bodies of Greece stated they disseminate the information to the public through the media, their website or other publications, whereas type B bodies face more strict confidentiality restrictions, as the reports they perform are basically created for industrial or private organisations, therefore, they are restricted to retain the material used in the production of the reports as well as the minutes of their meetings confidential, either permanently or for a specific time period.

38.3.3 Transparency

Two of the type A organisations stated that they operate under a code of practice that has been created and signed by the respective Ministry, while the others stated that are independent. Regarding the type B bodies, one of them operates under specified guidelines, two on their own, and the remaining ones did not provide us with insight concerning this question. These codes of practice tend to cover the structural and processional issues of the body, the methods used for the selection of employees, the composition and selection of the members of the Board, etc.

None of the members of the type A or type B organisations reported that they have any potential conflicts of interest.

With respect to the confidentiality requirements, most of the type A bodies are transparent – meaning that either their material used in the production of scientific advice or the agendas and their minutes of their meetings do not have to be kept confidential, and only EIM is operating under strict rules of confidentiality since the majority of its reports are created for private organisations and industries. The vast majority of type B organisations are also partially transparent, leaving TEE to be under strict rules of confidentiality regarding the material used in their discussion and its agendas and minutes of their meetings.

Some of the type A and B bodies tend to perform conferences or workshops for the public or specified categories of citizens, respective of the issue of these events. In more detail, only CRES and the Technological Assessment Committee hold meetings that are open to the public, meaning that they hold meetings that take place whenever an important issue occupies the public and needs to be clarified and can be attained by lay people or journalists that disseminate the information to the public afterwards.

38.3.4 Generation, delivery and responses to advice

Since the size of the core scientific advisory bodies in Greece tends to be fairly small, they meet when request from the respective Ministry arises rather than perform meetings on regular prearranged dates. This in relation with the fact that they operate under specific guidelines does not allow great freedom to the bodies. On the other hand, type B organisations tend to meet on their own initiative or they have prearranged meetings; therefore, they seem to be more regular in their operational structures. They also tend to form sub-groups when they have to produce advice reports and spatially tend to delegate work to other bodies or people. Also, none of the interviewed bodies stated that they use public consultation of any kind.

The type of advice generated by the type A and B organisations is usually in direct relation to the activities and the scope of the body. Regarding the finalisation of the advice provided to the requesting body, type A bodies use a full range of methods, such as consensus of opinions, statement of the majority of opinions, or notating in the reports the full range of different opinions. Usually, the method utilised depends on the kind of the organisation and the body to which the advice is given. The type B organisations follow the above pattern as well.

With respect to the requisite of formal policy response, there are differences between type A and type B organisations. In more detail, half of the type A organisations tend to require such response, either formally or informally, while the majority of type B do not.

38.3.5 Evaluation and impacts of advice

For half of the type A organisations there is formal or informal assessment of their operation and impact of scientific advisory function, while for the other half there isn't. It is interesting at this point to note that the body asking for informal policy response is amongst the organisations where there is no formal assessment. Therefore, no pattern can be drawn about the relationship between the requirement for formal policy response and the assessment performed. Where there is assessment the organisations use these reports as guidelines for alteration of their processes, structures and methods of operations. There is no formal assessment of their operation or impact of advisory function in all type B organisations.

Most of the type A and B bodies in Greece stated recent examples where the advice they generated has had an impact on the state or policy formulations, in general. In terms of other domestic or international advisory bodies most of the core scientific advisory bodies were not aware whether their scientific advice had been utilised by other, while some of the multifunctional bodies were aware and presented relevant examples where their advice was used (for example by the European Commission). This dissemination depends on the remit of the body, rather than whether it is Type A or B.

38.3.6 Changes in the advisory system

Only two out of the six core (Type A) scientific advisory bodies of Greece has stated that it went under institutional and administrative changes during the past 5 years. Amongst the type B organisations, three had not, one decreased its members under respective command by the Ministry and one went through administrative changes, since the time had come according to its memorandum of association to undergo such processes.

Hungary

General Overview

39 Background

Changes in policy making in Hungary have largely been influenced throughout most of the last decade by the membership requirements of the European Union. Implementing the “acquis communautaire” has led to the establishment of new structures and bodies. Two key ministries, the Ministry of Transport and Water and the Ministry of Agriculture and Regional Development have both created separate departments for EU integration.

39.1 Policy Making

Hungary is a parliamentary democracy. The President, whose role is largely ceremonial, is elected by Parliament. The prime minister, also elected by Parliament but on the recommendation made of the President, heads the government. Parliament is comprised of a unicameral National Assembly or Országgyűlés (386 seats; members are elected by popular vote under a system of proportional and direct representation to serve four-year terms).

Executive power - government functions and the highest-level control of public administration - is exercised by the government, in which the Prime Minister plays a dominant role. The government is constituted upon the appointment of ministers and their ministerial oath.

Legislation may be initiated by the President of the Republic, the Government, all Parliamentary Committees, and any Member of Parliament.

The majority of laws are prepared and proposed to Parliament by the government. In addition to the subjects covered exclusively by legislation, the government can issue decrees and also conclude international agreements in the name of the Republic of Hungary.

Parliament's supervisory role is weak. Legislative supervision is exercised during plenary sessions through questions and interpellations.

According to the constitution a popular initiative may also be submitted by at least 50,000 voters. A popular initiative may be directed at putting onto Parliament's agenda, a question falling within its competence. Parliament is obliged to discuss the question contained in the initiative.

39.1.1 Decentralisation

In January 1999 a new three-level administration system was introduced that consisted of:

- 3,131 Település (settlements): municipalities, basic level of self-government, responsible for all matters that have not been assigned to other levels

- 19 megyék and Budapest (counties): regional policy, with extensive powers in economic policy
- 7 régiók (regions)

The basic level of local government is the municipality level. However, these units were considered too small to receive EU funding or to be a partner by cross-border co-operation projects and so in line with the EU NUTS regional units County Development Councils were established. These are composed of members of the representatives of central government, of the subregions, of the county local government, of the Chamber of Industry and Commerce, Farmers' Union and of organisations of employees and employers (Illesi 2001).

39.1.2 The Ministries

The ministries listed below were established in 1998 following the general election. However, this set up could change in the need future as the elections currently underway in Hungary are predicted to change the political landscape.

- Ministry of Agriculture and Regional Development
- Ministry of Cultural Heritage <http>
- Ministry of Defence
- Ministry of Economic Affairs
- Ministry of Education
- Ministry of Environment
- Ministry of Finance
- Ministry of Foreign Affairs
- Ministry of Health
- Ministry of Interior
- Ministry of Justice
- Ministry of Social and Family Affairs
- Ministry of Transport, Communications and Water Management

39.2 Policy areas

39.2.1 Agriculture

The ministry for Agriculture and Regional Development is responsible for agriculture policy. Following the 1998 general election, responsibility for regional development policy was added to responsibility for rural development policy. The ministry is therefore responsible for the development of strategic development plans on national, regional and county level for both rural and regional development.

In 1997 a new National Agricultural Programme was formulated. Also in 1997 'The Law on the Development of Agriculture' was passed that was based on NAP.

According to this law the aims of Hungarian agricultural policy are:

- increasing of production efficiency in interest of security of food availability

- creating of proportional factor income parity in agriculture
- contributing of improvement of rural progress
- coordination between production and sustainable development in agriculture

The change of government in 1998 brought about a slight shift in agricultural policy away from supporting smaller farms towards large-scale farms (Ferto 2001). However, the overall aims remained the same:

- to increase of production and competitiveness
- to help family farms
- to propagate environmental friendly production technologies
- to increase agricultural export performance
- to develop R&D and education
- rural development.

The Ministry of Agriculture and Regional Development established a Department for European Integration with the following sections.

The Section of EU Negotiations

The Section of Co-ordination SAPARD

The Section of EU Harmonisation

The PHARE Agro-economical Bureau

39.2.2 Energy

The Energy Policy Department in the Ministry of Economic Affairs is in charge of energy policy in general. The tasks of the Ministry in energy matters are defined as:

„to co-ordinate domestic and international tasks in relation to energy supply and energy management, establish the energy prices under this authority by separate laws, to co-operate in the activities related to the environmental impacts of the energy sector and industry, to co-operate in the utilisation of renewable energy sources“

The Hungarian Energy Office is the state administration agency with independent responsibilities and jurisdiction on a national level, controlled by the Government and supervised by the Minister of the Economy. The president of the Office presents annual reports to the Parliament on the operations of the Office.

The most important responsibilities of the Office are the licensing, regulation and supervision of the activities of gas and electricity companies; the planning of the prices of natural gas, electricity and heat for final decision making, and also consumer protection.

Nuclear Energy

The control and supervision of the safe application of nuclear energy is the task of the government, which is performed through the Hungarian Atomic Energy Committee (HAEC), the Hungarian Atomic Energy Authority (HAEA) as well as the Ministers concerned.

The tasks related to nuclear safety is the responsibility of the President of HAEC while the Minister of Health is responsible for the activities related to radiation protection. Licensing and regulatory supervision of nuclear facilities fall into the competence of the Hungarian Atomic Energy Authority. Licensing of other facilities associated with the handling of radioactive materials or wastes as well as the use of ionising radiation generating equipment is regulated by the Ministry of Health. Legal rules for the use of atomic energy are promulgated by the Parliament, the Government, or the ministers concerned. Legal rules comprising safety requirements are concerted in advance with the president of the HAEC.

Hungarian Atomic Energy Commission (HAEC)

The Hungarian Atomic Energy Commission is authorised by the Hungarian government to oversee decision making, co-ordination and control of matters concerning the peaceful use of atomic energy in Hungary. Its members are high ranking officials of the ministries, interested in the application of atomic energy. The president of HAEC, appointed by the Prime Minister, is member of the Government.

Hungarian Atomic Energy Authority (HAEA)

The Hungarian Atomic Energy Authority is the central public administration organisation with its own tasks and regulatory competence directed by the government. Under the Act on Atomic Energy No. CXVI. of 1996 HAEA both regulates certain activities (in particular licensing of nuclear facilities) and co-ordinates the regulation of other activities by ministries and administrative bodies specified under the Act. The director general of HAEA and his deputies are appointed and dismissed by the Prime Minister. The Government exercises supervision over HAEA through the president of the Hungarian Atomic Energy Commission.

39.2.3 Transport

Hungarian Ministry of Transport and Water Management has the responsibility for policy making in the are of transport policy. It comprises

The **EU Integrational block**, which compiles four organisational units together was established in June 2000. Its establishment was necessary to prepare for the EU-accession and then to take part of its mission, to make it more concerted and efficient on those fields that are co-ordinated by the department.

Transport division

In 1996, Parliament issued a declaration on the new Hungarian transportation policy. Its main strategic directions are the protection of human life and the environment, the efficient and market conforming operation of transportation, the promotion of a more balanced regional development of the country and the improvement of the conditions of co-operation with the neighbouring countries. All these are in harmony with the main effort to have transportation aid the EU integration of Hungary.

Water division

The water department has responsibility for:

- Flood control – Due to the basin and mainly plain nature of the country, it is especially threatened by floods and inland waters. The proportion of areas protected against floods in

Hungary is the highest in Europe. 15% of the territory of the country, where 2.5 million people live in 700 communities, is situated under the level of authoritative floods. A third of the arable land, 32% of railways and 15% of public roads are situated in threatened areas and 30% of the GDP is produced there. The safety of the population and material goods is protected by Government-managed flood-control works at a length of 4220 kilometres (2640 miles).

- Drinking water and waste water – Provision of mains drinking water and sewage disposal to all the country's population. The regulation of public waterworks services and the modernisation of the tariffs for public water works services. The large-scale development of sewage drainage and purification in communities, cheaper and more efficient water usage solutions, and the introduction of new technical processes are all very important

39.2.4 Environment

The main responsibilities for policy making in the area of the environment is the Ministry of the Environment. However, the *2001 Regular Report On Hungary's Progress Towards Accession* observed that:

„the responsibilities for environmental protection are divided between six different Ministries, each of which has various implementing bodies at regional and national level. However, there are no clear responsibilities and clear division of competencies amongst them. Environmental tasks are fragmented, all concerned authorities have their own specific and exclusive permitting, compliance checking and enforcement tasks; no general regulatory system exists, but instead there are several small independent ones.

There is regional as well as sectoral fragmentation, and a significant amount of unnecessary work. A rationalisation of the whole system should be carried out, otherwise serious implementation problems can be expected. Although the administrative capacity in the Ministry of Environment has improved, it seems that the Legal Department still needs further strengthening.“

Hungarian National Council on the Environment

The Environment Act confers broad competencies on the Council. It delivers preliminary expert opinions and reports on draft legislative acts as well as governmental and ministerial decrees. Such prior assessment is necessary in order to ensure that due account is given to relevant environmental considerations in drafting a piece of legislation.

39.2.5 Health and the Consumer

The Ministry of Health is responsible for the preparation of health care legislation, health and medical research and for the licensing of pharmaceuticals and medical technology.

Hungary drew up a Food Safety Strategy in April 2001, which was prepared by the inter-ministerial working committee on food safety. The strategy describes the official bodies involved, their roles, organisation and staffing as well as the institutional changes planned in order to ensure co-ordination between the Ministry of Health, the Ministry of Agriculture and Regional Development and the General Inspectorate of Consumer Protection. (European Commission 2001)

The Ministry of Economic Affairs is responsible for consumer protection Affairs, assisted by other Ministries in the areas of their competence (justice, health, agriculture, environment and transport). The Office of Economic Co-operation is in charge of procedures against unfair manipulation of consumer choice. The General Inspectorate for Consumer Protection is responsible for enforcement of consumer and health protection. Under its co-ordination and management, a Central Market Surveillance and Information System started functioning in January 2000.

39.2.6 Research

The Ministry of Education has the overall responsibility for Research Policy. Under the Ministry, the main organisation responsible for R&D strategy in Hungary are the Science and Technology Policy Council (STPC) and the Science Advisory Board (SAB) both of which were established in 1999.

In addition, the role of the Ministry of Education has been strengthened through the integration of the former governmental office, the National Committee for Technological Development (OMFB). A new division was created in January 2000 supervised by a Deputy State Secretary responsible for R&D issues. A technology policy advisory body of 15 members remained under the name OMFB.

In 2000, the Government launched a National Research and Development Programme, developed by the SAB, which is to serve as a long-term development programme for Hungarian science, technology and innovation. It defined thematic priorities for research activities.

The following points form the basis of the development plan:

- working out an attractive, performance-based faculty and researcher career model
- strengthening the existing scientific research units and increasing their absorbing capabilities for competition-based funding
- strengthening the competition-based research funding schemes as the Hungarian Scientific Research Fund (OTKA) and the Technological Development Fund
- launching the new National Research and Development Programmes.

The Research and development programme involved a commitment to considerable increases in the R&D budget in 2001 and 2002. It involves an increase of 61 MEURO over two years. The R&D expenditure should increase from its 1998 base of 0.8 per cent to 1.5 per cent by 2002.

40 Scientific Advice

The restructuring process to prepare for membership of the European Union has often meant the redefinition of the way in which policy is formed and implemented in Hungary. With respect to formation of structures to advise the policy making process, there has been considerable freedom to define new structures as there were few existing ones to build on. This is in contrast to some other older EU member states where the formation of new bodies is heavily influenced by existing structures.

Advice to the policy making process comes from a variety of sources. One of the main ways would appear to be through institutes and agencies that are directly under the supervision of one the various ministries. However, other bodies such as the Hungarian National Council on the Environment have been established to provide a broad range of advice to the policy making process. The National Council on the Environment is comprised of one third of each industry, academia and environmental movements (NGOs). New bodies appear to pay more attention to public participation.

Database Report

41 Advisory Bodies covered in database

Name of body	Policy areas covered	Who advised	Full/basic coverage	Nature of body	SOME CATEGORISATION
Ethics Committee for Clinical Pharmacology	Research Health	Other	Full	Statutory-permanent	100% Scientific advisory
Scientific and Research Ethics Committee	Research Health	Legislature Ministry Other	Full	Statutory Permanent	100% Scientific Advice
Hungarian Commission on Sustainable Development	Environment Research	Head of Govt Ministry	Full	Statutory Permanent	100% Scientific Advice
Co-ordination Committee on Drug Affairs	Health	Head of Govt Ministry Agency	Full	Statutory Permanent	Not only Scientific Advice
Medical Research Council	Research Health	Ministry	Full	Statutory Fixed-term	100% Scientific Advice
Committee for Evaluating Biotechnology Procedures	Agriculture Environment Health Fisheries	Ministry	Full	Statutory Permanent	100% Scientific Advice
Food Safety Advisory Board	Agriculture Research Health	Head of Govt Ministry Legislative	Full	Statutory Permanent	
National Committee for Technological Development (NCTD)	Research	Head of Govt Ministry	Full	Statutory Permanent	100% Scientific Advice
Hungarian National Environmental Council	Agriculture Environment Transport Research Energy	Head of Govt Ministry Legislative	Full	Statutory Permanent	100% Scientific Advice
Science Advisory Board (SAB)	Research	Other Advisory Body	Full	Statutory Permanent	100% Scientific Advice

Science and Technology Policy Council (STPC)	Research	Head of Govt	Full	Statutory Permanent	100% Scientific Advice
Forestry Commission	Agriculture Research	Ministry Other	Full	Statutory Permanent	100% Scientific Advice
Hungarian Academy of Sciences	Research		Full	Statutory Permanent	
Research and Information Institute for Agricultural Economics	Agriculture Research	Ministry	Full	Statutory Permanent	
Hungarian Atomic Energy Authority (HAEA)	Energy	Head of Govt.	Full	Statutory Permanent	
Hungarian Energy Office (HEO)	Energy	Ministry	Full	Statutory Permanent	
General Inspectorate for Consumer Protection	Health	Ministry Other	Full	Statutory Permanent	
General Inspectorate of Transport	Transport	Ministry Other Advisory Body	Full	Statutory Permanent	
Institute of Environmental Management	Agriculture Environment Research	Ministry	Full	Statutory Permanent	
Institute for Transport Sciences Ltd	Transport Environment Research	Ministry	Full	Statutory Permanent	
Fodor József National Center for Public Health	Health		Basic	Statutory Permanent	
National Institute for Food Hygiene and Nutrition (of the Fodor József National Center for Public Health)	Health		Basic	Statutory Permanent	
National Institute of Chemical Safety (of the Fodor József National Center for Public Health)	Health		Basic	Statutory Permanent	
National Institute of Environmental Health (of the Fodor József National Center for Public Health)	Health		Basic	Statutory Permanent	
Frédéric Joliot-Curie National Research Institute for Radiobiology and Radiohygiene (of the Fodor József National Center for Public Health)	Health		Basic	Statutory Permanent	
National Institute of Occupational Health (of the Fodor József National Center for Public Health)	Health		Basic	Statutory Permanent	
Johan Béla National Center for Epidemiology	Health		Basic	Statutory Permanent	
National Institute for Agricultural Quality Control	Agriculture		Basic	Statutory Permanent	

41.1 General trends

The Hungarian advice system is categorised by two types of advice body that have been deliberately set up to provide advice. One type of body focuses on evaluating or reviewing individual technologies and the other focuses on providing strategic advice. The bodies that focus on strategic advice tend to be in areas of cross-cutting policy making. These bodies not only play an advice role but also explicitly take on a co-ordination function between the different ministries. They invite scientists, experts from industry and NGOs to participate in the debate.

More traditional areas of policy making such as agriculture and transport have also more traditional forms of advice structures. In these areas the federal research institutes still form one of the main ways of producing advice. In the Energy sector the regulators play a large role in the provision of advice.

41.2 Structural issues

41.2.1 Secretariat

All the bodies have a secretariat. The secretariats of A bodies and B bodies differ both in their organisation and in their responsibilities.

Type A bodies

The secretariats of type A bodies have between 1 and 6 employees. Half of these have either 2 or 3 employees. The main role of all the secretariats of type A bodies is the organisation and administration of the bodies. They are responsible for arranging the meetings including maintaining contact with the members and preparing documents. The secretariats are responsible for minute taking and for ensuring that the members and the body requesting the advice are informed of the decisions taken in the meetings. The secretariats of type A bodies also have other roles depending on a number of different factors including the age of the body, which policy area it works in and its links to the policy making body.

One of the additional roles that the secretariats play is communicating the decisions to a wider audience. This can be through press releases, via a web site or through publications. The secretariat of the Commission on Sustainable Development is one example of a secretariat that plays an active role that goes beyond purely administrative activities. This is due to the fact that the body does not just advise one ministry but all ministries involved in developing strategies for sustainable development. This body was established not just to provide advice but also to co-ordinating body which would work on cross-departmental issues on sustainable development such as the Hungarian proposal for the World Summit on Sustainable Development. Most of the bodies members are civil servants from the relevant ministries. In this way this body differs from the more typical models of a scientific advisory body that consists only of scientific experts.

As is the case in most European countries, the secretariats of the Hungarian bodies in the field of research play a more active role in collecting and analysing information related to the S&T field. This applies both to the high level body the Science and Technology Policy Council and to its advisory body the Science Advisory Board.

Type B Bodies

All type B bodies have secretariats whose main role is to provide administrative support. Functions over and above administration in these organisation are undertaken by other departments such as research, supervision or by press departments.

41.2.2 Budgets

Type A bodies

The budgets of a high proportion of the secretariats cannot be separated from those of the department or ministry where they are situated. This is the case for the Commission on Sustainable Development whose secretariat is part of the Ministry for Environment and Water Management and the case for the National Committee for Technological Development that is part of the Ministry of Education. In the case of some bodies, a separate secretariat does not exist, but the employees from one of the ministry's departments are responsible for organising the body in addition to other tasks. This is the case for the Science Advisory Body.

The budgets of the type B bodies different enormously depending on the number of employees. The annual budget of the Academy of Sciences exceeds 130 Meuro. The Hungarian Energy Authority has an annual budget of 4 Meuro and the Atomic Energy Authority of 1.9 Meuro. However, this does not say anything about the amount or the form of advice they provide.

41.2.3 Membership

Size

Type A bodies

The twelve type A bodies looked at in Hungary have between 7 and 30 members. However, the number of members of the majority of bodies is in the middle range. Only two of these bodies are comprised of a very small number (one with 7 and the other with 9) and only two bodies have considerably larger numbers of members (one with 27 and the other with 30). Five of the bodies have between 20 and 24 members.

The two bodies with the smaller number of members are the Science and Technology Policy Council and the Presidency of the Medical Research Council. Both of these bodies are one part of, or are attached to, another organisation that performs a similar role. This goes some way to explaining their smaller size. The Science and Technology Policy Council (STPC) works together with the Science Advisory Board (SAB, 30 members) The STPC is a high level advisory body and consists of the Prime Minister, relevant ministers and the heads of the funding organisations. It is supported by the much larger SAB that had a broader membership from the scientific and business communities. The Presidency of the Medical Research Council functions in a similar way and is an advisory body attached to the Medical Research Council.

Type B bodies

The number of employees in type B bodies varies considerably. The Academy of Sciences is the largest with over 5500 employees and the Hungarian Energy Office is the smallest with 88 employees.

Background

Type A bodies

There are few Type A bodies in Hungary that are constituted only of scientists. The majority of bodies that deliver advice have members from the body receiving the advice involved.

Only four of the twelve bodies looked at are made up of purely or primarily scientific members. These are predominantly in medicine-based areas of research. They are the Ethics Committee for Clinical Pharmacology, the Scientific and Research Ethics Committee, the Committee for Evaluating Biotechnology Procedures and the Forestry Commission.

Members from these bodies are mainly drawn from the natural sciences, however, they also have a few other members from other backgrounds. The Scientific and Research Ethics Committee also has two social scientists, a nurse and a journalist.

There are two other categories of type A bodies. The first has a balanced mixture of scientists and civil servants and the second is composed mainly of civil servants and has the dual purpose of advisory and co-ordination body. Examples of bodies with a mixture of scientists and civil servants or other non-scientific members include the Food Safety Advisory Board, the National Committee for Technological Development and the National Environment Council. The Food Safety Advisory Committee (20) has a mixture of scientists (7), industry representatives (2), NGOs (2) and civil servants (9). The National Committee for Technological Development (15) has a combination of scientists (3), industry representatives (2), NGOs (4) and civil servants (6). The National Environment Council explicitly balances its membership, requiring 7 members from each of the scientific community, industry and business sector and from NGOs.

A small number of bodies in Hungary have a dual role and have a co-ordination function in addition to being an advisory body. These types of bodies tend to be in areas of a cross-cutting nature where the implementation of advice created requires co-ordination across more than one ministry. These type of bodies have considerably more members from the civil service than other bodies. The Commission on Sustainable Development is one such example. Its 24 members consist of 18 civil servants, 2 scientists, 2 NGO representatives and 2 parliamentarians. The Science Advisory Board operates in a similar manner with 15 of its 30 members coming from the civil service.

Without further analysis on the reasons for the small number of women in certain bodies, it is difficult to make generalisations. However, certain observations are possible. There were fewer women in those bodies with high numbers of natural scientists. There were also considerably more women in those bodies that had higher numbers of social scientists, civil servants and NGO representatives. Three of the bodies have over one third of the members who are female. However, there are exceptions such as the National Environment Council where only two of the members are women despite the fact that there is a high level of non-natural science members.

There are few if any experts from other countries who are involved in the scientific advisory bodies in Hungary. This does not mean, however, that they do not have any contact to other bodies or are not aware of the decisions taken by other bodies.

41.2.4 Budgets

Type A bodies

The costs of the secretariats are often not distinguishable from the departmental budgets of the ministries (see 2.1). In most cases, only the budget for the whole department or research council is available. Only the Committee for Evaluating Biotechnology Procedures was able to provide its annual budget (Euros 100,000) and the National Environment Council (Euros 68,000).

The budgets of the independent bodies (such as the two mentioned above) are mostly spent on employing a small secretariat to organise the body and on the fees and costs of the members. Those bodies which have high numbers of civil servants do not pay expenses as the civil servants participate in the body as part of their normal activities for the ministries. They also do not often have to fund a secretariat as this is provided by the ministry.

Some of the bodies have budgets for commissioning research but, this is more uncommon. One such example is the Hungarian National Environmental Council.

41.3 Functional Issues

41.3.1 Scope of work

Type A bodies

Most of the type A bodies have a specific remit for their activities and no body is entirely open in its scope. Some of the bodies have broader remits than others. However, the issue is less the scope of the bodies than the type of advice they are supposed to deliver. Some of the bodies were established to provide strategic advice. These bodies tend to have a broader scope of issues that they cover. Other bodies focus on reviewing individual technologies. They tend to be narrower in their scope, less strategic in their advice and be involved in a range of other activities associated with implementing advice. The bodies looking at gene technology or biotechnology fall into this category. They are also involved in standard-setting, regulation, licensing and education and training. However, bodies especially in the area of biotechnology can also have a strategic role. This depends on the reason for setting up the body.

The type A bodies with a broader focus tend to also have a wider variety of stakeholders involved. This applies to the National Environmental Council and the Science Advisory Board. Bodies with a narrower focus on applications in gene or biotechnology have more natural scientists such as the Committee for Evaluating Biotechnology Procedures.

Type B bodies are most likely to play a dominant role in the provision of scientific advice in the areas of agriculture, energy and transport. In agriculture the Ministry's Federal Research institutes are a main provider of advice. In Energy and Transport, the regulators are one of

the main providers of advice. This is especially the case with the Hungarian Atomic Energy Authority and the Hungarian Energy Office. They cover the entire spectrum of issues in their individual policy areas.

41.3.2 Independence

Type A bodies

Independence of advice seems to be dealt with through the selection of members that cover the scope of advice being requested. The members of most of the bodies are either appointed by the ministry or minister requiring the advice or they are suggested through peer review mechanisms. As many of the bodies also have civil servants amongst their members, the form of delivery of the advice is less important as they are involved in the process of forming it.

The secretariats are not independent. They are mainly supplied by the ministries. Whether this type of dependence on the body requesting the advice influences the independence of the decision making remains an open question.

Most of the bodies are a combination of reactive and proactive. In many cases they are required to play a proactive role in policy development in the area they are responsible for such as the Science and Technology Policy Council or the Food Safety Agency. There are a few bodies that are purely reactive. These tend to be those that review procedures such as the Committee for Evaluating Biotechnology Procedures. These bodies do not play any role in the formation of strategic advice.

Some of them have web sites that they use to explain their workings to a wider audience than the receivers of the advice. Others do not yet have web sites (Science and Technology Policy Council) and still use the more traditional method of press releases to communicate their decisions. Very few of the bodies did not communicate their findings at all.

Type B bodies have a higher degree of independence from the ministries in their primary function. However, there are few rules for the provision of scientific advice for B bodies and it mostly occurs on an ad hoc basis.

41.3.3 Transparency

Type A bodies

The activities of the majority of the bodies are governed by the law or decree by which they were established. In some cases the ministry created a decree to establish a new body whereas in other cases the body was called into being as part of the establishment of a new law in a particular policy area. For example, the National Environmental Council was established as part of the Environmental Act. The decrees cover the aims and objectives of the bodies and also its organisation and relationship to the body requesting the advice.

There do not appear to be any trends concerning the bodies' commitment to communicate the information beyond their original remit.

Regarding the need to keep information confidential, the ethics and biotech committees are required to keep information confidential and are also required to announce any interests. They also do not hold any of their meetings in public. Other bodies are more open and tend to only keep their agendas and minutes confidential.

The National Committee for Technological Development requires its members to keep material and discussions confidential as do several other bodies such as the National Environmental Council and the Science Advisory Boards. These bodies control the information they allow to reach the public. Their main method of communication is through press releases. Other information is only available on request. The Hungarian National Environmental Council is more open and releases all information upon request. It also holds conferences and symposia but, does not hold its actual meetings in public. Very few organisations release the agendas and minutes.

41.3.4 Generation, delivery and responses to advice

Type A bodies

The main source of information for all the bodies is the expertise that the members bring with them. Other sources of information are the use of national experts, the use of information from other advisory bodies and background work carried out by the secretariats. There are a few exceptions to this rule that include the Science and Technology Policy Council that mainly relies on input from the Science Advisory Board and does not rely only on the expertise of its own members. As has been commented on earlier, the different types of expertise needed to formulate advice are ensured through the combination of different types of members that seems to characterise the Hungarian system.

There is almost no formal response required by the policy maker. However, because many of these bodies are not merely advice bodies but also perform a co-ordination role between the ministries, the ministries use them to formulate ideas. They do not require the same ratification that a decision from a purely scientific body needs.

41.3.5 Evaluation and impacts of advice

Type A bodies

The Co-ordination Committee on Drugs Affairs is regularly evaluated as is the Scientific and Research Ethics Committee of the Medical Research Council, the Ethics Committee for Clinical Pharmacology and the Committee for Evaluating Biotechnology Procedures. Mostly this is an internal process, however, in the case of the Ethics Committee for Clinical Pharmacology it is performed by an external. The other bodies are not evaluated.

Although impact is hard to assess, several of the bodies named concrete examples of recent cases where they have played a role in formulating policy. For example, the Presidency of Medical Research Council has been influential in formulating the new decree on biomedical research. The Hungarian National Environment Council that plays more of a ratification role with regards to policy making in other areas has succeeded in blocking regulation or modifying laws that would have had a detrimental effect on the environment. The body has also been responsible for speeding up the ratification of international conventions such as the Aarhus Convention.

The inter-ministerial bodies have recently influenced and are still influencing the development of long-term strategies. The Science and Technology Policy Council has been involved in strategies on the long-term development of Hungarian science, technology and innovation policy and on strategies to increase Hungarian R&D expenditures. The Commission on Sustainable Development has also had the task of developing a national strategy for sustainable development.

Type B bodies

Examples of recent impacts by type B bodies can be found by looking at the Energy Authority. The Energy Authority has recently been involved in preparing the proposals for secondary legislation of the 2001 act on electricity. This aims to open up the Hungarian energy market and pave the way for privatisation.

41.3.6 Changes in the advisory system

There are considerable changes happening in the advisory system. As can be seen in Austria, one of these changes is the need to cope with the co-ordination of policy making across ministries on issues such as S&T and sustainable development. Four of the bodies have been set up in 1999 or later. One of these was the Science and Technology Policy Council and the Science Advisory Board which underwent considerable changes to their structures in 1999. The others were the Commission on Sustainable Development and the Committee for Evaluating Biotechnology Procedures.

Ireland

General Overview

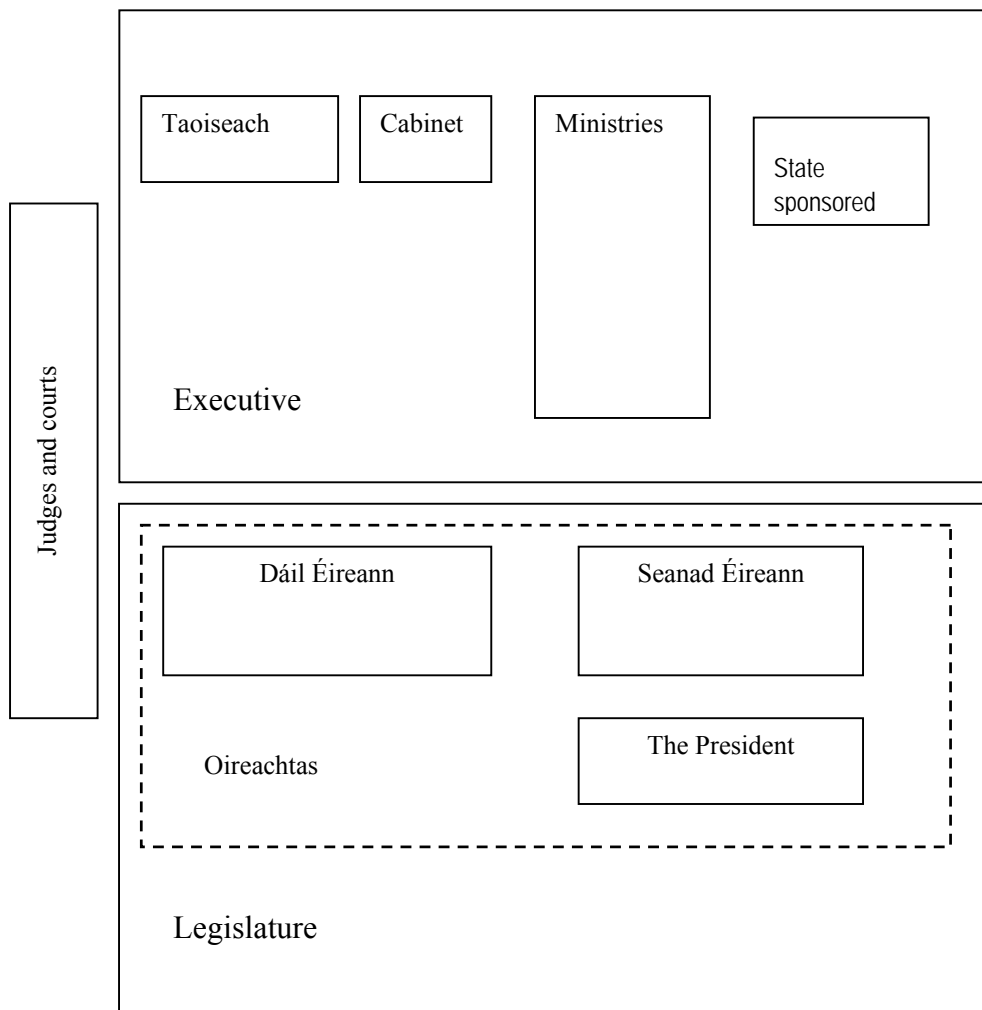
42 Background

42.1 General

Ireland is a Republic, operating under a constitution established in 1937. The Constitution sets out the functions and mode of operation of the various State bodies and functionaries, together with other important considerations such as the process by which they are selected, their composition and term of office.

Legislative power is vested with the Oireachtas (National Parliament), which comprises two houses - the Dáil Éireann (the Parliament, whose members are elected by the public in a General Election), and the Seanad Éireann (the Irish Senate, 11 of whose members are nominated by the Taoiseach, and the remaining 49 elected) - plus the President (an elected position). The President is supported by the Presidential Commission (comprising the Chief Justice, the Chairperson of the Dail and the Speaker of the Senate) and the Council of State – a high level advisory body.

Figure 1: Overview of the Irish political system



The President⁴⁰ is elected directly by the people and has a term of office of seven years. The President does not have an executive or policy role but does have a role in guarding the Constitution. To this end the President can: refer a bill to the Supreme Court for a judgement on its constitutionality; call a referendum on a bill where a majority of the Seanad and not less than one-third of the Dáil request that the President refuses to sign it; in the case of an emergency, convene a meeting of the either or both houses of the Oireachtas; and refuse to dissolve the Dáil on the advice of a Taoiseach who has ceased to retain a majority.

The main function of the Senate relates to legislation. A Bill may start life in either the Dáil or the Senate, although most originate from the Government and are passed by the Dáil first. They are then sent to the Senate for debate and consideration. Within 90 days, the Senate may propose amendments, reject or pass a Bill. However, the Dáil has the power to over-ride the Senate's rejection of a Bill. In relation to Bills for Government spending (Money Bills), the Senate has very restricted powers. It has only 21 days to consider a Money Bill and cannot make amendments to it. Neither can it originate such Bills. In recent years, parliamentary committees have become an important part of the work of the Senate. Joint Committees involve both Seanad and Dáil members sitting and voting together on particular issues.

As the government is formed from it, and responsible to it, the Dáil has primacy over the Seanad. However, the Seanad does have prior or exclusive powers in two areas, namely: in petitioning the President to decline to sign a bill and in abbreviating the time within which the President may sign a bill into law.

Under the Constitution, judicial power is vested with the Courts.

Lastly, executive power rests with the Government, comprising the Taoiseach (Prime Minister), the Tanaiste (Vice or Deputy Prime Minister) and the Cabinet of Ministers. The Government is headed by the Taoiseach who is nominated by a majority vote of the Dail Eireann (the elected Parliament – see above) and appointed by the President. The Government is collectively responsible for all Departments of State (see Figure 2). Governmental decisions are made by a Cabinet appointed by the Taoiseach. The proceedings of these meetings are confidential. The Government dominates policy making.

42.1.1 Departments

Following a reorganisation in June 2002, there are currently 15 Government Departments, each headed by a minister appointed by the Taoiseach. Each department has permanent civil service staff that remain in office regardless of changes in government. The Departments and their main areas of responsibility are listed below:

- **Department of Agriculture and Food:** regulates the agriculture and food industries.
- **Department of Arts, Sport and Tourism:** development of the arts in Ireland; responsibility for the growth of sustainable; promotes sport at local, regional, and national levels.
- **Department of Communications, Marine and Natural Resources:** responsible for the telecommunications and broadcasting sectors; regulates, protects and develops the

⁴⁰ See <http://www.gov.ie/aras/>

marine and natural resources of Ireland; supervises sea transport and port services. The Geological Survey of Ireland is linked to this department.

- **Department of Community, Rural and Gaeltacht Affairs:** responsible for community and local development in Ireland; promotes the development of inhabited offshore islands.
- **Department of Defence:** manages and controls the Irish defence forces.
- **Department of Education and Science:** responsible for providing public education at primary and post-primary levels; manages state subsidies for universities and third-level colleges.
- **Department of Enterprise, Trade and Employment:** responsible for the promotion and development of enterprise, employment, trade, the protection of workers and the regulation of businesses.
- **Department of Environment and Local Government:** promotes development and protects amenities; oversees the local authorities and has responsibility for the protection of natural heritage and heritage policy generally; also has functions relating to housing, manages elections, provides driver testing, and promotes the protection of the environment. The Meteorological Office, and the Radiological Protection Institute of Ireland are linked to this department.
- **Department of Finance:** concerned with the economic and financial management of the state; also advises the Government on the overall management and control of the public sector.
- **Department of Foreign Affairs:** promotes and protects national interests abroad; also pursues peace and reconciliation on the island of Ireland.
- **Department of Health and Children:** responsible for development of health policy and the planning of health services.
- **Department of Justice, Equality and Law Reform:** aims to protect the security of the state, to prevent and tackle crime and to protect individuals' rights and freedoms; also deals with immigration and asylum applications.
- **Department of Social and Family Affairs:** provides financial and other forms of support to people in need of assistance.
- **Department of the Taoiseach:** provides administrative and research support services to the Taoiseach and the Government.
- **Department of Transport:** responsible for roads (other than local roads), traffic issues, bus and rail transport, aviation policy, and road safety in Ireland.

42.2 Policy areas

42.2.1 Agriculture

Responsibility for agriculture policy falls to the Department of Agriculture and Food⁴¹. The mission of the Department is to “lead the development of a competitive, sustainable and consumer-focused agri-food sector and a vibrant rural economy and society”. In carrying out its mandate the Department undertakes a variety of functions including:

- policy advice and development on all areas of Departmental responsibility;
- representation in international especially EU and national negotiations;

⁴¹ See <http://www.gov.ie/daff/>

- development and implementation of national and EU schemes in support of agriculture food rural development and rural environment;
- monitoring and controlling aspects of food safety;
- control and audit of public expenditure under its control;
- regulation of the agriculture and food industries through national and EU legislation;
- monitoring and controlling animal and plant health and animal welfare;
- monitoring and direction of state bodies engaged in the following areas;
 - research training and advice;
 - market development and promotion;
 - industry regulation and development;
 - commercial activities;
- direct provision of support services to agriculture and food.

The Minister heads the Department and below them there are 2 Ministers of State. Administratively, the department is divided into 8 divisions, namely: Finance Audit Accounts; Cereals/Plant Health Horticulture/State Bodies Food and Structural Policy; EU / International Trade; Beef Export Refunds Other Market Supports Intervention Operations Beef Controls; Area Aid/Premia/Headage Rural Development Quotas/Collection/Lands Agriculture Structures; Personnel Economics and Planning Accommodation General Co-ordination Management Services International Organisations; Animal Health and Welfare Disease Eradication National Beef Assurance Scheme; Milk Policy Beef/Sheep Pig/Poultry; and Information Systems. In addition there is a Chief Veterinary Office and a Chief Agricultural Inspector.

42.2.2 Fisheries

The ministry with responsibility for fisheries policy is the Department of Communications, Marine and Natural Resources⁴². The Department has the following key roles and functions:

- In the field of Communications:
 - With the telecommunications market fully liberalised, the Department is now moving to position Ireland at the forefront of Internet developments and driving the e-commerce agenda. There is a large-scale programme to roll-out broad band around the country.
 - Beginning regulatory and market reform, addressing needs of national Post Office network.
- In Broadcasting:
 - Creating an environment which encourages the establishment and maintenance of high quality Irish radio and television services.
- In Energy:
 - Liberalising the electricity market, restructuring the ESB, addressing infrastructure and capacity needs.
 - Commitment to peat fired power, new investment, assured viability for Bord na Mona.
 - Opening up the gas market, developing new supply capacity, extending the network.
 - Advancing the creation of an all-Ireland energy market.

⁴² See <http://www.marine.gov.ie/>

- Improving and intensifying energy conservation and efficiency, increasing the proportion of energy generated from alternative resources, minimising greenhouse gas emissions in line with commitments under the Kyoto Protocol.
- With regard to marine and natural resources:
 - Supporting and facilitating the availability of efficient and competitive maritime transport and port services including emergency response services, and the development of a competitive Irish flagged shipping sector.
 - Supporting the sustainable management, development and contribution of Irelands marine territory, seafood sector, inland fisheries and marine tourism and leisure.
 - Promoting minerals and hydrocarbons exploration and development for the optimum benefit of the Irish economy, consistent with the highest standards of safety and environmental protection.
 - Delivery of legislation to underpin functions of Loughs Agency FCILC.
 - Supporting the sustainable and environmentally friendly development of the forestry sector including the development of Coillte.
 - Supporting and facilitating the development of the marine and natural resources sectors by promoting effective research, technology, development and innovation.

With regard to fisheries, the Department's key responsibilities include:

- Protection of the marine environment
- Management and development of the marine coastal zone
- Management and development of the seafood and inland fisheries sectors
- Development of marine tourism and leisure
- Marine and natural resources research, technology, development and innovation

Relevant agencies and division within the Department are:

- The Aquaculture Policy Section, which responsible for the strategic, economic and sustainable development of the aquaculture sector, as well as the broad regulation of it, within the framework of the Common Fisheries Policy and the Fisheries(Amendment) Act, 1997. Aquaculture Policy and development functions are exercised separately from the licensing, monitoring and enforcement of aquaculture activities which, are handled by the Coastal Zone Administration Division(CZAD) as an integral part of coastal zone management. The CZAD, Inland Fisheries and Aquaculture Policy Divisions consult and advise each other on matters relating to their respective remits.
- The Inland Fisheries Division, the purpose of which is to conserve the inland fisheries resource in its own right and maximise its long-term economic and social contribution at national, local and community level. Strategic Objectives are:
 - To ensure the efficient and effective conservation of fish stocks.
 - To maintain and improve the status of fish habitats.
 - To develop the tourist angling product and increase the level of expenditure and tourist angling numbers.
 - To manage the commercial and recreational salmon fishing effort effectively and to develop the commercial potential of other species.
 - To deliver efficient and effective State services to the inland fisheries sector.
- The three Sea Fisheries Divisions:

- The Sea Fisheries Control Division is responsible for the implementation and enforcement of National and EU Regulations on Sea Fisheries, as well as Shellfish and fish Safety in conjunction with the Food Safety Authority.
- The Seafood Policy and Development Division is responsible for EU, National and International policy as well as NDP Investment Schemes for the Seafood Industry and liaising with BIM.
- The Sea Fisheries Administration regulates and administers the Irish Fishing fleet Register and Licences.

42.2.3 Energy

Responsibility for energy policy falls under the relevant divisions of the Department of Communications, Marine and Natural Resources. The prime areas of responsibility are:

- Natural Gas
- Licensing Gas Exploration and Development
- Electricity Supplies
- Oil Supplies
- Licensing Oil Exploration and Development
- Minerals Exploration and Mining
- Renewable Energy

Nuclear safety concerns fall under the remit of the Department of Environment and Local Government. Key objectives for the energy sector are to develop a competitive energy supply industry, to ensure security and reliability of energy supply and to develop energy conservation and end-use efficiency.

The Semi-State bodies / agencies involved in implementing energy policy are: the Electricity Supply Board (E.S.B.), Bord Gais Eireann (The Irish Gas Board), Bord na Mona (Peat-powered energy), and the Irish National Petroleum Corporation (I.N.P.C.).

42.2.4 Transport

The Department of Transport forms the main department responsible for transport policy. Its mission statement is “To promote the provision, development and regulation of competitive, safe, secure and high-quality services as well as optimum asset utilisation in the transport sector in Ireland”.

Transport issues are dealt with in three of the six administrative divisions in the department, namely: Aviation; Public Transport Regulatory Affairs Division/CIE Restructuring Division/Railway Inspectorate/Road Haulage Division; and Public Transport, CIE Corporate Affairs & Investment Division, Transport Planning Division & PPP's.

Semi-state bodies under the aegis of the Department are: the two airlines, Aer Lingus and Aer Rianta; Córas Iompair Éireann (the body with oversight of rail and bus transport in Ireland), and the Railway Procurement Agency

Other departments have responsibility for particular aspects of transport policy. The Department of Environment and Local Government⁴³ has responsibility for: Vehicle Emissions (policy and legislation); Roads Infrastructure (through the National Roads Authority (NRA) and Local Authorities); Vehicle Licensing (through the Motor Tax Offices in the Local Authorities); Driver Licensing and Driver Testing; and Road Safety. The Department of Communications, Marine and Natural Resources is responsible for marine transport.

42.2.5 Environment

Responsibility for environment policy falls to the Department of Environment and Local Government. Environment is one of a number of functions performed by the department and this is reflected in its divisional structure, where Environment is one of 7 divisions. The others are: Roads; Housing; Local Government; Development/Planning; Water Services; and Corporate Services. The Department's overall objective is "to promote sustainable development by leading and coordinating the adoption of appropriate balanced policies in relation to environment and development and to maintain proper regulatory and monitoring systems for environmental protection", and its overall mission is "to promote sustainable development and improve the quality of life through environmental protection, infrastructure provision, balanced regional development and good local government".

The environment division is divided into five main sections. These are

- Waste management;
- Environment Policy;
- Air/Climate;
- Water Quality; and
- A division to cover issues related to the International level, North South relations, British Irish relations and Environmental Awareness.

In addition to the above, the Department of Arts, Heritage, Gaeltacht and the Islands has some responsibilities which impact environmental and conservation issues. The Department of Arts, Heritage, Gaeltacht and the Islands was established in 1997. It is responsible for the formulation of national policy relating to Arts and Culture. Amongst its other responsibilities, the Department is responsible for the formulation and implementation of national policy in relation to Heritage, including Inland Waterways, National Parks and Wildlife and also for promoting the sustainable development of the populated offshore islands.

42.2.6 Health and the consumer

Responsibility for health policy falls to the Department of Health and Children⁴⁴. The mission of the department is, in a partnership with the providers of health care, and in co-operation with other government departments, statutory and non-statutory bodies, "to protect promote and restore the health and well-being of people by ensuring that health and personal social services are planned, managed and delivered to achieve measurable health and social

⁴³ See <http://www.environ.ie/>

⁴⁴ See <http://www.doh.ie/>

gain and provide the optimum return on resources invested". The key objectives of the Department of Health and Children are:

- to support the Minister in the formulation, development and evaluation of health policy and in the discharge of all other Ministerial functions;
- to plan the strategic development of services, through partnership and consultation with health boards, the voluntary sector, other relevant government departments and other interests;
- to encourage the attainment of the highest standards of effectiveness, efficiency, equity, quality and value for money in the health delivery system;
- to strengthen accountability at all levels of the health service;
- to encourage the continuing development of a customer service ethos in the delivery of health services;
- to optimise staff performance, training and development; and
- to represent the Irish interest in European Union, World Health Organisation and other international fora relating to health matters.

The Department of Health and Children is divided into a number of divisions, each representing a key area of the Department's work. These are: Blood Policy, Mental Health and Services for Older People; Children and Disability; Finance, Planning and International; Medical; Personnel Management and Development; Primary Health Care; Secondary Care; and Strategic Policy Development.

42.2.7 Research

Responsibility for research policy is divided between the Department of Enterprise, Trade and Employment⁴⁵ and the Department of Education and Science⁴⁶. Within the Department of Enterprise, Trade and Employment, the Office of Science and Technology⁴⁷ has responsibility for the development, promotion and co-ordination of Ireland's Science, Technology and Innovation Policy, covering all aspects of the national system of innovation, including basic research, applied research, industry RTDI, technology transfer, funding for innovation and public awareness of science and technology. The Office of Science and Technology is responsible for the Science and Technology budget including all Exchequer and EU funding for research and technological development for industry.

Operating under the aegis of the Department of, Enterprise, Trade & Employment is Forfás⁴⁸, the National Policy and Advisory Board for Enterprise, Trade, Science, Technology and Innovation in Ireland. The mission of Forfás is to enhance Ireland's performance in science, technology and innovation and thereby contribute to economic and social development. The broad functions of Forfás are to:

- advise the Minister on matters relating to the development of industry in the State

⁴⁵ See <http://www.entemp.ie/>

⁴⁶ See <http://www.gov.ie/educ/>

⁴⁷ See <http://www.entemp.ie/epst/ost.htm>

⁴⁸ See <http://www.forfas.ie/>

- to advise on the development and co-ordination of policy for Enterprise Ireland, IDA Ireland and such other bodies (established by or under statute) as the Minister may by order designate
- encourage the development of industry, technology, marketing and human resources in the State
- encourage the establishment and development in the State of industrial undertakings from outside the State, and
- advise and co-ordinate Enterprise Ireland and IDA Ireland in relation to their functions.

The Science, Technology and Innovation division, within Forfás, is specifically tasked with supporting the Board of Forfás in providing advice to the Minister for Trade, Enterprise and Employment on STI issues.

Currently operating as a sub-board of Forfás another organisation with an important role in research policy is Science Foundation Ireland⁴⁹ (SFI), the National Foundation for Excellence in Scientific Research. Launched in response to the Technology Foresight Reports, SFI is responsible for the management, allocation, disbursement and evaluation of expenditure of the €635million Technology Foresight Fund. The money is aimed at establishing Ireland as a centre of research excellence in strategic areas relevant to economic development, particularly Biotechnology and Information and Communications Technologies (ICT).

Within the Department of Education and Science, the Higher Education Authority⁵⁰ (HEA) is of particular importance. The HEA is the planning and development body for higher education in Ireland. It was set up on an ad hoc basis in 1968, and was given statutory powers in the Higher Education Authority Act 1971. Over the recent past, the HEA has allocated increasing levels of funding to universities and other institutes of higher education, mainly targeted at the provision of research infrastructure. In addition two research councils have recently been established: the Irish Research Council for Science, Engineering and Technology; and the Irish Research Council for Humanities and Social Science.

43 Scientific advice

43.1 General background

In general, it appears that the provision of scientific advice in Ireland does not represent a major area of policy focus and that the current system is seen as satisfactory. However, since the major reorganisation of Government departments in June 2002, the entire situation is in a state of some flux and a number of changes can continue to be expected. For example, in the field of transport policy, the Department of Transport is investigating the introduction of a greater degree of formalisation between specialist technological competencies and the policy advisory function. Similarly, new arrangements have been implemented for the provision of advice in the field of energy policy.

However, as far as can be determined, there is no overall cross-departmental grouping which brings together the Government's senior policy advisory structures.

⁴⁹ See <http://www.sfi.ie/>

⁵⁰ See <http://www.heai.ie/>

Therefore, within Government, advisory structures in Ireland tend to operate on a hierarchical basis. At the top, policy is formulated by Government Departments, some of which may have scientific and technical staff, depending on their specific departmental remit. Groups of these staff will be convened on an *ad hoc* basis to provide advice on policy topics as required. Additional advice will be provided to the Department from various stakeholder groups or from the Semi-state bodies which operate, generally autonomously or semi-autonomously, under the aegis of the Department. In this regard, some departments appear to have set up specific agencies to undertake research and provide relevant advisory services, whilst others rely on the establishment of more *ad hoc* committees and similar types of body. The established agencies will have their own scientific and technical staff who may be called upon to provide inputs to policy. Below the semi-state agencies and the officially convened committees, although often working in collaboration with them, is a diverse collection of groups. Some of these will have a narrow focus, often centred on a particular industry, stakeholder group or region; others will have a broader interest and will engage a range of associated experts. Some of these groups will have a more or less permanent basis, while others may be specially convened task forces, required to examine and report on specific issues.

43.2 Advice provision in relevant policy areas

43.2.1 Agriculture

As noted above, the main Department with responsibility for agriculture is the Department of Agriculture and Food. The main advisory bodies in this field are Teagasc and the Food Safety Authority of Ireland (FSAI), although Teagasc has a broad remit and many of its advisory services are targeted at the public and workers within the agricultural sector. In seeking advice on specific topics or issues, the Department of Agriculture and Food also establishes committees which have a limited life-span. A recent example is the Advisory Committee on the Role of Women in Agriculture which was set up in June 2002 with the remit of providing the Minister on policies “appropriate to the promotion of women in agriculture”.

Teagasc - the Agriculture and Food Development Authority - is the national body providing advisory, research, education and training services to the agriculture and food industry. It was established under the Agriculture (Research, Training and Advice) Act, 1988. An eleven-member Authority governs Teagasc. The Minister for Agriculture, Food and Rural Development appoints the Chairperson and five ordinary members. The Minister, following nominations from designated organisations, also appoints the remaining members. The 2000 research and development budget on a total cost basis is £25.77m (€32.7m), of which £18.35m (€23.3m) relates to research in sustainable agriculture and rural development and £7.43m (€ 9.4m) to food research.

The FSAI is covered under section 39.2.7, Health and the consumer.

43.2.2 Fisheries

Advice on fisheries policy follows the general hierarchical structure described above. Overall policy formulation and implementation is the responsibility of the Department of Communications, Marine and Natural Resources (DCMNR). Groups of scientific and technical experts are convened within the Department to focus on specific policy issues as the need arises. External advice on fisheries issues is provided, first and foremost, by the two semi-state agencies, the Bord Iascaigh Mhara (the Irish Sea Fisheries Board) and the Marine Institute. The former is primarily concerned with the development of the Irish fisheries and aquaculture industry. It conducts and provides a conduit for the funding of applied research related to the needs of industry. It also provides marketing services and deals with aspects of safety. The Marine Institute, which has a number of regional stations and one in Dublin, is concerned with more basic aspects of marine research. This includes fisheries research but also extends to cover environmental, hydrographical and other marine-related subjects.

Below these semi-state agencies are a number of regional and stakeholder-related groups which may also provide advice on specific topics, although this does not form a major element within their portfolio of activities. Examples include: the Salmon Research Agency; the Central Fisheries Board and its eight regional boards; the Aquacultural Licensing Advisory Board; the Shellfisheries Safety Board; Industrial Fisheries Development committees; the National Common Fisheries Policy Strategy Revision Group. Lastly, various ad hoc groups, committees, fora and boards may be established on a short-term basis in order to provide advice and information on specific issues.

Bord Iascaigh Mhara (BIM) was established under the Sea Fisheries Act, 1952, and now acts under the aegis of the Minister for Communications, Marine and Natural Resources. Its main functions are to promote or engage in any business conducive to the development of the sea fishing industry. Its activities include:

- **Market Development:** Aims to develop and expand both home and export markets for Irish fish products, provides investment and marketing support services;
- **Aquaculture and Planning:** Development and expansion of the fish farming sector under the National Aquaculture Grants Scheme; strategic and long term planning and economic/market research on home and export markets for both wild and farmed fish products.
- **Fleet Development:** Brings all aspects of the fleet together to achieve a single purpose approach to making the fleet profitable. Areas covered include the operation of the Marine Credit Plan, technical services to the fleet and a fishing technology programme to improve the efficiency of the fleet, provide new fishing methodology with the conservation objective.
- **Marine Services:** Provides a comprehensive manpower development service which incorporates education and training courses for skippers, fishermen, fish farmers and trainee fishermen.

The division also develops and expands the national ice supply network. A total of 120 staff is employed of whom 23 are engaged on S&T activities.

The Marine Institute was incorporated under the Marine Institute Act 1991. Its main functions are: ‘to undertake, to co-ordinate, to promote and to assist in marine research and development and to provide such services related to marine research and development that in the opinion of the Institute will promote economic development and create employment and protect the marine environment’. The Marine Institute is also responsible for advising the Minister on policy relating to marine research and to advise the Minister on proposals

relating to such research and development requiring funding from the exchequer or from any State owned or controlled organisation. The Board was appointed in October 1992. The Institute receives funding in the form of a grant from the Department for Communications, Marine and Natural Resources. This was £7.895m (€10.025m) in 1999 and £12.299m (€15.617m) in 2000.

In order to implement the Government approved marine RTDI strategy, published by the Marine Institute in 1998 and to facilitate the integration of the Salmon Research Agency, the Marine Institute underwent a major internal reorganisation in 1999. The Marine Science Technology and Innovation Division plays a central role in the stimulation and support of research, development, technology and innovation, contributes to national marine S&T policy formulation and maintains an operational capacity in those areas essential to underpinning marine research and resource development. The Marine STI Division comprises the following sections:

- Marine Food
- Marine Technology
- Water - based Tourism and Leisure
- Communications
- Marine Data Centre
- Research Vessel Operations (RV Celtic Voyager)

The Marine Fisheries Services Division (MFSD) provides a wide range of monitoring, assessment and research services on marine fisheries in order to advise on the sustainable exploitation of this resource. The Division is made up of the following sections :

- Demersal Fisheries
- Pelagic Fisheries
- Inshore Fisheries
- Nephrops Fisheries
- Economic Analysis

The Salmon Management Services Division (SMSD) was formed in September 1999 through the integration of staff from the fish stock assessment and aquaculture sections of the former Fisheries Research Centre. The new Division has the responsibility to deliver scientific services in relation to salmon, aquaculture, sea trout, eels and some aspects of experimental inshore fisheries. The Salmon Management Services Division is comprised of the following sections:

- Aquaculture
- Wild Salmon Fisheries
- Catchment Management
- Inshore Fisheries

The Marine Environment and Health Services Division (METHS) is responsible for a range of environmental and fish health services required under national and EU regulations. The Division comprises some 25 technical and scientific staff based at the Institute's laboratories in Abbotstown. The Marine Environment and Fish Health Division is comprised of the following sections:

- Marine Chemistry, which carries out a range of technical monitoring work in the area of the marine environment and marine food products.

- Biotoxin Unit, which manages the national biotoxin monitoring programme, to ensure the safety of shellfish production in species such as mussels, oysters and scallops.
- Fish Health Unit, which provides statutory and diagnostic services in the area of fish disease for the Irish aquaculture industry.

The **Central and Regional Fisheries Boards** were established in October 1980 under the Fisheries Act, 1980. The Boards are statutory bodies under the aegis of the Department of Communications, Marine and Natural Resources. Their main functions are the protection, conservation, management and development of Ireland's inland fisheries and sea angling resources, and to this end they operate a general policy for the protection and improvement of inland fisheries, the surveying of sea angling resources and the protection of molluscs. Their activities include surveys, development, management, protection and conservation of fisheries; research and experimental work, and management of fish farms and hatcheries.

Seven Regional Fisheries Boards, which were established simultaneously with the Central Fisheries Board, are responsible for fisheries conservation and development in their particular regions. The Central Fisheries Board is financed by a grant-in-aid under the Fisheries Vote, supplemented in the case of the Regional Boards by fishery rates, licenses, and anglers' registration fees.

43.2.3 Energy

The Department of Communications, Marine and Natural Resources has responsibility for the formulation and implementation of energy policy. The Minister is the shareholder in the four main energy supply corporations: ESB, Bord na Mona, Bord Gais Eireann and Irish National Petroleum Corporation. The Minister is advised on policy matters by the Energy Advisory Board (EAB). The Department has recently established Sustainable Energy Ireland, a new semi-state body, formerly the Irish Energy Centre, which provides advice on energy issues, particularly those relating to renewable sources of energy and the associated technologies. Energy policy formulation is highly dependent on the monitoring and analysis of energy generation and consumption statistics. Sustainable Energy Ireland has been tasked with the compilation of national energy statistics whilst analyses of these statistics are performed by the Economic and Social Research Institute (ESRI). More specifically, these analyses, commissioned studies and general advice on energy economics are frequently provided by ESRI staff who are expert in energy forecasting and modelling. A number of Government Departments and agencies also use ESRI's services for various economic policy studies.

In areas of energy policy where there is a significant element of scientific and technological content or where there may be specific research issues, the Science and Technology Division of the Department of Enterprise, Trade and Employment may engage its own agencies for advice or commission studies from external consultancies. Staff from Forfás may also provide advice on energy issues.

Sustainable Energy Ireland, formerly the Irish Energy Centre, was established in 2002 as an EU funded initiative of the former Department of Public Enterprise. It is supported by the European Union through the Community Support Framework. As Ireland's national agency for energy efficiency and renewable energy information, advice and support, the Authority promotes and assists the development of sustainable energy. SEI's headquarters are in

Dublin, with regional offices in Sligo and Cork city. The centre provides a national service from the Renewable Energy Information Office in Bandon, County Cork.

SEI provides guidance on the potential for more efficient use of energy in the home, office, industry and municipal activities and on the development of renewable energy resources, from commercial projects to domestic applications. Practical information and advice is offered to each sector through targeted conferences, seminars, workshops and publications. In addition, the Centre offers advice on potential sources of funding for sustainable energy initiatives. Through its links with the Department of Communications, Marine and Natural Resources, the Centre plays a consultative role in the policy-making process by proposing strategies and legislation to encourage more sustainable energy practices. Also, the Centre participates in interdisciplinary panels and working groups to advise and seek advice on the broader issues related to energy supply and use. The Centre was previously an independent member of the Energy Advisory Board, which advised the Minister on energy efficiency and renewable energy matters. However, since the reorganisation of Irish government departments the Board has ceased to operate and advice on energy policy is provided from a number of sources, of which SEI is probably the foremost. The specific role of SEI is set out in the 2002 Sustainable Energy Act, which stipulates:

The functions of the Authority [SEI] shall be:

- to promote and assist environmentally and economically sustainable production, supply and use of energy,
- to promote and assist energy efficiency and renewable sources of energy,
- to promote and assist the reduction of greenhouse gas emissions and transboundary air pollutants associated with the production, supply and use of energy,
- to promote and assist the minimising of the impact on the environment of the production, supply and use of energy,
- to promote and assist research, development and demonstration of technologies connected with the foregoing paragraphs of this subsection,
- to provide advice, information and guidance
 - to the Minister and such other Ministers or bodies as the Minister may direct, and
 - to energy suppliers and users, relating to the matters specified in the foregoing paragraphs of this subsection.

Other activities and duties of the SEI include:

- (a) co-operating with the Central Statistics Office and acting as an agent of that Office in relation to matters related to the functions of the Authority,
- (b) the compilation, extraction and dissemination of information and projections relating to energy production and use (including implications relating to the sourcing, transformation, transmission, distribution and emissions thereof),
- (c) the licensing, regulation and control of activities related to the functions where directed by the Minister from time to time,
- (d) the initiation, development, administration, participation in and promotion of schemes and programmes of action,
- (e) the promotion of and assistance with participation in international programmes,
- (f) the provision of assistance in the co-ordination of activities carried out in the State related to sustainable energy,
- (g) the assessment of energy technologies and markets for the purpose of promoting best practice,

- (h) encouraging the establishment and development of companies involved in the provision of services,
- (i) the exchange of information with organisations outside the State and participation in international activities,
- (j) representation of a Minister of the Government at meetings of international bodies where requested to do so by the Minister.

The **Economic and Social Research Institute (ESRI)** was incorporated in 1960 as a company limited by guarantee under the Companies Acts, 1908-1990. The Institute is governed by a Council of 32 members which elects an Executive Committee with delegated powers to manage the Institute. ESRI is an independent, non-profit and non-political organisation. The essential role of the Institute is to undertake research designed to provide knowledge relevant to solving the major economic and social problems in Ireland. An important secondary function of the Institute is to assist in the development of top quality research workers through its training and education programmes. The Institute is financed by a general grant-in-aid through the Department of Finance; fees are earned in commissioned research and through sales of publications etc. The Institute employs a total research staff of 38, of whom 9 are under short-term contracts. The Institute also employs 29 technical staff in information and technical services and 17 general support staff.

The current activities of the Institute include research in economic forecasting and modelling, economic growth, the international environment, regional issues, the public sector, prices and incomes, demography and labour, social policy, values and attitudes, data and methodology. It also undertakes commissioned studies, surveys and data analysis on behalf of outside organisations and provides training in research for young graduates. Some 35 research staff are employed on research activities.

The Survey Unit of the Institute carries out surveys - including fieldwork - and processes data for members of the Institute's staff and for a number of outside bodies. Over twenty major surveys (ranging from 1,000 to 12,000 interviews per survey) are undertaken each year by ESRI's panel of about 250 interviewers as part of the Institute's research programme or are commissioned by outside agencies. The Institute also conducts the Hospital In-Patient Enquiry Scheme and the Perinatal Recording System on behalf of the Department of Health. About 32 full-time staff are employed in information and technical services including 3 research staff members.

43.2.4 Transport

In obtaining policy advice on transport related issues, the Department of Transport relies on a small number of in-house specialists or on commissioned studies from external consultancies, particularly with regard to large public projects. There is no formalised link between specialist competencies and the policy advice function. Nevertheless, the Department of Transport does have an interest in instigating a formal programme of transport related research, although it has yet to develop a "Transport Research Board or Council". The Department is also shortly to establish a Railway Safety Commission to examine issues relating to public safety. One of the constraints to the Department's policy formulation activities is the lack of detailed statistics and information on the transport sector.

Although transport policy may involve scientific and technological issues, it is characterised by having to deal with more holistic issues, particularly as it generally has major socio-economic impacts. For this reason, transport policy formulation tends to have recourse to large-scale economic impacts and appraisal studies (often provided by studies commissioned from consultants) rather than relying on specialist technical advisory groups.

A number of agencies have responsibility for specific aspects of transport policy. These include:

- The National Roads Authority
- Public Partnership Transport Forum (chaired by the Department of Transport, which also provides its Secretariat)
- Dublin Transportation Office (corporate body)
- Railway Procurement Agency (independent, commercial, statutory State body)
- Irish Aviation Authority (commercial state-sponsored body)

The **National Roads Authority** was established by Ministerial Order on 23 December 1993. The Order was made by the Minister for the Environment under the provisions of the Roads Act, 1993. The Authority's primary function, under section 17 of the Roads Act, 1993, is to secure the provision of a safe and efficient network of national roads. For this purpose it has overall responsibility for the planning and supervision of construction and maintenance works on these roads. In addition to its general mandate, the Authority has been assigned a number of specific functions under the Roads Act, including:

- preparing medium term plans for the development for the national road network;
- preparing or arranging for the preparation of road designs, maintenance programmes and schemes for the provision of traffic signs and delineation / road markings on national roads;
- securing the carrying out of construction, improvement and maintenance works on national roads, allocating and paying grants to local authorities for these purposes;
- carrying out or assisting with training, research or testing activities in relation to any of its functions;
- promoting the case for Exchequer funding and EU assistance for national roads;
- entering into agreements with the private sector for the financing, operation and management of national road projects, and
- making toll schemes for national roads.

The Research activities of the NRA are undertaken by the Road Traffic, Safety and Transportation Division and the Pavement and Materials Research Division. These Divisions comprise the national centre for road research in Ireland and they perform two broad functions:

- to undertake research and development on road construction, maintenance, safety and transport matters of particular importance in Ireland; and
- to serve as a centre which can disseminate the findings of research in Ireland and other countries.

Both Divisions provide the National Roads Authority, the Department of the Environment and Local Government, the local authorities and their consultants and contractors with

information, technical assistance and guidance related to all aspects of road construction, traffic, safety and transportation which enable them to formulate policy and plan, design, construct, maintain and operate the road system in the most cost effective manner. The technical and information services of the Divisions cater for these functions.

43.2.5 Environment

The principle advisory body in this area is the **Environmental Protection Agency (EPA)**, which was established on 26 July 1993 by Ministerial Order made under Section 19 of the Environment Protection Agency Act, 1992. The main objectives of the EPA are:

- to implement and enforce a system of Integrated Pollution Control (IPC) licensing for all scheduled activities throughout the country using best available technology not entailing excessive costs (BATNEEC) to eliminate or limit releases to the environment and to minimize impacts on the environment;
- to implement and enforce a system of licences for all significant waste recovery and disposal activities, including landfills;
- to promote the need to take into account environmental considerations in policies, programmes and projects undertaken by all sectors of the economy, including the public sector, based on the principles of sustainable and balanced development, the precautionary approach to pollution control and the use of clean technology;
- to prepare and update periodically a national hazardous waste plan for implementation by other public authorities;
- to encourage good environmental practices;
- to develop and implement, in co-operation with local authorities and other relevant bodies, a national integrated, decentralised, environmental monitoring programme so as to improve, standardise and expand the quality of the environment database and improve the scientific basis for better evaluation of the state of the environment;
- to evaluate the quantity and the quality of the nation's water resources to facilitate sustainable use, and the implementation of programmes to maintain and improve the quality to cater for all users;
- to oversee the pollution control and related environmental activities of local authorities and ensure that they are carried out in an effective manner;
- to assess and verify the quality of drinking water throughout the country on a regular basis, and to develop codes of practice, guidelines and manuals for the purpose of environmental protection and to improve the management, maintenance and operation of water and sewage treatment plants and landfill sites;
- to develop appropriate environmental quality objectives and corresponding environmental quality standards;
- to promote and co-ordinate environmental research;
- to assess potential and emerging environmental issues in Ireland, and relevant legislative and other developments in EU countries and internationally;
- to develop a pollution emissions register (PER) and improve the quality of information to the public;
- to improve public understanding of the environment and environmental issues and to promote greater public involvement in the protection of the environment by providing greater public access to environmental information and relevant databases.

The Agency has identified four programme areas:

- Integrated Pollution Control (IPC) Licensing and Control;
- Environmental Monitoring and Laboratory Services;
- Environmental Management and Planning (Incorporating Waste Licensing) ;
- Corporate Affairs. The Corporate Affairs Programme deals mainly with administrative matters. The manpower and costs of this programme have been apportioned over the other three programmes for present purposes.

The Agency manages, as part of its overall programme, the Environmental Monitoring, Research and Development sub-programme of the Environmental Services Operational Programme 1994-1999.

The Agency provides general information and specialist advice to the local authorities and to the Department of the Environment and Local Government in relation to air and water quality problems and on other topics such as the implementation of EU Directives and other international agreements. Other activities include: servicing the Management Committee and the High-Level Expert Group of the European Environment Agency for which the EPA is designated national focal point; preparation of National reports on air and water quality for publication, as well as a general State of the Environment report. Other reports prepared are those dealing with revised national programmes for environmental quality monitoring and for hydrometry; development of an integrated environmental information system for Ireland.

Also relevant is the **Radiological Protection Institute of Ireland (RPII)**. The Institute was established on 1st April 1992 in accordance with the provision of the Radiological Protection Act, 1991. It acts under the aegis of the Minister for Public Enterprise. Its main functions are:

- to advise the Government on nuclear energy and associated matters;
- to regulate the use, transportation and disposal of radioactive materials;
- to prepare safety codes and regulations for the safe use of ionising radiation;
- to measure levels of radioactivity in the environment and assess their significance; to provide a dosimetry service
- to promote knowledge, proficiency and research in nuclear science and technology.

The RPII is financed by grant-in-aid (£1,704,000 (€2,163,634) in 1999) and income from contracts and charges for services. The total number employed by the Radiological Protection Institute of Ireland is 45 including temporary staff which includes specialists in physics, chemistry, medicine, engineering, health physics, biology and other disciplines. 41 staff are directly involved in science and technology activities. Technical Services cover:

- Radiation Protection in Medicine and Industry:
- Monitoring of Environmental Radiation:
- Radon Studies, Radioecology Research and Information Services:
- Emergency Planning

43.2.6 *Health and the Consumer*

A number of bodies and committees of a technical nature come under the responsibility of the Minister for Health and Children. These include the Health Research Board, the National Drugs Advisory Board, the Postgraduate Medical and Dental Board, the Food Advisory Committee, the Therapeutics Substances Advisory Committee, the National Cancer Registry Board and the Committee on Dental Care and Fluorides. Advice is also provided through commissioned studies placed with the Economic and Social research Institute (see Energy section).

The Department employs consultants to study and advise on various aspects of the health services. The Food Advisory Committee advises on matters relating to the composition, description, manufacture, processing, labelling and advertising of food.

The **Irish Medicines Board** is a competent authority for both human and veterinary medicines in Ireland. It administers a service for obtaining, assessing and disseminating information regarding the safety of drugs and medicines. The Board also advises the Minister for Health and Children on matters relating to the safety, quality and efficiency of drugs and medicine, and the conduct of clinical trials. It is also involved in regulatory and licensing activities in regard to pharmaceutical products: post-marketing surveillance and monitoring of drugs, inspections of manufacturers' premises and processes, and of wholesalers' premises, stock control systems etc. and the operation of EU Council directives relating to pharmaceuticals and drugs.

The **Postgraduate Medical and Dental Board** was established in 1980 under the terms of the Medical Practitioners Act, 1978. It replaced the former non-statutory Council for Postgraduate Medical and Dental Education and Training (established in 1973). The Board has the following functions:

- To promote the development of postgraduate medical and dental education and training and to co-ordinate such developments;
- to advise the Minister for Health, after consultation with other bodies, on all matters, including financial matters, relating to the development and co-ordination of postgraduate medical and dental education and training;
- to provide career guidance for registered medical practitioners and registered dentists.

The staff numbers 3 whole-time and 1 part-time officer are supplemented by 54 part-time professional staff.

In addition a number of topic-specific advisory bodies can be identified. These include:

- Advisory Forum on Cardiovascular Health
- Antenatal Testing for HIV Committee
- Benzodiazepine Committee
- Breast Cancer Advisory Group
- Casebased Reporting of HIV Committee - Working Group of Surveillance Subcommittee of National AIDS Strategy Committee

- CJD Advisory Group
- Commission on Assisted Human Reproduction
- Expert Group on Radiotherapy Services
- Forum on Fluoridation
- Preparation of Department's Health Strategy
- Review Group on Pharmacy Regulations
- Second National Cancer Forum
- Task Force on Cardiovascular Health

The **Food Safety Authority of Ireland (FSAI)**⁵¹ was established under the Food Safety Authority of Ireland Act, 1998. The Act was enacted in July 1998 and came into effect on 01 January 1999. The principal function of the FSAI is to take all reasonable steps to ensure that food produced, distributed or marketed in the State meets the highest standards of food safety and hygiene reasonably available and to ensure that food complies with legal requirements, or where appropriate with recognised codes of good practice.

The Authority is a statutory, independent and science-based body, dedicated to protecting public health and consumer interests in the area of food safety and hygiene. It comes under the aegis of the Minister for Health and Children and currently has a board of ten. It also has a 15 member Scientific Committee that assists and advises the Board to ensure that decisions relating to food safety and hygiene take account of the latest and best scientific advice and information available.

The Scientific Committee of the FSAI was established by the Board of the FSAI in February 2000, to assist and advise the Board on scientific and technical questions relating to food safety and hygiene, in addition to advising on the implementation and administration of food inspection services and on the nutritional value of food. The Scientific Committee is composed of scientists from a range of disciplines working in a voluntary capacity. Their role is to assist and advise the FSAI Board on scientific matters.

In practice food safety issues can require specific knowledge and it is often more appropriate to form a Sub Committee of specialists to tackle specific scientific tasks. To date the following Sub Committees have been established:

- GMO and Novel Foods Sub Committee
- Nutrition Sub Committee
- Microbiology Sub Committee
- Sub Committee on Food Additives, Chemical Contaminants and Residues
- BSE Sub Committee
- Dorsal Root Ganglia Task Force

⁵¹ <http://www.fsai.ie/>

43.2.7 Research

Overall policy direction for research is provided by the **Irish Council for Science, Technology and Innovation (ICSTI)**. Established in 1997, as a Committee of Forfás, the Council advises the Government on the strategic direction of science, technology and innovation (STI) policy. Its advice encompasses all aspects of STI policy including: primary, secondary and third-level education; scientific research; technology and research, development and innovation in industry; prioritisation of State spending and public awareness of STI issues.

ICSTI has twenty-five members and its Secretariat is provided by Forfás. The Council implements its work programme through the establishment of Task Forces to deal with agreed priority topics. A leading academic or industrial representative chairs each task force. On completion of work on one of the priority issues, the next priority from the remaining list is agreed and a project initiated. Recent priority topics include:

- Commercialisation of Research
- Modern Biotechnology
- EU Sixth Framework Programme of Research and Technological Development
- Public Awareness of Science
- Metrics and Impact
- Industrial Design and Development

Within Forfás, the **Science, Technology and Innovation (STI) division** supports the Board of Forfás in providing advice to the Minister for Enterprise, Trade and Employment on key national and international issues on STI policy. The general objectives of the S&T Division include:

- To formulate policy advice on the key national and international issues relating to science, technology and innovation (STI) and to convey this advice to Government and in particular to the Department of Enterprise, Trade and Employment.

The activities undertaken by the S&T Division cover five main areas:

- Delivering timely and well-founded policy analysis and advice on science, technology and innovation issues to national policy-makers.
- Undertaking evaluations of existing S&T policies and programmes, in order to improve their performance and relevance to economic development.
- Providing data, indicators and a flow of other information on science, technology and innovation to policy-makers, decisions-takers and interested groups in the public and private sectors.
- Providing secretariat and research support for the Irish Council for Science, Technology and Innovation.
- Advising and providing support to the Office of Science and Technology on international science and technology programmes and issues.

The S&T Division has a total staff of 15 people and an expenditure of £973,000 (€1,235,000) in 1999 and a budget of £1,153 million (€1,464 million) for 2000.

43.2.8 *Policy advice across several fields*

The Government utilises the services of a number of additional bodies for advisory services and commissioned studies on a range of topics. The two main bodies providing this type of broad service are the National Economic and Social Council and the State Laboratory. The Economic and Social Research Institute (ESRI), referred to under the energy section above, would also fall into the general policy advisory field.

The **National Economic and Social Council (NESCC)** was established by Government in November 1973. Its members, in addition to independents, include representatives from employer and employee unions, agricultural groups and representatives of community and voluntary organisations. NESCC's main task is to provide a forum for discussion of the principles relating to the efficient development of the national economy, the achievement of social justice, and to advise the Government, through the Taoiseach, on their application. Council reports are submitted to the Government, laid before each house of the Oireachtas and published. It is financed by grant-in-aid from the Department of the Taoiseach and by income from the sale of publications. NESCC employs a total of 7 staff. Consultants are frequently employed to assist in the preparation of specific research reports. NESCC conducts studies on a wide range of relevant topics in the areas of economic and social policy.

Research Areas include: review of industrial policy; farm incomes; social planning; housing requirements and population change; health and energy policy; economic and social policy assessment; manpower policy.

The State Laboratory is an independent office under the aegis of the Department of Finance. It was established in 1924 following the merger of the Revenue Laboratory and the Chemical Laboratory of the Department of Agriculture and Food. Its main function is the provision of an analytical and advisory service to Government Departments and offices. The bulk of its work is statutory in nature and the main areas of analytical activity are in the Revenue, Agricultural and Environmental arenas. Its analytical results and advice are used for the purposes of: litigation and advice; the implementation and formulation of legislation; and assessing the potential requirements for future national and/or EU legislation. The Laboratory is represented by its staff on National, European (EU) and International committees. It participates at both EU and international levels in the collaborative testing of analytical methods. The bulk of State Laboratory funding comes directly from the exchequer. A less significant source of income is EU travel refunds. The State Laboratory employs a total of 74 permanent staff, of whom 63 (including the State Chemist) are directly involved in science and technology activities; the remainder are in administration and support services.

Testing and Analytical services include:

- Agriculture (Inorganic): Fertilisers are analysed on behalf of the Department of Agriculture and Food to ascertain compliance with both EU and national legislations. Animal feedingstuffs are analysed for minerals, trace elements and heavy metals.
- Environment and Special Analytical Services: The environmental area transcends most government departments and samples are analysed, for example, for the Health and Safety Authority, the Department of the Environment and Local Government and the Department of Agriculture and Food and analyses samples seized in accordance with the Animal Remedies Act.
- Animal Feedstuffs and Microbiology:

- Residues/Contaminants Section: The activities of this section encompass the Department of Agriculture and Food, Local Authorities and State-Sponsored bodies.
- Revenue (Alcohol and Oils):
- Customs/CAP:
- Toxicology:
- Quality Control and Accreditation:

44 References

Forfás, *State Expenditure on Science and Technology, 2000*. August 2001.

O'Doherty, D. *European Trend Chart on Innovation: Country Report: Ireland, covering period May-September 2001*, October 2001.

See specific URLs referenced as footnotes.

Database Report

45 Advisory Bodies covered in database

Name of body	Policy areas covered	Who advised	Full/basic coverage	Nature of body	Type A or B
Irish Agriculture and Food Development Authority	Agriculture Research	Ministry	Full	Statutory Permanent	B
Marine Institute	Environment Research Fisheries	Ministry, Agency	Basic	Statutory Permanent	B
CJD Advisory Group	Agriculture Research Health	Ministry, Other	Full	Non- statutory Permanent	A
Agri Food 2010 Committee	Agriculture	Ministry	Basic	Non- statutory Fixed-term	A
Scientific Committee of the Food Safety Authority of Ireland	Agriculture Health	Agency	Basic		A
Environmental Protection Agency	Environment	Ministry, Other	Basic	Statutory Permanent	B
Radiological Protection Institute of Ireland	Environment Research Health	Ministry, Other	Full	Statutory Permanent	B
Irish Council for Science, Technology and Innovation	Research	Ministry, Agency	Basic		A

45.1 Structural issues

45.1.1 Secretariat

The type A bodies that are covered in the study do have a secretariat, which tend to be provided by a relevant government body and whose main role is to undertake administrative functions for the bodies. Type B bodies do not have secretariats in the same sense although they do have administration structures.

45.1.2 Membership

Membership for the type A bodies varies from 9 for the CJD advisory group to 25 for the Irish Council for Science, Technology and Innovation. For the only type B body where it is specified, the Environmental Protection Agency, membership is 242. The low number of cases makes it difficult to elaborate on the backgrounds of members.

45.1.3 Budgets

Budgets are only specified for two type B bodies. The Irish Agriculture and Food Development Authority has a budget of €4,537,388, of which about 40% of this budget is spent on agricultural and food research, the remainder on training and agricultural extension. It is impossible to estimate the proportion used on the generation of advice. The Radiological Protection Institute of Ireland has a budget of €3,484,000, with the government providing €2.641m and the remainder being accounted for by earnings from licence charges, dosimetry, certification and other services plus research and consultancy fees.

45.2 Functional issues

45.2.1 Scope of work

The two type B bodies and one type A body covered are broad in scope – that is they focus on one area but address a number of issues within this..

45.2.2 Independence

Two of the bodies covered are non-statutory, one, the CJD Advisory Group is permanent, while the other, the Agri Food 2010 Committee, is fixed-term (and may have now completed its work). All of the bodies have close relationships with the relevant ministries, with, in most cases, members of the bodies (and members of the boards of type B bodies) being appointed by the Ministry (although this may not be the only source of members – for example some may be nominated by professional bodies). Both the CJD Advisory Group and the Irish Agriculture and Food Development Authority are able to select their own subjects for examination (these are the only two bodies for which this is covered)

45.2.3 Transparency

The Irish Agriculture and Food Development Authority has a code of practice that covers issues such as conflicts of interest (this is the only body for which this issue is addressed). Again, it is difficult to draw any conclusions about the availability of information due to the low number of bodies covered, however, it appears that reports of bodies do tend to be available on the web. This is also true for advice reports and activity reports for the Irish Agriculture and Food Development Authority, although agendas and minutes are confidential. In contrast, the minutes of the CJD Advisory Group are available on the web.

45.2.4 Generation, delivery and response to advice

Bodies appear to employ a range of sources in the generation of advice. Expertise of the members themselves and review of existing literature feature prominently. Both the type B bodies covered conduct their own research while one of these and the type A body commission new research. For the Irish Agriculture and Food Development Authority, international expert consultation is also important.

45.2.5 Evaluation and impacts of advice

It is difficult to comment on evaluation and impacts as this has only been addressed for one body.

45.2.6 Changes to the advisory system

It is difficult to comment on whether bodies have undergone many changes as this has only been addressed for one body. The Irish Agriculture and Food Development Authority has seen recent institutional changes and changes to its scope and mission.

Italy

General Overview

46 Background

The governance system of Italy has undergone in the last few years some important changes, that have affected in particular the voting system and the way in which governments are formed. Other changes concerned the balancing of power between the different levels of government and the devolution of a whole range of competencies and legislative powers from the national government to the regions: the discussion on these issues is at present still ongoing.

Italy is a republic, a unitary State, based on the French model, with considerable devolution of power to the regional level. The current Constitution was drawn up in 1946-47, soon after the Second World War and the national referendum that put an end to the monarchy and established the republic. The Constitution was formally adopted in 1948; it is a “rigid” constitution, in the sense that specified procedures must be followed to amend it, and its provisions have higher standing than any other normative source.

The Italian system of government is parliamentary republican. Parliament is at the centre of the system; the President of the Republic is elected by Parliament; the government must enjoy the confidence of Parliament; all laws must obtain legislative approval from the Parliament. The government does not have normative powers, unless they are delegated to it by Parliament or in exceptional circumstances. Before the recent reforms, members of Parliament were elected with a proportional voting systems. The absence of majority voting in the electoral system led to governments by coalitions, which were quite difficult to form and keep together. This kind of situation in turn caused a certain instability of the executive branch and put somehow at question the “governability” of the country. For this reason, in the middle of ‘90s there was a change in the voting system, with the adoption of a majority voting that still retains some parts of proportionality in it. The new voting system allowed the formation of majority government, but there are still some kind of incongruence in the whole political system, and debates are still ongoing at the Parliament concerning the best way to complete the reform process.

The head of the state is the President of the Republic, which is elected by the two chambers of Parliament meeting in joint session with representatives of the regions. His mandate is for seven years. The President nominates the President of the Council of Ministers (Prime Minister) who is the head of the electoral coalition that has won the elections. The President of the Republic also nominates the ministers, proposed by the Prime Minister. The President of the Republic does not have legislative powers but he formally promulgates laws approved by the Parliament. He is formally Chief of the Armed Forces and he chairs the Superior Council of the Judiciary, which is the self-governing body of judges.

The main legislative body, as already said, is the Parliament. It has two chambers, the Chamber of Deputies and the Senate of the Republic, both elected for five years. The two chambers have equal authority and identical functions. Every law must be approved by both chambers: the system can be therefore described as a perfect bicameralism. The Chamber of Deputies, housed in Palazzo Montecitorio, is composed of 630 deputies while the Senate of

the Republic, housed in Palazzo Madama, is composed of 315 elected senators plus life senators (former Presidents of the Republic and five senators nominated by the President of the Republic). The two chambers have a fixed number of parliamentary committees which are in charge of the preliminary debate of government Bills and of legislative proposals emanating from Parliament. These are then approved by the chambers in plenary session. Frequently, however, the committees are granted direct legislative powers. The committees also have an investigative function and control the activities of government. The composition of the committees in each chamber mirrors exactly the relative strength of the parties in that chamber. The chambers can also constitute bicameral committees and commissions of inquiry, endowed with powers normally held only by the judiciary authority, in order to obtain information on specific matters.

The government has limited normative powers, but it does anyway have considerable scope to influence the parliamentary legislative process. In fact, the government establishes the working agenda of Parliament and can obtain priority status for government bills; it also has a normative power that enables it to make regulations which are in any case subordinate to the legislative power of Parliament. In general, there is a very close working relationship between the offices of the ministries and the parliamentary committees.

The main decision making body is the Council of Ministers, which is composed of all ministers of the government. It is responsible for the approval of all government Bills before presentation to Parliament, for the exercise of legislative and regulatory powers, for the resolution of conflict between ministers and for the appointment of heads of national public bodies and of general directors of ministries.

The relationships between the different levels of government (national, regional, local) are undergoing a phase of revision and change which is gradually devolving competencies from the national authorities to the local level. This can be considered as the end of a very slow process that dates back to the origin of the Republican State. Even if the Constitution of 1948 allowed for the creation of regional governments through legislation, up until the early 1970s only five “special regions” (*Regioni a Statuto Speciale*) were created (Sicilia, Sardegna, Valle d’Aosta, Trentino-Alto Adige and Friuli). The introduction of the remaining 15 “ordinary” regions required specific legislation and was delayed until 1975-77. The “special regions” benefited from a much more autonomous status, at least as far as the legislative power and competencies were concerned. Numerous contradictions characterised the structure of powers, functions, competencies and resources at the different levels of government: while regional governments were granted by the Constitution legislative powers in important fields, the inconsistency between autonomy of expenditure and dependency on transfers from the central government limited regional autonomy and accountability. In turn, as this asymmetry reduced responsibility and accountability of local and regional governments, it also had a role in feeding the Italian public debt, which grew at a very fast pace during the eighties. As a matter of fact, with the separation between expenditure competencies and revenue collection, needs were always determined by regions in the absence of budget constraints, and always financed by the central government.

Due to strong criticisms that grew in intensity at the beginning of the nineties, the roadmap towards decentralisation was implemented at last. Act 142 of 1990 gave new powers to municipalities and provinces to adopt their own statutes and to define their organisation. The act also clarified the role and functions of mountain communities and instituted metropolitan areas connected to the principal national poles of urban aggregation: these centres were given

territorial planning and network service functions and tasks related to economic development. Act 59 of 1997, using a wide interpretation of the Constitution, redefined and wholly re-organized the State in all its administrative functions, transferring or attributing to the different territorial and administrative levels the competency for administrative functions and the autonomy on expenditure decisions. Act 59 implemented a large decentralisation of functions by reversing the traditional approach, inherited from the Constitution, of defining the competencies of Regions. On the contrary Act 59, which used all the space available without having to modify the Constitution, defined the competencies of the central state, leaving all other competencies to local autonomies.

At the same time Act 59 and, even more, its implementation decree n.112/99, considered not only the competencies that the Constitution had attributed to the central or regional level but dealt also with the devolution of functions to “*functional autonomies*” (for example Universities), to municipalities or to the private sector, with the idea of completely redefining the public sector. The principle of vertical subsidiarity was fundamental: public activities were to be carried out by higher levels of government only where they could not be carried out by lower levels. Matters of explicit national interest remained within the sphere of the State (external affairs and trade, defence, public order and safety, justice, university and scientific research, large network infrastructure and heritage). Around 40% of the administrative functions were transferred from the Ministries to the Regions, Provinces and Municipalities. In particular, with regard to the promotion of local development, functions related to industry were transferred to the regions which were to manage incentives, while the central administration retained functions relating to the general orientation of industrial policy. It took two years and 100 Prime Ministerial decrees to transfer assets, equipment, resources and personnel from the Ministries to the other level of administration.

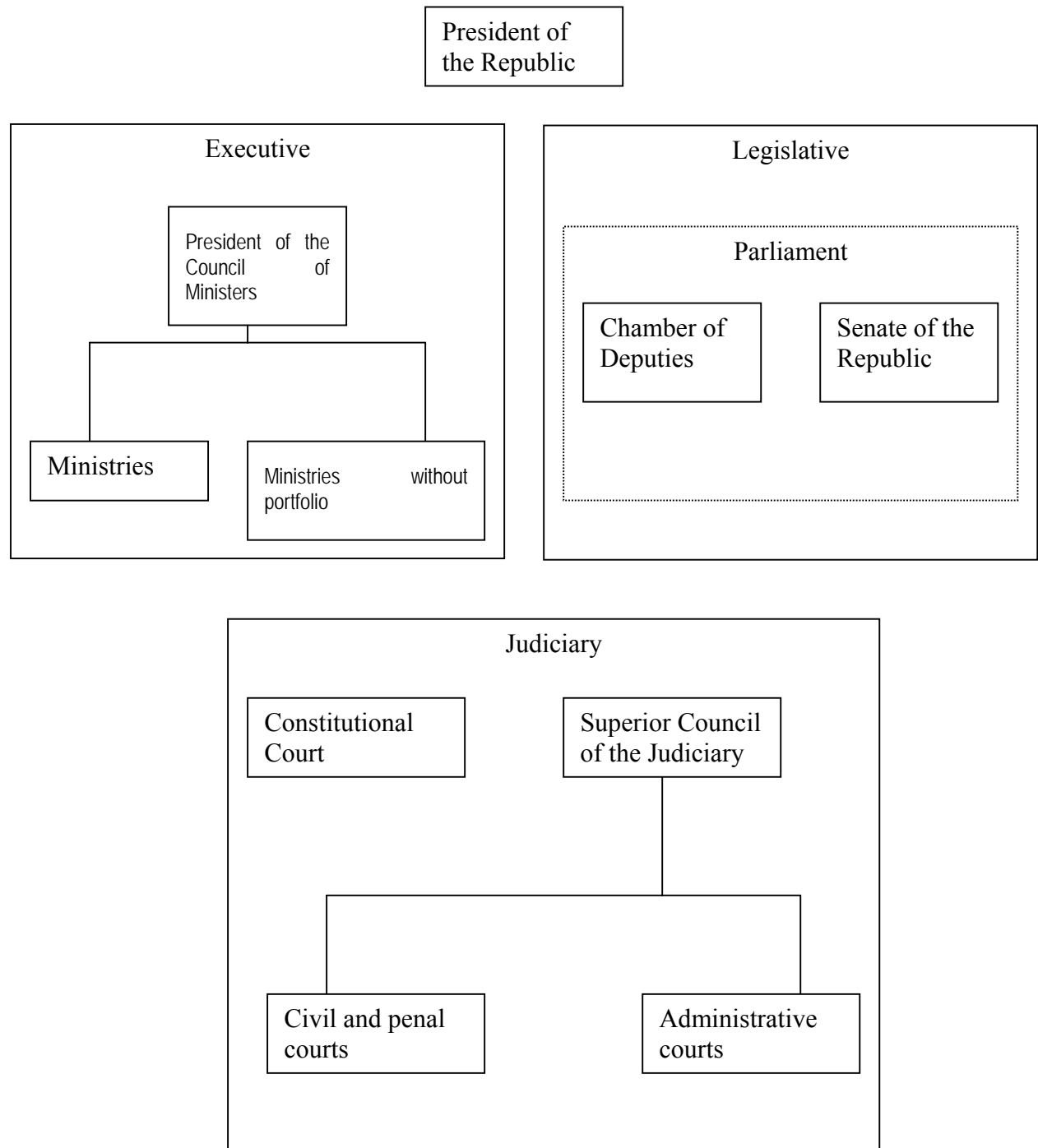
The process of decentralisation was far more pronounced on the expenditure side than on the revenue side: in fact, it is only lately (mainly since 1997) that the issue of fiscal decentralisation has been put forward. At first it was a political stance and only later did it become a matter to be discussed in order to build a coherent governance model which gives careful consideration to the balancing of costs and benefits, both from a national and a regional perspective. One important step in regional decentralisation took place in 1992 with the attribution to the Regions of health service contributions and automobile taxes; in 1995 state transfers were abolished excluding those for the health fund, for natural disasters and for purposes of major national interest, and they were offset by the assignment to the Regions of a share of the excise tax on petrol and the institution of an equalisation fund. Another step towards fiscal autonomy was made in 1997 with the attribution to the regional level of a new tax on productive activity, and of a personal income tax surcharge. However, the major change took place in 1999 with law 133, which abolished health fund transfers and assigned to the Regions new shares and surcharges of central government taxes, in particular VAT and Income Taxes. For what concern local governments (municipalities), in 1992 the municipal real estate tax was introduced and in 1997 some previously existing minor municipal taxes were abolished and offset by share in national taxes on income. The regional and local autonomy was further reinforced by a wide administrative process which has renewed the rules of the electoral system for Municipalities and Regions, introducing the direct election of the City Mayor (1993) and of the President of Regions (2000), allowing in the latter case for a majority premium to ensure political stability.

All these provisions were considered by many to be an anticipation of the constitutional reform towards federalism that should have been produced by a bipartisan work carried out

by the “II Commissione Bicamerale” formed by representatives of both branches of the Parliament, under the D’Alema Government. No agreement was reached at that time and only at the beginning of 2001 (under Amato’s Government) was a new constitutional law approved by the Parliament. This law was subsequently confirmed in a referendum held in fall 2001. The law integrated the principles of administrative decentralisation introduced by ordinary law and recognizes legislative, financial and administrative autonomy to regions and local autonomies. It assigned to the State the responsibility of implementing equalisation of financial resources in order to ensure, over the whole territory, the access to the same level of essential services. An equalisation fund would provide for the resources needed in order to co-finance (together with local resources) the public functions attributed to the sub-central levels in areas of lower fiscal capacity.

Anyway, the reform process has still to be completed, as with the new elections and the appointment of Berlusconi Government other major changes that can further increase the autonomy of the regional and local governments are in discussion at the Parliament. As a matter of fact, during the last five years words like federalism, fiscal autonomy and devolution have become part of the political jargon, very often losing their original meaning. Political parties have accepted or even strongly supported as flagships such words, sometimes without clarifying, either in the political arena and in front of the electorate, what these slogans really meant. Unfortunately, these attitudes have not contributed to develop a serious collective thinking on the model Italy wants to adopt to change from a centralized State to a decentralized one, and on the real costs and benefits that can be associated to this type of process.

The Italian Political System: overview



46.1 Policy areas

46.1.1 Agriculture

The area of agricultural policies lies under the responsibility of the Ministry for Agriculture and Forest Policies. The technical-scientific committee for agricultural and agroindustrial policy has the specific role of providing qualified advice in all matters relevant to the activities of the Ministry. The committee is presided by the Minister himself (or by a general director) and is made up of twenty qualified experts, coming from different fields: agricultural policies, economics, law, biotechnology, biology. Members of the committee are chosen among academics experts and judges and are appointed by the Minister for a period of three years. Their mandate can be renewed once. Their remuneration is fixed by the Minister in accordance with the Ministry of Treasure and Economic Planning.

46.1.2 Fisheries

The competence in matter of fisheries lies within the General Direction for fishery and aquiculture. This direction operated once within the Ministry of Merchant Navy. After the suppression of that Ministry, the Direction is at present operating within the Ministry for Agriculture and Forest Policies. The Direction is divided in several Units: the Unit for International Relationships, the Unit for Juridical Discipline, the Research Unit, the Statistic Unit, the Control Unit, the Unit for European Interventions and the Unit for National Interventions. The National Lab for Hydrobiology, operating within the direction, is an important research lab which can provide specific scientific advice on relevant issues. Another source of advice on these topics is the Central Institute for scientific and technological research applied to the sea (ICRAM), which is a research institute operating under the surveillance of the Environment Ministry

46.1.3 Energy

This field is disciplined by the General Direction for Energy and Mineral Resources, operating within the Ministry for Productive Activities. The competence of the Direction concerns: the activities of control of petroleum procurements; the planning, surveillance and control of all activities linked with the production and distribution of electric energy; the surveillance over the National Institute for Alternative Energies; the authorization to transports of radioactive materials; the detection of energetic needs. The Direction also looks over research and extraction of liquid and gas hydrocarbons.

46.1.4 Transport

The planning and programming service of the Ministry of Infrastructures and Transports is the main technical body of the Ministry, which has got responsibilities for transport policies. The service has also the duty of drafting the General Plan of Transports, which is the main planning document of the Government, relating to transports. The service is divided in five Operative Units, that deal with the following matters: Economic planning of investments (this

unit is in charge of keeping contacts with CIPE and with the Minister of Economic Planning, in order to coordinate interventions in matter of transport with the overall economic planning of the State); Relationships with local governments; Elaboration of the General Plan of Transports (this unit also monitors the implementation of the Plan); General coordination for the planning and execution of big infra-structural networks; Research and analysis of demand needs and supply offer in matter of transports.

46.1.5 Environment

The Environment Ministry, which has got the responsibility for defining policies in matter of environment, has got a permanent Technical-Scientific Commission. The Commission gives obligatory advice on the regulatory activities of the Ministry and it can also be required to elaborate specific proposals by the Minister himself or by the Directors of the various Services. As it is required mainly to evaluate and control the Ministry initiatives, it doesn't seem to have a really active role in shaping the decision making process. Its main range of competencies concern the elaboration of cost-benefit analysis and the ex-post control of the results achieved by the various projects. It also promotes various activities of technical-scientific advice on a wide range of subjects such as the transports policy, the protection of the sea, the protective measures for the Venice lagoon, but it seems that this function plays a minor role in the overall attributions of the Commission. Within the Environment Ministry there are also other structures dealing with more specific issues: we can take as an example the Technical Secretariat for the Defence of the Soil, which is composed by 20 experts nominated by the Ministry himself and it's in charge of collecting and analysing data on the hydro-geological situation of the national territory. Even if they are in charge of more specific matters, these structures are similar to the Technical-Scientific Commission since they mainly give obligatory advice and perform ex-post evaluations. For specific problems, the Ministry can also draw on advice issued by the National Agency for Environmental Protection.

46.1.6 Health and the consumer

The Ministry of Health has the main responsibility for the definition, implementation and evaluation of all policies concerning the public health. In its work, the Ministry can draw on a series of body of advice. The main sources of scientific advice are the Higher Council of Health and the Higher Institute of Health. The former is composed of fifty members of right (the General Directors of the departments and the services of the Ministry of Health, the Director of the Agency for the Regional Sanitary Services, the Director of the Higher Institute of Health and the Director of the Higher Institute for Worker Security and Protection), plus some members not of right, chosen by the Minister among university professors and other experts. External experts can be convened on occasion. The Higher Council of Health acts on input from the Minister, who can invite it to consider questions of specific interest, but it can also propose in first person the study of important problems and advance opinions concerning the formulation of guidelines for the protection of the public health. Moreover the Council expresses obligatory advice on the regulations predisposed from any central administration that concern public health and on international conventions regarding the same matter. The Council is articulated in five sections, that meet every month. The general assembly gathers every two months. The Minister has faculty to convene the general council, or one of its sections, at anytime.

The Higher Institute of Health (ISS) is the technical-scientific organ of the National Health Service. It is independent from a scientific and administrative point of view, but it operates under the vigilance of the Ministry. It carries out controls, experimentation and researches on every matter of public health in Italy. The Institute is composed from experts designated in part from the Health Minister and in part in representation of other Ministries (the Environment Ministry, the Ministry of University and Scientific and Technological Research, the Ministry of Industry, Commerce and Handicraft, the Ministry of Social Transactions). These experts work together with the Directors of the Laboratories of the Institute. The Institute collaborates with the Health Minister in the elaboration of the National Sanitary Plan, it advises the government and the regions for the respective sanitary plans, it promotes programs of scientific research, and it promotes conventions and scientific debates at the national and international level.

Another technical-scientific organ of the National Health Service is the Higher Institute for Worker Security and Protection (ISPESL). Also this institutes operates under the vigilance of the Health Ministry, while being at the same time fully independent from a scientific and administrative point of view. ISPESL deals with every matter related with workers health. It carries out activity of advice for the elaboration of national and regional sanitary plans, supplies technical-scientific standardization of methods and procedures of risk assessment on matters related to workers health and it carries out activity of certification and accreditation of laboratories and organisms of certification. The technical-scientific committee of the ISPESL is named with decree of the Health Minister It remains in charge for three years and it gathers at least four times every year. It is composed of experts chosen by some Ministries (Health Ministry, Ministry of Industry, Commerce and Handicraft, Ministry of Social Security, Ministry of University and S&T Research, Ministry of the Interior and Environment Ministry) and other experts chosen by research institutes such as the National Research Council (CNR) and the National Agency for Alternative Energy (ENEA).

Within the Health Ministry there are also other important commissions in charge of dealing with specific topics: they are the Commission on Drugs, (CUF, Commissione Unica Farmaco) which controls the introduction of medicines on the market, and their prices, the National Oncological Commission (CON, Commissione Oncologica Nazionale), the Commission on stem cells, and the Commission for AIDS Therapy. The National Committee of Bioethics (CNB) and the National Committee on Biosafety and Biotechnology (CNBB) are other source of advice in the area of ethics and biotechnologies. They do not operate within the Ministry of Health, but within the Presidency of the Council of Ministers. The former (CNB) is more geared towards issuing general guidelines on ethic problems, while CNBB has got a more technical orientation and looks to specific problems linked to the introduction on biotechnologies in everyday life.

46.1.7 Research

The responsibilities for the definition of research policies lies within the Ministry of Instruction, University and Research. Within this Ministry, the Technical Secretariat for Research Policy, made up of experts nominated by the Minister herself, is the main body of advice for these matters. Other bodies of advice for the elaboration and evaluation of research policy are the Committee of Experts for Research Policy and the Committee for Evaluation of Research.

The Ministry of Instruction, University and Research, aided by the Technical Secretariat and listening also to advice issued by the Science and Technology Assembly (which should represent the scientific community), drafts the Guidelines for the National Plan of Research, presented to the Council of Ministers, that represent the most important document for the national research policy. At present, the renewal of these guidelines, issued in 2000, is going on within the Ministry.

47 Scientific advice

47.1 General background

Apparently, the issue of science governance doesn't seem to have a high stance in the political agenda of Italy. This should not come as a surprise, anyway, because it seems that science as a whole does not have a relevant role in the politician's mind. As a matter of fact, Italy is one the European Country with the lowest share of GDP devolved to scientific research, and even if this could represent a clear factor of alarm, given the relevant role that science can play in fostering the economic and cultural development, still there are no signs of change. Furthermore, it should also be noted that Italy still lacks a specific Ministry of Science and Technology. All the decisions in matter of science and research are left to the competence of the Ministry of Instruction, University and Research. As this Ministry has dealt, in the last few years, mainly with problems linked to the reform process of the educational national system and of the organization of universities, issues linked to science and research were somehow neglected.

In the past few years, as the weakness of the Italian system for Science and Research finally reached the attention of policymakers, there were some attempts to rationalise the system and to increase the public awareness on these topics, but they were not very successful. In particular, the interest of the public opinion on these topics has remained quite low and the changes that were introduced have not seemingly reached any significant effectiveness. It should not come to a surprise, for this reason, that the number of scientific body of advice proposed for the analysis is quite small, if we compare Italy with other big European countries.

Generally speaking, the scientific advice structure in Italy is quite devolved and it doesn't show a high degree of formalization.

At the governance level the most important ministries have got their own permanent scientific committee, composed by experts nominated by the Ministry himself. These scientific committees have to provide obligatory advice over the regulatory activities, and they can also be invited at any moment to express their advice over relevant questions on the political agenda. The technical secretariat of MIUR (Ministry of Instruction, University and Research) is in charge of keeping the coordination among these scientific committees. Actually, it seems that the range of competencies of these committees is not very wide: when a specific problem arises, usually *ad hoc* committees have to be created to deal with it. This is for example the case of the Commission on stem cells, which has the role of advising the government on the possibility to allow the therapeutic use of stem cells. One such Commission was nominated under the past government in September 2000, with a mandate of three months. In December 2000 the Commission finally issued its advice, but this had no

impact at all on the governance process: in fact, the important issue of therapeutic human cloning and of the use of stem cells still lacks a legislation nowadays. With the change of Government, the new Minister of Health (which was, as a matter of fact, a member of the former Commission, and was one of the subscribers of a minority document, which in some way dissented from the conclusions issued by the majority of the members of the Commission) has nominated another Commission on stem cells, with a longer mandate, to re-examine the all matter from the start.

At the parliamentary level, auditions with scientific experts from Italy and from abroad can be held by permanent parliamentary commissions on every specific matter which requires scientific investigation. Usually these auditions are held during the initial phase of the debate, when the information needed to support the decision-making process must be gathered, but they can be held also in subsequent stages. Also the special commissions, nominated to deal with specific problems, have a high degree of freedom in accessing to scientific expertise and advice in every phase of their activity. The relevance of advice issued in these cases varies on case-by-case basis.

An important source of scientific knowledge is represented by the research institutes. Some of these institutes operate under the vigilance of MURST: they are the National Council of Research (CNR, Consiglio Nazionale Ricerche), the National Institute of Physics (INFN, Istituto Nazionale Fisica della Materia) and the National Spatial Agency (ASI, Agenzia Spaziale Italiana). The Higher Institute of Health (ISS, Istituto Superiore Sanità) and the Higher Institute for Worker Security and Protection (ISPESL, Istituto per la Sicurezza E Protezione del Lavoro), operate under the vigilance of the Health Ministry and deal with research in the field of public health. The National Institute for Alternative Energy (ENEA, Ente Nazionale Energie Alternative) operate under the vigilance of the Ministry of Productive Activities, while the National Institute for Research Applied to the Sea (ICRAM, Istituto Centrale Ricerca Applicata al Mare) operates under the control of the Environment Ministry. All these institutes are independent under the scientific and organizational point of view. They carry on their own specific research, the results of which can be used as a source of information and advice for the policy-makers. They can also be required to provide advice on specific matters.

To rationalize what seemed to be quite a devolved and informal structure of scientific advice, D.L. 204/98 introduced some unified committees, with particular concern to the orientation of research policy and the evaluation of research carried on in the national laboratories. These committees operate within MIUR and formulate their proposals to the Ministry herself and to the government. They are the Committee of Experts for the Research Policy (CEPR, Comitato di Esperti per la Politica della Ricerca) and the Committee for Research Evaluation (CIVR – Comitato di Indirizzo per la Valutazione della Ricerca).

CEPR is composed by 8 experts, nominated by the Minister, and it has to deal with the research policy and with the evaluation of the national priorities, on the basis of the current tendencies of the research at the international level. It helps the government in the elaboration and monitoring of the National Plan for Research (PNR, Piano Nazionale per la Ricerca). CIVR is made up of seven experts which remains in charge for four years. It aims at promoting the evaluation of research, by sustaining the scientific excellence and the valorisation of national scientific resources. The Committee formally started its work on September 1999: it operates within the Ministry of Instruction, University and Research, and its aided by the technical secretary for research of this ministry.

D.L 204/98 introduced also the National Scientific Councils (CSN, Consigli Scientifici Nazionali), which are elected in representation of the national scientific community and constitute the Science and Technology Assembly (AST, Assemblée della Scienza e della Tecnologia), together with spokesmen of the public administrations and of the economic world. CSN and AST formulate observations and proposals for the elaboration of PNR. They also provide advice to the Inter-departmental Committee for Economic Policy (CIPE) and to other public administrations.

However, it does not seem that this reform has succeeded in raising the awareness of the importance of science in the decision-making process. As a matter of fact, the most important weakness of the Italian case is that scientists still lack voice and visibility in the political debate. The absence of a specific Ministry to deal with Science and Technology seems quite important in this sense. In fact, all the committees that have been introduced still operate within MIUR, which seems to have paid (and as a matter of fact, is still paying nowadays) more attention to matters of Instruction and University than to matters of Science and Research.

47.2 Advice provision in relevant policy areas

Among the areas covered in the present research, it seems that “Health and the consumer” is the area in which the relevance of science in the decision-making process appears with more evidence. Public opinion and politicians are in Italy particularly sensitive towards issues of public health. A brief overview of some recent cases can explain the role that science plays in the decision-making process in this area:

- electromagnetic pollution: Italy is one of the country with the most restrictive legislation against electromagnetic pollution. Italian law is far more severe than the prescriptions of ICNIRP (International Commission on Non-Ionising Radiation Protection), which can be considered as the most important source of scientific advice on this matter, and which is composed of experts from the different countries. Apparently, this legislation was justified on the basis of advice issued to the Ministry of Health by ISS and ISPESL. In reality, it seems that there have been some kind of important differences between the advice issued by these body (for example, ISS was far more in line with prescriptions of ICNIRP). In the presence of such as a scientific conflict, the decision-maker has simply picked up the advice that was more respondent to pressures coming from group of interests (in particular from NGOs and politicians of green parties).
- Therapeutic human cloning: as already said, Italy still lacks a legislation on this topic. The advice issued by the Dulbecco Commission (which was nominated and asked to answer some very specific questions by the former Minister of Health), still lies unheeded. As a matter of fact, a new Commission has been appointed to deal with this topics.
- Nuclear energy: the concern for the possible after-effects of nuclear energy finally led, in the eighties, to a national referendum that put an end to this kind of technology in Italy. It has to be remarked that Italy does not have significant natural resources, and has to depend fully on abroad for its energetic needs. Scientists were for the most part strongly against this kind of decision.

Another signal of the relevance of concerns regarding human health can be found also in the fact that the area of biotechnology is one of the area where the structure of advice is more formalised. Quite paradoxically, on these topics there is a plurality of body of advice, each operating within a different Ministry. Operating at a inter-departmental level, or even outside the departmental structure, we've got the National Committee of Bioethics, the National Committee on Biosafety and Biotechnology and the Inter-departmental Committee on Biotechnology. Furthermore, there is the Technical-scientific committee of experts of the Ministry of Agriculture, and the Commission on the use of stem cells of the Ministry of Health. As a matter of fact, the coordination between these different bodies is quite low, and there is the suspicion that such a fragmented structure can have significant consequences on the impact of advice issued. Faced with different type of advice, in fact, there's a strong temptation for the decision-maker to simply pick up the one that is more in line with his political preferences.

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Database Report

49 Advisory Bodies covered in database

Name of body	Policy areas covered	Who advised	Full/basic coverage	Nature of body	SOME CATEGORISATION
1) CIVR – Comitato di Indirizzo per la Valutazione della Ricerca (Committee for Research Evaluation)	Research	Head of Government Ministry of Instruction, University and Research Other	Full	Statutory permanent	100% Scientific advisory
2) Laboratorio nazionale di idrobiologia – (National lab of Hydrobiology)	Environment Fisheries	Ministry for Agricultural and Forest Policies	Basic	Statutory permanent	Multifunctional body
3) Commissione tecnico scientifica per la sicurezza – (Technical Scientific Committee on Bio Safety)	Environment	Ministry of Environment	Full	Statutory fixed-term	100% Scientific advisory
4) ISS – Istituto Superiore di Sanità (Higher Institute of Health)	Health	Head of Government Ministry of Health Other	Full	Statutory permanent	Multifunctional body
5) ICRAM - Istituto Centrale per la Ricerca scientifica e tecnologica applicata al Mare (Central Institute for scientific and technological research applied to the sea)	Environment Fisheries	Ministry of Environment	Full	Statutory permanent	Multifunctional body

6) ISPESL – Istituto Superiore per la Protezione e la Sicurezza del Lavoro (Higher Institute for Worker Protection and Safety)	Health	Ministry of Health and Ministry of Productive Activities	Full	Statutory permanent	Multifunctional body
7) CNBB - Comitato Nazionale per la Biosicurezza e le Biotecnologie (National Committee on Bio Safety and Biotechnology)	Agriculture Environment Research Health	Head of Government Legislature Ministry Other	Full	Statutory permanent	100% Scientific advisory
8) CNB - Consiglio Nazionale di Bioetica (National Bioethics Committee)	Agriculture Environment Research Health	Head of Government Legislature Ministry Agency Other	Full	Statutory fixed term	100% Scientific advisory
9) INEA – Istituto Nazionale di Economia Agraria (National Institute of Agrarian Economy)	Agriculture Fisheries	Ministry of Agricultural and Forest Policies Other	Full	Statutory permanent	Multifunctional body
10) INFN - Istituto Nazionale di Fisica della Materia (Italian Institute for the Physics of Matter)	Research	Ministry of Instruction, University and Research Other	Full	Statutory permanent	Multifunctional body
11) Segreteria Tecnica per la Ricerca (Technical Secretariat for Research)	Research	Ministry of Instruction, University and Research	Full	Statutory fixed-term	100% Scientific advisory

12) INRAN - Istituto Nazionale di Ricerca per gli Alimenti e la Nutrizione (National Institute of Research on Food and Nutrition)	Agriculture Environment	Ministry of Agricultural and Forest Policies	Full	Statutory permanent	Multifunctional body
13) Consiglio tecnico scientifico degli esperti per la politica agricola e agroalimentare del MIPAF (Technical-scientific Committee of experts for the agricultural and agro industrial policy)	Agriculture Environment	Ministry of Agricultural and Forest Policies	Full	Statutory fixed-term	100% Scientific advisory
14) ANAS - Ente nazionale per le Strade (National Roads Council)	Transport Environment	Ministry	Basic	Statutory permanent	Multifunctional body
15) ENEA - Ente per le Nuove tecnologie l'Energia e l'Ambiente (National Institute for New Technologies Energy and Environment)	Environment Energy	Ministry Other	Full	Statutory permanent	Multifunctional body

16) CTS - Commissione Tecnico-Scientifica per la valutazione dei progetti di protezione e di risanamento ambientale (Technical scientific Committee for the evaluation of projects of environmental protection and restoring)	Environment	Ministry	Full	Statutory permanent	100% Scientific advice
17) Comitato sull'utilizzazione delle risorse idriche (Committee on the utilization of hydric resources)	Environment	Parliament	Full	Statutory permanent	100% Scientific advice
18) Consiglio Superiore di Sanità (Higher Council of Health)	Health	Ministry of Health	Full	Statutory permanent	100% Scientific advice
19) Agenzia per i servizi sanitari regionali (Agency for Regional Healthcare Services)	Health	Other (Regions and Autonomous Provinces)	Basic	Statutory permanent	100% Scientific advice
20) Consiglio Superiore dei lavori pubblici (High Council of public works)	Transport	Ministry	Basic	Statutory permanent	100% Scientific advice

49.1 *General trends*

In Italy, for long time the most important source of scientific advice was represented by public research institutes. These institutes are usually autonomous on a legal and administrative point of view, but they are linked to a specific Ministry, that overlooks their activities. The type of Ministry depends from the area of main activities of the institute. For example, we can have institutes supervised by the Ministry of Health (that is the case of ISS,

Higher Institute of Health and of ISPESL, Higher Institute for Worker Protection and Security), or by the Ministry of Environment (ICRAM, Central Institute for scientific and technological research applied to the sea), by the Ministry of Agricultural and Forest Policies (INRAN, National Institute of Research on Food and Nutrition), or by the Ministry of Instruction, University and Research (INFM, Italian Institute for the Physics of Matter and CNR, National Council of Research). All these institutes are multifunctional bodies that carry on different activities: the most important is usually the activity of research performance, but they also can fund research, get involved in education and training, raise public awareness. For these institutes, the provision of scientific advice is just one among the activities performed, and in some cases it's not the more relevant. Usually the main recipient of the advice is the Ministry that supervises the institute.

In a certain sense, it can be said that this type of quite devolved and not formal system of advice has been changing in the last few years, at least for what concern specific areas. It is more and more common, in fact, to find specific committees of advice, especially in areas of particular relevance such as research, health and environment. As a matter of fact, quite paradoxically, we assist at a proliferation of committees in some specific areas, with a certain overlapping of competencies. As an example, we can consider the particular area represented by biotechnology: in this field we can find some different committees and commissions. There is the National Committee on Bio Safety and Biotechnology, which is a consultative body of the Presidency of the Council of Ministers and which has to deal mainly with direct, physical risks linked with the introduction of biotechnology. Then there is the Bioethics Council, which is a consultative body of the Presidency of the Council of Ministers, too, and which has to deal with ethical risks in general: as a matter of fact, ethical risks linked with particular kinds of biotechnology have proven to be one of the main concern of this Council. Within the Ministry of Environment, we find the Technical Scientific Committee on Bio Safety and within the Ministry for Agricultural and Forest Policies, we have the Technical-Scientific Committee of experts for agricultural and agro industrial policy: also these two commissions deal with biotechnology, even if in different manners and with different points of view. Anyway, there is obviously scope for a overlapping of points of view and of different advice to arise. This problem is further reinforced by the fact that there aren't formal mechanisms of coordination between different committees operating in the same area. Linkages between committees are established only on an informal basis (quite often members of the different committees know each other quite well and so they can exchange information and points of view).

49.2 Structural issues

49.2.1 Secretariat

All type A bodies tend to have a secretariat. Usually, the size of the secretariat is quite small (one to four people). In general, the secretariat is provided by the relevant government department. The case of the Monitoring Committee on the utilization of hydric resources is quite different. As a matter of fact, this type of body is quite peculiar because, even if it is established within the Ministry of Environment, it is not a departmental body: it is an inter-departmental consultative body that gives advice directly to the Parliament and not to the Ministry. The technical secretariat of this Committee is not provided by the staff of the Ministry of Environment, but by the General Direction for Protection of the Soil of the Ministry of Public Works.

Type B bodies do not have a technical secretariat: there's a general, organizational secretariat which serves the whole institute. In some cases, the head offices of these institutes can have their own personal secretary, which can not anyway be considered as a technical secretariat.

For type A bodies, the secretariats tend to undertake both an organizational function (organizing meetings, keeping contacts between members, producing minutes, etc.) and a more technical work (such as collecting documents and performing some literature research). The importance of background work performed by the secretariat in the overall process of generation of scientific advice clearly depends on the kind of resources (both in terms of human and financial resources) given to the secretariat itself. When the secretariat is made up of just one person, as in the case of the Technical Scientific Committee on Bio Safety, it does not perform background work. In other cases, where there are more people making up the secretariat (as in the cases of CIVR, of CNBB and of the Technical-scientific Committee of experts for the agricultural and agro industrial policy) background work performed by the secretariat can be considered as an input into the process of generation of scientific advice.

49.2.2 Membership

Type A bodies tend to be composed by few members (15-30). Only CNB and the Higher Council of Health are made up of more than 50 members. Anyway, all type A bodies are committees-like structures and they share the same structural properties: members are appointed by the relevant Minister who chooses them among experts of proven competencies in the relevant field. For type B bodies the membership numbers are quite difficult to assess. Numbers, when possible, are provided in the database, but they refer to the structure as a whole and so they include all categories of workers, from researchers to organizational staff. As these numbers are not significantly linked with the activities of advice, they are not analysed further.

For type A bodies, usually the backgrounds of members can be restricted to two main categories: "academic experts in natural and physical sciences" and "academic experts in social sciences and humanities". Which of the two categories is prevalent depends on the specific areas of competency of the body: usually a certain equilibrium between these two categories can be observed. Other categories, such as industry representatives, NGO representatives and so on are not usually represented. One notable exception to this is represented by the case of CIVR, the Committee for Evaluation of Research that includes an industry representative. This fact can be linked to the specific activities performed by this Committee which is in charge of evaluating scientific research performed in Italy. The decision to include an industry representative in this Committee was maybe linked to the need to assure a certain linkages between the community of research and the industrial world, in order to have a better coordination of the activities of research with the productive and development needs of industry. Also CNBB has got a wider memberships, as it's include not only academic experts but also civil servants and industry and NGOs representatives: this can be due to the particular position of this body, which is not a departmental committee, but it's a public body operating within the Presidency of the Council of Ministries. Moreover, this body also has got to deal with a quite broad focus (that is all matters concerning Bio Safety and Biotechnology), in a specific field where different interests can quite often conflict between them: a wider memberships was, for these reasons, in a certain sense required to guarantee a full representation of all the different points of view.

In Italy, there isn't the habit of including lay people in the committees for scientific advice that tend to be formed only by relevant experts. In terms of the gender of members, it seems that no general background can be found. Usually the number of female is quite small. Furthermore, no specific trends relating to the background of these female members can be detected.

Members of type A bodies are selected among experts that work in Italy. Usually, the possibility of having members that work in other countries is not formally established. The only committee that has got, on a formal level, the possibility of being formed also by experts working abroad is CIVR, (Committee for the Evaluation of Research). The detection of potential overlapping between committees (people that work in more than one committee) has proven particularly difficult, because this kind of information is not systematically kept within the different committees. Data on this question have proven to be quite erratic, depending from the personal knowledge of people interviewed: for these reasons, it's difficult to make an analysis, or to draw general conclusions. In general, it seems that these matters are not very salient at the political level: people can work in different committees without having to declare their other affiliations. Even if there are not precise data on this matter, the impression arising from the interviews conducted is that these kind of overlapping can be quite common.

Data regarding membership for type B body are obviously more difficult to analyse and in most cases also to collect. Where possible, data regarding the composition have been put in the database, but that concerns only general numbers: it has proven not possible to break down the background of any individual worker, when having to study institutes (such as the ISS, Higher Institute of Health), that have more than 1000 people of personnel, between researcher, administrative staff, and so on.

49.2.3 Budgets

Data on budget have proven to be very difficult to collect, for a series of different reasons. For type A bodies, budgets are usually determined through government departments and it's difficult to attribute what part of this overall budget goes directly to the committees. Usually, for this type of bodies budget are not very large, even because members of these bodies are not paid full-time: they are usually given a token of presence, plus the reimbursement of expenses. Bodies of this type do not usually have funds to finance research or to perform their own research.

Also costs of the secretariat are not easy to ascertain, in most cases for the very specific structure of these secretariats. As the most part of these secretariats is provided through departmental staff, it's difficult to estimate the amount of time these people do really dedicate to the advisory body.

Type B bodies usually perform a plurality of functions: they do not only give advice but they perform their own research, they can in certain cases finance new research, they carry on activities of formation and training, they organize meetings and workshops to raise public awareness and so on. As a result these bodies usually have quite large budgets, but no general tendencies can be detected at this regard.

49.3 Functional Issues

49.3.1 Scope of work

Half of the type A bodies included in the database has got a broad scope of action, while the other half has got a focused scope. Among bodies with a broad focus we find the Bioethics Council, which deals with every matter that has got ethics relevance. It has to be remarked that this kind of body mainly deals with ethical problems and risks, so the type of advice delivered in some cases does not have a highly technical profile: this makes somehow easier for this council to deal with a plurality of matters. Other committees with a broad focus of action are the Committee for Bio safety and Biotechnology and the Technical-scientific Committee of experts for the agricultural and agro industrial policy. The Technical Secretariat for Research represents a particular case: in fact, it has to deal mainly with a single problem that is the drafting of the Guidelines for the PNR (National Plan for Research), which is the main document of research programming in Italy. However, as dealing with PNR means dealing with all matters in field of research, this body has been considered to have a broad focus.

Type A bodies that work within the Ministry of Environment tend to have a focused scope of action, together with CIVR (Committee for Research Evaluation), that works within the Ministry of Instruction, University and Research.

Type B bodies, as already said, usually perform a lot of functions in a series of different fields. As they can also count over more resources (both in terms of financial and human resources) they usually have a broad scope of action.

49.3.2 Independence

For type A bodies, all members are appointed (usually the appointment is made by the relevant ministry). The majority of these bodies are purely reactive: in most cases they are formed to respond to very specific questions coming from departmental offices. Exceptions to this are the Bioethics Council, the Committee for Research Evaluation, the Higher Council of Health and the Committee for Bio safety and Biotechnology: these bodies can select their own subjects. The Bioethics Council and the Committee for Bio safety and Biotechnology are also the only committees that present advice in final form to the policy makers: all others committees deliver advice through a dialogue with policy makers. It has to be remarked that this exception can also be linked to the nature of these two specific bodies of advice that do not operate within a given Ministry, but are consultative bodies of the Presidency of the Council of Ministry. It doesn't sound as a surprise, then, that these two bodies also give wide circulation to their advices, through media, publications, and the website. Other committees, that as said operate by means of dialogue with the policy makers, usually do not give circulation to their advice: exceptions to this are represented by CIVR and by the Technical Scientific Committee on Bio Safety that disseminate their advice in different forms (through website and ad hoc publications).

For type B bodies data on memberships are, as already said, difficult to comment upon: these bodies are in most cases research institutes and access to them is gained through normal examination procedures. It has to be remarked that in most cases it can be possible that the

personnel of these institutes is not directly involved in activities of advice, anyway. These institutes can usually select their own subjects, but this refers to the general activities of the body: it is quite plausible that in most cases these institutes give advice only on relevant issues after a precise question coming from departmental offices. The possibility of selecting their own subjects, for these type of bodies, should then be interpreted more as concerning the activities of research and development than the activities of advice in a strict sense. These bodies usually give advice in final form to policy makers and they also disseminate advice in different forms. Also in this case, anyway, a little bit of interpretation must be done. Usually these bodies disseminate advice through academic journals but it can be the case that, in the process of arriving at a scientific publication, the type of knowledge that lies at the base of the same advice given to policy-makers can undergo some type of changes.

49.3.3 Transparency

In general, the operation of the bodies (both A and B type) does not seem to be governed by any kind of code of practice. There are a few exceptions to these, anyway. CNBB, CNB, ENEA, and CTS, together with the Higher Council of Health and with the Technical-scientific Committee of experts for the agricultural and agro industrial policy do in fact have a kind of code of practice. In certain cases this mainly consists of an internal regulation or statute (as for CNBB, CNB, the Technical-scientific Committee of experts for the agricultural and agro industrial policy and the ENEA). For the Higher Council of Health the code of practice is more formal as it is represented by legislative and ministerial decrees. The code of practice of CTS was approved by a specific Decree of the Presidency of the Republic.

In general, no formal declarations of potential conflicts of interests are required by members. This applies to both type A and type B bodies, but with a significant difference. If it can be somehow difficult for type B bodies to formulate clear requests of declaration of conflicts of interests (because there are too many members, because the activity of advice is just one among the others, and so on), there should not be too many difficulties to include such a norm for type A bodies. Anyway, this is not the case, at least at present.

For type A bodies, we can see a difference, for what concerns the availability of advice issued by the bodies, between bodies that disseminate their advice and bodies that do not disseminate their advice. For bodies that do not disseminate their advice, this advice is usually not available to the public. Obviously, this is not the case for bodies that disseminate their advice: usually, in these cases, some advice can be found also on the Internet, on the website of the body (this is for example the case of the Commission for Bio safety and of the Council of Bioethics).

Also type B bodies do not tend to make information concerning specific scientific advice easily available to the public, even if with the growing diffusion of Internet this point is somehow changing (institute like ISS and INEA, for example, have been starting to put a lot of information directly available to the public on the website, and this applies also to scientific advice).

Bodies covered in the database, finally, do not hold any meetings in public.

49.3.4 Generation, delivery and responses to advice

Type A bodies operate through meetings, that can be regular, if required and on request. Most of these bodies furthermore create internal sub-groups to deal with very specific problems. The main sources of information are expertise held by the members of the body and literature review. Background work from the secretariat can be sometimes used, while international or national expert consultation rarely is. Public consultation is not used at all.

The mode of operation of type B bodies is more difficult to analyse, also because these bodies do not have a specific structure to deal with problems of scientific advice: any different situation is dealt upon in an informal, ad hoc, manner. For these bodies, the standard mode of operation is continuous works. Main sources of information are, as for type A bodies, expertise of the members and literature review. Moreover, these bodies do rely in large part on their own performed research.

For all bodies covered in the database (both type A and type B) the delivery of advice does not formally require any form of policy response.

49.3.5 Evaluation and impacts of advice

Detecting any general trend regarding the assessment of the advisory functions of bodies has not proven possible. Some kind of type A bodies, that have to deal with very specific problems, produce data that enter in the policy-making process dealing with the relevant issues at stake (this is for example the case of the Technical Secretariat on Research: this body elaborates the guidelines for the National Plan of Research, that lie at the base of the formal approval of this Plan by the Council of Ministers). Anyway, also in this case it's almost impossible to assess the real contribution of the technical-scientific advice, cause the policy-making process is, by its very nature, quite difficult to analyse (this would require a much more detailed approach, based on case-analysis, not on the collection of general data). Moreover, it has to be remarked that in some cases these type A bodies are linked in a very strict way to departmental offices (through the secretariat, through the dialogue with policy makers, etc.) and this makes even more difficult any assessment of impact.

For type B bodies, assessment of impact is even more difficult. In general, as these bodies also tend to give lots of advice in form of technical standards, it is possible to say that, at least for this category of advice, they usually have an impact. When looking at more elaborate typologies of advice (for example policy formulation, risk assessment and so on), data tends to grow more and more fuzzy and opaque, so it's not possible to draw any general conclusion on this.

The presence of international networking mechanism should be ruled out: international experts consultation, as already said, it's not commonly used as a source of information, nor advice generated by the different bodies (both type A and type B) seems to be used by international bodies of advice. Usually type B bodies are represented in international technical and scientific consulting board, but this can not be directly interpreted as implying activities of advice (these bodies can in fact elaborate in some cases general guidelines and principle, that anyway enter the process of scientific advising at the national level only in an indirect manner).

49.3.6 Changes in the advisory system

The main change that can be detected in the overall system for scientific advice does not deal with internal ways of functioning of the different bodies but with a tendency to have more committees and type A bodies, at least in some very specific policy areas (as said in the introduction). This tendency is anyway quite recent and it's difficult at present to assess if this is a permanent evolution of the system or just a response to specific emergencies that have arisen in the last years (especially for what concerns problems linked with the introduction of new technologies that can have potentially dangerous side effects, such as biotechnologies).

Luxembourg

General Overview

Please note: It has been rather difficult to use the Internet to gather information about scientific advisory bodies in Luxembourg. One of our contacts in the Ministry of Health provided us with the name of four advisory bodies and with some printed copies of their advice; we found only a few reports published online and quoting them, but none of these bodies were presented online. Thanks to our contacts, we estimate that we have a good overview over the number and identities of scientific advisory bodies in the Grand Duchy. It may however be troublesome to get information with the required level of details without directly contacting people within these bodies, as there is no information available.

50 Background

The Grand Duchy of Luxembourg is a constitutional monarchy. The executive power lies with the Grand Duke; the country is a parliamentary democracy established by the Constitution of October 17, 1868, last reviewed in 2000. In practice, executive power lies with the Prime Minister and the members of his 19-ministers government. The government is responsible to the legislative assembly (Chamber of Deputies).

It is important to stress that the Grand-Duchy of Luxembourg is a small country (441 300 inhabitants at the beginning of 2001). Consequently, it is largely dependent on foreign countries for its research and scientific advice, especially Belgium, France and Germany. There are therefore little research institutions and scientific advisory bodies compared to other EU countries.

Considering the issue of policy-making in Luxembourg, functions of research, advice, policy-design and implementation, enforcement and evaluation do not seem to be separated in many of the areas studied. Scientific advice is generally not provided by an independent body. Furthermore, there are very few bodies that are both consultative and scientific. Many of the identified advisory bodies are not scientific and therefore do not qualify for this study.

Luxembourg, however, is very keen on adopting decisions taken at the EU level, when they exist, as during the BSE crisis. Luxembourg seems to consider that EU consultative bodies are a source for scientific advice to be trusted.

The Economic and Social Council (*Conseil Economic et Social*) is the main advisory body in Luxembourg and is always consulted by the government for important questions related to economic, financial and social problems. Although it is not of a scientific nature, because its members represent the various sectors of the national economy, it is able to form special commissions made up of experts to be consulted for a specific study or advice.

51 Policy Areas and Scientific Advisory Bodies

51.1 Agriculture and Fisheries

Responsibility for Agricultural policy lies with the Ministry of Agriculture, Viticulture and Rural Development (*Ministère de l'Agriculture, de la Viticulture et du Développement Rural*). The Ministry told the authors of this report that there were no scientific advisory bodies for agriculture in Luxembourg. Fisheries are not a relevant area for Luxembourg, as it has no access to sea. However the Higher Council for Fishing (*Conseil Supérieur de la Pêche*) is a non-scientific advisory body for freshwater fishing.

51.2 Energy

Energy policy is developed by the Directorate for Energy within the Ministry of Economy (*Direction de l'Energie – Ministère de l'Economie*)

51.3 Transport

Transportation matters are dealt with within the Ministry of Transportation (*ministère des Transports*). Policy making in this area is also influenced by work by the Inter-ministerial Work Group on “Mobility”, which gathers together representatives from the ministries in charge of transportation, home affairs, housing and environment. There are two non-scientific advisory bodies worth mentioning; the State Traffic Commission (*Commission de circulation de l'Etat*) and the National Committee for Civil Aviation Safety (*Comité national de sûreté de l'aviation civile*)

51.4 Environment

The Ministry of Environment (*Ministère de l' Environnement*) is in charge of environmental questions. However, these questions may be of interest to other ministries (Economy for energy policy, Agriculture for example).

51.5 Health and the Consumer

The policy responsibility for health matters falls to the Ministry of Health, particularly to the Directorate of Health (*Ministère de la Santé – Direction de la Santé*). According to the Law of November 21, 1980, one of its missions is to advise public authorities and local communities. In practice, the Directorate of Health has a double function of advice and control. It provides scientific advice to ministries and local administrations (for instance about school or hospital building). Advice deals with prevention, hospital organisation, preventive medicine, social medicine, communicable diseases, drugs, and bills. Advice provided is purely consultative.

The advisory bodies noted below are composed of voluntary members (often the same because of the country size) and external experts.

- Higher Council of Health (*Conseil Supérieur d'Hygiène*)
- National Ethics Commission (*Commission Nationale d'Ethique*)
- Committee for AIDS Watch (*Comité de surveillance du sida*)

- Consultative Commission for Laboratories (*Commission consultative des laboratoires*)

51.6 Research

The Ministry of Culture, Higher Education and Research (*Ministère de la Culture, de l'Enseignement Supérieur et de la Recherche*) is in charge of research matters. However, other ministries conduct research within their own research institutions.

- National Research Fund (*Fonds National de la Recherche*)
- Committee for Ethics in Research (*Comité d'Ethique de la Recherche*)
- National Consultative Commission for Ethics in Life and Health Sciences (*Commission Consultative Nationale d'Ethique pour les Sciences de la Vie et de la Santé*)

52 References

Comité de surveillance du sida, *Rapport d'activité 2001*, 60 p.

Ministère de la Santé, *Rapport d'activité 2000*, 150 p.

Database Report

53 Advisory Bodies Covered in the Database

Name of body	Policy areas covered	Who advised	Full/basic coverage	Nature of body	Type A or B
Committee of AIDS Watch	Health	Legislature, Ministry	Basic		
Higher Council of Health	Health	Ministry	Basic		

Given the limited information collected on Luxembourg it is not possible to comment further

Netherlands

General Overview

54 General Background

54.1 The Constitutional Context

In the Netherlands, policymaking takes place within a number of constitutional rules and institutions. In constitutional terms, the differences between the Netherlands and the surrounding European countries are few: all are Parliamentary democracies. The citizens elect their members of Parliament (the Lower House). A Government is formed on the basis of the election result, generally by a coalition of parties with a joint majority. The remaining parties form the opposition. In the Netherlands, members of Government are not members of Parliament (dualist system)⁵², as opposed to the United Kingdom where ministers are normally members of Parliament (monistic system). The main tasks of the Lower House consist in monitoring the Government and (participating in) the legislative process. The Government is responsible for developing and implementing policy.

The Upper and Lower Houses are normally deemed to be a part of the High Councils of State. Alongside the two Houses, the Council of State (RvS) and the General Auditor's Office make up two further High Councils of State. The Council of State is the highest ranking political advisory board to the Government and responsible for making recommendations on legislative and administrative procedure to Government and Parliament. The RvS makes recommendations on any laws submitted by the Government to Parliament. The General Auditor's Office monitors the legitimacy and appropriateness of central government expenditure, and is accountable to the Lower House, which in turn can hold ministers responsible. Over recent years, that brief has expanded. Apart from financial control, the General Auditor's Office is increasingly turning its attention to policy evaluation.

A number of statutory administrative boards are in place alongside the Councils of State. They include the so-called permanent advisory boards that make recommendations to the various ministries. The permanent advisory boards are more fully explained in the following chapter. Figure 1 gives an overview of the advisory bodies that are involved in advising Dutch Government. The most important bodies for the Dutch situation will be studied.

Apart from the various administrative boards at State level, the relationship with decentralized governments is important in terms of the political decision-making process. The Netherlands is a decentralized nation state in which policymaking takes place at different levels: local councils, the provinces, district water boards and the State itself. Water boards have a particular function in the Dutch system of government. The degree of autonomy at 'lower' policy levels is less than in other European countries. By comparison with the State, lower administrative entities have limited powers to levy tax. They frequently implement

⁵² Dualism has also entered local politics in the local council elections: Aldermen are no longer members of the local council.

state policy. The province, for example, is often a 'go-between' or a 'serving-hatch' between local councils and the state, whereas other federal European countries, such as the German 'Länder' states have more autonomy.

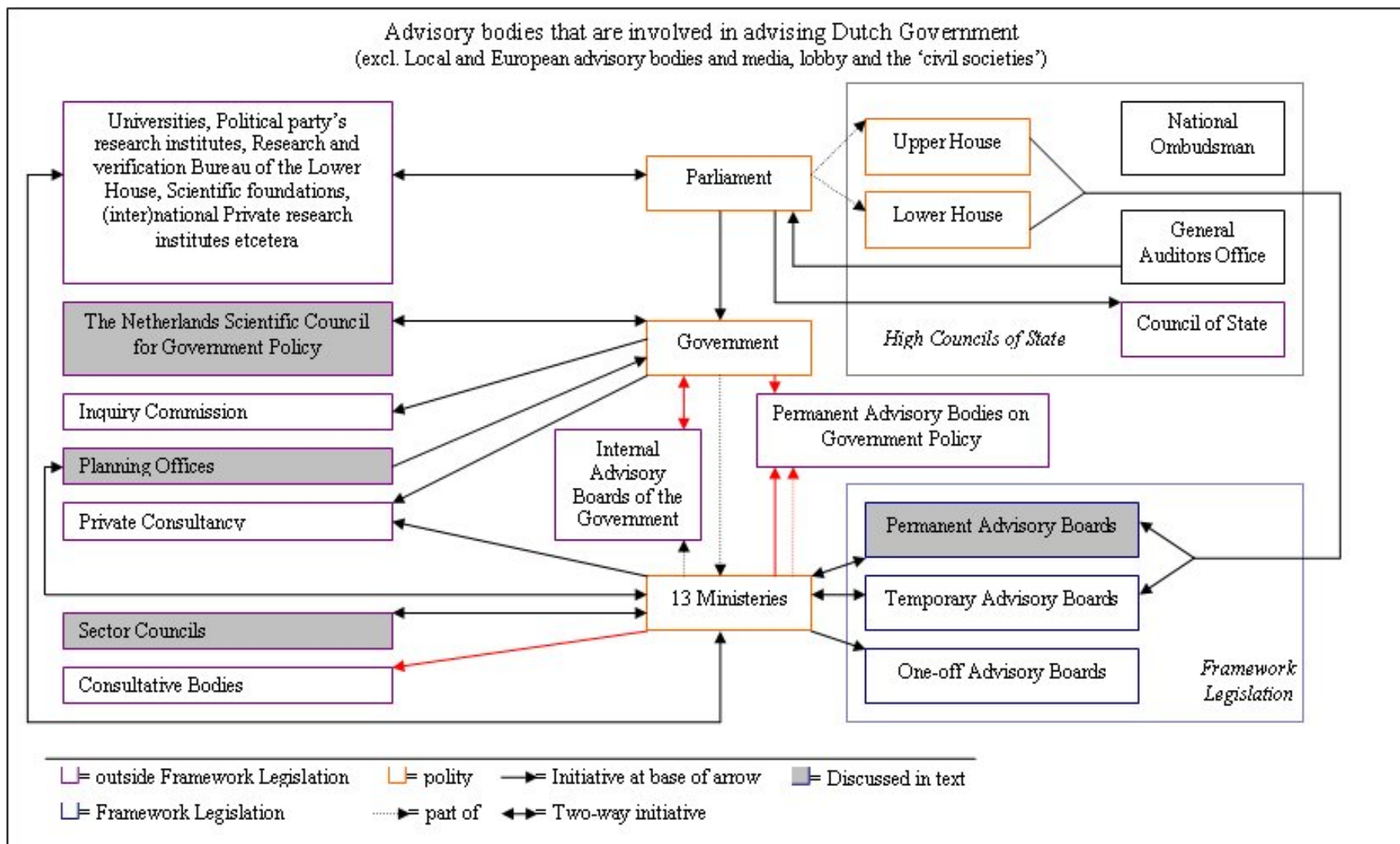


Figure 1: Advisory structure

54.2 *The Policy Arena*

This 'formal' perspective on the institutions that exercise influence on policymaking is only one side of the coin. Alongside these constitutional bodies, an assortment of establishments and groupings inside and outside the government (attempt to) impact on the policymaking process. The term 'Policy Arena' would imply as much. In this policy arena, the Dutch governing culture is characterized by an emphasis on negotiations and consensus between those who have a vested interest in policymaking (often referred to as the 'Polder' model). The social centrefield, a collective name for the various pressure groups of the Netherlands, has a major part to play in this context (trades union associations, employer associations etc.)⁵³. The so-called 'Polder' model by which the State, employers and employees reach a consensus by consultation on socio-economic policy, is well known in the international dimension. It must be stated in this connection that the model has been increasingly criticized in recent years. Cumbersome decisionmaking, blurring of responsibilities, undermining of political primacy and problems of policy management are increasingly seen as major flaws.

The Dutch consultation and consensus model means that reasoning and information play an important role in the decision-making process. It follows therefore that research and consultancy establishments also have an influential part in providing information and making scientific recommendations to the State (Government, Parliament and ministries), the social centrefield and other bodies. That goes for both non-profit and profit-making research and advisory bodies. Such agencies are drawn into the policy-making process by way of their research activities and recommendations.

There is a considerable lack of clarity, also on the part of the state itself, regarding the influence exercised by research establishments on policy and the nature and extent of contracting such research and recommendations. Some quarters even refer to a sixth force, alluding to the various research establishments that make recommendation to the State (after the fourth force - officialdom, and the fifth force - the media). Estimated costs range from tens of millions to many billions of guilders per annum. The considerable variety of advisory boards and organizational consultants further contributes to the lack of clarity. The coalition agreement specifies that departments must economize on external consultants, but replies to respective questions in the House(s) appear to indicate that expenditure to third parties has been on the increase over recent years. That is attributable, inter alia, to the fact that the authorities have made substantial economies over the past decade which resulted in expertise being lost and therefore having to be contracted in on a temporary basis.

In addition to the lack of clarity regarding the extent of outsourcing advisory services, little is known about the topics on which recommendations are requested, and the impact of such advice on policy. As a result, little is known about the actual force that is brought to bear by research and advisory bodies.

⁵³ Deth, J. van, J.J. Vis, *Regeren in Nederland. Het politieke en bestuurlijke bestel in vergelijkend perspectief* [Governing the Netherlands. A comparative perspective on the political and administrative system], Assen, Van Gorcum, 1995, pp. 99-100.

54.3 Conclusion

The above provides a brief sketch of both the formal and informal policy framework. In formal terms, it is the task of advisory boards to make scientifically based recommendations to Government and Parliament. That aspect will be treated in more detail in chapter three. In addition to the formal structure, it is important to also look at the context in which policy is actually implemented. Pressure groups, citizens, the media and other bodies and establishments all have a bearing on policy. Scientifically based recommendations can provide the various groups with a source of information on how to influence policymaking. Research establishments furthermore have a direct impact on policy development by making recommendations to Government as external advisory bodies. The extent to which such parties exercise influence on policy is hardly transparent and furthermore constantly gives rise to political disagreement.

55 Policy Areas

This section deals more closely with the engagement of the various ministries in the policy areas under discussion, i.e. agriculture, fisheries, energy, transport, environment, health and the consumer, and research.

55.1 General

In order to get an idea of the various advisory bodies working in these areas it is important to know which ministries are engaged in these policy areas. The table below provides a schematic overview of the ministries engaged in the various policy areas.

Policy Area	Ministries
Agriculture	Ministry of Agriculture, Nature Management and Fisheries (LNV)
Fisheries	Ministry of Agriculture, Nature Management and Fisheries (LNV) Ministry Transport, Public Works and Water Management (V&W)
Energy	Ministry of Economic Affairs (EZ) Ministry of Transport, Public Works and Water Management (V&W) Ministry of Housing, Spatial Planning and the Environment (VROM)
Transport	Ministry of Transport, Public Works and Water (V&W)
Environment	Ministry of Housing, Spatial Planning and the Environment (VROM) Ministry of Agriculture, Nature Management and Fisheries (LNV) Ministry of Transport, Public Works and Water Management (V&W)
Health and the Consumer	Ministry of Health, Welfare and Sport (VWS) Ministry of Agriculture, Nature Management and Fisheries (LNV) Ministry of Economic Affairs (EZ)
Research	Ministry of Economic Affairs (EZ) Ministry of Education, Culture and Science (OC&W)

The policy to be implemented by a ministry during its period of office is to a large extent defined by the coalition agreement and policy documents submitted by ministers to the Lower House at regular intervals. Policy documents are debated in Parliament. The ministries fulfil two major tasks within the policy process. They engage in the preparation as well as the implementation of a policy. Formally, policy is laid down by the Lower House.

Preparatory policy work may be initiated by a number of activities. New issues arise on a regular basis on the social and policy agenda. The process moves along various formal and informal channels, such as initiatives announced in the coalition agreement and policy documents, a direct order issued by the minister to his officials as a result of questions addressed in the House to the minister, an issue of topical interest, by an official who

recognizes the importance of a particular topic, on the initiative of an advisory board member or by a lobbyist group. During the set period of policy preparation, scientific research and recommendations may be sought and advantage taken of the influence and input of social groups. The extent of any influence being brought to bear by advisory board members and interest groups varies from department to department. That is not to say that such influence is the same in the case of each ministry and that such opinions and recommendations are used to the same degree. The question as to whether or not scientific recommendations are taken up or disappear in the bottom drawer of someone's desk is influenced by a number of factors. Then there are certain policy matters which fall into the responsibility area of more than one ministry, meaning that such a policy must be jointly developed on an interdepartmental basis.

Formally, policy implementation is the Minister's responsibility. In practice, implementation is undertaken by an executive committee. As an example, the State Department for Cattle and Meat Inspection (RVV), acting on behalf of the Ministry of Agriculture, Nature Management and Fisheries, is responsible within the Netherlands to ensure that production and sale of animals and animal products take place in compliance with the regulations regarding animal health, public health and animal welfare. In this context, the RVV also takes care of disease control in animals. It does so in compliance with policy, translated into a regulatory system.

55.1.1 Agriculture

In the Netherlands, agricultural policy is the remit of the Ministry of Agriculture, Nature Management and Fisheries (LNV). It is important to note that this body comprises nine Central policy directorates. Agriculture has its own Central policy directorate, the Agriculture Directorate. The LNV is among the largest of the Dutch ministries. It is worth mentioning that this ministry has its 'own' schools and takes responsibility for the training they provide.

55.1.2 Fisheries

In the same way as any issues in the area of agriculture, the fisheries policy area also falls into the remit of the Ministry of Agriculture, Nature Management and Fisheries. The Fisheries Directorate forms one of the nine central policy directorates and its central objective is the promotion of responsible fishing practice and balanced exploitation of fish stocks, weighing the fisheries' interests against those of nature.

Water management and water-related construction falls within the remit of the Ministry of Transport and Water Management (V&W). The V&W is sub-divided into six departments, with 'water' being the responsibility of the Directorate-General of Public Works and Water Management (RWS). In view of the fact that several ministries have a vested interest in the subject of fisheries, this is an instance of interdepartmental policy consideration.

It must be noted that as far as the Ministry of Agriculture, Nature Management and Fisheries is concerned, discussions have taken place on several occasions at times of cabinet formation on whether or not a separate ministry might be appropriate in these policy areas. It has been argued that agriculture and fisheries can be seen as a normal economic sector and therefore, like any other sectors of the economy, fall under the remit of the Ministry of Economic Affairs. In this light, nature management belongs in the remit of the Ministry of Housing, Spatial Planning and the Environment.

55.1.3 Energy

The energy policy area is a matter of interdepartmental consideration between three different ministries.

In the Netherlands, energy policy is the responsibility of the Ministry of Economic Affairs. The Directorate-General (DG) for Market Regulation and Energy is one of four DGs within the Ministry of Economic Affairs, which is concerned in particular with energy sector marketing and the effects of privatization of and on behalf of the energy sector.

In addition, the Ministry of Housing, Spatial Planning and the Environment deals in the main with the opportunities offered by sustainable energy, such as wind energy and biomass energy. In this context, possible subsidies for insulation and energy savings are also an important topic for the Ministry of Housing, Spatial Planning and the Environment.

Finally, the Ministry of Transport and Water Management addresses various opportunities for utilizing sustainable energy in transport (such as electrically driven cars).

55.1.4 Transport

The Ministry of Transport and Water Management is concerned with the management of transport in the Netherlands, including public and goods transport by air, road, rail and waterways.

55.1.5 Environment

The issue of environmental protection forms an important policy component for various ministries. The Ministry of Housing, Spatial Planning and the Environment, in particular, is concerned with any issues regarding spatial provision. Within this Ministry, the environment is the responsibility of the Environmental Management Directorate.

Apart from the Ministry of Housing, Spatial Planning and the Environment (VROM), the Ministry of Agriculture, Nature Management and Fisheries also plays an important part in respect of the development and management of nature in the Netherlands. In view of the fact that the agricultural sector accounts for a substantial part of spatial provision in the Netherlands (two thirds of the Netherlands is given over to agriculture), there are moves towards pooling the values generated by both the economy and natural landscapes.

In addition, the Ministry of Transport and Waterways has responsibility for water management and water quality.

55.1.6 Health and the Consumer

Health is primarily the responsibility of the Ministry of Health, Welfare and Sport. The Ministry is in charge of issues concerning healthcare and food safety although competency for the latter policy area has been the subject of intense discussion between the Ministry of Agriculture, Nature Management and Fisheries and the Ministry of Health, Welfare and Sport, VWS. The outcome of that debate is that food safety inspection (policy implementation) has been placed under the National Food Safety Authority. That body is accountable to the VWS.

In the Netherlands, consumer policy is a topic that has certainly been enjoying greater attention over recent years. In this respect, the Ministry of Economic Affairs performs an important function.

55.1.7 Research

In the same way as environmental policy, research is a subject matter in which practically every ministry has an interest. Each ministry has a budget for research into its relevant policy areas. Nevertheless two ministries must be named for holding a special position in terms of their research activities.

First of all, the Ministry of Economic Affairs is responsible for creating a climate for innovation to promote economic developments. That is the task of the Innovation Directorate. In addition, the Ministry of Education, Culture and Science is engaged in stimulating scientific research in the Netherlands. Among other incentives, a science budget is made available in this connection.

56 Scientific Advice

As outlined in the above, the Netherlands is characterized by a strongly consultative culture. Numerous pressure groups led to a complex advisory system in the 1970s. In the 1990s, demand for a more transparent structure was translated into the so-called Framework Legislation to lay down which scientific advisory boards were to be legally approved to make recommendations to the various ministries. This chapter⁵⁴, successively discusses the basis for setting up the Framework Legislation (sub 3.1), the historic background of the Framework Legislation (sub 3.2), and the significance (3.3) and effects of the Framework Legislation (3.4).

56.1 Basis and Objective of the Framework Legislation

The review of the advisory system can be seen as a process of public, administrative and constitutional renewal that began in 1990. The Framework Legislation was the result of that review. The review was based on three objectives, which are discussed below.

Firstly, in the mid 1990s it was considered desirable to tighten and standardize the advisory system due to the fact that the number of advisory boards of the Netherlands had seen consistent growth since the 1960s. The increasing complexity of social problems, greater state

⁵⁴ This chapter is partly based on 'De staat van advies' (Ministry of the Interior and Kingdom Relations, 2002)

intervention, the growing diversity of advisory bodies and the need for policy making by joint deliberation with pressure groups had been contributory factors in this development. Consequently, in the 1980s the set-up of advisory boards was far from coherent and threatening to grow out of control.

Administrative economies were achieved by reducing the number of recommendations and abolishing compulsory recommendations. The objective was to reduce the number of advisory bodies and to accelerate the pace of legislative procedures and policy processes.

Another objective of the Framework Legislation was to restore political primacy. In view of the fact that prior to 1997 consideration had been given to merging consultation with deliberation procedures, an influential network of civil servants, pressure groups and relevant specialists had emerged within the advisory system. That resulted in a non-transparent exchange of interests and viewpoints at the expense of independent consultancy. When receiving recommendations, Ministers and Parliament were therefore to a considerable extent faced with pre-negotiated compromises that left them very little room for amendment. The review of the advisory system was therefore aimed at splitting advisory from consultative procedures by relieving the many advisory bodies who also had a deliberating function of their task; at the same time, members of the new advisory boards would be appointed by virtue of their scientific qualification and their social insight and experience. A board's political balance is not a determining factor.

Thirdly, before 1997 there had been growing dissatisfaction among politicians regarding the quality and usefulness of recommendations provided by external advisory bodies and the speed with which they were submitted. For that reason, the review of the advisory system endeavoured to improve the political approach.

To increase their efficiency, the number of advisory boards, their membership and the size of their secretariats was to be considerably reduced. The approach was further improved by making it compulsory for boards to draw up an annual work schedule, a budget clause, annual reporting and statutory evaluation. Parliament was given the opportunity of directly seeking advice from any of the advisory boards.

Finally, the Framework Legislation enables advisory boards to make recommendations to any Minister on their own initiative, based on the idea of supporting political bodies in exploring new avenues, particularly where social changes are taking place which Ministers and Parliament are not adequately equipped to handle.

The Framework Legislation aims to promote problem-solving measures by enabling various advisory boards jointly to make recommendations. Indeed, they are obliged to do so if accordingly commissioned.

56.2 Historic Background of the Framework Legislation

The origins of today's Framework Legislation go back a long way. An amendment in 1922 to the Constitutional Law prescribed that permanent advisory and supporting boards be appointed by law. The Constitutional Law review in 1983 clarified that permanent advisory boards were envisaged in matters of legislation and national policy. The Constitutional Law of 1922 already provided for setting up an organic law with generally applicable rules for the commissioning, appointing, convening, working procedures and competencies of advisory

boards. It took until 3 July, 1996, for such a law to come into effect in the Framework Legislation for Advisory Boards. The Framework Legislation was the final stage of the review procedure. It brought to conclusion some twenty years of public, administrative and political debate on the renewal of the advisory system. The Framework Legislation became effective on 1 January, 1997.

56.3 Significance of the Framework Legislation

The Framework Legislation covers recommendations at national level made by legally appointed advisory boards in respect of policy or general regulations. The significant factor is that it concerns external recommendations made to the State regarding policy and general regulations. It is a characteristic of the various advisory boards that they are appointed by law or royal order.

The Framework Legislation covers three types of advisory boards:

1. Permanent advisory boards;
2. Temporary advisory boards;
3. One-off advisory boards.

56.3.1 Permanent Advisory Boards

The basis for the structure of the boards is the fact that advisory boards are working in the same policy area as a specific ministry. With the exception of the Ministries of Finance and Defence, each ministry can call on up to three permanent advisory boards. There are 23 permanent advisory boards in total.

Differentiation is made in the structure of the boards between advisory boards aimed at broadly strategic recommendations (the so-called strategic advisory boards) and the technical specialist advisory boards that are concerned with a more closely defined area of policy. Strategic advisory boards can be categorized as broadly-based advisory boards aimed at working out strategic recommendations. Their task is to make recommendations to the Government and the Upper and Lower House(s) in respect of short and medium term policy outlines.

In the initial stages of the debate over the new advisory system no provision had been made to retain ten advisory boards with a 'narrow' specialist remit. They were, however, retained because they combined specialist knowledge that would have otherwise to have been bought in at great expense by the Ministries. The task of these technical specialist advisory boards is to inform the Government and both Houses on certain technical, specialised issues.

56.3.2 Temporary Advisory Boards

For recommendations on a temporary or topical issue a temporary advisory board may be appointed for a maximum period of four years, with a possible two-year extension.

56.3.3 One-Off Advisory Boards

Special rules apply to the appointment of ad-hoc boards. Such advisory boards are commissioned on a one-off basis with an advisory task, and subsequently relieved of their advisory duty once their recommendations have been put forward. The House must be notified of the appointment of a one-off advisory board, and members of a one-off advisory board appointed and dismissed by the Minister. As opposed to temporary and permanent advisory bodies, a one-off advisory board only makes recommendations to the Minister, and must not make recommendations to the Upper or Lower House(s) on its own initiative.

In order to forestall a disproportionate proliferation in one-off advisory boards, specific stipulations have been drawn up regarding the appointment of such advisory boards⁵⁵.

56.3.4 Advisory Activities Outside the Framework Legislation

Alongside of advisory boards appointed under the Framework Legislation, there is a range of other bodies who make recommendations to the Government and whose activities are outside the Framework Legislation. In the following are listed the most important advisory boards who are working outside the Framework Legislation.

Firstly, the Framework Legislation is not applicable to the Government's internal (official) advisory boards, such as those that consist for more than one half of civil servants employed by the Ministry or one of its subordinate institutions.

Furthermore, the regulations of the Framework Legislation apply to a limited extent to those advisory boards, whose advisory responsibility to the authority is not their main task. That applies, for example, to the four sector councils for research and development, and also to planning offices and private consultancies.

It remains unclear whether or not the abolishment of a number of advisory boards has led to an increase in sub-contracted private consultancies or other research establishments.

56.4 Effects of the Framework Legislation

The Ministry of the Interior and Kingdom Relations is under obligation to evaluate the effectiveness of the Framework Legislation at four-yearly intervals. The first evaluation following the Framework Legislation coming into effect in 1997 covers the 1997-2000 period. That evaluation is discussed below, based on the three earlier stated objectives of the Framework Legislation.

⁵⁵The appointment of a temporary or one-off advisory board is subject, for example, to justification being given for the appointment of that board. Arguments must be brought why independent recommendations are considered necessary and why an existing advisory board cannot be commissioned to undertake the advisory task. It is furthermore a requirement to have the order for the advisory board's appointment co-signed by the Ministry of the Interior and Kingdom Relations alongside the issuing ministry's signature.

56.4.1 Simplification and Transparency

Firstly, the objective of the Framework Legislation was to simplify the advisory system and make it transparent.

Based on the fact that fewer external advisory boards were appointed during the years 1997-2000 than over the previous period, a tightening of the advisory system seems to have been largely achieved. In the years 1997-2000, 23 permanent advisory bodies, 9 temporary and 38 one-off boards were appointed (in 1995 there were as many as 113 external advisory boards). Furthermore, the boards remained within the membership parameters of the Framework Legislation with a maximum of 15 members, and in most cases, no specific commissions are set up by the advisory boards.

On the other hand, it would appear that temporary advisory boards have the tendency to become permanent, and in particular, the number of appointments of one-off advisory boards has increased. Permanent advisory boards do sometimes view the appointment of temporary and one-off advisory boards as an encroachment on their function. The reasons for deciding in favour of one-off or temporary boards vary. Apart from speedier recommendations in a specific subject matter, inadequate specialist knowledge on the part of permanent advisory boards does play a part. The determination of an annual schedule by the permanent advisory boards does in actual practice appear to hinder a speedy response to topical issues. Furthermore, a temporary or one-off advisory board is set up for political reasons, such as a motion brought by the Lower House, for example.

56.4.2 The Separation of Recommendation and Deliberation

In general, it can be said that the deliberating function has not been wholly taken out of advisory activities, but its significance has been somewhat reduced. Most members are appointed on the basis of their expertise and experience; furthermore, officials who are working in the same field as an advisory board no longer sit on that board. Board members often come from a small network of well-known policy makers, academics and politicians. It must be added that there is evidence of an increasing tendency to have political leanings reflected on the board.

56.4.3 The Political Approach in Practice

First of all, the tactical approach by means of work schedules and annual reports appears to be limited. In particular, vast discrepancies appear to exist in the work schedules of the boards. Some of them confine themselves to a summary report while others draw up an extensive work schedule for the year ahead.

It would appear from the evaluation that the impact of recommendations is limited, particularly where strategic advisory boards are concerned, despite the fact that the ministries in the main respond positively in terms of the content of such recommendations. The following constitute some of the causes: Where recommendations had been invited, co-operation and communication between the ministry and the strategic advisory boards were frequently laborious and the recommendations not appropriately co-ordinated with the overall policy process. Theoretically speaking, the Framework Legislation continues along the lines

of existing procedures, such as the budget and policy cycle, whereas in actual practice it does not always seem to work out in that way. The scheduling of recommendations is inadequately co-ordinated with the work of the ministries, and ministries are not fully aware of strategic recommendations being available from the boards for implementation in strategic policy development.

To a lesser extent that also applies to the technical specialist boards, which are called on in the main to advise on a concrete and topical issue at the time it is required by the ministry. In this context, the impact of the recommendations is quite noticeable.

Finally, it would appear from the evaluation that the opportunity of joint recommendations is not fully taken up. Furthermore, the boards seem to only occasionally put forward recommendations on their own initiative. The reasons given are that the activities of the organizations have to be fully co-ordinated with the ministries' wishes, and that consultation moreover takes place between the respective ministry and the advisory board regarding the work schedule to be drawn up.

Database Report

57 Advisory Bodies covered in database

Name of body	Policy areas covered	Who advised	coverage	Nature of body	Type	Framework Legislation
Advisory Council for Science and Technology Policy	Research	- Head of Government - Ministry	Full	Statutory Permanent	A	Y
General energy Council (AER)	Energy	- Head of Government -Legislator - Ministry	Full	Statutory Permanent	B	Y
Commissions for exotic flora and fauna	n/a	n/a	n/a	n/a	n/a	Y
The Health Council of the Netherlands (Gezondheidsraad)	Environment Health	- Head of Government -Legislator - Ministry	Full	Statutory Permanent	A	Y
The advisory Council for the Rural Areas (RLG)	Agriculture Environment Research Energy Fisheries	-Ministry -Other	Full	Statutory Fixed-term	B	Y
Dutch Advisory Council for Transport, Public Works and Water Management (RVW)	Transport Environment	-Legislator - Ministry	Full	Statutory Permanent	B	Y
Council for Public Health and Health Care	Health	-Legislator - Ministry	Basic	Statutory Permanent		Y
Rathenau Institute	Agriculture Transport Environment Research Health Energy	Legislator	Full	Statutory Fixed-term	B	N
The Council for Housing, Spatial Planning and the Environment (VROMraad)	Environment	- Head of Government -Legislator - Ministry	Full	Statutory Permanent	B	Y
Netherlands Scientific Council for Government Policy	Agriculture Transport Environment Research	Head of Government	Full	Statutory Fixed-term	A	N

	Health Energy					
Environmental Planning Agency	Agriculture Transport Environment Health Energy	-Ministry -Agency -Other -Advisory body -Other	Full	Statutory Permanent	B	N
the Council for Research on Spatial Planning, Nature and Environment	Agriculture Transport Environment Research Health Energy Fisheries	- Head of Government - Ministry -Other	Full	Statutory Fixed- term	B	N

57.1 General trends

The Netherlands is characterized by a strongly consultative culture. Numerous pressure groups led to a complex advisory system in the 1970s. In the 1990s, demand for a more transparent structure was translated into the so-called Framework Legislation to lay down which scientific advisory boards were to be legally approved to make recommendations to the various ministries.

The Framework Legislation covers recommendations at national level made by legally appointed advisory boards in respect of policy or general regulations. The significant factor is that it concerns external recommendations made to the State regarding policy and general regulations. It is a characteristic of the various advisory boards that they are appointed by law or royal order.

Alongside of advisory boards appointed under the Framework Legislation, there is a range of other bodies who make recommendations to the Government and whose activities are outside the Framework Legislation.

Therefore, besides type A and B bodies, for the Dutch situation there could also be made a distinction between Framework Legislation bodies and bodies outside the Framework. However, bodies within and outside the Framework have a lot of similarities. Whenever, significant differences will be explicitly stated.

57.2 Structural issues

57.2.1 Secretariat

All advisory bodies (both type A and B) have a secretariat. The secretariats are not only used for typical secretariat work. One type B body does not use the secretariat for 'background work', but this body has a total staff of 300! This body is not part of the framework Legislation. The type B bodies that use the secretariat for background work and two of the three type A bodies, use the secretariat for this kind of work quite often.

57.2.2 Membership

Most bodies number between about 10 to 20 members. The two exceptions and biggest bodies constitute out of 212 (type A) and 300 (type B) members (only the latter being not part of the Framework Legislation. Of the total number of members of all the bodies reviewed for this study, only 21 were woman (3.4%).

All but one type B bodies have members that have backgrounds in ‘natural and physical sciences’ and in ‘social science and humanitas’. Two other common backgrounds are ‘industry representatives’ and ‘other’.

All members of the Dutch type A bodies are appointed and for one type A body advertisements/open applications are used as well. Of the type B bodies four use appointment, three an advertisement/open application and one type B body uses an other approach.

One member of a type B⁵⁶ body works abroad. Members of one type A and one type B are also a member of another advisory body. Probably this is the same person.

57.2.3 Budgets

The annual budgets of the bodies vary from €1.500.000 to €5.300.000 for type A bodies and €550.000 to €2.200.000 with one exception of €32.800.000 for a type B bodies. However, this is the biggest body (300 members) of the Dutch bodies and is not part of the Framework Legislation. Most of the bodies have the flexibility to increase these funds if the needs arise (one type A and two type B bodies do not have this flexibility).

For what purposes these budgets are exactly used is not entirely known because not all respondents answered this question. However a general indication is that most bodies ‘pay members part-time’ and ‘reimburse their expenses’. Some bodies (also) ‘employ members full time’. ‘Commissioned research’ is also often paid out of the budget and some ‘other’ expenses that are made.

The annual costs for the secretariats vary from € 300.000 to € 5.300.000. However these are absolute values. Normalised for the number of people working in the secretariat, the cheapest secretariat costs € 33.333 (per person per year) and the most expensive one € 116.667. These budgets are spent on ‘normal secretariat work’ and ‘background work’. One type B body indicated that € 170.000 of the total budget for the secretariat of € 300.000 is spent on ‘short track studies’ (i.c. background work).

Most people questioned did not say who paid for the secretariat. In two cases (both type B) a ministry provided the secretariat. As far as known the secretariats are paid out of the total budget of the bodies.

⁵⁶ Or more members of the same body.

57.3 Functional Issues

57.3.1 Scope of work

One of the type A bodies has an open scope while the other two are focused. Type B bodies are either broad or focused, so they have one or more areas of interest. Within the areas of interest all but one body can select their own subject. One type B body is purely reactive. There seems to be no relation between specific backgrounds and focus, because almost all bodies tend to have members with a background in social and natural sciences.

Major activities of the bodies are mostly ‘research performance’, ‘research funding’ and ‘update review on state of the art’. One type B body’s only major activity is ‘raising public awareness’ whilst another type B body major activities are ‘ethical review’ and ‘raising public awareness’. One type B body (the biggest) also performs all other activities, although most of these are minor activities (major activities being ‘raising public awareness’ and ‘other’).

57.3.2 Independence

All members of the Dutch type A bodies are appointed and for one type A body advertisements/open applications are used as well. Of the type B bodies four use appointment, three an advertisement/open application and one type B body uses an other approach.

One of the type A bodies has an open scope while the other two are focused. Type B bodies are either broad or focused, so they have one or more areas of interest. Within the areas of interest all but one body can select their own subject. One type B body is purely reactive. There seems to be no relation between specific backgrounds and focus, because almost all bodies tend to have members with a background in social and natural sciences.

All Dutch bodies present their advice in final form to policy-makers and 5 type B bodies also have a dialogue with policy-makers. Besides this all bodies disseminate the advise through ‘the media’ and ‘information leaflets/publications’. Most of them also use ‘academic journals’ and/or ‘websites’.

57.3.3 Transparency

Except for two type A bodies all bodies have a ‘code of practice’. However, it’s not quiet clear that all the respondents have the same understanding of a code of practice. Some bodies consider the Framework Legislation as a code of conduct. An addition to the Framework Legislation, according to some respondents, is the law that installs the body. Several respondents refer to the (in)formal organisation of their all-day organisation and the order of activities in developing and working on advice.

Some bodies do not fall under the Framework act, so the above mentioned does not comply to these bodies. One (type A) of these four bodies does not have a code of practice.

Two type B bodies outside the Framework Legislation do have a code of practice. One describes it as follows: ‘In its choice of methods, the [body] pays particular attention to the specific political context. A project consists of a number of stages. In the design stage, the projects are demarcated and defined, and an analysis is made of which methods are most

suitable. This stage ends with the approval of the project plan by the management and Board of the [body]. The design stage frequently involves a preliminary study or an expert workshop to decide which subjects should be central to the project in question.

The chosen approach is implemented during the realisation stage. External parties are normally brought in to carry out the various activities, such as university researchers, scientific journalists and consultancy firms. A steering commission, made up of experts and representatives of various interest groups, is usually set up to provide advice on the projects. Finally, the project results are compiled and communicated by means of publications, workshops and/or conferences.’

The description of the second body is almost similar to the Framework act: ‘The Council can give advice at the request of its founding ministers on particular subjects, but also on its own initiative, considering the developments in society and science, creating a sense of urgency for particular items of knowledge production, management and transformation.’

The biggest type B body is not part of the Framework Legislation, but does have an code of practice. It has installed a Supervisory Commission to keep an eye on the scientific level of the body.

Of the three type A bodies members of two have to ‘declare any potential conflicts of interest’. The members of one of these bodies have to keep their discussions confidential.

Only two of the type A bodies ‘declare any potential conflicts of interest’. And four of the type B bodies members have to keep the material used for the advice and their discussion confidential.

The ‘remit of the body’ is ‘published’ and ‘on the web’ for all type A bodies. For the four type B bodies that answered this question three have this information ‘available on request’ and one of these also ‘published’ this ‘on the web’.

All bodies ‘published’ and all but one have their ‘advice reports’ and ‘activity reports’ ‘on the web’. For two bodies they are also available on request.

Two type B bodies agendas are ‘confidential’, for all others they are ‘available on request’ one type B body has them ‘on the web’.

Half of the minutes are ‘confidential’ (one type A) and the other half are ‘available on request’.

57.3.4 Generation, delivery and responses to advice

One type A and B body have a ‘continuous operation’ while the others operate on ‘regular meetings’. Two of the type A bodies ‘delegate their work to other bodies/groups’. The other type A and most type B bodies ‘formulate subgroups’.

All bodies use ‘expertise held by members themselves, review of existing literature, national external expert consultation [and] international external expert consultation’ for their advice formulation. Except for one type B body these sources of information are used often.

‘Background work by secretariat’ is also very common. Other sources of information are dispersed over the bodies and used less frequently.

When the advice is finalised it is presented in ‘final form to policy-makers’ and most of the type B bodies have a ‘dialogue between advisory body and policy-makers’. For all advices there is a formal requirement for a policy response. One exception to this rule is a type B body that is not part of the Framework Legislation.

Before the advice is delivered the members of one type A body do not take a ‘common position’ (- full range of opinions communicated to those requesting advice). This is also true for one type B body, however this body also has the option for a ‘common position agreed through consensus’, just like all the other bodies.

57.3.5 Evaluation and impacts of advice

The bodies evaluate themselves and some do this in cooperation with ‘a sponsoring organisation’ and/or an ‘other’. One type B body outside the Framework Legislation only uses an ‘other’. Of the bodies that answered the question how the evaluation is available, one type A and B body answered ‘formally published’ one type A and three type B bodies make the evaluation ‘publicly available’ and one type B body does both.

All but one type A body indicate that their advice has had an (recent) impact. Some examples of these impacts are:

- Recommendation to renew the policy of technology within the area of traffic and transport. As a result the ministry is now setting up a new policy in this field (2001)
- The report Safeguarding the public interest (2001) had an impact on the discussion about privatisation.
- Recent advice on questions that were ignored until now in a research program on Flyland, an option for a new airport in the North Sea, had the effect that new questions were added to the research program.

The advice of the bodies is also used by other bodies, except for the advice of three type B bodies (of which one did not answer the question).

57.3.6 Changes in the advisory system

One type A and four type B bodies had ‘changes to scope / mission’, of which two type B bodies also had ‘institutional changes’. Another type B body had an ‘other change’.

However, the biggest and most radical change occurred in 1997 when the Framework Act was established. (For more information on the Framework Act see the paragraph 1.1).

Portugal

General Overview

58 Background

If we look at the past history of Portugal, it is possible to say that democracy is a recent achievement. Indeed, Portugal lived through an authoritarian period of 48 years, the longest in Europe, and it was one of the latest western European state to adopt a democratic system of government. The “Carnation Revolution” of 1974 brought an end to the regime of Oliveira Salazar and liberated aspirations for democratic values. Another important event, that strengthened Portugal’s integration with the world economy, was membership in the European Union since 1986.

The present Constitution, drafted after the revolution of 25 April 1974, dates from 1976. It established a mixed presidential, parliamentary system: the legislative power is shared between the government and the Assembly of the Republic (unicameral) which is composed of 230 deputies that are elected by universal, direct and secret vote of Portuguese citizens above the age of 18, according to the system of proportional representation. Since its adoption, the Constitution has been many times revised (1982, 1989, 1992, 1997 and 2001). Reforms of the Constitution are initiated by the deputies, who adopt them by a two-thirds majority of their number in the Assembly of the Republic.

Concerning the balancing of power between the different levels of government, we can say that the structure of government is quite centralised and it is based on the unity and indivisibility of the State, even if there have been, since 1995, attempts to transfer some responsibilities to local governments in areas such as pre-school care, social housing, public security, tax collection, and environmental matters. The national territory is divided in 18 districts (Aveiro, Beja, Braga, Bragança, Castelo Branco, Coimbra, Évora, Faro, Guarda, Leiria, Lisboa, Portalegre, Porto, Santarém, Setúbal, Viana do Castelo, Vila Real and Viseu). The local authorities, which enjoy a certain financial autonomy, have responsibility for administering activities related to their own development and public services. The archipelagos of the Azores and Madeira constitute autonomous regions, endowed with political-administrative statutes and with their own Government bodies.

The head of the State is the President of the Republic, who is also the Supreme Commander of the Armed Forces. The President is elected by absolute majority (if necessary, after a second round) by direct, universal and secret suffrage of Portuguese citizens above the age of 18. His term of office is five years and he may not be re-elected for a third consecutive mandate. Among other powers, the President of the Republic nominates the Prime Minister, after hearing the parties represented in Parliament and taking into account the electoral results. He also officially appoints the members of the government on proposals of the Prime Minister.

The Council of State is a policy consultation body of the President of the Republic, who chairs it. The Council consists of former Presidents of the Republic, the Prime Minister, the President of the Assembly of the Republic, the President of the Constitutional Court, the Ombudsman, the presidents of the governments of the autonomous regions, five citizens appointed by the President of the Republic, and five citizens delegated by the Assembly of the

Republic. This Council gives its opinion in certain cases where the President must take important decisions and advises him when invited to do so. Sometimes, in exceptional circumstances (e. g. dissolution of Parliament), the opinion of the Council of State, albeit not binding on the President, must be published at the same time as the latter's decision. The council was originally a broadly consultative group with deep roots in Portuguese history. It was a kind of throwback to an earlier Portuguese concept of corporative, regional, or functional representation. However, it had no executive power and in recent times had been called into its advisory capacity only rarely. As a result, membership on it had come to be mainly honorary.

Legislative authority is shared between the Assembly of the Republic and the government. Certain areas are exclusively reserved for the Assembly: such matters are absolutely reserved and include elections, political parties, the State Budget, referenda, the basic structure of education and national defence. Other matters lie within the exclusive jurisdiction of the Assembly of the Republic, but the Government may legislate by means of a legislative authorization from the Assembly. Examples are rights, liberties and guarantees, definitions of crime and security measures, taxes and the fiscal system, agricultural and monetary policy, rural and urban rent law, jurisdiction of courts, information services. In other areas, the Assembly and the government have concurrent legislative authority. The organisation and workings of the Government are exclusively reserved to the legislative competence of the Government itself.

Much of the assembly's work is usually done in committees, both permanent and ad hoc. Committee membership reflects the assembly party makeup, and are usually not allowed to serve on more than two committees. The committees examine legislative proposals, most of which come from the government rather than from the assembly itself, after a first reading in the assembly. Appropriate witnesses and expert testimony can be called; for certain types of legislation, labour legislation for example, concerned parties have to be heard. Once a committee approves a bill, the bill is presented to the assembly to receive a second reading and a plenary vote.

The state's highest executive institution is the Council of Ministers, or cabinet. The council consists of the prime minister and of fifteen to eighteen cabinet ministers. Most ministers come from the parliament, but they are not required to do so. In coalition cabinets, the majority of ministers usually belongs to the coalition's largest party, that of the prime minister, and the remaining ministers come from other coalition parties. Once in the cabinet, a member of parliament has to relinquish, at least temporarily, his or her seat in that body.

The Council of Ministers has both administrative and policymaking functions, is responsible for national security and defence affairs, and is in charge of the day-to-day implementation of government policy. In addition, Portugal's cabinet has extensive legislative powers by virtue of its power to pass decree-laws within areas of its responsibility. It can also be granted the right by the Assembly of the Republic to pass legislation in areas of responsibility usually reserved to parliament, its "relatively reserved legislative powers". Because getting a bill through the assembly can be a slow process, the Council of Ministers has often made use of this right. The council is responsible both individually and collectively for its actions, first to the prime minister and ultimately to the parliament.

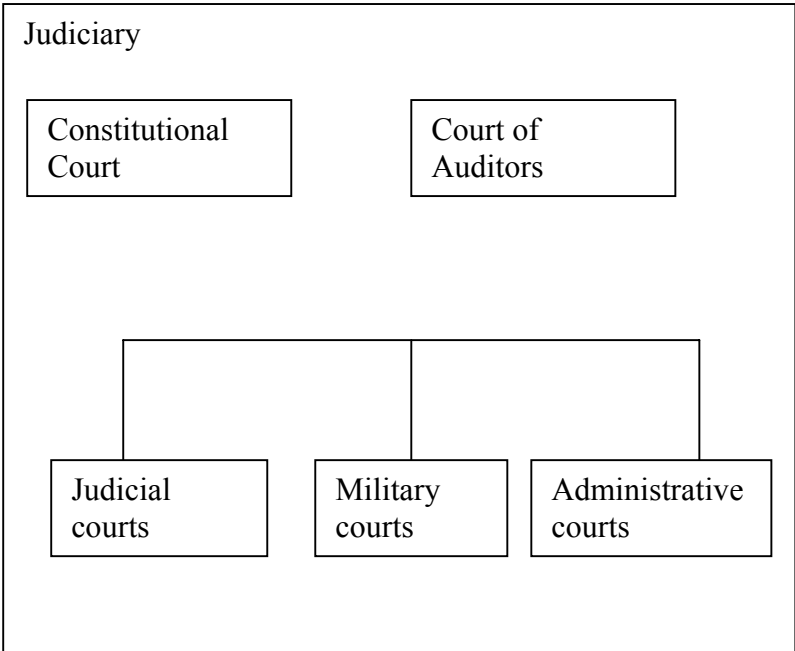
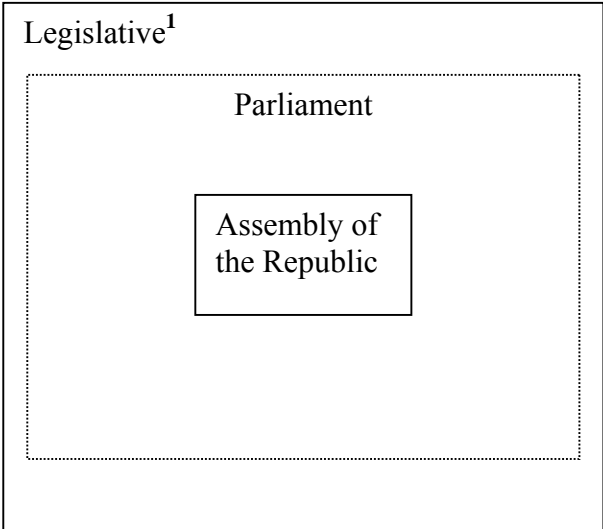
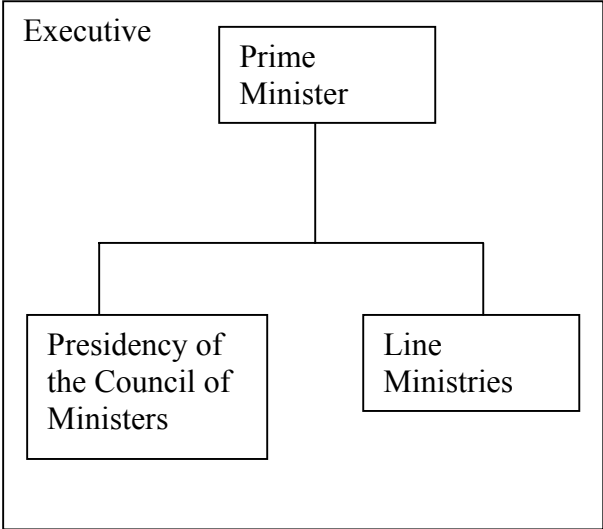
Ministers are assisted by politically appointed secretaries of state, who vacates their positions when their ministers leave the council. As allowed by Article 203 of the 1989 revised

constitution, a number of ministers sometimes meet together and form what the constitution terms “councils of specialised ministers” to work on matters of mutual concern. They can call on their secretaries of state and civil servants for assistance and can submit the results of their collaboration to the entire cabinet for review.

Additional bodies have been created to assist individual ministers on the council as a whole. In addition to advising ministers, these bodies meet with groups being affected by government decisions.

The Portuguese Political Systems: overview

President of the Republic



Autonomous regions with own legislative and administrative powers:
Azores and Madeira archipelagos

¹ Legislative authority is shared between the Assembly of the Republic and the government.

58.1 Policy areas

58.1.1 Agriculture

The Ministry of Agriculture, Rural Development and Fisheries (Ministério da Agricultura, Desenvolvimento Rural e Pescas – MADRP) draws up and carries out policies concerned with the farming, fishing, forestry and food sectors, and that have to do with rural development and the fishing industry. There are three Secretariats of State integrated in the Ministry: the Secretary of State for Rural Development, the Secretary of State for Agricultural Markets and Food Quality and the Secretary of State for Fisheries. Coming under the tutelage of the Ministry are also the Institute for Funding and Aid to Agricultural and Fisheries Development (IFADAP), and the Portuguese Institute for Agricultural Intervention and Guarantee (INGA) – this latter Institute coming under the joint leadership of the Ministry of Agriculture and the Ministry of Finance. A consultative body – the National Council of Agriculture, Rural Development and Fisheries (CNADRP) was set up to facilitate the talks and consultation going on among the various representatives of socio-economic and scientific interests in the agricultural sector.

The Ministry has seven Regional Directions and six central bodies working directly with the Ministry dedicated to planning, coordinating and follow-up. Among them, the Secretary-General may be singled out for the technical and administrative service it renders in the fields of human, financial, computerised and documentary resources and in public relations. Another important body is the Office for Planning and Agri-Food Policy (GPPAA), which helps to co-ordinate domestic and Community policies and handles the information back-up system that monitors and evaluates policies. The Portuguese Institute of Agricultural Research (Instituto Nacional de Investigação Agrária - INIA), is the national laboratory, under surveillance by the Ministry of Agriculture, which has the specific charge of conducting experimental and theoretical research aiming at the amelioration of agricultural production and at protecting the biological patrimony.

58.1.2 Fisheries

The Secretary of State for Fisheries is the structure of the Ministry of Agriculture, Rural Development and Fisheries which carries the specific responsibility for the drafting, implementation and evaluation of policies regarding the fishing industry and the proper utilizations of sea resources. The Fisheries and Merchant Navy School, operating under the surveillance of the Ministry, is the structure responsible for the training activities linked with the fishing sector. The Research Institutes for Fisheries and the Sea (IPIMAR) provides the scientific and biological foundations for fishing policies. Some of the duties of this Institute lie in protecting the bio-diversity and promoting the rational exploitation of sea-life. The IPIMAR is also in charge of research programs in different fields connected with fishing and aquiculture. Furthermore, the IPIMAR draws up projects to promote the good quality of fresh fish foodstuffs as well as efficient methods used in manufacturing. Among other studies, the IPIMAR has been recently working on a data base of all existing ocean resources and of the oceanographic conditions in which they live. This data base was elaborated by collecting data received by satellite.

58.1.3 Energy

The Ministry of Economy (Ministério da Economia – ME) is the governmental department responsible for the definition, execution and supervision of the government policies concerning the production of goods and services, the activities of firms, the commercial and touristy sector and the industry of energy. More specifically, the General Directorate of Energy (DGE), operating within the Ministry of Economy, is the body of the Portuguese Administration responsible for the conception, execution and evaluation of energy policy. The mission of the Directorate General includes, logically, the need to make citizens aware of the importance of the energy questions in terms of the country's aimed economic and social development. This is done through information on the available instruments to execute policy decisions and through dissemination of the results of the monitoring processes.

An important source of scientific advice in the energy field is the National Institute of Industrial Engineering and Technology (INETI). INETI is a Research, Demonstration and Technological Development organisation, integrated within the Ministry of the Economy. INETI's attributions form part of the Ministry of the Economy's overall economic and social development strategy and policy. INETI serves as an interface between Research and Development, technological integration activities and the business community. The activities of the Institute encompass three main areas: the direct Scientific and Technological support to the government policies, the financing and performing of Technological R&D (in particular via the Community Support Frameworks and the R&D Framework-Programmes), the supply of services to the business community. INETI also collaborates with the Ministry of Economy in the regulatory activity of metrology, standardisation and certification, and in the training of specialised experts.

A more specialised body of advice and support is the Technological and Nuclear Institute which provides scientific and technical support in the definition, implementation and monitoring of Portugal's nuclear policy, in the widest sense of that term. It promotes and carries out scientific research and technological development activities, in particular in fields related to the peaceful applications of nuclear energy; it provides scientific and technical support to the Government in the implementation of policies in the fields of nuclear safety, monitoring of radioactive drugs and nuclear metrology, and in areas involving radiation applications and radioisotopes; it organises and administers advanced training and other courses; it promotes professional training, updating, specialisation and development in co-operation with higher education institutions and other public and private bodies; it organises the transfer of technology to bodies in the public and private sectors.

58.1.4 Transport

The Ministry for Public Works, Housing and Communications (Ministério do Equipamento Social - MES) is the governmental department responsible for defining national transport strategies. It coordinates and implements projects relating to construction, housing, air, land, inland waters and sea transports and communications.

One of the main area of responsibility of the Ministry is linked to the development of the road infrastructure. Concerning this, the Ministry has in particular a special role in the promotion of research into new construction technologies which are more geared towards the protection of the environment and the preservation of the building heritage. The Ministry holds the responsibility also for the development of the national and international airports, for the strengthening of the railway system, for the completion of the suburban rail system of the Metropolitan Area of Lisbon and for the redesigning of the Greater Porto rail system of the Metropolitan Area of Porto.

The main technical consultation body of the Ministry is the Council for Construction and Transport which has the purpose to assist the Government in resolving problems relating to construction and transport. The Council is responsible for issuing technical and economic-financial rulings on projects that are submitted to it, particularly in the following fields: a) General plans, pre-projects, and state projects to be funded by the state or by state tender or subsidy, in addition to alterations or extensions to projects already approved; b) Plans for the development, transformation or restructuring of the railway network; c) Plans for repair, expansion and operation of ports; d) Management of construction projects; e) Granting of public transport franchises; f) Tariff systems for rail, road and port infrastructures; g) Legal or regulatory projects of a technical nature or relative to the transport sector.

Other technical and administrative support services of the Ministry are the General Administration, the Social Support Office, the Legal Audit Office, the General Inspectorate of Public works, Transport and Communications, the Studies and Planning Office, the European Affairs and External Relations, the Environmental Audit Office, the Directorate-General of National Buildings and Monuments and the Directorate-General of Land Transport. The Environmental Audit Office is responsible for support, consulting, co-ordination and supervision concerning the environmental impact of the initiatives undertaken within the scope of the Ministry.

The Directorate-General of Land Transport (DGTT) promotes the development of the road transport system and ensures its operation, so as to satisfy mobility and accessibility requirements with levels of efficiency and quality in accordance with the parameters of the policy defined for the sector. It is also responsible for ensuring the articulation and co-ordination of road transport with the other forms of transport and it collaborates in the definition of the global policy for the transport system.

58.1.5 Environment

The Ministry of Environment (Ministério do Ambiente e do Ordenamento do Território) carries the responsibility for all kind of actions aiming at assuring the sustainability of the national interventions in the field of development and the conservation of an adequate level of respect for environment integrity.

In that respect the activity of the Minister is an integrated one, possessing a horizontal valence between the different areas of Government intervention, with the objective that such interventions will not be harmful to the Environment.

The Ministry defines, coordinates and executes the policies of Environment and Land-use Management; it guarantees the compliance with the European Union standards in the fields of environmental basic sanitation; it qualifies the coastline and it strengthens the conservation

conditions of bio-diversity, especially in the protected areas and sites of the Natura 2000 Network.

58.1.6 Health and the consumer

The Ministry of Health (Ministério da Saúde) has the main responsibilities for the definition, implementation and evaluation of all policies concerning the public health of Portuguese citizens. The Institute for the Informatic and Financial Management of Health (IGIF), operating under the surveillance of the Ministry, is the central institution responsible for the analysis, planning and execution of the Information System and for the management of the financial resources of the National Health Service. The National Institute for Medical Emergency is the body of the Health Ministry which is responsible for the coordination of the Integrated System of Medical Emergency, distributed all over the national territory.

The Quality Institute of Health (Instituto da Qualidade em Saúde – IQS) is the body responsible for the definition and the realization of norms, strategies and guidelines aiming at raising the efficiency and quality of the health systems. The IQS is directed by a general director, nominated for a period of three years by the Ministry of Health. The general director can be aided by a maximum of three secretary, nominated by the Ministry of Health on proposal of the general director. The general director presides also the Consultative Council which is the main consulting structure of the IQS. The Council is made up of a maximum of 15 experts, nominated by the Ministry of Health on proposal of the general director of IQS.

58.1.7 Research

The Ministry of Science and Technology (Ministério da Ciência e da Tecnologia - MCT) was established by the 13th Constitutional Government in 1996. The Ministry defines the principles on which national science and technology policy should be based, together with the corresponding organisational, financial and implementation structures; it promotes and co-ordinates activities in the areas of scientific research, technological development and innovation, and evaluates relevant programmes and plans; it supports the training and education of human resources in the fields of science and technology; it promotes and co-ordinates activities intended to foster the information society; it encourages wider and more profound understanding of science and technology activities, in particular through the dissemination of scientific and technological information, the teaching of science and technology, and media coverage of these fields; it co-ordinates international scientific and technological projects; it prepares and proposes to the Government a draft science and technology budget and rolling plans for scientific research and technological development activities.

There are a series of bodies which advice and support the Ministry. The Superior Council for Science and Technology is an independent consultative body that works closely with the Ministry of Science and Technology and has the purpose to enable the scientific and technological communities, society and employers to participate in the definition of science and technology policy. The Science and Technology Policy Co-ordination Office advises the Minister on the co-ordination of the different initiatives carried out within the Ministry.

The Science and Technology Monitoring Unit is responsible for collecting, processing and disseminating information on the science and technology system. The basic objective of the Unit's functions is to develop systematic information on Science and Technology matters, drawn from primary and secondary information sources, in order to facilitate an up-to-date understanding of the science and technology system. The Unit is also responsible for planning and for drafting the science and technology budget. The Foundation for Science and Technology is responsible for promoting, funding, monitoring and evaluating scientific and technological institutions, programmes and projects, and for the training and education of human resources.

59 Scientific advice

59.1 General background

No specific interdepartmental guidelines have been established on how to solicit science-based expert advice. There are some general principles of Independence, Transparency and Responsibility which can be identified as an important concern on this matter.

Anyway, in recent years the Government has been increasing the trend to promote a dialogue with target groups or social players and to involve them in the debate on scientific issues. Beyond other reasons behind this attitude, there may be the expectation that such a dialogue might contribute to more adequate and effective actions. A plurality of instruments have been used in the current implementation of this practice. The Government has supported the organisations of Public Discussions, often by using open conferences and seminars, focusing on the objectives and on the general content of new programmes at the phase of their preparation. As examples of this kind of initiatives we can mention the Open Seminars, lasting one day or half a day, for the programmes included in the Frame Support Programme III. The effort of promoting public discussions was focused in particular in the areas of Research, Industry and Environment. The Science and Technology Ministry also organized public discussions before the establishment of the Programme for the Information Society. The public debate on a Green Book for the National Initiative for the Information Society took place on different places of the country involving a significant share of potential interested users of this Initiative.

In 1998 the Observatório das Ciências e Tecnologias (OCT) launched a permanent Forum on the Science and Technology Policy. By that time, the Forum focused on the "White Book on the Portuguese Scientific and Technological Development". Comments were asked through the web page of the OCT. The resulting participation can be considered as rather significant, given the quality of the participants. It is interesting to note that inputs have been received from people in different sectors (not just research itself).

At present, a web forum on "European Debate for a Information and Knowledge Society in EU" is running in the scope the Ministry of Science and Technology too. The participation appears to be lower than in the previous forum.

Comments on the Integrated Programme of Support to Innovation launched by the Office of the Prime Minister were requested by internet at an early phase of launching of the general lines of this programme (which aims at integrating and optimising synergies across public interventions on the various programmes with potential impact on innovation and running in different ministries).

In other cases the Government promoted processes of consultation addressed to relevant social players in specific areas of intervention. During the preparation of the White Book on Portuguese S&T Development, a large process of consultation was addressed by the Ministry of Science and Technology to the scientific community and also to public and private organizations, firms, professional organizations and associations, local and regional authorities. A similar and large process of consultation was undertaken in the scope of the Integrated Programme of Support to Innovation. Moreover, during the Portuguese Presidency of EU, the public discussion on eEurope initiative was mostly directed to social players at EU level. In particular, the Ministry of S&T addressed key social players across the Union. The Ministry of Science and Technology has also been organizing, on an annual basis, a meeting where experts from different sectors (Universities, Research Institutes, Firms, other Ministries, Parliament, Professional Associations and other) are invited to go to in depth discussions on issues relevant to the Portuguese agenda on Research Policy.

The Ministry of the Environment is one of the Ministries that rely most on external consultations, that in many cases go beyond the strict boundaries of the scientific community. The Ministry usually follows the practice of promoting the public discussion of some of the political measures that have a high public impact and require at the same time the use and public understanding of scientific knowledge. Within the Ministry there is also a common and systematic involvement of NGOs in different consultation bodies. This also applies in areas with have an impact on the field of research or partially overlap with it.

In order to assist on the current follow up and design of public programmes, the Government usually supports the elaboration of studies on the impact of the various programmes. This was the case, for example, of some aspects in relation to the field of Innovation (in particular for the programme for the modernization of the Portuguese Industry). These studies are conducted, in general, following a call for proposals process.

Another important initiative that has involved experts from a wide range of layers in the active discussion of political matters is the foresight exercise ET 2000 (Engenharia e Tecnologia 2000) where the foreseen evolution of different sectors of engineering in the period 2000-2020 in Portugal was tentatively devised. This exercise mobilised about 500 experts of different areas and sectors and was conducted by the Portuguese Association of Engineers. It was possible to promote in depth discussion of the main trends found in different sectors in relation to the evolution of the technologies and the associated science base. It was also possible to gather a large number of experts of different sectors in an interdisciplinary basis.

60 References

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Database Report

61 Advisory Bodies covered in database

Name of body	Policy areas covered	Who advised	Full/basic coverage	Nature of body	SOME CATEGORISATION
1) IGOPTC – Inspecção-Geral de Obras Públicas Transportes e Comunicações (General Inspectorate of Public Works, Transport and Communications)	Transport	Ministry Other advisory body Other	Full	Statutory permanent	Multifunctional body
2) CNADS – Conselho Nacional do Ambiente e do Desenvolvimento Sustentável (The Portuguese National Council on Environment and Sustainable Development)	Environment	Head of government Ministry	Full	Statutory permanent	100% Scientific advisory
3) DGPC – Direcção Geral de Protecção das Culturas (Directorate General for Crop Protection)	Agriculture Research	Ministry	Full	Statutory permanent	100% Scientific advisory
4) OCT – Observatório das Ciências e das Tecnologias (Observatory on Science and Technology)	Research	Ministry	Full	Statutory permanent	Multifunctional body
5) Comissão Nacional Portuguesa das Grandes Barragens (Portuguese Commission for	Environment	Ministry	Full	Statutory permanent	100% Scientific advisory

Great Dams)					
6) INETI – Instituto Nacional de Engenharia e Tecnologia Industrial (National Institute of Industrial Engineering and Technology)	Environment Energy	Head of Government Ministry	Full	Statutory permanent	Multifunctional body
7) IPIMAR – Instituto de Investigação das pescas e do mar (Research Institute for Fisheries and the Sea)	Environment Fisheries	Ministry of Agriculture, Rural Development and Fisheries Other	Full	Statutory permanent	Multifunctional body
8) IHERA – Instituto de Hidráulica Engenharia Rural e Ambiente (Institute of Waterpower, Rural Engineering and Environment)	Agriculture Environment	Ministry Other	Full	Statutory permanent	Multifunctional body
9) Conselho Nacional de Ética para as Ciências da vida (National Council of Ethics)	Research Health	Head of Government Legislature Ministry Other	Full	Statutory permanent	100% scientific advice
10) Instituto dos Resíduos (Institute of Waste)	Environment	Ministry	Full	Statutory permanent	Multifunctional body
11) IEP – Instituto das Estradas de Portugal (Portuguese Road Institute)	Transport	Ministry	Basic	Statutory permanent	Multifunctional body

61.1 General trends

The scientific advice system of Portugal is fairly devolved and it's difficult to detect any general tendencies. An important source of scientific advice is represented by research institutes linked to the different Ministries but access to these sources of scientific advice often happens in a quite informal manner. In the absence of general established procedures, problems are often dealt upon on a case by case basis.

A few exceptions to this situation can be found in the database: these are recently formed committees of advice that can be considered as type A bodies and that share some properties in common (small number of people, way of operating, etc.) Anyway, the number of these bodies is quite small and in general the system seems to rely more on type B bodies, in particular on public research institutes.

61.2 Structural issues

61.2.1 Secretariat

The majority of bodies included in the database are type B bodies to whom questions regarding the secretariat are not applicable. Usually these bodies are large public institutes of research that have got their own general secretariat, who serves the whole institute, does not have to perform any background work and can not be considered as a technical secretariat.

Type A bodies included in the database tend to have a secretariat but no general tendencies can be detected at this regard. The secretariat can be provided by another body (this is the case of the Commission for Great Dams that works within the Institute of Water: the secretariat for this Commission is provided by the Institute and it can not be considered properly as a technical secretariat) or it can be constituted internally to the bodies examined. Three bodies fall in this latter case: as it's difficult to detect general tendencies when the number of cases involved is so small, we reassume the data applying to these situations:

- CNADS Conselho Nacional do Ambiente e do Desenvolvimento Sustentável – The Portuguese National Council on Environment and Sustainable Development: this body has a secretariat made up of 3 people selected by the Ministry of Cities, Land Planning and Environment. The cost of maintaining this secretariat is 45.000 Euros. The secretariat performs organizational works (organization of meetings, preparation of minutes, etc.) and it also does some kind of background work. As a matter of fact, “background work by the secretariat” has been said to be an important source of information for the activities of advice of this specific body.
- DGPC Direção Geral de Protecção das Culturas – (Directorate General for Crop Protection): this body has a secretariat made up of 1 person. The cost of this secretariat was not detectable: anyway, this structure performs mainly an organizational function. Background work by this secretariat was anyway mentioned as a source of information for the activities of the body.
- Conselho Nacional de Etica para as Ciências da vida – (National Council of Ethics): this body has a peculiar organization: it does not have a secretariat strictly speaking, but it has a Commission of Co-ordination that performs a lot of important functions. This Commission is made up of 10 people and it carries on organizational functions (it prepares the meetings, it is in charge of drafting the minutes and the agendas, etc.), it is in charge of keeping the finances of the bodies and it also does a lot of important

background work: this type of background work can be considered as a relevant source of information for the activities of scientific advice performed by the body.

61.2.2 Membership

As already said, questions regarding memberships are difficult to answer for what concern type B bodies, so this section only comments upon data available for type A bodies. This type of bodies share a committee-like type of structure: they are usually composed by few people (from a minimum of ten to a maximum of 48; usually members of these bodies are chosen by appointment), they have, as already said, their own secretariat, their work is organized on a series of regular meetings.

Background of members of these bodies depends upon the nature of the bodies themselves and on the functions they have to perform: bodies dealing with very specific, technical problems (for example the Commission for Great Dams) are composed only by experts (in the specific case, by experts in engineering). The Directorate for Crop Protection is made up of parliament members that on turn refer to national scientists to collect the needed technical information. The CNADS encompasses members from a lot of different categories: experts in physical and natural sciences, experts in social sciences and humanities, lay people, civil servants, NGO representatives, industry representatives are all included in this body of advice. This body has also got a broad remit and it also makes some kind of public consultation: it is really a case in which a lot of different competencies are brought together to bear upon questions of general relevance (environment and sustainable development).

No general trends can be detected for what concerns the gender of the members, nor in terms of their number neither in terms of their specific background. The same is true for the questions regarding the possibility of having experts from other countries, from international advisory bodies, or from other advisory bodies within the country

61.2.3 Budgets

Data on budgets were extremely difficult to collect and in the majority of cases we were obliged to leave the space blank. For these reasons, it would be impossible to draw any general conclusions on this point.

61.3 Functional Issues

61.3.1 Scope of work

Type B bodies tend to have a broad focus and they also perform a lot of activities: research performance, research funding (in some cases), education and training, raising public awareness and so on.

Two type A bodies have got a broad remit: they are the National Council of Ethics and the CNADS. These two bodies also enjoy a particular status: CNADS is an independent public

advisory body, while the Bioethics Council is a public consultative bodies operating within the Presidency of the Council of Ministers. Background of the members of these two bodies is quite wide ranging, as already said (in particular for what concerns CNADS).

The Directory for Crop Protection and the Commission for Great Dams have got a focused scope of action: it does not come as a surprise, then, that also in terms of background of their members we do not find any particular variety: the Directorate is made up of members of the Parliament, while the Commission is made up of experts in engineering.

61.3.2 Independence

All type B bodies are formally quite independent, as they are for the greater part public research institutes, even if linked with Ministries. Membership in these bodies is normally gained through competitive examination. These bodies usually can select their own subjects and they deliver their advice in final form to policy-makers. They also disseminate their findings wider than those requesting the advice: as these bodies are research institutes, this is normally accomplished through the publication of reports, scientific papers in specialized journals and so on.

Among type A bodies, the CNADS seems to enjoy a particular degree of independence. As already said it is not linked to any particular ministry (the only link is that a Ministry provides its secretariat). Members of the CNADS are not appointed, but elected through a process of peer nomination. The body is free to choose its own subjects and it delivers advice in final form to policy-makers, at the same time spreading its findings through a plurality of means (media, the web, publications and so on). Also the National Council of Ethics shares some of these features: even if in this case, members are not elected but appointed (by the government and by other subjects, mainly representing different interests of particular social categories: the procedures of appointment have been changing during the history of the Council to assure a growing degree of independence). Anyway, the body can choose its own subjects for examination, it presents advice in final form to policy makers and it spreads its findings to a wider target than those requesting then advice (in many case, advice are not “requested”, but are given by the Council on its own initiative). Other type A bodies usually are linked to other institutions (departmental offices or other bodies): these type of bodies usually are more reactive in their functioning, rely more on dialogue with policy-makers and do not tend to spread their advice.

61.3.3 Transparency

Generally speaking, the operations of the bodies do not tend to be governed by some kind of code of practice. This is true in particular for what concerns type B bodies: only IGOPTC has got its own internal manual of procedures that contains the general guidelines to be applied to all activities of the body (and not specifically to scientific advice).

The situation for type A bodies is more blurred, also because the sample is quite small. Anyway, it seems that these bodies usually have got some kind of internal rules of practice: this in particular applies to CNADS and to the National Council of Ethics. DGPC does not have a formal code of practice, but references are made to the ordinary law, that contains

some dispositions to be applied to this specific case. Data regarding the presence of a code of practice were not available for the Portuguese Commission for Great Dams.

The issue of the declaration of potential conflict of interests is not dealt with on a formal basis. Members are not usually requested to formally declare their potential conflict of interests. In some cases, members have to take into consideration by themselves any potential situation of conflict, but it does not seem that this can have any particular consequences regarding the operation of the body (for example members are not requested to leave discussion when there is a potential conflict).

Even confidentiality requirements are not dealt with formally: anyway, it seems that the great majority of bodies tend to keep confidential a great part of their activities.

The only body that holds public meetings is CNADS: this body also relies on public consultation as a source of information for scientific advice. Anyway, this is the only body that tries to assure a greater involvement of the public in the process of provision of scientific advice.

61.3.4 Generation, delivery and responses to advice

Type B bodies usually work by continuous operations, while type A bodies rely more on meetings. Meetings are regularly held but they can be also organized when particular necessities arise or on demand of members.

Type A bodies rely basically on the expertise held by their own members and on literature review. In some cases, background work by the secretariat is an important source of information (this happens for CNADS, for example). Type B bodies tend to rely more on their own research. Both type A and type B bodies also use in some cases external expertise. Also international expertise can be used when necessities arise (when expertise at the national level is not enough).

The delivery of advice does not in any case imply any formal response by the policy makers.

61.3.5 Evaluation and impacts of advice

The assessment of the advisory functions of bodies is quite difficult as answers tend to be very specific to individual cases. In general, the only diffused impact is represented by technical standards issued by type B bodies that form the base of reference for political regulations.

Data included in the database tend to exclude the possibility that advice at the national level had been used by advisory bodies in other countries or by international bodies. Even if advisory bodies in other countries, or international bodies, sometimes are said to be an important source of information for the activities of some bodies of advice, this could not be taken as an indication of a functioning network in this area. As a matter of fact, as the scientific community of Portugal is quite small, in some cases references to expertise from abroad is an important resource to deal with very specific problems: resources that are difficult to find at the national level can be found in the international arena.

61.3.6 Changes in the advisory system

The system does not seem to be undergoing any particular changes. The only fact that must be underlined is that in the '90s some important committees have been for the first time constituted (CNADS and Bioethics Council). These two bodies represent examples of scientific advice bodies that share some characteristics in common, that other older bodies do not have (they both have a broad remit, background of the members is wide-ranging, they have a committee-like structure, they diffuse their advice widely, and so on). It is not possible at present, given also the few examples available, to say if these two cases will remain isolated or if they could represent the first examples of a general evolution of the system of scientific advice.

Slovakia

General Overview

62 Background

General Information:

Political system:	Parliamentary democracy
Capital:	Bratislava
Population:	5 379 455 (as of 26 May, 2001)
Administrative divisions:	8 regions (kraje, singular - kraj); Banskobystricky, Bratislavsky, Kosicky, Nitriansky, Presovsky, Trenciansky, Trnavsky, Zilinsky
Independence:	1 January 1993 (Czechoslovakia split into the Czech Republic and Slovakia)
Constitution:	Ratified 1 September 1992, fully effective 1 January 1993; changed in September 1998 to allow direct election of the president; amended February 2001 to allow Slovakia to apply for NATO and EU membership
Legislative branch:	Unicameral National Council of the Slovak Republic (Narodna Rada Slovenskej Republiky); 150 seats; members are elected on the basis of proportional representation to serve four-year terms; last elections held 25-26 September 1998 (next to be held NA September 2002); seats by party - governing coalition 93 (SDK 42, SDL 23, SMK 15, SOP 13), opposition 57 (HZDS 43, SNS 14)
Executive branch:	<i>chief of state:</i> President Rudolf SCHUSTER (since 15 June 1999) <i>head of government:</i> Prime Minister Mikulas DZURINDA (since 30 October 1998)
Judicial branch:	Supreme Court (judges are elected by the National Council); Constitutional Court (judges appointed by president from group of nominees approved by the National Council)

The National Council of the Slovak Republic is the sole constituent and legislative body of the Slovak Republic. It is a state power authority and the status of other state authorities is derived from its primary status in the Republic. Being an elected body, it represents the

sovereignty of the state and people. Members of the National Council of the Slovak Republic are elected in general, equal and direct elections by secret ballot. The Parliament has 150 members and they are elected for a four-year term.

Committees of the National Council of the Slovak Republic

The National Council of the Slovak Republic sets up committees - initiative and oversight bodies formed by members of parliament. The committees submit draft acts and other recommendations to the National Council of the Slovak Republic on matters falling under their competence. They monitor the observance and application of laws and compliance of their implementing regulations with them. If a committee discovers breaches of a law or finds that an implementing regulation does not comply with it, or a regulation has not been issued on time, it informs the relevant member of the Government or head of the relevant central state administration body of this and requests immediate corrective action; if the corrective action is not taken, it notifies the National Council of the Slovak Republic of this.

18 committees are operating at the National Council of the Slovak Republic at present. Only members of the National Council can be members of the committees. On average, one committee has 12 members, while MPs can be appointed to no more than two committees. The composition of the committees reflects the division of seats in the Parliament.

- Constitutional Law Committee
- Finance, Budget and Monetary Committee
- Economy, Privatisation and Undertaking Committee
- Agriculture Committee
- Public Administration Committee
- Social Affairs and Housing Committee
- Healthcare Committee
- Defence and Security Committee
- Education, Science, Youth and Sports Committee
- Culture and the Media Committee
- Environment and Nature Protection Committee
- Human Rights and Nationalities Committee
- Conflicts of Interest Committee
- European Integration Committee
- Mandate and Immunity Committee
- Special Oversight Committee for the Inspection of the Slovak Information Service (SIS)
- Special Oversight Committee for the Inspection of Military Intelligence Foreign Affairs Committee

The Government of the Slovak Republic (SR) is the supreme body of executive power. It consists of the Prime Minister, presiding over it, his deputy prime ministers and ministers. The Prime Minister is appointed and recalled by the President of the Slovak Republic. Upon proposal from the Prime Minister, the President of the Slovak Republic appoints and recalls other members of the Government and entrusts them with the management of ministries. For its policy and administration the Government is responsible to the SR National Council (the Slovak parliament). The National Council of the Slovak Republic can hold a vote of no confidence in the Government at any time. The Government is obliged to appear before the National Council of the Slovak Republic within 30 days of its appointment, present its

programme (e.g. the current one for 1998 to 2002) and request the expression of its confidence.

As the chief formulator of the nation's public policy under the SR Constitution, the Government has the authority to make major policy on the matters of national economy and social security. It is responsible for meeting the Government programme objectives within the scope of the adopted national budget. The main functions of the Government also include making proposals on the state budget, preparing the annual closing balance sheet, and issue government regulations and decrees under power given to it by law. The Government has a quorum if more than one half of its members are present. The majority of votes of all members of the Government are needed to pass a governmental resolution.

The Government submits draft bills to the Slovak parliament, which are frequently preceded by nationwide discussions and consultations with the relevant organizations. Members and committees of the National Council may also propose bills. There are no binding procedural rules regarding the method by which the Government develops the bills it submits to the National Council. The current Government produces legislative plans for each year. These plans identify legislation the Government wants adopted and sets deadlines by which various ministries should submit drafts to the Office of the Government. The ministry with the relevant experience drafts bills. This ministry circulates the draft among other ministries, central authorities and political pressure groups (e.g. Association of Employers of Slovakia; Association of Towns and Villages or ZMOS; Confederation of Trade Unions) that could also be affected by the bill.

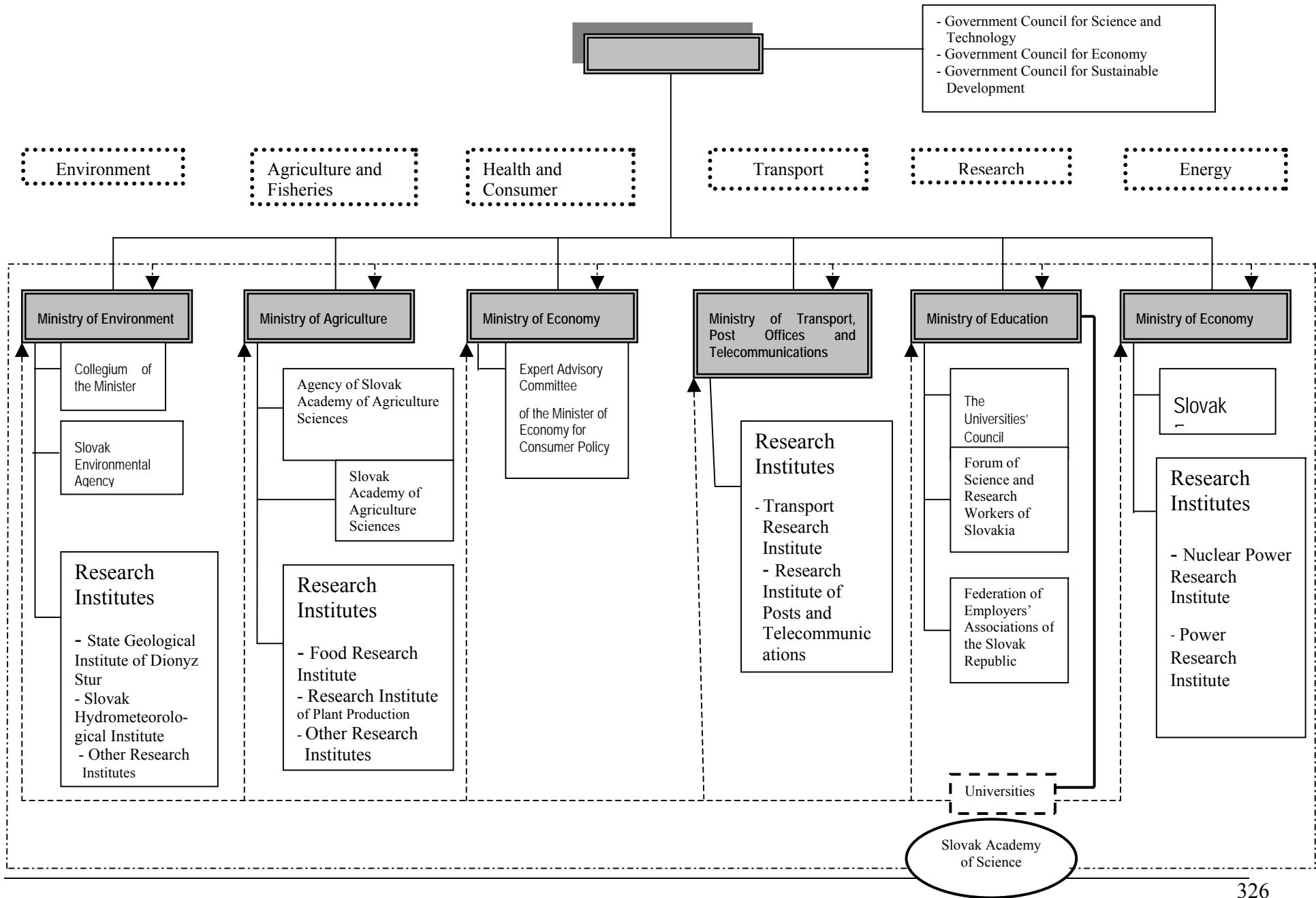
List of Ministries in the Slovak Republic:

1. Ministry of Agriculture
2. Ministry of Construction and Regional Development
3. Ministry of Culture
4. Ministry of Defence
5. Ministry of Economy
6. Ministry of Education
7. Ministry of Environment
8. Ministry of Finance
9. Ministry of Health
10. Ministry of Interior
11. Ministry of Justice
12. Ministry of Labour, Social Affairs and Family
13. Ministry of Privatisation
14. Ministry of Transport, Posts and Telecommunications

Constitutional Court of the Slovak Republic

The Constitutional Court of the Slovak Republic is an independent judicial body charged with protecting constitutionality. The Constitutional Court decides on the compatibility of laws with the Constitution and constitutional laws; the compatibility of governmental ordinances and generally binding legal regulations issued by ministries and other central state administration bodies with the Constitution, constitutional laws and other laws; the compatibility of generally binding regulations issued by territorial self-government bodies with the Constitution and laws; the compatibility of generally binding legal regulations issued

by local state administration bodies with the Constitution, laws, and other generally binding legal regulations; the compatibility of generally binding legal regulations with international treaties promulgated in a manner specified for the promulgation of laws.



62.1 Policy Areas

62.1.1 Agriculture and Fisheries

Primary responsibility: Ministry of Agriculture

In accordance with Act No. 347/1990 as amended by later regulations, the Ministry of Agriculture of the Slovak Republic (MA SR) is the central state administration body for agriculture, forest management, water management (within a specified scope), fisheries, hunting, and the food industry. It carries out state administration and state expert oversight of the agriculture sector and expert supervision, direction and inspection of state administration, which is carried out in accordance with laws and decrees by other bodies and organisations in the agriculture sector and territorial state administration authorities.

It directs and guides the concepts behind the state's economic policy in agriculture, in line with the Government's Policy Statement. In order to implement and facilitate these activities, it establishes and systematically directs state public benefit enterprises, organisations and agencies, primarily in the fields of science, research, development, inspection, control and supervision, certification, training, consulting, economic utilisation of forests etc. The MA SR currently has 373 employees. 36 regional departments, externally located from the Ministry's headquarters, and 8 organisations performing state oversight, control and inspection services in agriculture and the food industry (including the SAPARD agency) are subordinated to the Ministry. The Ministry also includes 27 public benefit enterprises and organisations in the field of science, research, advisory and education.

The control of import and transit of fish and fish products is performed by the State Veterinary Administration of the Slovak Republic. Through its regional, local veterinary administration agencies and accredited laboratories, State Veterinary Administration is responsible for food inspection and approval of fish release and its handling. This task is performed by veterinarians of 8 regional veterinary administrations, 39 local veterinary administrations and 6 accredited laboratories. Full alignment with EU legislation concerning market introduction of fish products, including transit, will be completed through the adoption of amendment to the Veterinary Care Act will be in effect as of 1 January 2003. The control of the size, species and quantity of fish caught as well as the control of compliance with the permitted fishing methods, daily fishing times, and protection during the spawning season is ensured by the Slovak Fisheries Union through fish guard.

62.1.2 Energy

Primary responsibility: Ministry of Economy

The main co-ordinator of the creation and formulation of Slovakia's industrial policy is the Ministry of Economy. The following are the key responsibilities of the Ministry:

1. The formulation of industrial policy;
2. The monitoring of the Slovak industry's internal and external environment;
3. The regular updating of industrial policy taking into consideration the latest information acquired from permanent monitoring and updating activities;
4. Co-operation with the relevant ministries in the process of drafting modifications to legislation.

The Ministry of Economy is the central body of state administration in charge of power industry. In respect of state regulation of power industry the Ministry of Economy is also in charge of regulation of business in the power industry and licensing, the Ministry of Finance is responsible for price regulation and the Antimonopoly Office is responsible for the area of competition.

Pursuant to the Act No 130/1998 Coll. on Peaceful Use of Nuclear Energy, the Nuclear Regulatory Authority is in charge of supervision of nuclear safety. The main purpose of the Authority is to guarantee the peaceful use of nuclear energy in Slovakia and to ensure that all nuclear energy facilities in Slovakia are designed, built, operated and decommissioned according to valid legislation. Another important responsibility of the Nuclear Regulatory Authority is to control nuclear materials, special materials and facilities – i.e. items that could be abused in certain circumstances and used for other than peaceful purposes.

62.1.3 Transport

Primary responsibility: Ministry of Transport, Posts and Telecommunications

The State Transport Policy of the Slovak Republic has been formulated in twelve basic systemic blocks of principles and in concrete, targeted and scheduled tasks. The document comprises the issues of relations of the state, carrier and citizen, fair competition, financing, transport taxes and fees, the modernisation and development of the transport infrastructure, transport and the environment, legal regulations and technical standards in transport, the safety and reliability of transport, quality in transport, informatics and statistics, labour law and social areas, integration and foreign relations, and science and research in transport.

In January 2000, the Government approved the “Update and Specification of the Principles of the State Transport Policy of the Slovak Republic“ as the basic systemic document for the transport sector. The main strategic goal of the Slovak Republic’s transport policy, arising from the principles of the European Transport Policy, is to secure conditions for long-term development aiming at sustainable mobility in the

integrated use of all modes of transport. Special emphasis is placed on intermodality and support for more ecological modes of transport, i.e. rail transport, inland waterway transport and combined transport, as well as public transport, and for the creation of conditions to secure the accessibility of the Slovak Republic by air.

62.1.4 Environment

Primary responsibility: Ministry of Environment

The Slovak Republic's central state administration authority for environment is the Ministry of the Environment. In the specific areas of state administration the Ministry co-operates with other relevant ministries, Slovak Environmental Agency, Slovak Environmental Inspection, Slovak Hydro-meteorology Institute, environmental departments of regional and district state administration offices, labour inspection authorities, fire safety, civil protection and health protection authorities and the Head Mining Office.

The Slovak Government has been applying the principle of integration of environmental protection in other policy areas since 1994. For example in the field of energy Slovak energy policy has had explicit reference to alternative sources of energy instead of nuclear energy. Slovakia formally continues to pursue the idea of integration of environmental concerns into other policy having some relevant strategic documents proposed by the Government, including the State Energy Policy, the State Water Management Policy, the Policy of Spatial Development and Spatial Plans subject to the strategic environmental assessment procedure that is obligatory under par. 35 of the Act No. 127/1994 Coll., on environmental impact assessment as amended by the Act No. 391/2000 Coll. This allows the Ministry of the Environment to execute its power to shape these documents in accordance with the principles of sustainable development. Slovakia has adopted the National Strategy for Sustainable Development in April 2002. The Slovak Government has also agreed with the principle that each relevant document submitted to the Government must contain a statement on environmental impacts.

The issue of drinking and bathing water quality is within the scope of the activities of state health institutes, which inspect the quality of both drinking water and water intended for bathing.

The Ministry of Agriculture is the central state administration authority in the area of water management and controls state water supply and sewerage companies, the Slovak Water Management Company and the Water Management Research Institute. The Ministry of Environment is the central authority for the protection of water quality and its rational use. The supply of the population with drinking water is the responsibility of municipalities.

The Ministry of the Environment is the central state administration body for nature and landscape protection. It ensures implementation through its institutions and organisations: State Nature Protection of the Slovak Republic, an expert organisation responsible for across-the-board nature protection and the management of protected

areas, Slovak Environmental Inspection - nature protection inspectorate, Slovak Caves Administration, and the Slovak Environmental Agency providing information services related to nature protection.

The authorities responsible for the area of experiments on animals are the Ministry of Agriculture, State Veterinary Administration, and regional and district veterinary administrations. Permits for the execution of experiments and breeding of laboratory animals are issued by an accreditation commission.

The area of nuclear safety is fully under the supervision of the Nuclear Regulatory Authority. The Ministry of Transport, Posts and Telecommunications provide the implementation of legal regulations in this area of noise from motor vehicles and machinery.

62.1.5 Health and the consumer

Primary responsibility: Ministry of Economy

The Civil Code, Commercial Code and Consumer Protection Act No. 634/1992 Coll. provide the basic legal framework for consumer and health protection as amended.

In the Slovak legal system, Council Directive 98/83/EC relating to the quality of water intended for human consumption (drinking water) is contained in Water Act No. 138/1973 Coll. and Act No. 272/1994 Coll. on the Protection of People's Health. The implementing regulation is Ministry of Health Regulation No. 17/1979 on the basic hygiene principles for the establishment, specification and use of protected zones of water sources. Technical standard STN 75 7111 Drinking water, lays down the requirements for the assessment of water quality intended for the mass and individual supply of the population with drinking water. Water quality inspection is also partially covered by STN 75 7211 Drinking water, Quality control in transportation, accumulation and distribution. The full transposition of this Directive is expected upon the adoption of an amendment to Act No. 272/1994 Coll. on the Protection of People's Health and the implementing regulation People's Health Protection Codex from 2002.

From the institutional point of view, Slovakia has at its disposal a system of consumer protection bodies, which adequately enforce the applicable legislation. The performance of state administration in this area is co-ordinated by the Ministry of Economy. However, there are other bodies operating institutionally in the field of consumer protection – local state administration authorities – district and regional authorities (small traders' and consumer protection sections), Slovak Commercial Inspection, Slovak Agricultural and Food Inspection, State Veterinary Administration, public health institutes, and price control bodies. Two umbrella major non-governmental consumer organisations, the Association of Slovak Consumers and Association of Consumer Entities of Slovakia, also play an important role.

In February 2001, the Ministry of Economy submitted document no. 870/2001-010 "Analysis of the Efficiency and Operation of the Current System of Market Oversight Bodies and Draft Legislative Objective for an Act on the Integration of Market Surveillance (Act on the General Market Surveillance Authority)" at a governmental

session. According to this draft, the establishment of an integrated authority anticipates the inclusion of the competences of the current Slovak Commercial Inspection, regional and district state administration bodies, and partially the Hallmarking Office into a general integrated market surveillance authority for the area of consumer protection and creation of links for co-operation with the Slovak Metrology Inspectorate and other bodies performing market surveillance under current legal regulations. In the area of foodstuffs, the Ministry of Agriculture anticipates the creation of a separate food inspection authority.

This means that in the field of consumer protection, the general integrated market surveillance authority will assume competences at the level of territorial state administration bodies - regional and district authorities.

The Slovak Commercial Inspection, which is the general market surveillance body for consumer protection has a total of 297 employees. Two main non-governmental consumer organisations: the Association of Slovak Consumers and Association of Consumer Entities of Slovakia.

Institution	COMPETENCES
<ul style="list-style-type: none"> • Ministry of Economy 	<ul style="list-style-type: none"> - creation, co-ordination and implementation of the state consumer policy - creation of legal regulations on consumer protection
<ul style="list-style-type: none"> • Slovak Commercial Inspection 	<ul style="list-style-type: none"> - general market surveillance authority in the area of consumer protection - price inspection authority
<ul style="list-style-type: none"> • Consumer organisations (in particular the Association of Slovak Consumers and Association of Consumer Entities of Slovakia) 	<ul style="list-style-type: none"> - participation in the creation and oversight of the fulfilment of the state consumer policy - participation in the creation and review of legal norms on consumer protection - dealing with consumer disputes between consumers and sellers

The Slovak Republic's central state administration authority for the health care and health protection is the Ministry of Health. At the regional level, the state administration of health protection is implemented by state regional hygiene inspectors and state district hygiene inspectors in co-operation with the respective state health institutes.

62.1.6 Research

Primary responsibility: Ministry of Education

The central state administration authority in charge of science and technology in the Slovak Republic is the Ministry of Education. It is responsible for overall co-ordination and support of science, research and technology in order to enhance the effectiveness of the state administration, organisations, institutions and individuals.

The National Council adopted The Concept of state science and technology policy up to 2005 in December 2000. The Slovak Republic will adopt, in accordance with the acquis, a law on science and technology, law on Science and Technology Support Agency and amendment of the Act on the Slovak Academy of Sciences. Draft bills were submitted for discussion in 2001. The adoption of this legislation will increase the autonomy of science and technology, improve the transfer of research results into the economic and social spheres, strengthen co-operation between the Slovak and the international research institutions, and create more favourable conditions for a stable and progressive financing of science and technology in Slovakia.

63 Scientific Advice

63.1 Working Definition of Scientific Advisory Structure

For the purpose of this analysis we defined scientific advisory structure as an institute interpreting scientific and research knowledge to practical policy makers (e.g. ministries) in certain area.

Institution active in the area of science and research could be divided into four basic types:

- Organizations and institutes established (and financed) by various central state authorities or a special law, e.g. the Slovak Academy of Sciences.
- Universities or their parts
- Science and research organizations registered in the commercial register as for profit legal bodies
- Non-for profit governmental science and research organizations

In the Slovak Republic does not exist a single unified model of scientific advice implemented among central state institutions. Each ministry has developed its own system and structure of scientific advisory. In the most cases ministries use services of their own experts (e.g. experts from directly managed agencies) or consult its draft policies with experts from various research and science agencies, research institutes of the Slovak Academy of Sciences and/or universities.

16 advisory bodies are operating at the central government level at present. With respect to its statute and our working definition only 3 bodies could be accepted as scientific advisory structures in this report:

- Government Council for Economy
- Government Council for Science and Technology
- Government Council for Sustainable Development

These 3 councils represent mixture of policy and science thinking. The councils serve as co-ordination and advisory bodies to the Government.

Slovak Academy of Sciences (SAS)

The Slovak Academy of Sciences is a scientific and research institution for basic and oriented research, whose primary mission is to acquire new knowledge of nature, society and technology with the aim of providing the scientific basis necessary for the development of Slovakia. SAS was established by law. The main ruling body is The Presidium and The Presidium's Office. Other bodies: Science Committee, 70 scientific institutes, 46 Scientific Societies, 15 Commissions, 36 Colleges, Humboldt's club and Discussion club. The SAS edits 44 scientific and scholarly journals and 100 - 120 monographs per annum. Since Slovak science forms only a small section of the world scientific community, the scientific activities at the SAS are carried out in a close contact with scientific activities abroad.

Database Report

64 Advisory Bodies covered in database

Name of body	Policy areas covered	Who advised	Full/basic coverage	Nature of body	SOME CATEGORISATION
Economy Ministers Expert Body for Consumer Policy	Health	Ministry	Full	Non-statutory-fixed-term	100% Scientific advisory
Biosafety Committee and Board of Experts	Environment Research Health	Ministry	Full	Statutory permanent	100% Scientific advisory
Food Research Institute	Agriculture Research Health	Legislature Ministry Other advisory body	Full	Statutory permanent	20%
Engineering, Design, Research Organisation - Power Development Centre	Research Energy	Ministry Agency	Full	Non-statutory fixed-term	?
Research Institute of Plant Production	Agriculture Research	Legislature Ministry Agency Other advisory body	Full	Non-statutory permanent	?
Research Institute of Animal Production	Agriculture Environment Research	Legislature Ministry Agency Other advisory body	Full	Statutory permanent	12%
Transport Research Institute	Transport Environment Research	Ministry	Full	Statutory permanent	

	Health Energy				
EGU Power Research Institute Bratislava, Ltd.	Environment Research Energy	Ministry	Full	Non-statutory permanent	?
Dionysos Sturs Institute of Geology	Environment Energy	Ministry	Full	Statutory permanent	?

64.1 General trends

The organisation of the provision of scientific advice is only slowly becoming an issue in Slovakia. There are few bodies that have been specifically established to deliver scientific advice. One of the advice bodies identified, the Economic Ministers Expert Body for Consumer Policy plays a co-ordinating role in the area of consumer policy. On the one hand, this body can be considered a scientific advice body as it was set up to provide input to the policy making process on one of the issues selected by the project. On the other hand, the emphasis of the body is not on the advice provided by the experts but the co-ordination of different policy areas within the ministries. The body was set up in 1993 to assist the development of a comprehensive consumer policy. One of its tasks has been reporting on the implementation of the PHARE programme.

Another body has recently been set up with the aim of providing scientific advice, the Biosafety Committee and Board of Experts. However, this body has only started operating this year.

Advice is normally and much more often provided through research organisations and the Academy of Sciences, through federal research institutes directly under the control of one of the ministries or through agencies responsible for supervision and regulation in a particular sector.

64.2 Structural issues

64.2.1 Secretariat

There are no independent secretariats in Slovak type A bodies. One of the secretariats of the two type A bodies looked at does not have a secretariat and the other one consists of one civil servant. The Economic Minister's Expert Body for Consumer Policy does not have a secretariat of its own but, is run from the Consumer Policy Unit of the Ministry Economic Affairs. The secretariat of the Biosafety Committee and Board of Experts is organised by one individual in the Ministry of the Environment. Its role is limited to administrative tasks such as organising meeting, setting agendas, compiling technical documentation, taking minutes and

The type B bodies have secretariats that concentrate on administrative duties. Their activities rarely go beyond supporting the running of the institute or agency.

64.2.2 Membership

Due to the small number of varied bodies, any generalisations are difficult. However, the two type A bodies looked at had 23 and 20 members. The number of employees of type B bodies differed considerably. The B bodies have between 25 and 270 employees depending on the responsibilities they undertake. The research institutes that advise the Ministry of Agriculture have each between 112 and 270 members.

Both the Economic Minister's Expert Body for Consumer Policy and the Biosafety Committee and Board of Experts have a combination of scientists, industry, NGOs and civil servants. They are not just scientific advice bodies. The majority of members of the Body for Consumer Policy are civil service employees (12 out of 20). Although the majority of members of the Biosafety are natural scientists (14 out of 23), the body also includes two NGO representatives and four industry representatives. Both of these bodies have a high proportion of women.

64.2.3 Budgets

Overall budgets are varied especially for the B bodies. It depends on the number of employees. The budgets for the A bodies are difficult to establish as the secretariats for the type A bodies are part of the ministries and they do not have their own budgets. Only the Biosafety Committee has a separate budget for paying members expenses and fees. This is set at Euro 4000 per annum.

64.3 3. Functional Issues

64.3.1 Scope of work

The type B bodies are varied. Some of the larger research institutes and the Academy of Sciences cover a very broad scope of issues. Other type B bodies are broad in so far as they concentrate on a specific policy area but, address a wide range of issues within this area. The newly established A body the Biosafety Committee is more focused in its scope. It focuses on a specific question within a policy area. In this case it focuses on the use of gene technologies and GMOs.

The type B bodies perform a variety of tasks depending on their primary function that include research, standard setting and implementation depending on the type of organisation.

64.3.2 Independence

Independence is an interesting issue in Slovakia as the two type A bodies have considerable contact to the ministries requesting the advice. Firstly, they do not have independent secretariats. Both of these are supplied by the ministries. Secondly, the two bodies also have at least one quarter of members who come from the body requesting the advice or from other parts of the civil service. The advice is formulated in a dialogue between policy makers and body. Thirdly, the members of both bodies are appointed by the Minister or the ministry. Finally, the bodies are purely reactive and only produce advice when it is required by the ministries.

The question of the independence of advice is not an issue with the B bodies. These are asked to provide advice on an ad hoc basis to perform tasks such as drafting policy documents.

64.3.3 Transparency

The existence of codes of practise differ. The Body for Consumer Policy does not have any code of practise. It is an advisory body established by a minister and therefore not required to have one. The body is not permanent. The other type A body, the Biosafety Committee, was established as part of the law on genetic technologies and genetically modified organisms.

The type B bodies all have laws stating what their role is. This is the case for the federal research institutes and for the regulatory bodies.

The issue of declaring interests is not high on the agenda and none of the bodies are required to state their interests. However, members of the type A bodies are requested to keep the information confidential.

The material from both the type A bodies is available either on the web or by request. This includes the minutes and the agendas of the meetings. The research orientated type B bodies communicated much of their research work, but not of their advice work. This is delivered direct to the ministries.

64.3.4 Generation, delivery and responses to advice

The information in the A bodies comes from the members and the information in the B bodies comes from a wider variety of sources. The Biosafety Committee has a large number of natural scientists as members. The Consumer Policy Body draws most of its members from the various ministries involved in the formulation and the implementation of consumer policy.

The type B bodies' main source of expertise is their continuous operation. This is the case for each different type of B body. Both the research institutes and the regulators gain knowledge about their particular field through their every day responsibilities. It is this expertise that they draw on when they are asked to provide advice.

The public is not included in the provision of advice.

The advice from the A bodies is delivered in its final form to the policy makers. However, the fact that there are policy makers on all the bodies makes this less of a final form and more of an interactive process.

64.3.5 Evaluation and impacts of advice

The impacts of the advice can be seen clearly in the A bodies that have been given the responsibility of designing strategies and policies. One such example is the Power Research Institute in Bratislava which wrote the energy policy concept up to 2010 and was responsible for the reform of legislation towards the deregulation of the national electricity market. The Research Institute of Animal Production has also been involved in drafting policy documents recently.

Advice is not used by bodies in other countries.

64.3.6 Changes in the advisory system

Changes are slowly occurring. The Biosafety Committee has recently been established. There is, however, still an emphasis on drawing advice from more traditional bodies such as federal research institutes.

Slovenia

General Overview

65 Background

The present country overview study is divided into four parts. The first section provides an overview of the political structure in Slovenia. It identifies the main actors and bodies in terms of formulation and implementation of states policies and supporting scientific or expert advisory structures. The second section shows the policy areas under study. In the third section focus is laid on scientific advice in Slovenia in general. Finally, the fourth chapter introduces a list of advisory bodies. Slovenia is one of the youngest European countries, having become an independent state in 1991 after the collapse of the Yugoslav federation. The Nation counts not even two million inhabitants and covers an area roughly half of the size of Switzerland. The Slovenian system of policy-making can be described as centralised. The importance of regional level and regional bodies in policy-making is weak. According to public debate in Slovenia, changes in this respect may be expected. First democratic elections led to an “inflation of parties” competing for votes. Due to proportional voting system consolidation of the number of parties represented in Parliament (currently 8) and Government (currently 4) moves slowly but without significant tensions. Slovenian policy development is characterised by the hierarchy of legal norms. The highest statute is the Constitution other legal acts in hierarchical order are:

- laws passed by the Parliament, (National Assembly/first Camber and National Council/second Camber)
- decrees issued by the government for implementation of laws, regulations and guidelines
- orders issued by ministers for the implementation of laws and government decrees;
- regulations which local government bodies have passed in order to regulate affairs under their jurisdiction.

While Government and Ministers issue executive regulations, laws have to be adopted in a phased process by Parliament. A proposal for a law can be put forward by the Government, National Assembly deputies (MPs), the National Council or at least five thousand voters.(see Table 1 for detailed origin of laws)

Table 1:

Origin of the laws (including amendments on laws and ratifications)	Term of office 1997-2000
- of government origin	570
- National Assembly MPs origin	59
- of National Council origin	2
- constitutional laws (parliamentary and government origin)	2

(Source: Report on the 2. term of office of the National Assembly; National Assembly of the Republic of Slovenia; Research Dpt, Oct. 2000) see: http://www.riigikogu.ee/osakonnad/msi/ecprd/Slovenia_Assamb.html

The Government is the central policy-making body in the Republic of Slovenia, it is led by the Prime Minister⁵⁷.

⁵⁷ The **Prime Minister** is elected by a majority vote of the deputies in the National Assembly, following a proposal by the President of the Republic. The Prime Minister directs and leads the work of the government, he maintains the unity of its political and legal direction and co-ordinates the work of the ministers. He also proposes ministers, who are appointed and relieved of their duties by the National Assembly. The Administrative

It determines, guides and co-ordinates the implementation of state policies. The Government proposes laws to be adopted by the National Assembly (first Chamber)⁵⁸. The Government is responsible to the National Assembly for the policies it adopts. Only the National Council (second Chamber)⁵⁹ can demand that the National Assembly (first Chamber) takes another vote on a law before it is announced – it has an advisory role⁶⁰. The Government is not obliged to seek the opinion of other state organs, scientific advisory or consultative bodies or individuals.

Usually government seeks opinions of social partners (business associations, trade unions in matters concerning their field of interests) and not so frequently opinions of organisations of civil society (in matters concerning their interests).⁶¹

The government can establish various offices, services, centres, working bodies and expert councils for specific areas and other tasks. Consultative bodies can be formed by the government and by individual ministers.. Their composition (scientific and /or expert support) depends on the task the authority in question performs. Usually consultative bodies have a mixed structure (political/scientific and expert). Some specialised consultative bodies are founded by law (e.g. the Council for Education, the Council for Statistics, and the Health Council), others are founded by the government or individual ministers, often with the agreement of other institutions.⁶² However, ministers and the government are not obliged to follow these proposals.⁶³

Government (Cabinet) working bodies and scientific advice ⁶⁴

Slovenia's party system is still very fragmented. Four coalition partners are needed to form the current government. Consequently cabinets tend to be big. In order to reflect the proportion of votes the parties “supply” to the coalition, the number of minister-posts and ministries is usually summed up starting with the smallest coalition partner. The actual

Office of the Prime Minister and the Government General Secretariat carry out co-ordinating and technical tasks..

⁵⁸ The **National Assembly** is the highest legislative body in Slovenia. It is composed of 90 deputies elected directly by a proportional voting system with some elements of a majority system.

It passes laws, ratifies international agreements and makes other decisions.

⁵⁹ The **National Council** has 40 members and is a body of representatives from social, economic, professional and local interest groups. Council Members are elected by special-interest organisations and local communities. The National Council has an advisory role, it can propose new laws to the National Assembly, give its opinions and it can demand that the National Assembly takes another vote on a law before it is announced.

⁶⁰ The **National Council** itself can establish commissions and other permanent and occasional working bodies.

⁶¹ http://www.riigikogu.ee/osakonnad/msi/ecprd/Slovenia_Assamb.html

⁶² For example, in 1994, the Socio-Economic Council was founded by the social partners — the government and representatives of employees and employers — as a tripartite, consultative body for the discussion of issues and measures connected with economic and social policies. The council's decisions, which have to be adopted unanimously, are binding on the organs and working bodies of all three social partners. The Economic and Social Council participates in the preparation of legislation and provides opinions on legal acts within its sphere of competence. These issues include, in particular, social rights, employment, collective bargaining, prices and taxes, the economic system and economic policy, legal security, co-operation with the International Labour Organisation and the Council of Europe, workers' co-management and trade union rights. The Council communicates its proposals, recommendations and opinions to the National Assembly, the National Council and the public. Other consultative bodies formulate positions and make recommendations to ministers or the government.

⁶³ see: <http://www1.oecd.org/puma/sigmaweb/profiles/slovenia-r/svn-3.htm#Advisory%20and%20consultative%20arrangements>

⁶⁴ see: <http://www.sigov.si/vrs/ang/ang-text/government/working-bodies.html>

government consists of the Prime Minister, 14 ministers and 1 minister without Portfolio. Party fragmentation leads to a big cabinet and a large number of ministries in a small state. Subsequently the efforts to co-ordinate and prepare joint positions in cabinet rise. This problem is tackled by establishing co-ordinating institutions. Government offices, services and centres on the one hand and permanent or temporary working-bodies and councils to supply expertise for a joint position on the other.

Working bodies are set up by the Government either on the basis of the Government's procedural rules or on the basis of a particular law relating to the area in question, which determines that a working body needs to be founded and its composition. Government working bodies (committees, commissions etc.) usually consist of a president, a deputy president and an appropriate number of members, nominated by the government. Resolutions are passed by the majority vote of those present at a session. A report is prepared following discussion of particular issues and approaches containing an evaluation of the topic under discussion, standpoints relating to key issues, possible proposals for change or supplementation of proposed approaches, the standpoint of the working body on the opinions and proposals put forward, as well as proposed resolutions for government approval. External (scientific) experts taking part in government working bodies or councils even can represent the governments position in working bodies of the National Assembly.⁶⁵

In order to ensure that the work of the government and government bodies is technically well founded, the government sets up appropriate expert or technical councils to advise it in particular areas. Other councils are founded by law (e.g. Council for Environmental Protection of the Republic of Slovenia, Slovenian Broadcasting Council).

⁶⁵ see: <http://www.sigov.si/vrs/slo/vlada/vlada.html> „Kot svojega predstavnika pri delu delovnih teles državnega zbora lahko vlada določi višje upravne delavce in zunanje sodelavce, ki so sodelovali pri pripravi obravnavanih gradiv in razpolagajo s potrebnim strokovnim znanjem.“

Problems in scientific and expert advice of Government (Cabinet) Working Bodies

The large number of government (cabinet) committees and commissions are indicators for the huge workload the Slovenian Government is confronted with, originating from being a newly established country in transition.

Democratic elections led to a “party inflation” within a nation of not even 2 million inhabitants.

As a result of proportional voting system multi-party coalition governments are the norm.⁶⁶

In the past a number of decisions in cabinets committees went in the process of negotiations between frequently less competent party negotiators and ended up at the session of the cabinet not been properly prepared.

Space for “political decisions” without respect for proper procedures and profound expert consultation, took place in the decision making process in government.

Unpredictable (political) decision making in government, missing proper scientific and expert consultation due to fragmentation of scientific advice led to different reactions. The Prime Minister tried to solve the problem by additional staffing of the secretary generals and other governments offices in order to ensure better co-ordination and decision making quality. The reaction of ministers went in the opposite direction.

Ministries and scientific advice

Ministers facing complicated and in a number of occasions delayed or capricious cabinet decisions (so-called rotten compromises) lacking the expertise -lost in the co-ordination process-, tried to avoid decision making in the cabinet.

For a minister looking for scientific expertise in government councils is neither rational nor politically wise because of possible blockades from the side of coalition partners. Using the hierarchy of norms and ministers autonomy covered by the constitution (they can only be dismissed with majority of all members in the National Assembly) ministers have been removing from their legislation occasions on which the government is supposed to agree with specific regulations at the field of their responsibility. The same took place with for e.g.

nominations of heads of institutions in the area of their responsibility. Increasing ministers possibility to build up their “own” (scientific) advisory structures.

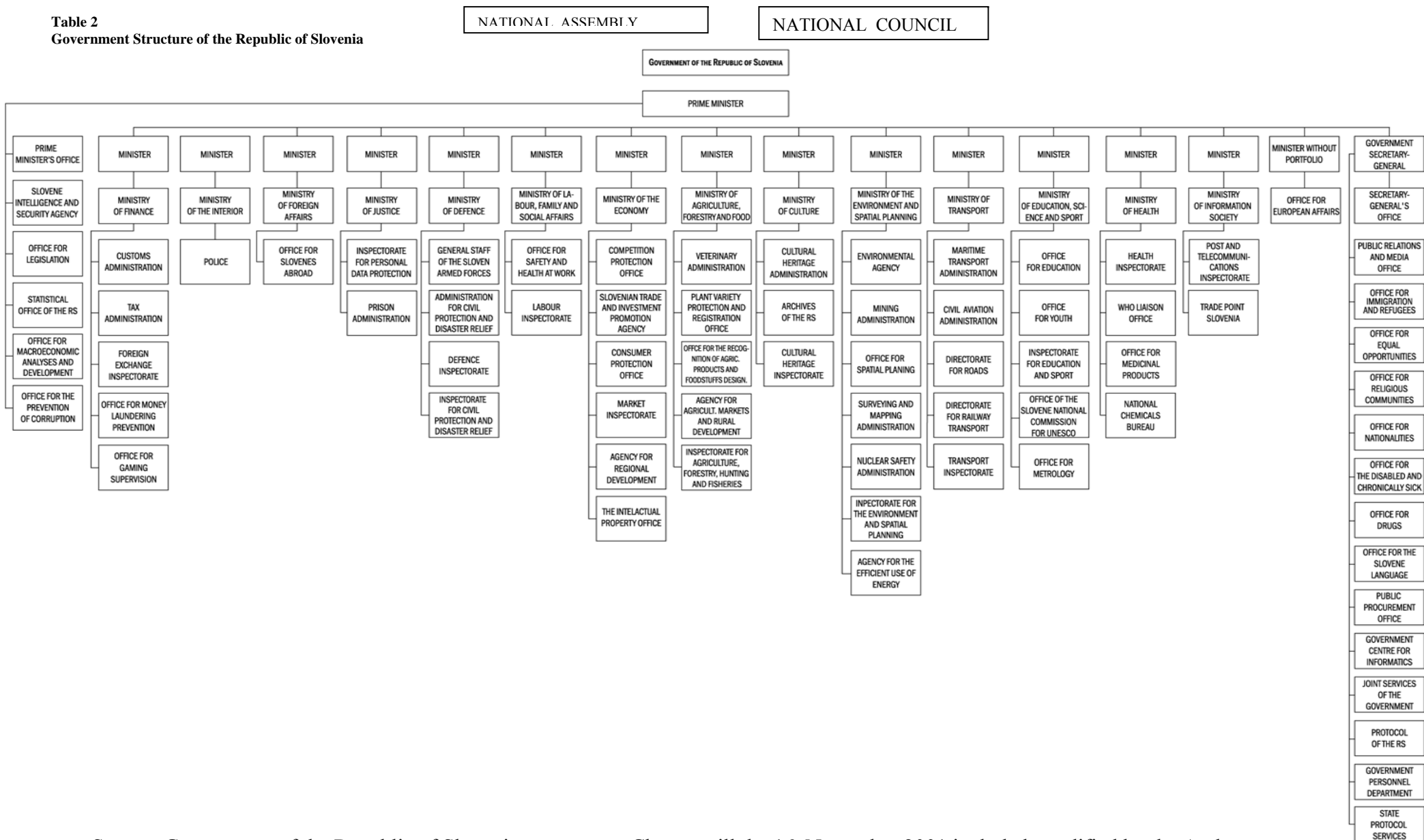
While proposing new or adapted legislation they have changed respective regulations in the direction of bigger autonomy of decision making of the ministers.⁶⁷

Most of the ministers being experts for their ministries field usually count on public servants and colleagues, or trust in intra-ministerial scientific advisory structures or in “own” commissioned domestic or foreign research.

⁶⁶ The current Government coalition consists of four parties: the Liberal Democracy of Slovenia (LDS), the United List of Social Democrats of Slovenia (ZLSD), SLS+SKD Slovene People's Party (SLS+SKD) and the Democratic Party of the Pensioners of Slovenia (DeSUS). LDS has nine portfolios in addition to the post of Prime Minister: foreign affairs, finance, defence, economy, the environment and spatial planning, education, science and sport, health, information society and European affairs. ZLSD has three portfolios: internal affairs, culture, and labour, family and social affairs. SLS+SKD also has three portfolios: justice, agriculture, forestry and food, and transport. The coalition agreement was signed on 15th November 2000.

⁶⁷ see: Slavko Gaber: Studying decision-making in the 'Centre of Government' –Slovenia Paper, presented to the ECPR 28th Joint sessions of Workshops Copenhagen 14 - 19 April, 2000

Table 2
Government Structure of the Republic of Slovenia



Source: Government of the Republic of Slovenia (www.sigov.si) Changes till the 16. November 2001 included, modified by the Author..

65.1 Policy areas

65.1.1 Agriculture

Agriculture policy development falls into the competence of the Ministry of Agriculture Forestry and Food.

The current Minister Franci But holds a masters degree in agro-economy and thus can be considered as an expert for at least some areas of his portfolio.

Under the Minister's responsibility falls:

- the Veterinary Administration
- the Office for Plant Variety Protection and Registration further
- the Office for the Recognition of Agricultural Products and Foodstuffs Design as well as
- the Agency for Agricultural Markets and Rural Development and the
- Inspectorate for Agriculture, Forestry Hunting and Fisheries. (see Diagram)

Beside the Ministry the (Socio-)Economic Council of the Republic discusses matters in connection with agriculture, fisheries and food industries.

The Homepage of the Ministry indicates that Expertise and scientific advice is gained through in-house research and commissioned research partially on national and partially on international level. Detailed Project List is available.⁶⁸

65.1.2 Fisheries

See previous section

65.1.3 Energy

On April 27 2001 a new law came in force shifting the areas of energy and mining from the Ministry of the Economy under the jurisdiction the Ministry of the Environment and Spatial Planning. The Minister Janez Kopač is an expert in finance.

The Ministry consists of the following bodies:

- the Agency of the RS for the Environment,
- the Mining Authority of the RS,
- the Office of the RS for Spatial Planning,
- the Mapping and Surveying Authority of the RS,
- the Nuclear Safety Authority of the RS,
- the Agency for Efficient Use of Energy, and
- the Inspectorate of the RS for the Environment and Spatial Planning.

Regarding the areas of energy and mining the activities of the ministry now also include primary and transformed energy, the production of energy resources and their rational use, management strategies for all types of raw minerals (regardless of whether they are energy

⁶⁸ <http://www.sigov.si/mkgp/>

sources, metals or non-metals), the opening and functioning of mines, except for those that are in the process of closing or have stopped functioning according to relevant legal provisions. In the area of energy the most important tasks ahead of the Ministry are the harmonisation of the sectoral legislation with the *acquis*. This includes the liberalisation of the energy market, the abolition of monopolies and the creation of possibilities for private investments into the energy sector.⁶⁹

Beside the Ministry of the Environment and Spatial Planning the (Socio-)Economic Council of the Republic and the Slovenian Energy Agency discuss matters in connection with Energy.

The Slovenian Energy Agency is an independent organisation that came into existence as a result of the new Energy Law. The Energy Agency, which has its headquarters in the city of Maribor, determines consumer prices for use of Slovenia's energy networks (e.g., the electricity grid), resolves disputes, and grants licenses.

Energy policy is primarily driven by harmonisation with the EU *acquis*.

65.1.4 Transport

Slovenia's Transport policy activities are located at the Ministry for Transport.

The Minister Jakob Presečnik holds an engineers degree in construction

The focus of the ministry falls into two parts:

- the one is determined by harmonisation with the EU *acquis*,
- the other is driven by the development of national transport (sea, air, land) infrastructure

Scientific advice is usually based on domestic expertise commissioned by the Ministry.

Years ago the ministry established a scientific council for the reorganisation of navigation services whose activities faded-out and were replaced by a project group.

65.1.5 Environment

(See also Energy section)

The Environment agenda is located at the Ministry of the Environment and Spatial Planning

Within the Ministry it is organised in the new **Agency of the RS for the Environment and Spatial Planning**. The Agency for the Environment and Spatial Planning is a body of the Ministry and also the main national expert institution which is responsible for implementation

of the administrative and expert tasks related to the integrated protection of the environment and natural assets(self-definition). These include the conservation of nature, the protection of air and soil, environmental impact assessment, protection from noise, water management, the distribution of concessions for use of waters, the monitoring of meteorological, hydrological and ecological parameters, assessment of the state of geological, seismological and other geophysical phenomena etc. Three existing bodies in the Ministry of the Environment and Spatial Planning were integrated into the agency, which Slovenia was bound to establish in accordance with its EU accession negotiation position: the Nature Protection Authority of the RS, the Hydro-meteorological Institute of the RS and the Authority of the RS for Geophysics. They were reorganised into new units: the **Environmental Office**, the **Office for General Affairs**, the **Monitoring Office**, the **Seismological Office** and the **Meteorological Office**. The Agency was established in order to enhance the effectiveness of the organisation (including the delivery of information), through rationalisation of administrative procedures.⁷⁰

⁶⁹ see: <http://www.gov.si/mop/vsebina/angl/index.htm>

⁷⁰ *ibidem*

The Council for Environmental Protection of the Republic of Slovenia plays a role in environmental policy advice. It was founded on 30 November 1993 by the National Assembly in accordance with the 90th article of the Law on Environmental Protection. It is independent from the Ministry and the Government.

According to the 91st article of the Law on Environmental Protection the Council should:

- monitor the quality and the protection of the environment in Slovenia,
- assure the connection and inclusion of Slovenia in global environmental actions elsewhere and
- influence the events in Slovenia through its statements, recommendations and suggestions.

The primary role of the Council is to contribute to policy development in the longer term by providing an authoritative factual basis for policy making and debate, and by setting new policy agendas and priorities. This requires consideration of the economic, ethical and social aspects of an issue as well as the scientific and technological aspects. It provides advice on matters, both national and international, concerning the pollution of the environment; on the adequacy of research in this field; and the future possibilities of danger to the environment. Within this remit the Council has freedom to consider and advise on any matter it chooses. The members of the Council are experts and researchers in various fields of science, which enables comprehensive estimations of phenomena and conditions of the environment from the viewpoint of protection of national natural wealth and its sustainable management. The public must be informed about the estimations of environmental conditions, national environmental policies, reconciliation of Slovenia's developmental interests with environmental protection, environmental regulations, and other issues that are connected with environmental protection.

The CEPRS operates professionally and independently; it is neither a governmental nor an executive agency, but it can lead discussions with these agencies or project councils and other institutions. It expects constructive co operation from everybody involved in environmental issues. The views and evaluations given by the Council can only be of a professional nature; political evaluations and decisions are the responsibility of the Parliament, Government and other political bodies. The Council invites different experts and non-governmental representatives from the fields that are placed on the agenda to attend its meetings and contribute to discussions. It wants to allow easy public access to information. The statements, opinions and recommendations of the Council are intended for anybody who is personally or professionally responsible for environmental conditions or is affected by them. The CEPRS has an independent full-time secretariat. The Council has standing orders, office space, and other amenities that enable intensive work on the aforementioned issues.

The Council is also concerned with the management of environment and human lives as well as the management of natural goods and the provision of healthy living conditions.⁷¹

65.1.6 Health and the consumer

In Slovenia the two agendas health and the consumer are organised in different Ministries. Health in the Ministry of Health and consumer protection in the Ministry of the Economy and therein in the Consumer Protection Office.

The current minister for Health is Dr. Dušan Keber, Professor of Internal Medicine. the Ministry's agendas are covered by the following Offices

- the Health Inspectorate,

⁷¹ see: http://www.sigov.si/svo/svors_e3.htm

- the Office for WHO Liaisons
- the Office for Medical Products and
- the National Chemicals Bureau.

The Minister is advised in his work by the Council for Health of the Republic of Slovenia constituting itself within the ministry, as well as the Ethical Commission of the RS and the Ethical Commission for Transplantation Activities.⁷²

The Food and Nutrition Council was also established under the Ministry of Health.

The FNC has different working groups. It is composed of representatives of various state ministries and food and nutrition experts. The Consumer Protection Office is also involved in this group and considers it as an 'unformal' expert advisory body for their work in the food area.

The activities of the **Consumer Protection Office within the Ministry of the Economy** are the following

to fulfil:

- technical and administrative tasks relating to preparation and implementation of the programme for consumer protection in administrative bodies, professional organisations and non-governmental organisations;
- consumer education and dissemination of information;
- organisation of comparative evaluation of products and services; advising consumers, monitoring and co-ordinating activities of ministries and professional institutions;
- implementation of tasks in the field of consumer protection, participation in and promotion of the development of non-governmental, non-profit consumer organisations;
- interstate and international co-operation in the technical and administrative area of consumer protection.⁷³

The Consumer Protection Office is advised by the Consumer Protection Council

Beside representatives of the Consumer Protection Office it is constituted of representatives of other state departments/ministries, legal experts from the field of consumer protection and representatives of non-government consumer organisations.

65.1.7 Research

Research prior the responsibilities of the Ministry of Science and Technology is now organised in accordance with the new Government Act, within the Ministry of Education, Science and Sport. (Fusion of the former two Ministries Education and Sport on the one side and Science and Technology on the other). The responsible Minister is Lucija Čok. She holds a doctors degree in pedagogy.

The new ministry handles matters related to: research; university and postgraduate education and the promotion of science; the development, establishment and functioning of the infrastructure needed for research; scientific publications; the scientific information system, and communications and international co-operation in science.

In order to do so the Ministry has established a diversified Expert System (Ekspertni Sistem) with the –

- Council for Science and Technology as its largest body. Other Bodies are :
- The National Council for Scientific Research the specialised
- Council for Technological Development the

⁷² <http://www.sigov.si/mz/ang/institucije1.html>

⁷³ <http://www.sigov.si/uvp/index.htm>

- Scientific Council for the Nature and Culture of Slovenia and the Slovenian People and other
- Sub-Councils for different scientific and technological Branches.

66 Scientific advice

66.1 General background

The potential for expert supported decision making in small democracies of only a few million of citizens is a problem of general limited human (scientific and expert) resources. In new democracies with political parties and affiliations still in the process of formation there is little hope for having experts for the different specific fields being deployed for the same field of expertise at all levels of decision making (cabinet, ministry, parliament, committees councils and political party). Up to a degree the problem of scarce human resources is going to stay as permanent back side of a coin of efficient management and governability of small political entities.⁷⁴

It can be expected that the EU accession will increase the problem due to delegation of national experts to EU Bodies.

In Slovenia policy development, benefited allot from ministers (currently 15) being experts in their field and from foreign expert help. But domestic scientific recourses and foreign expert help were not able to satisfy the needs of different partners in representative democracy arrangements. Where each part wants his/her own expertise. Trying to satisfy all needs only led to fragmentation of advice capacities leaving behind numerous bodies and names that do not necessarily reflect their “real” function.

The delegation of much decision-making to committees on the one hand and the devolution of substantial slices of power to individual ministers on the other are liable to be dangerous for the unity of governmental policy.⁷⁵ Divergent developments in decision making and in incorporating scientific advice are still in place. The resulting sub-optimal performance is known to wider public and was one of the reasons for low popularity of the government in the nation.⁷⁶ After high expectations, support for the government is declining. In contrast to that, the institution with the highest degree of trust in Slovenia is now education.⁷⁷

Summing up one could argue that the Slovenian People do not trust the competing policy development procedures currently in place in Slovenia. But they do trust in education and scientific expertise.

Best practise in decision making and subsequently in scientific advisory structures and scientific advice production methodologies supporting it are still not found. Nevertheless one could characterise the advisory structures match as government (collective) against government (individual/minister/ies). With the independent entities playing an outsider role.

In newly established democratic political entities consolidation or de-fragmentation of competition at all levels of decision making (e. g. cabinet, ministry, parliament, committees councils and political party) is a time and recourses consuming task driven by necessity. Representative democracy arrangements on the one hand extend this process, on the other hand they increase liberty in decision making from “either/or” to “not only... but also” thus increasing costs and often effectiveness. In the Slovenian case, lost effectiveness in policy development seems to have a deeper impact on the necessity for consolidation than financial recourses or arguments. Although the latter are more often referred to.

⁷⁴ see: Slavko Gaber: Studying decision-making in the 'Centre of Government' –Slovenia Paper, presented to the ECPR 28th Joint sessions of Workshops Copenhagen 14 - 19 April, 2000

⁷⁵ See, Toš 1999, 248. In Slavko Gaber: Studying decision-making in the 'Centre of Government' –Slovenia Paper, presented to the ECPR 28th Joint sessions of Workshops Copenhagen 14 - 19 April, 2000

⁷⁶ In comparison to 1991 when 43 percent of the population expressed their ether complete trust or important trust in the government in 1998 the same figure was 26%.

⁷⁷ went up from 52 per cent in 1991 to 72 per cent in 1998

66.2 Advice provision in relevant policy areas

66.2.1 Agriculture and Fisheries

Beside the Ministry of Agriculture Forestry and Food and its parts (see Table 2) the Minister himself who can be considered as an expert for at least some areas of his portfolio, provide advice in the policy area. Beside that the (Socio-)Economic Council of the Republic discusses matters in connection with agriculture, fisheries and food industries.

The Homepage of the Ministry indicates that Expertise and scientific advice is gained through in-house (Ministerial) research and commissioned research partially on national and partially on international level.

66.2.2 Environment and Energy

Environment

One of the main sources of advice is the Agency for the Environment and Spatial Planning, it is a body of the Ministry. The other source is the Council for Environmental Protection of the Republic of Slovenia. It is independent from the Ministry and the Government founded by law

Energy

Besides the Ministry and its constituencies (see Table 2) the Slovenian Energy Agency who is an independent organisation provides expertise in this field.

66.2.3 Transport

Scientific advice is usually based on domestic expertise commissioned by the Ministry.

66.2.4 Health

There are the following ways in which the Ministry of Health obtains scientific advice:
Through the current Minister himself who is an expert in his field.
Through Offices and Bureau's established within the ministry.
Commissions and Councils established to advice the minister. (for details see section 57.1.6)

The consumer

Consumer protection agendas are realised within the Ministry of the Economy and therein in the Consumer Protection Office. The Office on the one hand uses own expertise and on the other hand is advised by the Consumer Protection Council. (for details see section 57.1.6 second part)

66.2.5 Research

Research now falls under the responsibility of the Ministry of Education, Science and Sport.

As a result of the fusion of the Ministry of Education and Sport and the Ministry Science and Technology. The Minister can be considered as an expert for Education. In research matters she is advised by a diversified Expert System. The Council for Science and Technology being its largest body. (for others see 57.1.7)

Database Report

67 Advisory Bodies covered in database

Name of body	Policy areas covered	Who advised	Full/basic coverage	Nature of body	Categorisation
Ministry of Agriculture Forestry and Food of RS	Agriculture	Ministry	Basic	Statutory-permanent	Type B Commissions Research/Expertise to various Institutions.
Agency for Efficient Use of Energy of the Republic of Slovenia	Energy	Ministry	Full	Statutory-permanent	Type B Preparation of strategical documents in areas of responsibility drafting of secondary
Slovenian Nuclear Safety Administration	Environment/Energy	Regulatory Body Government Ministry	Full	Statutory-permanent	Type B Regulatory function, inspection in nuclear and radiation safety field, Many of SNSA's employees are members of different ad-hoc
Ministry of Transport of the Republic of Slovenia	Transport	Ministry	Basic	Statutory-permanent	Type B Commissions Research/Expertise to various Companies/
Council for Environmental Protection of the Republic of Slovenia	Environment	Public/ Parliament	Basic	Statutory-permanent	Type A CEPRS operates professional and independently. Its task is to influence the events in Slovenia through its statements,
Health Council	Health	Ministry	Full	Non-statutory Fixed-term	Type A Prepares an annual report on national health Discusses national health
National Chemicals Bureau of the RS	Health/Environment/	Ministry	Full	Statutory-permanent	Type B Self standing Organ within the Ministry of Health, gives opinion concerning new

National Medical Ethics Committee of Slovenia (NMEC)	Health	Legislature, Ministry, Other Advisory Body	Full	Statutory-permanent	Type A The NMEC is formally an independent nongovernmental public body, although a state institution. It extensively advised the legislator during the drafting stage of laws on
Government Council of the Republic of Slovenia for the Disabled	Other	Government	Full	Statutory-permanent	Type A Gives opinion on all national programs and other legislation and provides expertise in the area of
Expert Council for Consumer Protection (ECCP)	Consumer Protection	Office for Consumer Protection	Full	Non-statutory Permanent	Type A Is a non-departmental consultation body commenting the annual consumer protection
ME-Office of RS for Consumer Protection (OCP)	Consumer Protection	Other : The Office is a public authority	Full	n/a	Type B comment the legislation affecting the consumers' position of other sectors, creates the consumer policy,
Science and Technology Council of the Republic of Slovenia (STC)	Research	Head of Gvt Ministry	Full	Statutory-Fixed-term	Type A prepares the National Research Program (NRP) monitors the execution of NRP evaluates research groups and programs performs legislative issues related to R&D

67.1 General trends

Slovenian policy development is characterised by divergent developments in decision making and thus in incorporating scientific advice. Party fragmentation leads to a big cabinet and a large number of ministries (14) in a small state. Subsequently the efforts to co-ordinate and prepare joint positions in cabinet rise, while Ministers increase their autonomy of decision making covered by the Constitution. Best practise in decision making and subsequently in scientific advisory structures and scientific advice production methodologies supporting it are still not found. Nevertheless one could characterise the advisory structures match as government (collective) against government (individual/minister/ies). Parallel to this independent entities play an outsider role. Herein different approaches to build up “own” advisory structures can be observed. On the one hand Government Councils and Offices are build-up to cooperate with many different ministries (e.g. Government Council for the Disabled). On the other hand Councils mainly advising one minister exist (e.g. Health Council, ECCP advising the OCP). Some councils, although closely affiliated to one ministry, report to the minister and the head of government. (e.g. Science and Technology Council)

Generally, scientific expertise - in all policy areas covered- is acquired through a combination of methods. For analytical reasons the broad variety of observed advisory bodies and structures of acquiring scientific advice will be narrowed down to two prototypes: in Type A bodies and Type B bodies. In this case the typology of the body refers to its aim and not to its composition. Type A bodies are those specifically set up to provide a scientific advice function. Whereas Type B bodies sometimes deliver advice but were not exclusively set up to do so and have other functions as well (e.g. inspection, regulatory function).

Except from commissioned research, preferred by the ministry of Agriculture and the ministry of Transport, consultative Type A bodies in Slovenia usually have a mixed structure (academic experts, civil servants, industry representatives, NGO representatives, lay people and other) whereas Type B bodies are dominated by civil servants, regardless whom they advice (Government, Ministry, Parliament). However, completely independent advice bodies like the CEPRS are less common.

67.2 Structural Issues

67.2.1 Secretariat

Most Type A bodies providing expertise to Ministries have no own secretariat, but use the administrative assistance of the Ministry, or in the case of Type B bodies are even part of it. Government advisory bodies usually use administrative assistance of government offices. Some bodies like the Office for Consumer Protection (OCP, Type B) and the Expert Council for Consumer Protection (ECCP, Type A) or the Government Council for the Disabled (Type A) and the Office for the Disabled (Type B) work on complementary bases. Some Type B bodies like the Agency for Efficient Use of Energy or the

Nuclear-Safety Administration have no own secretariat, whereas others (e.g. the National Chemicals Bureau) have one.

Independent advisory bodies like the Council for Environmental Protection of the Republic of Slovenia have their own secretariat.

67.2.2 Membership

The size of advisory bodies covered in Slovenia varies from 9 to 45 members although the vast majority has around 20 members. Both extremes are actually organs within a ministry - Agency for Efficient Use of Energy (9) and the Slovenian Nuclear Safety Administration (45) - and have legislation or regulatory functions (Type B). In nearly all bodies the majority of members are male with the exception of the National Chemicals Bureau (Type B) where 19 of 23 members are female.

The backgrounds of the members of advisory bodies show no clear pattern. Although advisory bodies with rather natural science topics seem to be more science centred than other bodies, which tend to have a broader representation. For example, the Expert Council for Consumer Protection has 4 academic and 15 other experts whereas the Health Council and the National Chemicals Bureau have a ratio of 15/0 in the first case and 21/2 in the latter. Usually the members of advisory bodies are fully employed. Either they are civil servants (usually Type B) or they are employed elsewhere (hospitals, universities, NGOs etc.). Some bodies contain experts of international advisory bodies (e.g. STC, ECCP, NMEC) or other advisory bodies within the country (Slovenian Nuclear Safety Administration, STC, ECCP, NMEC). The ECCP has one foreign academic expert on its member list, which is in fact not active anymore.

Usually international experts are invited on occasion and are not a fixed part of the structure. This has structural (part time structure) and probably financial reasons (only reimbursement). Full time expertise is delivered either through civil servants (National Chemicals Bureau, Slovenian Nuclear Safety Administration) or through commissioned research. Full time independent advice bodies are less common.

67.2.3 Budgets

Slovenia is a newly established country in transition. The vast majority of advisory bodies are not older than ten years. Most Type A bodies have no own budget and function on the basis of reimbursement of costs. Some of them like the Expert Council for Consumer Protection do not even reimburse costs. Most bodies have no own secretariat, but use the administrative assistance of the Institution they advice. This holds especially for Type A bodies but also for some Type B bodies. With Type B bodies advice production is usually covered by the general budget. Given this structure, international expertise is mostly incorporated through the purchase of foreign literature or the commission of research.

67.3 Functional Issues

67.3.1 Scope of work

The scope of work of advisory bodies is hard to judge. On the one hand nearly all bodies covered are focused on one main topic. On the other hand some of the topics (like the topic of the Government Council for the Disabled) are really horizontal. Advisory bodies with rather natural science topics seem to be more science centred than other bodies, which tend to have a broader representation in membership.

67.3.2 Independence

Most of the covered bodies work in close co-operation with the institutions requesting the advice. Some even work on complementary bases . An exception in this respect is the Council for Environmental Protection of the Republic of Slovenia that works fully independent and has its own secretariat.

The members of Type A bodies (if they are not civil servants being usually type B) are appointed. Rarely a mixed structure of appointment and election is observed. In the National Medical Ethics Committee of Slovenia (NMEC), for example, members have to declare potential conflicts of interest, and in particular issues they can be excluded from voting and sometimes also from discussion. In other bodies this is not the case or changes from subject to subject. Due to “part time structure” and functioning on the basis of reimbursement of costs, financial aspects play no prominent role in Type A bodies.

67.3.3 Transparency

The operation of most of the bodies is governed by a code of practice. An exception here builds the Expert Council for Consumer Protection which has no formal guidelines or code of practice. The code of practice is particular to individual bodies. It usually defines the mode of operation that sometimes differs widely. For example, the members of the Science and Technology Council of the Republic of Slovenia (STC, Type A) need not to declare any potential conflicts of interest. If the members of the STC have to keep discussions or material used confidential depends on the subject. Whereas the members of the NEMEC (Type A) have to declare potential conflicts of interest and are obliged to keep the used material and discussions confidential. What information from the body is available and how it is made available differs from body to body and even from case to case. The remit of the body is usually published.

67.3.4 Generation, delivery and responses to advice

Formal policy response to advice delivered is not common but not rare either. This depends on the legal basis of the body that in most cases can be described as “sui generis”. Any general trend on how bodies formally operate in detail could not be observed. As expected most bodies use very often expertise held by members themselves to formulate advice followed by the review of existing literature and the consultation of national external experts. International external expert consultation is more likely to be used by bodies dealing with natural and technical sciences like chemicals or the efficient use of energy. Surprisingly the use of public consultation shows no general trend.

67.3.5 Evaluation and impacts of advice

Approximately one third of the bodies studied has no formal assessment of its operation. For most of the assessed bodies it remains unclear who conducts the assessment, as the corresponding questions were not answered. The National Chemicals Bureau (Type B) assesses itself whereas the Science and Technology Council (Type A) is assessed by the recipient of its advice. Half of the bodies covered stated that their advice had an impact, mostly on policy formulation. The other half did not answer this question.

67.3.6 3.6 Changes in the advisory system

Two thirds of the covered bodies stated that there have been recent changes in the structure or in the processes of their work. This is not surprising because the policy making process itself is still in transition. The same holds for scientific advisory structures and scientific advice production methodologies supporting it. Advisory structures in Slovenia are rather formed by necessity and opportunity than by a detailed master plan.

Spain

General Overview

68 Background

The death of General Franco in 1975 heralded the end of 36 years of dictatorship and led to the establishment of the democracy in Spain. The radical transformation from a dictatorship to a democratic government was made clear in the Constitution of 1978. The most important task of the Constitution was to devolve power to the regions, which were given their own governments, regional assemblies and supreme legal authorities. The central government of Spain retained exclusive responsibility for foreign affairs, external trade, defence, justice, law (criminal, commercial and labour), merchant shipping and civil aviation.

Even if regions has got important autonomies, Spain should not be considered as a federation, but as a unitary State which in any case retains some characteristics of a federal State, as the upper chamber of Parliament is oriented towards the representation of the country's regional governments ("*Comunidades Autónomas*"). Each Autonomous Community has its own statute, akin to a regional constitution, which provides the authority to pass legislation in specific domains.

As stated in Article 1 of the 1978 Constitution, Spain is a parliamentary monarchy. The current Constitution was drawn up in 1977/78, approved by national referendum and officially adopted in December 1978. It can be considered as a "rigid" Constitution, and is a directly applicable legal source: it is not only the primary norm that defines the normative system but it is a normative source in itself. The political form of the Spanish State is a "parliamentary monarchy". The Crown is the constitutional institution that embodies the Head of the State and represents the unity of the State as opposed to the separation of powers between the judiciary, legislative and executive branches and to the division of the national territory in different Autonomous Communities.

The King has got a series of legislative and executive authorities, but these are mainly to be intended in a formal way, as they are constitutionally regulated without any discretionary element: he assents to Acts of Parliament and promulgates them, he summons and dismisses Parliament, he calls general elections, he is responsible for calling national referendum in accordance to the Constitution.

The King also proposes and formally appoints the President of Government (Prime Minister) and removes him according to the Constitution. The proposal is addressed to Parliament after consultation with political parties, and the appointment must fall on whoever obtains the confidence on the lower chamber. On proposal of the President of Government, the King appoints and removes members of government. He can also preside at the Council of Ministers at the request of the President of Government. Among other powers, the King is also the highest command of the armed forces (also this power is merely formal, as he cannot decide on its own), he has the high patronage of the Royal Academies and he has the power of granting grace according to the law.

For what concerns international relationships, the King declares war with the approval of the Parliament, he accredits foreign ambassadors and he can express the consent of the State to international obligations by treaties, according to the Spanish Constitution and law.

The main legislative body is the Parliament, which represents the Spanish people. The national Parliament, called “Cortes”, is made up of two chambers: the lower is the Congress of Deputies and the upper is the Senate. The Congress consists of 350 members representing Spain's 50 provinces and the North African enclaves of Ceuta and Melilla. Each province is an electoral constituency with the number of deputies depending on its population. Members of Congress are elected by a system of proportional representation for four years. The electoral system requires parties to obtain a minimum vote of 3 per cent to gain a seat in Parliament. Members of the Senate are elected directly by a first-past-the-post system. Each province provides four members plus additional members in the Balearic and Canary islands, where extra members represent the various islands, making a total of 208 members. The 17 autonomous regions also elect one senator each and an additional member for each one million inhabitants, totalling a further 46 members. The Senate has the power to amend or veto legislation initiated by Congress, but Congress has prominence over the Senate because it has more specific functions and can revoke the decisions of the other chamber. As the power of the chambers are not equal, the system can be defined as a “imperfect bicameralism”. Furthermore, the system resembles the structure of legislative powers in many federal countries inasmuch as the upper chamber is oriented towards the representation of regional interests.

Only the plenary sessions of the chambers can exercise all of the parliamentary functions, and these functions can only be assigned to different parliamentary bodies when specifically provided in the Constitution. Parliamentary committees have basically a preparatory functions, but can receive delegated powers from the plenary chamber. The committees are composed of members elected by the parliamentary groups (which usually correspond to political parties) and the composition of the committees mirrors the relative strength of the parties in the chamber. There are standing legislative and non-legislative committees, as well as non-standing or ad hoc committees established for specific purposes. Standing legislative committees can pass legislative Bills or proposals when the plenary session delegates the appropriate powers to them.

The Head of the Government is the President of Government (Prime Minister), who also presides the Council of Ministers. He is considered to be above the rest of the members of the government, and not simply “*primus inter pares*”. He is proposed and formally appointed by the King, after having listened to political parties, and he must obtain the confidence of the lower chamber. His role is to provide general guidelines of government policies and to co-ordinate and direct administrative activity. He has the power to nominate and remove ministers and can propose the dismissal of Parliament. The Vice-President of Government assumes the presidential functions in case of death, illness or absence of the President.

The Council of Ministers, composed of all the ministers of the government, is the highest decision-making body and is the head of the executive authority. It has the responsibility of the direction of national and international policies, it approves

decrees, decree laws, delegate decrees and government Bills before their presentation to Parliament, it appoints and removes higher administrative officials and it proposes the general budget of the State to the approval of Parliament. The Council of Ministers can operate in full session or through delegated committees of government, which are composed of the ministers responsible for specific areas. These committees deal with matters as foreign policy, state security, economic affairs, regional policy, and so on. They prepare the affairs that eventually require a joint proposal for the Council of Ministers, and co-ordinate the activities of the different departments concerning common tasks.

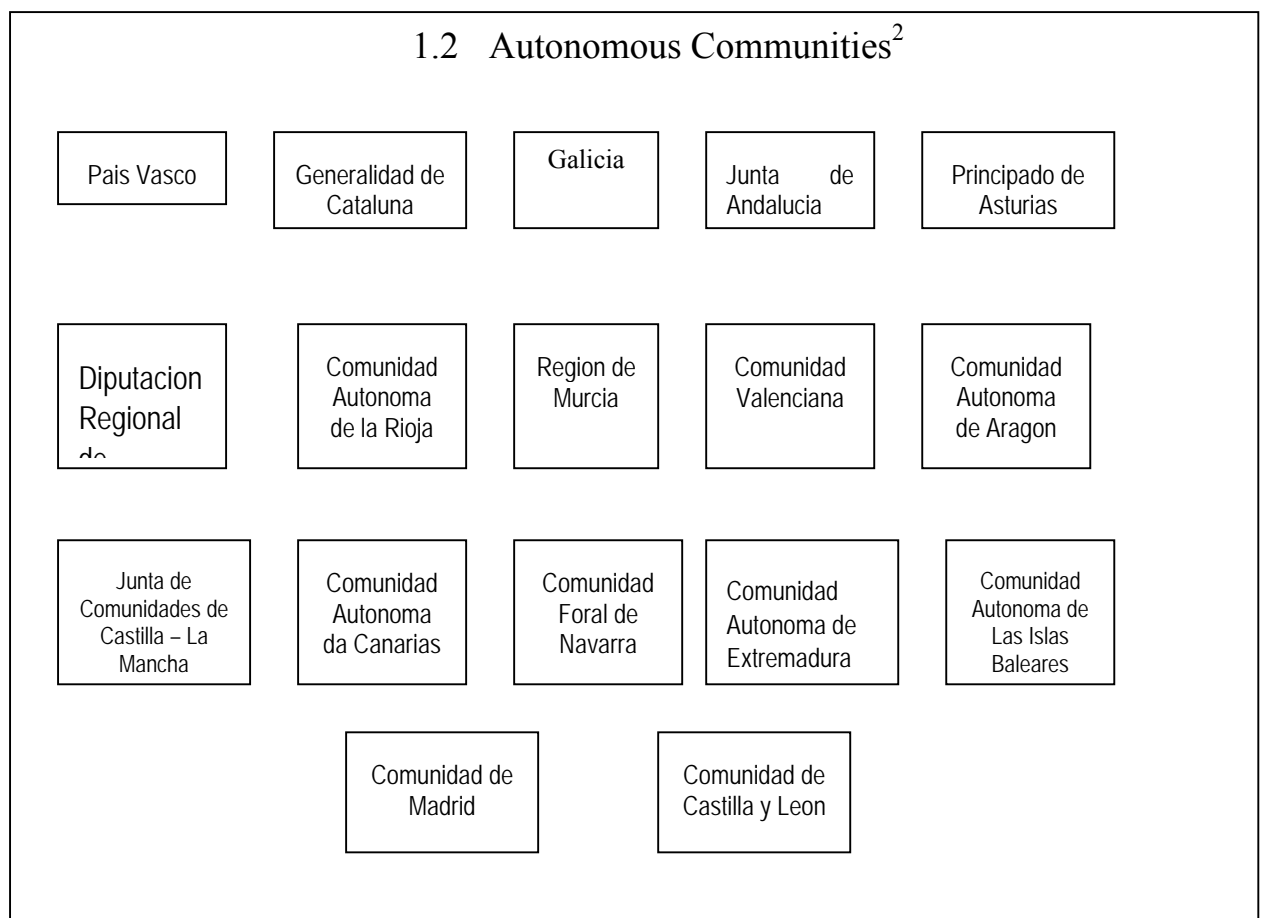
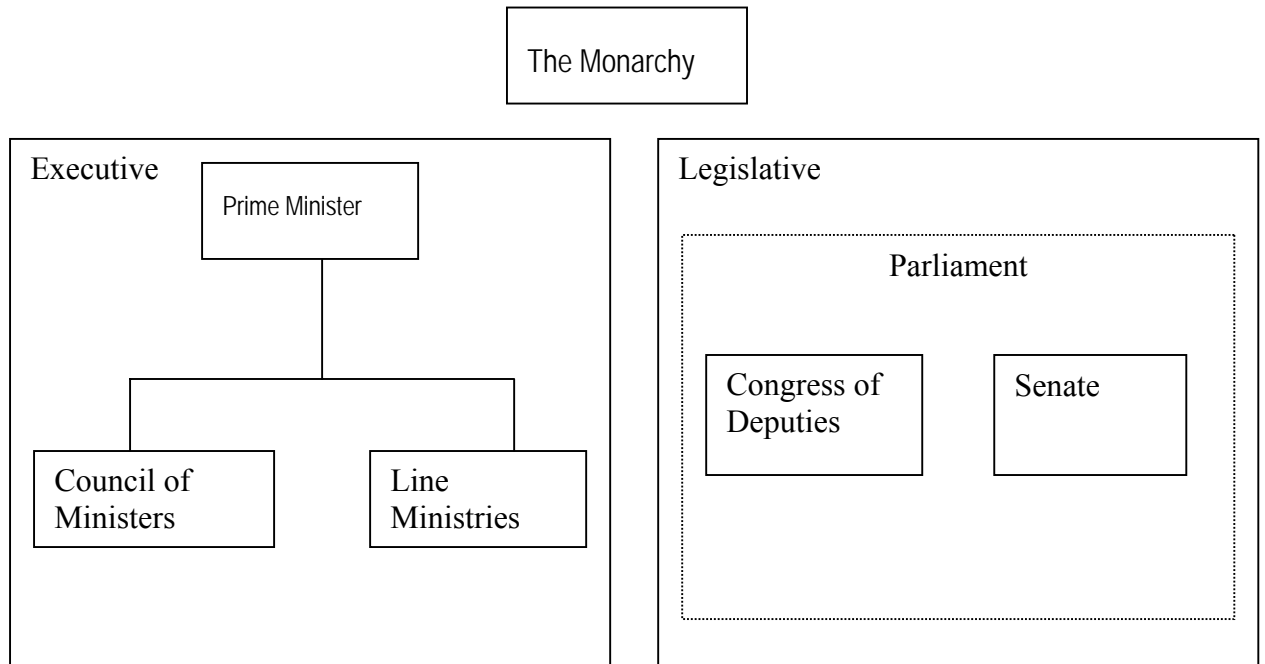
Local governments are articulated in different levels: regions, provinces and municipalities.

There are 17 autonomous regions, each with its own parliament, president, government, administration and Supreme Court (plus its own flag and capital city). Regional parliaments remain in charge for four years, as national Parliament. The regions are funded by the central government and the regions of the Basque Lands, Catalonia, Galicia and Andalusia are responsible for matters such as economic development, education, health, environment, police, public works, tourism, culture, local language and social security. The other regions have less autonomy and fewer responsibilities. The people of the Basque country, Catalonia and Galicia have also been recognised as separate ethnic groups and have the right to use their own languages in education and administration, as declared in the Statute of Autonomy of 1983 accepted throughout Spain in a referendum. With the increasing influence of the Basque and Catalan regional parties in national politics after the general election, the whole question of regional power and autonomy has taken on a new significance, as pressures that point towards greater fiscal autonomy on the side of the regions are increasing.

Each region is further divided into a number of provinces. Each province has its own administration which is responsible for a range of services, including health, public works, sports facilities and social clubs. There is a civil governor appointed by the national government, plus a military governor. There is also a provincial government (*deputacion provincial*) presided by the leader of the party with the most votes from the provincial elections.

Larger towns and villages form a municipality which is run by a council consisting of a number of councillors, each of whom is responsible for a different area of local services. The council is headed by the mayor and it has its offices in the town hall.

The Spanish political system: overview



¹ As the Congress has prominence over the Senate, the parliamentary system of Spain can be defined as an “imperfect bicameralism”

² The Autonomous Communities of the Basque Country, Catalonia, Galicia and Andalucia have got more autonomy and responsibilities than the others.

68.1 Policy areas

68.1.1 Agriculture

The responsibilities for agricultural policies are attributed to the Ministry of Agriculture, Fisheries and Alimentation (Ministerio de Agricultura, Pesca y Alimentación). The ministry is structured in two General Secretariats (one for Agriculture and the other for Fisheries), plus a Under-Secretariat General for Agriculture, Fisheries and Alimentation. The Under-Secretariat General has got competence for what concern economic, juridical and organizational matters: it administers and controls the human resources of the Ministry, it drafts the economic balance of the activities of the Ministry, it determines the economic and financial needs, it looks over at the administrative organization of the Ministry, it elaborates and implements the informatics plan, it controls the technical communication network, it helps the Minister in keeping relationships with professional organisations and with international institutions of cooperation, it collects and elaborates statistical data. The General Secretariat of Agriculture and Alimentation has got the specific responsibility for the planning and elaboration of the basic governmental policies in matter of agriculture. In working out this duty, it keeps cooperative linkages with the Autonomous Communities and with the European Union. Within it, the General Direction for Agriculture is the technical service which elaborates the basic norms for the coordination and implementation of activities linked with agricultural production, with the commercialisation of plants and seeds and with biodiversity protection. Competence in matter of breeding are attributed to the General Direction for Breeding, operating too within the General Secretariat for Agriculture and Alimentation.

68.1.2 Fisheries

The General Secretariat of Marine Fisheries, operating within the Ministry for Agriculture, Fisheries and Alimentation, has got the responsibility for policies concerning fisheries, with particular regard to the organization of the fisheries sector, the coordination of aquiculture, the commercialisation of fisheries products. Competences pertaining to the security of fisheries products are attributed to the Ministry of Health and Consumption. Research policies concerning fisheries are determined by the General Secretariat in cooperation with the Ministry of Science and Technology. Within the Secretariat, the General Direction of Fisheries Resources has got competencies in matter of fisheries for what concerns the inspection and control of fisheries activities, the coordination of activities linked with communitarian fisheries policies, the fisheries relationships with foreign countries, the cooperation with international organizations for fisheries and aquiculture. The general economic administration and planning of the fisheries sector are attributed to the General Direction for Fisheries Structures and Markets, operating within the Secretariat. The fFnd for the Regulation and Organization of the Market of fishing products and marine cultures (FROM, Fondo de Regulación y Organización del Mercado de Productos de la Pesca y Cultivos Marinos) is an autonomous body of the Ministry of

Agriculture, Fisheries and Food depending on the Secretariat General of Marine Fisheries. The FROM has legal personality and has assigned the following tasks: the promotion of associations, cooperatives and enterprises related to production, processing and marketing of both fishing products and marine cultures; the carrying out of promotion campaigns of fishing products; the promotion of new products from marine origin or from aquiculture; the management of procedures for the granting of national and Community aids derived from the Common Organizations of Markets of the European Union; the carrying out of studies and reports on economic plans relating to fishing national production in order to meet the every day more changing needs of the productive and commercial fishing sectors.

68.1.3 Energy

The State Secretariat of Economy, Energy and Small and Medium Enterprises, operating within the Ministry of Economy (Ministerio de Economía) has got, among other responsibilities, the duty of proposing, implementing and controlling policies in matter of energy. In particular, it takes decisions concerning: the elaboration of general planning proposals in matter of energy, the formulation of proposals for the conservation and production of energy, the conduction of research concerning alternative energies. The Secretary of State for Economy, Energy and Small and Medium Enterprises is member of the Delegated Governmental Commission for Economic Affairs and he also presides the Commission for Economic Policy, which is the body of advice of the Delegated Governmental Commission.

In its work the State Secretariat can rely on a series of directive bodies, that are the General Secretariat of Economic Policy (that in turn looks over the General Direction for Economic Policy and the General Direction for Sector Policies), the General Direction of Treasure and Financial Policy, the General Direction for Pension Funds, the General Direction for Small and Medium Enterprises and the General Direction for Energy and Mining Policy. This last Direction holds the responsibility for the general governance of the energetic and mining sectors. It elaborates proposals of law in matter of hydrocarbons, nuclear and electric energy, it promotes the rational utilization of electric energy, it gives authorization to activities of production and distribution of energy and to activities of exploitation of hydrocarbons, it looks over the carrying out of research activities linked with the utilization of energetic resources, also by collecting data concerning the production and consumption of energy. The General Direction is articulated in some Sub-Directions, which carry specific responsibility for assigned areas of competence. These are the Sub-Direction for Hydrocarbons, the Sub-Direction for Electric Energy, the Sub-Direction for Nuclear Energy and the Sub-Direction for Energetic Planning.

68.1.4 Transport

The Ministry of Development (Ministerio de Fomento) holds the responsibility for the elaboration and drafting of transport policies. The State Secretariat of Infrastructure is the main technical service of the Ministry. The Secretariat is divided in four General Direction: the General Direction of Road Network, the General Direction of Railways, the General Direction of Architecture and Town Planning, the General

Direction for Economic Planning. The State Secretary has also assisted in his work by the Cabinet and by the Sub-Direction General of Infrastructure Planning.

Every General Direction is in turn divided in several sub-directions. The General Direction of Road Network is divided in the General Sub-Direction of Planning, the General Sub-Direction of Projects, the General Sub-Direction of Construction, the General Sub-Direction of Conservation and Exploitation, and the General Secretariat. The General Direction of Railways is divided in the General Sub-Direction of Plans and Projects for Rail Infrastructure and the General Sub-Direction for Rail Infrastructure Construction. The General Direction for Economic Planning is divided in the General Sub-Direction of Investments, the General Sub-Direction for Preliminary Analysis, the General Sub-Direction for Statistic and Study, and the Economic Affairs. The Secretariat of State also looks over the activities of a series of institutions and technical bodies. These are the Autonomous Centre of Study and Experimentation for Public Works (CEDEX), the Public Enterprise for the Management of Railway Infrastructures (GIF), the Public Enterprise for Spanish Airports and Air transports (AENA), the National Enterprise of Roads (ENAUUSA) and the Enterprises of Public Soil (SEPES).

68.1.5 Environment

The Environment Ministry (Ministerio de Medio Ambiente) holds the responsibility for environmental policies. The Ministry is structured in a series of higher directive bodies. These are the State Secretariat of Water and Coasts, the Sub-Secretariat of Environment and the Secretariat General of Environment. There is also a Cabinet which directly assists the Minister. The State Secretariat of Water and Coasts elaborates the National Hydrological Plan, which contains the guidelines of the governmental policies in matter of hydric resources. It also boosts and controls the construction of hydraulic infrastructures, it prepares norms in matter of water and coasts, it guarantees the protection, management and control of the hydric heritage, it promotes research and technical studies in matter of hydraulic infrastructure and of protection of hydric resources.

The Sub-Secretariat of Environment has got general management functions: it has the control over human resources, it keeps the institutional relationships with other bodies, within and outside the Ministry, it elaborates data and prepares the informatics plan, it controls the economical management of the Ministry. The Sub-Secretariat of Environment also controls the General Technical Secretariat, the General Direction of Economic Control and Planning and the General Direction of the National Institute of Meteorology.

The Secretariat General of Environment is the directive body of the Environment Ministry which manages and co-ordinates the execution of policies relating to environmental protection, biodiversity conservation, rational utilization of natural resources, environmental education and raising of public awareness. The body of technical advice of the Secretariat General is the Technical Cabinet.

68.1.6 2.6 Health and the consumer

The Ministry of Health and Consumption (Ministerio de Sanidad y Consumo) has got the responsibility for policies in matter of health and consumer care. The Constitution of 1978 fixed the competencies of the Autonomous Communities and the residual competencies of the central Government in matter of health. The central Government has got responsibility for matter of general public health, for the overall guidelines and co-ordination of the health system and for legislation concerning the introduction of new drugs and the price system of existing drugs. The central Government also guarantees the technical homogeneity between the health services of the different Autonomous Communities. The main coordination body of the Ministry is the Inter-territorial Council of the National Health System (CISNS - Consejo Interterritorial del Sistema Nacional de Salud). The CISNS is the permanent body in charge of keeping communication and information between the different Health Services and between these Services and the Central Administration. It also has to co-ordinate the guidelines for human resources policies and for acquisition and distribution of health services and goods. The CISNS is made up of 34 members: half of them are representatives of the national administration, half of them are representatives of the 17 Autonomous Communities. The President of the CISNS is the Minister of Health and Consumption, who also appoints the Secretary, while the Vice-President is nominated by the representatives of Autonomous Communities. The CISNS gathers in plenary session on initiative of the President or of a third of its members: anyway, it has to gather at least four times at year. The CISNS is also structured in Commissions and Working Groups, each dealing with their own specific problems and establishing their own way of working.

68.1.7 Research

The Ministry of Science and Technology is the Department of the General Administration of State responsible for the policy of promotion and general co-ordination of scientific research and of technological development and innovation. The Ministry, through the State Secretariat of Scientific and Technological Policy, is responsible for the attainment of the strategic goals of the National Plan of Scientific Research, Technological Development and Innovation (2000-2003). It also has to contribute to the increase of importance and quality of the Spanish science and technology, to the reinforcement of the internationalisation process and to the qualification of human resources. The Department also contributes to the elevation of the competitiveness of companies by promoting innovations and by using the results obtained by the scientific research and by the technological development. An important aim of the Government is the development of the Information Society. The State Secretariat of Telecommunications and for the Information Society is in charge of the promotion of the information and communication technologies, of the telecommunications infrastructures and services which constitute their mediums and of the contents and applications of the information technologies. At the same time, this State Secretariat is in charge of the process of liberalisation of the telecommunications and audio-visual sector.

The higher bodies of the Ministry are the State Secretariat of Scientific and Technological Policy and the State Secretariat of Telecommunications and for the Information Society, plus the Under-secretariat of Science and Technology, which is mainly a managing body. The Cabinet is the body of immediate assistance of the

Minister. The Minister of Science and Technology is also the president of the Advisory Council for Science and Technology, of the Sector Conferences of the Ministers in the Parliament of the Autonomous Regions (regarding the matters within the responsibility of the Department), of the Inter-ministerial Committee of Information Society and New Technologies, of the Governing Council of the Astrophysics Institute of the Canary Islands, of the Committee for Industrial Competitiveness and of the Council of Co-ordination of the Industrial Security.

The State Secretariat of Scientific and Technological Policy is the higher body of the Ministry of Science and Technology with competence for scientific and technological policy. It has to boost, to plan and to supervise the activities of the Department regarding the scientific and technological research, especially those of the National Plan of Scientific Research, Technological Development and Innovation. It designs the mechanisms needed to get the participation and co-ordination of all agents involved in the Spanish science-technology-business system, in particular through the promotion of instruments favourable to the transfer of research results. It develops international strategies and initiatives in science and technology, and it co-ordinates and participates in international bodies and programmes of scientific research and technological development. It develops and boosts big scientific and technological facilities and it proposes legislative and regulative initiatives within the framework of the functions of the State Secretariat. It also exercises the control of efficiency of the promotion tasks of the industrial technological development carried out by the Centre for the Industrial Technological Development (CDTI) and it promotes research concerning energy diversification and saving carried out by the Institute for the Energy Diversification and Saving. The Secretariat-General of Scientific Policy, the State Research Office and the State Office of Technological Policy depend on the State Secretariat of Scientific and Technological Policy.

The State Secretariat of Telecommunications and for the Information Society is the higher body of the Ministry of Science and Technology in charge of boosting, planning and supervising the activities of the Department with regard to the telecommunications and the Information Society. It has to study, to propose and to execute the general policy on telecommunications and the development of the Information Society. It elaborates and proposes the regulation regarding the ordering and ruling of the telecommunications, the audio-visual services and the tools which favour the development of the Information Society. It promotes and develops the advanced infrastructures and facilities of telecommunications and the Information Society. It designs and executes projects which favour the integration of information technologies in all fields of the economic and social activity. It boosts and co-ordinates the Strategic Initiative of the Government for the Information Society. It elaborates the proposal, the management and the following of the national programmes and of the strategic actions of the National Plan of Scientific Research and Technological Development and Innovation in the telecommunications sector and it promotes the Information Society in co-ordination with the State Secretariat of Scientific and Technological Policy. It has the powers of control, inspection and sanction regarding telecommunications, audiovisuals and information society and it solves controversies between operators and users in accordance with the regulation in force. The Office of Telecommunications and Information Technologies and the Office for the Development of the Information Society depend on the State Secretariat of Telecommunications and for the Information Society.

69 Scientific advice

69.1 General background

In Spain, there are no specific interdepartmental guidelines on how to solicit science-based expert advice. Anyway, there's a growing awareness of the relevance of science and research as important means to foster development, and as fields that need a careful governance.

This awareness led in April 2000 to the creation of the Ministry of Science and Technology, which is the specific Department with responsibilities in matter of science and research. This creation allowed to coagulate within a unitary structure of responsibilities the competencies that were formerly spread between different Departments (in particular the Ministry of Industry and Energy, the State Secretariat of Education, Universities, Research and Development and the General Office of Higher Education and Scientific Investigation) and this in turn resulted in greater rationality and effectiveness of the overall system of government.

The Ministry has got important functions of control of a series of public research bodies which represent important sources of scientific advice. This function is in particular exercised through the State Secretariat of Scientific and Technology Policy, which holds the presidency of the Centre of Energy, Environmental and Technological Research (CIEMAT), of the National Institute of Agricultural and Food Research and Technology (INIA), of the Spanish Oceanographic Institute (IEO) and of the Technological Geo-mining Institute of Spain (ITGE).

The Ministry also took on the control of the Industrial Technology Foresight Observatory (OPTI), created in December 1997 within the Ministry of Industry with the aim to make foresight studies on the technological trends and needs of the Spanish industry in the future. In 2000, OPTI was established as a Foundation under the Ministry of Science and Technology protection. The main important public and private institutions in relation with technology development are member of board of this Foundation.

OPTI has carried out a planning of foresight activities that resulted in the realisation of 26 studies, with the aim to obtain a foresight vision of the more relevant technological aspects for the future development of industries. These studies have a time horizon of 15 years and a mixture of different methodologies: Panels of Experts, Delphi methodology and building scenarios have been applied. The work of OPTI covers the sectors of Agro-food, Energy, Environment, Chemical, Information and Communication Technologies, Transport, Basic and Transforming Manufactures and Traditional Industries (footwear, textile, toys, wood and furniture, glass and ceramic and jewellery). Recently, OPTI and the National Patents Office have begun a pilot action of Technology Watch in two sectors: Agro-food and Basic and Transforming Manufactures with the edition of two News Bulletins in paper and electronic format with information of patents and important technological news.

Another recent development is the creation of the Spanish Foundation of Science and Technology, which was established on initiative of the Minister of Science and Technology in April 2001. The Foundation has the main objective of strengthening

the linkages between the research system, the government system and the industrial sectors. The Foundation organizes seminars and workshops to put in contact representatives of the research community with representatives of the industrial world, in order to foster the scientific and technological research and to augment the overall competitiveness of Spanish enterprises.

69.2 Advice provision in relevant policy areas

An important source of advice in Spain is represented by public research institutes, which operate in the different areas of research and which are controlled, in the great majority of cases, by the Ministry of Science and Technology.

For what concerns agriculture matters, an important source of advice is the National Institute for Agricultural and Food Technology Research (INIA), which establishes the main objectives and the general guidelines for scientific and technological research concerning agriculture, breeding and food technology. The activities of INIA are carried on in accordance to the agricultural policy fixed by the Ministry of Agriculture, Fisheries and Alimentation and contained in different programs, in particular in the Sector Program of Agricultural and Alimentary R&D. The main Research Centres of INIA operates in the fields of Animal Health, of Forest Research and of Sustainable Agriculture. There are also Departments which have got specific competency on Biotechnology and Genetic Modifications, on Sustainable Use of Environment and on Food Production Technology and Industry.

The Spanish Oceanographic Institute is the body of research and advice for the governmental fisheries policy. It is an autonomous body which operates under the surveillance of the Ministry of Science and Technology. Its activity of research concerns the sea resources in general, the oceanographic problems and the protection of sea environment. The Institute aims to address its research activities in order to provide the Public Administration with specific information and advice regarding the rational utilization and protection of the sea environment. The Institute also formally represents the Spanish Government among international oceanographic organizations and commissions.

The Research and Experimentation Centre of Public Works (CEDEX) is a research body which provides advice to the Ministry of Development and to the Environment Ministry with reference to a wide range of problems, included matters of transports and environmental protection. CEDEX is structured in different Laboratories which deal with Harbour and Coastal Studies, Road Research, Building Structures and Materials and other civil engineering matters. The Centres and Laboratories of CEDEX reserve nearly 70% of their resources to technical high-level advice and nearly 30% to activities of applied research and development, technology transfer and scientific and technological information and divulgation.

For what concerns Health, the body of scientific and technical advice of the Ministry of Health and Consumption and of the health systems of the Autonomous Communities is the Health Institute Carlos III, which carries on activity of research

and control, is in charge of the promotion of health education and is also the structure which gives technical and scientific authorizations in matter of health.

Finally, in the area of research there are a series of specific structure of research and advice, all operating under the Ministry of Science and Technology: the State Research Office, the State Office of Technological Policy, the Higher Council of Scientific Research, the Spanish Foundation for Science and Technology, the Industrial Technology Foresight Observatory, the Advisory Council for Science and Technology. The Inter-ministerial Commission of Science and Technology is a inter-departmental commission which carries the specific responsibility for the development of Science and Technology Policy.

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Website of the Spanish Ministry of Economy: <http://www.mineco.es>

Database Report

71 Advisory Bodies covered in database

Name of body	Policy areas covered	Who advised	Full/basic coverage	Nature of body	Type
1) FECYT – Fundación Española para la Ciencia y la Tecnología (Spanish Foundation for Science and Technology)	Research	Ministry of Science and Technology	Full	Statutory permanent	Multifunctional body
2) IEO – Instituto Español de Oceanografía (Spanish Institute of Oceanography)	Environment Research Fisheries	Ministry	Full	Statutory permanent	Multifunctional body
3) Centro de Estudios de Carreteras del Centro de Estudios y Experimentación de Obras Públicas – (Road Research Center)	Transport	Ministry	Full	Statutory permanent	Multifunctional body
4) INIA – Instituto nacional de investigación y tecnología agraria y alimentaria (National Institute of Agricultural and Nutritional Research and Technology)	Agriculture Environment Health	Ministry	Full	Statutory permanent	Multifunctional body
5) CIEMAT – Centro de Investigaciones Energéticas Medioambientales y Tecnológicas (Research Centre for Energy Environment and Technology)	Environment Energy	Ministry Other	Full	Statutory permanent	Multifunctional body

6) Centro de Estudios de Puertos y Costas (Centre for Harbours and Coastal Studies)	Environment	Ministry	Full	Statutory permanent	Multifunctional body
7) CSIC – Consejo Superior de Investigaciones Científicas (Higher Council of Scientific Research)	Agriculture Environment Research Health	Ministry Other	Full	Statutory permanent	Multifunctional body
8) Laboratorio de geotecnia (Geo technical Laboratory)	Environment Transport	Ministry Other	Full	Statutory permanent	Multifunctional body
9) ONT – Organización Nacional de Transplantes (National Transplants Organization)	Health	Ministry Other	Full	Statutory permanent	Multifunctional body
10) Centro de Estudios Hidrograficos (Centre for Hydro-graphic Studies)	Environment	Ministry	Basic	Statutory permanent	Multifunctional body
11) Subdirección General de Investigación (Deputy General Directorate of Health Research)	Research Health	Ministry of Health and Consumer Affairs	Full	Statutory permanent	100% Scientific advice
12) Comité Asesor de Ética (Ethics Advisory Committee)	Environment Health	Ministry of Science and Technology	Full	Statutory permanent	100% Scientific advice

13) Agencia Española de Seguridad Alimentaria (Spanish Agency for Alimentary Safety)	Environment Health	Ministry of health and Consumption Ministry of Agriculture Ministry of Science and Technology Ministry of Environment	Basic	Statutory permanent	100% Scientific advice
14) CICYT – Comisión Interministerial de Ciencia y Tecnología (Inter ministerial Committee of Science and Technology)	Research	Ministry of Science and Technology Council of Ministers	Full	Statutory permanent	100% Scientific advice
15) CISNS – Consejo Interterritorial del Sistema Nacional de Salud (Inter territorial Council of The National Health System)	Health	Ministry of Health and Consumption Other (Autonomous Communities)	Basic	Statutory permanent	100% Scientific advice
16) Laboratorio Central de Estructuras y Materiales (Central Laboratory for Building Structures and Materials)	Environment	Ministry of Environment Other (bodies of the territorial Public Administration and private firms)	Full	Statutory permanent	Multifunctional body

71.1 General trends

For the most part, data included in the database for Spain regard multifunctional, type B bodies. This represents a clear indication of the low degree of formalization of the system for scientific advice in Spain. It seems that the most important source of scientific advice is represented by public research institutes that anyway carry on these activities together with other type of functions that is the performing of research, the financing of research, the activities of education and training, the promotion of events to raise the public awareness and so on. As a matter of fact, it seems that problems of scientific advice are dealt upon on a case by case basis. As the scientific community of Spain is not very articulated, it may be that references can be made on a personal and informal base to singular figure of scientists or to specific research

centres that may be the public research institutes included in the database but also the departments of the most important research universities of the country.

The few examples of type A bodies included in the database do not show a high degree of homogeneity. As a matter of fact among them only the Ethics Advisory Committee can be considered as a pure, scientific advisory body. Anyway, the establishment of this specific Committee is far too recent to allow any kind of further analysis, as it started its operation in April 2002. Also the Spanish Agency for Alimentary Safety can be considered as a purely scientific advice body, in charge of the specific task of assuring the protection of consumer safety and with a whole range of competencies. This Agency should in fact study and analyze the microbiological and epidemiological aspects of alimentary diseases, it will draft proposals for the implementation of norms in matter of alimentary safety, it will evaluate all risks linked with the introduction of new food in the market and it will license authorizations for sanitary products. In this case, the establishment of the body was even more recent (September 2002) and this did not obviously allow for a full coverage of this particular body. Other type A bodies included in the database, as CICYT and CISNS, are mainly political or governmental structures in charge of preparing policy proposals concerning specific and technical matters: these bodies are made up of politicians and of members of the government which have to take decisions in policy areas of particular relevance (the overall policy of research and the planning of health services) and which in turn have to rely to external scientific expertise. These bodies were anyway included in the database as they represent the main places of elaboration of high-level advice in technical and specific matters. The fact that scientists are not formally included in these bodies could be tentatively interpreted as another signal of the low level of formalization of issues linked to scientific advice in Spain.

71.2 Structural issues

71.2.1 Secretariat

For type B bodies, public research institutes and the like, questions regarding the presence, function, costs of the secretariat are clearly not applicable. These institutes may in fact have a secretariat, but this is mainly a general secretariat that does not perform any kind of background work and can not be interpreted as a technical secretariat. In two cases, that are FECYT and ONT, this kind of organizational secretariat was clearly identifiable and so data regarding it were included in the database.

Even type A bodies included in the database do not seemingly have any kind of technical secretariat, but it will be very difficult to draw any general conclusion about this point given the limited number of cases and the specific characteristics of some of these cases (CICYT and CISNS in particular). It has also to be kept in mind that bodies like the Ethics Advisory Committee and the Spanish Agency for Alimentary Safety are of very recent establishment (April and September 2002 respectively) and for these reasons it is very difficult to obtain precise information about them.

71.2.2 Membership

Type B bodies in the database tend to be composed by a great number of members, but this is also linked to the fact that these type of bodies usually perform a lot of different functions and so have to rely on a greater amount of resources (both in terms of financial and human resources) than type A bodies.

Also the breaking up of the memberships of subjects making up these bodies into the different categories included in the database is very difficult. The first, obvious difficulty is that in studying these bodies, one has to deal with numbers that are usually very great (in some cases, thousands of people) and so collecting information is quite problematic. Moreover, the general numbers of personnel regarding these institutes is referred to the overall structure, and this includes also people that do not usually perform activities of scientific advice. As a matter of fact, it seems that these bodies do not have specific sub-structure to deal with the problems of scientific advice. Issues of scientific advice are spread among the overall structure of these bodies: collecting information about the background of people that has to deal with scientific advice has not, for these reasons, proven possible. Anyway, one conclusion can be indirectly drawn by looking at the numbers relating the personnel working in these institutes: in fact, usually, the personnel of these bodies is made up of two main categories of people: researchers (that are usually “experts in natural and physical sciences”) and organizational and administrative staff. The fact that the practice of having technical committees to deal with problems of scientific advice is not diffused in Spain has as a consequence that these kind of problems are mainly dealt upon only at the level of the scientific community, where expertise in natural and physical sciences is the main background.

In general type B bodies do not include experts from other countries, international advisory bodies, or other advisory bodies within the country. This is also due to the specific features of these bodies.

Type A bodies included in the database are made up of a limited number of members: 10 in the case of CICYT, 12 in the case of the Ethics Advisory Committee and 30 in the case of the Deputy General Directorate of Health Research. The example of the Ethics Advisory Committee seems at this regard particularly interesting: in fact, if compared with similar structures operating in other European countries, it seems that this body has a limited memberships, which is restricted only to academic experts (for the most part in natural and physical sciences) and do not include other categories such as industry or NGOs representatives.

71.2.3 Budgets

Data on budgets were extremely difficult to collect because information relating to this specific point was not available. In almost all cases, spaces were left blank. For these reasons, it is obviously not possible to draw any general conclusions on the relation between the dimension of the budget and other questions, relating to the structure and operation of the bodies taken into consideration.

71.3 Functional Issues

71.3.1 Scope of work

Bodies included in the database tend to be broad in their scope. One specific body, that is the CSIC - Consejo Superior de Investigaciones Científicas (Higher Council of Scientific Research), is even open in its scope: this type of institute is a big research institute that groups together a lot of different centres operating in a wide-ranging series of fields of research, both in the area of physical and natural sciences and in the area of social sciences and humanities. However, it must be kept in mind that the openness or broadness of scope applies to the overall operations of the bodies included in the database that can freely select their fields of interest. It may be that, more specifically, activities of scientific advice *strictu sensu* are more linked to particular requests coming from the policy-makers.

71.3.2 Independence

In general, type B bodies included in the database are for the most part public research institutes that are formally autonomous, even if they are linked to specific Ministries. Membership in these bodies is usually gained through competitive examination following an open application (that is the usual procedure that regulates access to the civil service). These bodies can usually enjoy a certain degree of freedom and do not have to formally engage in a dialogue with those requesting the advice before it is finalised. Anyway, as the process of issuing scientific advice is, for these bodies, more fuzzy and opaque than for normal, committee-like, type of structures, it can be that some degrees of control and interference in the activities of scientific advice can be performed by policy-makers in an informal way.

These bodies usually give advice in final form to policy makers and they also disseminate advice in different forms. Also in this case, anyway, a little bit of interpretation must be done. As a matter of fact, these bodies mainly disseminate advice through academic journals and scientific publications but it can be the case that, in the process of arriving at a scientific publication, the type of knowledge that lie at the basis of the same advice given to policy-makers can undergo some type of changes.

Type A bodies are governmental public bodies (CICYT and CISNS) or committee established within a public body: the Ethics Advisory Committee is established within the Spanish Foundation of Science and Technology, while the Deputy General Directorate of Health Research is a consultative body operating within Health Institute Carlos III, which is an important public research institute of the Spanish

Health System. Membership in these last two bodies is gained through appointment, while members of CICYT and CISNS are politicians or members of the government. Among type A bodies, only the Ethics Advisory Committee seems to have a certain degree of freedom in selecting its subjects of analysis: other bodies are purely reactive in their operations.

71.3.3 Transparency

The operations of bodies included in the database tend to be regulated, in the majority of cases, by Statutes or internal regulations that apply to the overall functioning of the body and do not, usually, contain specific norms regarding the provision of scientific advice.

Members of the bodies are normally not requested to make any declaration of potential conflict of interests. Confidentiality issues are mainly dealt upon on a case by case basis. Quite often, is the structure requiring the specific advice that imposes some kind of confidentiality clauses, but this depends from the nature of the issues at stake: no general practices or terms of references have been found. Holding meetings in public is not a common practice.

71.3.4 Generation, delivery and responses to advice

Type B bodies included in the database tend to work mainly through continuous operations, while type A bodies mainly work through meetings. Information used to formulate the advice in usually comes from own performed research (for type B bodies), from expertise held by the members themselves and from literature review. In some case, references can be made to expertise external from the body, or even to international expertise. Governmental public bodies as CICYT have to rely on external sources of scientific expertise (in the case of CICYT, reference is frequently made to data provided by other bodies of advice on the overall performance of the Spanish research system).

The mean typologies of advice delivered assume the form of technical standard and of risk assessment. More elaborate types of advice, for example policy formulation, policy implementation and the like, are less frequent. This can also be a consequence of the bias towards type B institutes that normally do not act properly as consultative bodies, but mainly as sources of technical information. In all cases considered, the delivery of advice does not formally require any form of policy response.

71.3.5 Evaluation and impacts of advice

The assessment of the advisory functions of bodies is quite difficult as answers tend to be very specific to individual cases. In general, the only diffused impact is represented by technical standards issued by type B bodies that form the base of reference for political regulations.

Data included in the database tend to exclude the possibility that advice at the national level had been used by advisory bodies in other countries or international bodies. Even if advisory bodies in other countries, or international bodies sometimes are said to be an important source of information for the activities of some bodies of advice, this could not be taken as an indication of a functioning network in this area. As a matter of fact, as the scientific community of Spain is quite small, in some cases references to expertise from abroad is an important resource to deal with very specific problems: resources that are difficult to find at the national level can be found in the international arena.

71.3.6 Changes in the advisory system

The overall system for scientific advice of Spain does not seem to have been undergoing any significant changes in the last few years. The recent establishment of some committee-like structures to deal with very specific and technical matters that can have deep impact on society as a whole, as in the case of the Ethics Advisory Committee and of the Spanish Agency for Alimentary Safety, is an interesting development that could be interpreted as the signal of an inversion of tendency in the direction of having more committees and of reducing the reliance on informal ways of accessing scientific expertise and on advice coming from research institutes. Anyway, these examples are too limited in number and too recent to allow any further generalization.

Sweden

General Overview

72 Background

Sweden has a parliamentary political system where the executive cabinet is dependent on the confidence of the parliament. The parliament is elected every fourth year through a proportional system. Unlike the situation in the other Nordic countries the head of state (the Monarch) has no longer even a formal role in the process of selecting the cabinet. The Prime Minister is appointed by the parliament after a proposal from the speaker of the parliament. The Prime Minister then appoints the ministers of the cabinet.

Sweden is an obvious example of so called cabinet government. The ministers (at the present the cabinet consist of 20 ministers) of the cabinet make the major political decisions collectively. This means that major decisions, for example about bills that are to be presented to the parliament, are made at meetings with the cabinet as a whole. Hence even if a decision in general is prepared in the relevant ministry and signed and presented at the cabinet meeting by the responsible minister, the cabinet makes the final decision. This also means that the minister is not formally personally responsible for decisions made at this level.

The central public administration in Sweden is structured according to a ministry-agency model. Preparations of decisions and the supervision of the implementation of policy are made within the Government office that (at the present time) consists of 10 ministries and the Prime Minister's office. The ministers are, compared to many other European countries, rather small, and they have a limited role in the implementation of policy. Their role is primarily to act as staff units to the ministers, prepare decisions about new bills, and oversee the implementation process. The ministries in the Government office are:⁷⁸

- Ministry of Justice
- Ministry of Foreign Affairs
- Ministry of Defence
- Ministry of Health and Social Affairs
- Ministry of Finance
- Ministry of Education and Science
- Ministry of Agriculture, Food and Fisheries
- Ministry of Culture
- Ministry of the Environment
- Ministry for Industry, Employment and Communications

The actual implementation of governmental policy is the responsibility of a large number of public agencies and boards. These bodies are under the auspices of ministries but are not integrated within the ministers, and have a relatively

⁷⁸ In April 2002.

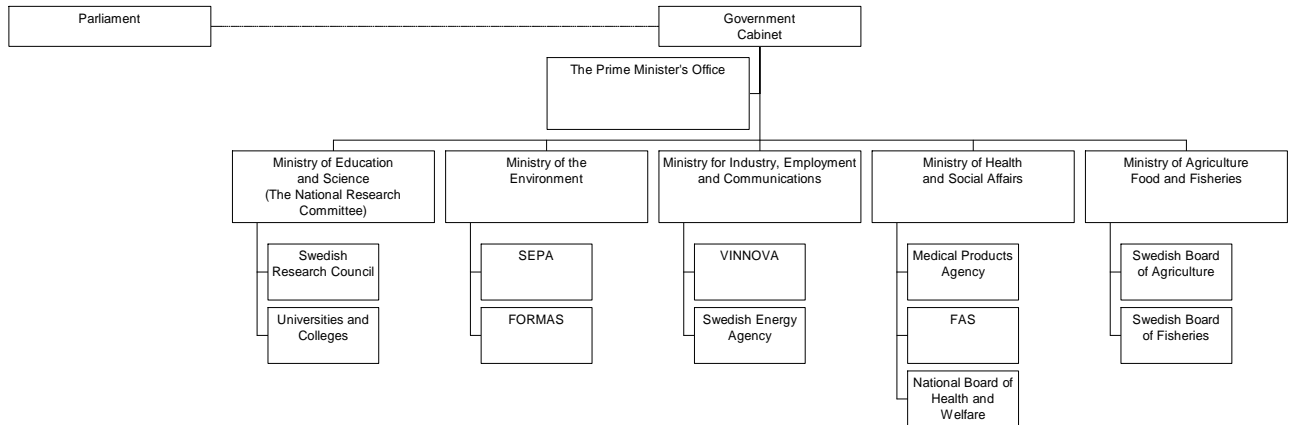
independent role in implementing policies, interpreting regulation, and also, in several areas, a responsibility for deciding on new regulation. For example, in the area of agriculture the Ministry of Agriculture (with a staff of about 120 people) has the overall responsibility, but the implementation process is primarily in the hands of the Swedish Board of Agriculture (with a staff of over 900 people). These bodies are, due to their size and expertise in their policy areas, important actors not only in the implementation process but also in the policy formulation process. Many of these boards do also have regional offices, and there is also a specific state administration at the regional level.

Sweden is a unitary political system, but with a strong constitutional status for local self-government. Local municipalities (*kommuner*) have a relatively high degree of independence, which is also guaranteed in the constitution. Local authorities are often considered to have a more important role in the Nordic countries than in the rest of Europe (Pettersson 2000). At the same time the local autonomy is limited since the state has impeded great responsibilities on the municipalities. There are also regional authorities, county councils, which primarily are responsible for the provision of health care. The regional level has traditionally played a limited role as a political level in the Swedish system, but is increasingly becoming more important.

The policy process in Sweden, as in other Nordic countries, has often been characterised as consensus oriented, and even corporatist. One aspect of this characteristic is that national interest groups traditionally have had a major influence of the process of formulating, and to a certain extent also implementing, policy. Representatives of national interest organisations have been members of agency boards, governmental committees and councils. Decision making in areas such as labour market- and agriculture policy has to a high degree been dominated by negotiations between the state and different interest groups. This corporate structure has, as will be discussed more in the next section, changed during the last two decades. The influence of the interest groups, especially in the labour market area, is not as significant as it used to be.

Specific institutional arrangements are also advantageous for consensus building between different interests in society. Most major legislation and major political decisions are for example prepared within the *committee system*. When an issue, of some reason, arise on the governmental agenda, and the cabinet (or, in reality, a minister) decides to deal with this issue, the usual procedure is that the minister on behalf of the cabinet, appoints a committee to investigate the issue. The committee can be composed of representatives of interest groups and political parties of the parliament, but also of experts from agencies or research organisations. In some cases the ministry appoints one person (usually a politician or a senior public servant) to investigate an issue. The results of the work of the committees are published in specific reports. These reports are sent out to governmental and non-governmental organisations that are presumed to be affected, or have an interest at stake. This is called the *referral system*, an institutional mechanism that is indirectly regulated in the constitution, and that guarantees a relatively open formulation process.

Structure of Government in Sweden



FAS= The Swedish Council for Working Life and Social Research

FORMAS= The Swedish Research Council for Environment, Agriculture Sciences, and Spatial Planning

SEPA= The Swedish Environmental Protection Agency

VINNOVA= The Swedish Agency for Innovation Systems

72.1 Policy areas

72.1.1 Agriculture

Within the Government office it is the responsibility of the Ministry of Agriculture, Food and Fisheries to handle agriculture issues.

Implementation and a lot of the regulation are the responsibility of the Swedish Board of Agriculture. The Swedish Board of Agriculture is the Government's expert authority in the field of agricultural and food policy, and the authority responsible for the sectors agriculture, horticulture and reindeer husbandry. Its responsibility therefore includes monitoring, analysing and reporting to the Government on developments in these areas, and implementing policy decisions within its designated field of activities. The Swedish Board of Agriculture is the Government's expert authority in the field of agricultural and food policy, and the authority responsible for the sectors agriculture, horticulture and reindeer husbandry. Its responsibility therefore includes monitoring, analysing and reporting to the Government on developments in these areas, and implementing policy decisions within its designated field of activities. One major task of the Board of Agriculture is the administration of the Common Agricultural Policy (CAP) of the European Union. The Board works for simplification of the CAP legislation, and to promote an efficient and environmentally adapted agricultural policy in the EU. The Board shall also strive to promote rural development. The Swedish Board of Agriculture is furthermore the chief authority for

Sweden's district veterinarians and the authority responsible for food supply within the civilian defence of the total defence system.

72.1.2 Fisheries

The Ministry of Agriculture, Food and Fisheries also handles fishery policy (the Fisheries division within the ministry).

Implementation and regulation is the responsibility of the Swedish Board of Fisheries. The Swedish Board of Fisheries is responsible for strengthening the fishery business, but also to withhold the supply of fish in the whole country. The board is, for example, responsible for implementing regulation and supporting R&D in this policy area. It also has the direct responsibility for specific R&D laboratories and research ships

72.1.3 Energy

Within the Government office the Energy policy is primarily the responsibility of the Ministry of Industry, Employment and Communications, although also the Ministry of the Environment also deal with issues that concerns energy policy. The energy issues has, in contrast to the situation in for example Denmark, traditionally been more related to industry policy, than to environmental policy.

The Swedish Energy Agency is the central administrative authority for matters concerning the supply and use of energy. Although the energy market concerning production and trading of energy is deregulated, the network of cables etc., is still controlled by the state through the Swedish Energy Agency. The Agency is also responsible for technology procurment and R&D funding within the energy sector.

72.1.4 Transport

The Ministry of Industry, Employment and Communication is also responsible for Transport policy. A number of governmental agencies are responsible for implementation of transport policy, for example the National Road Administration, and the National Rail Administration. There are also important public enterprises such as the Swedish Civil Aviation Authority, and the major rail travel company in Sweden (the old Swedish railway company) where the state owns a majority of the shares.

72.1.5 Environment

The Ministry of the Environment has the major responsibility for environmental policy, but also the Ministry of Agriculture, Food and Fisheries has responsibilities for environmental issues.

Implementation of environmental policy is primarily the responsibility of the Swedish Environmental Protection Agency (SNV). SNV is the central environmental authority under the Swedish Government. Its tasks, according to the instructions laid down by the Government, are to co-ordinate and drive forward environmental work both nationally and internationally. The agency consists of four secretariats and five departments, but also some special units such as a research council, which support environmental research. Also the Swedish Board of Agriculture is important at the central level. Implementation of environmental policy is also to a high extent delegated to local and regional authorities.

72.1.6 Health and the Consumer

Several ministries deal with health issues concerning the consumer, but the important ones are the Ministry of Health and Social Affairs and the Ministry of Agriculture, Food and Fisheries. The Ministry of Justice has a general responsibility for consumer issues.

The Ministry of Health and Social Affairs is responsible for health care, pharmaceuticals etc. Important agencies responsible for regulation and supervision within the health care area are for example the National Board of Health and Welfare (Socialstyrelsen) and the Medical Products Agency (Läkemedelsverket). The most important tasks of the National Board of Health and Welfare are:

- supervision of medical care and social services as to quality, safety, and the rights of the individual
- evaluation and follow-up studies of social policy
- mediation of expertise
- development and training
- co-ordination of social services statistics
- epidemiological surveying

The Board is also responsible for official statistics on social services, public health, health care and medical services, and causes of death.

Ministry of Agriculture, Food and Fisheries has the major responsibility for issues concerning for example food safety. The important agency responsible for the implementation of food safety is the National Food Administration. The main objectives of this agency are to promote safe foods of good quality, fair practises in the food trade, and healthy eating habits. The organisation consists of five departments responsible for research and development, regulations, control, information and nutrition and administration, respectively.

72.1.7 Research

All ministries has policies and funding for research, but the Ministry of Education and Science and the Ministry of Industry, Employment and Communications have the major responsibilities in this policy area. Public research funds are to a high degree

allocated to universities and colleges, although there are also a number of institutes that perform public funded research.

The Ministry of Education has a specific responsibility for co-ordination of the general research policy, is responsible for the basic funding of universities and for the Swedish Research Council. The Swedish Research Council is a recently formed co-ordinating agency for the support of basic research. The council consists of three scientific sub-councils: one for humanities and social sciences, one for medicine and one for the natural and engineering sciences. The council also has the specific task of being a scientific advisor to the Government.

The National Research Committee (Forskningsberedningen) is a standing body that advises the Government on matters regarding research policy. The minister for Education and Science is the chairman of this committee, which otherwise consist of researchers and industrial representatives. The cabinet has also appointed a scientific advisor responsible for promoting the conditions for research and the role of research in society.

The Ministry of Industry, Employment and Communications has a specific responsibility for the research connected to business and industry. The new Swedish Agency for Innovation Systems (VINNOVA) is responsible for research funding to applied technical research, supports different kinds of university-industry collaborations, and also provides funding for industrial institutes.

A number of agencies connected to other ministries also support sectorial, more mission oriented, research. Most important of these are the Swedish Research Council for Environment, Spatial planning and Agriculture Sciences (FORMAS) under the auspices of the Ministry of Environment, and the Swedish Research Council for Working Life and Social Sciences (FAS), under the auspices of the Ministry of Health and Social Affairs.

73 Scientific Advice

73.1 General Background

Scientific advice gets into the Swedish policy process in a number of ways. Two important mechanisms for influence of scientific advice has already been mentioned, the committee system and the referral system.

One major function of the committees (or commissions of inquiry) is to provide the policy formulation process with knowledge (Johansson 1992). This can be done in several ways. Firstly the committee in some cases consist of representatives from universities or other research organisations (in most cases connected to the committees as experts, not formally members of the committee). Secondly also other members might contribute with scientific expert knowledge, not the least members representing public agencies. Thirdly the committees can commission research or investigations in specific issues. These projects usually include researchers from universities or research institutes. Fourthly the secretary of the committee has an important role in leading the work of the committee, and working out proposals.

These secretaries have traditionally to a high extent been civil servants of public agencies and ministries.

The committee system has during the last two decades gone through changes that have influenced its capacity to provide the process with scientific knowledge. An important change is that the tendency to commission investigations by the committee seems to have decreased during the last two decades. One important reason for this is that committees have got shorter time to finish their work. In the 1960s and 70s committees could work for several years, which made commissioned research possible.⁷⁹ In the 1980s the Government decided that committees should not work more than two years (Premfors 1983). During the last years the committee system has also been criticised for bad quality due to the fact that the government does not give the committee enough time to do a proper job. The number of “one-man committees” has also increased during the 1990s, which also is a trend that is related to the higher speed of the policy process.

What concerns the members of committees the trend seems to be a larger number of representatives from the political sphere. During the period 1980 to 1992 the share of politicians in committees (mostly members of parliament) increased from about 40 percent to 50. This increase does however primarily seem to have been the effect of a significant decrease in the share of members of interest groups (from 6 percent 1981-82 to 2 percent 1991-92). Even if the share of researcher and members from public agencies has decreased somewhat, the changes are not significant. What concerns experts connected to the committees, the most obvious trend is that the share of civil servants from the ministries increased from 30 percent in the beginning of the 1980s to more than 40 percent in the early 1990s. The share of experts from interest organisations has decreased significantly, but also the share of researchers has decreased somewhat (Helander & Johansson 1998).

The referral system means that the ministry sends out the committee report to relevant stakeholders. Which actors that are considered in this process varies, but it is compulsory for all relevant public agencies to respond to a committee report sent to them. Usually the committee report is also sent out to relevant interest groups and other organisations. This process is also important for the possibilities for scientific advice. Many Governmental agencies, and some larger interest organisations, have their own research departments, and a quite large part of the referrals sent out goes to universities. The referral system is usually considered to play an important role in the policy formulation process. Referrals are also open to the public and are often quoted in the media, hence potentially also strengthening the public debate on scientific issues (Eriksson et al 1999).

National agencies and boards are also, naturally, important structures in providing scientific advice to the government and the parliament in other arenas than the committee system. As mentioned, many agencies have research departments, but are also connected with networks of scientists at institutes and universities. The agencies are important nodes in *informal networks* of scientist, ministries, interest groups etc. Hence the agencies use advice in their work, but also give advice within the budgetary

⁷⁹ It sometimes happened that PhD projects were financed within the work of larger committees (Helander & Johansson 1998).

process and in an informal process. All agencies and boards are also obliged to send in strategies about research in their policy areas to the Ministry of Education and Science. Even if most agencies have an instructed function to give expert advice to the government (apart from implementation tasks), there are also a few bodies that have more explicit tasks to give scientific advice. There are also examples of agencies with functions as research institutes and evaluation bodies.

There are a number of permanent committees and councils connected to ministries and governmental agencies. There are several permanent committees connected to ministries working with, for example, nuclear waste and biological diversity. The Swedish Research Council is an independent agency working with research funding, but also with advisory issues. A rather new scientific advisory body is the Gene Technology Advisory Board. There are also a number of smaller scientific advisory committees connected to, for example, the Swedish Medicines Agency and the National Food administration.

The Swedish system gives quite extensive opportunities to scientific advice, primarily through the committee system. The committee system does also seem to be more formalised, and more open for scrutiny, than in the other Nordic countries. There are, however, few cases with any “codes of practises” for scientific advice, and there are few permanent bodies that explicitly deal with scientific advice, even though the scientific advice function seems to be getting more attention (through the creation of new permanent advisory bodies). Unlike the situation in Denmark and Finland specific sectorial research institutes play a limited role as specific knowledge providers to the ministries and public agencies in the Swedish system. There are however a number of institutes with roles as expert advisors and, not the least, evaluating bodies. Large and powerful public agencies, with explicit roles as expert bodies, and the informal networks these agencies are also important structures for scientific advice in the Swedish system.

73.2 Advice Provision in Relevant Policy areas

73.2.1 Agriculture

The Swedish Board of Agriculture is the central authority concerning scientific advice. There are also a number of other governmental actors that are important in the process of providing scientific advice, through the committee system or through informal channels. Examples of these are the Swedish University of Agricultural Sciences (SLU), The Swedish Research Council for Environment, Agriculture Sciences and Spatial Planning (FORMAS), and The National Veterinary Institute.

73.2.2 Fisheries

The Swedish Fisheries Board is supporting R&D in this policy area and also has the direct responsibility for specific R&D laboratories and research ships. The Swedish University of Agricultural Sciences (SLU) also has some research in this area.

73.2.3 Energy

Swedish Energy Agency is responsible for technology procurement and R&D funding within the energy sector, and is also the expert agency in this area. An example of a scientific advisory committee in this area is the National Council for Nuclear Waste.

73.2.4 Transport

Both the National Road Administration, and the National Rail Administration are agencies that have resources for funding research, and have roles of being expert agencies within their areas. They are also important actors providing expertise and contacts with researchers in this policy area.

Other important governmental actors what concerns the provision of scientific advice in this policy area are the Swedish Institute for Transport and Communication Analysis (SIKA), the Swedish Agency for Innovation Systems (VINNOVA) and the Swedish National Road and Transport Research Institute (VTI).

73.2.5 Environment

An important standing scientific advisory committee on the ministry level in this area is the Swedish Environmental Advisory Council (Miljövårdsberedningen) that advises the Government on environmental issues. It is to a large extent composed of members of the scientific community. The minister of the Environment is the chairman of the council.

SNV has different departments working with research issues and environmental assessment. One example is the research department, which is responsible for the research support of the agency. The agency also administrates one permanent scientific advisory committee, the Scientific Council for Biological Diversity.

73.2.6 Health and the Consumer

The National Board of Health and Welfare (Socialstyrelsen) and the Medical Products Agency (Läkemedelsverket) are, through expert groups and networks, important providers of scientific advice. The National Board of Health and Welfare have specific experts groups in specific areas but does also continuously use experts as advisors in its decision making process. The National Food Administration has a network of scientists that it uses for advice, but has also a few specific expert groups in some areas.

73.2.7 Research

The National Research Committee (Forskningsberedningen) is a standing body that advises the Government on matters regarding research policy. The minister for

Education and Science is the chairman of this committee, which otherwise consist of researchers and industrial representatives. The cabinet has also appointed a scientific advisor responsible for promoting the conditions for research and the role of research in society.

The Swedish Research Council is primarily a co-ordinating agency for the support of basic research but the council also has the specific task of being a scientific advisor to the Government. Also the sectorial research councils, FORMAS and FAS, the Swedish National Space Board (Rymdstyrelsen), and the agency responsible for support to research connected to business and industry, VINNOVA, has advisory roles. VINNOVA has, for example, a specific analysis unit.

Swedish Technology Foresight is a national project that seeks to bring together a large number of players from the knowledge community to discuss the best way of promoting long-term interplay between technical, economic and social processes. The project is being run by the Royal Swedish Academy of Engineering Sciences (IVA), VINNOVA, the Swedish Foundation for Strategic Research (SSF), and the Federation of Swedish Industries.

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Database Report

75 Advisory Bodies covered in database

	Name of body	Policy areas covered	Who advised	Full/basic coverage	Nature of body
<i>Type A1 (committees and councils at ministry level)</i>	The Swedish Gene Technology Advisory Board	Agri. Environ. Fisheries Health Research	Legisl. Ministry Agency	Full	Statutory-permanent
	The Environmental Advisory Council	Environ.	Ministry	Full	Non-statutory permanent
	The Swedish Scientific Council for Biological Diversity	Environ.	Ministry Agency	Full	Non-statutory permanent
	The National Research Committee	Research	Ministry	Full	Non-statutory permanent
	The Swedish National Council for Nuclear Waste	Energy Environ.	Ministry Agency	Full	Non-statutory permanent
	The Swedish National Council on Medical Ethics	Health Research	Ministry Agency	Full	Non-statutory permanent
<i>Type A2 (committee at agency level)</i>	The Swedish Adverse Drug Reactions Advisory committee	Health	Agency	Full	Non-statutory permanent
	The Advisory Committee on Drugs	Health	Agency	Full	Non-statutory permanent
	Expert group for Diet and Health Issues	Health	Agency	Full	Non-statutory permanent
	Swedish Pediatric Committee on Nutrition	Health	Agency	Full	Non-statutory permanent
	The Toxicological Council	Environ. Health	Agency	Full	Statutory-permanent
<i>Type B1 (Research council)</i>	The Swedish Research Council for Environment,	Agri. Energy Environ.	Ministry	Full	Statutory-permanent

Type B2
(Gov.
Institutes)

Agriculture Sciences and Spatial Planning				
The Swedish Research Council	Research	Ministry	Full	Statutory-permanent
The Swedish Council for Working Life and Social Research	Health Research	Ministry	Full	Statutory-permanent
The Swedish Institute for Transport and Communication Analysis	Transport	Ministry Agency	A+ relevant questions in other sections	Statutory-permanent
The Institute of Marine Research of the Swedish Board of Fisheries	Fisheries	Agency	A+ relevant questions in other sections	Statutory-permanent
The Swedish Council on Technology Assessment in Health Care	Health	Ministry Agency	A+ relevant questions in other sections	Statutory-permanent
The National Institute of Public Health	Health	Ministry Agency	A+ relevant questions in other sections	Statutory-permanent
The National Veterinary Institute	Agri.	Ministry Agency	A+ relevant questions in other sections	Statutory-permanent

75.1 General trend

This analysis is based on data about a selection of permanent scientific advisory bodies in the Swedish political system. A scientific advisory body is defined as a governmental body established to give scientific advice to decision makers in the Government (executive or legislature).

The bodies have been divided into two groups: type A and type B bodies. Type A-bodies are committee-structured bodies with scientific advice as the major function. The type B-bodies are governmental bodies with multiple functions. There are sub groups within the group of type A bodies: committees and councils at the Ministry-level (A1) and committees and councils at the agency level (A2). The type B bodies have also been divided into two sub groups: research councils and research institutes. The main objective of the councils is research funding, but they also have advisory and dissemination objectives. The main objectives of the institutes are research performance, but they also to different degrees have advisory functions. The Swedish

Council on Technology Assessment in Health Care is an example of an evaluation centre, which also function as an advisory body.

The identification of scientific advisory bodies was made in three steps. First by identifying bodies mentioned at the web sites of the relevant ministries. Secondly by asking officials at the relevant governmental ministries to identify the *major* national bodies with scientific advisory functions. Thirdly by a snowball method, asking respondents of identified bodies to identify other important scientific advisory bodies in their field. In areas with many advisory bodies, such as in the health policy area, a selection of typical bodies was made.

Most of the type A1 bodies are committees; non-statutory bodies established by the Government (the cabinet). The type A2 bodies are connected to, and in all cases but one, established by specific Governmental agencies, outside the Ministerial hierarchy. Two type A bodies (one A1 and one A2) are established by law. All type B bodies are governmental agencies established by law.

The primary objects of the advice are generally either a ministry or an agency, in some cases both. Only one body has the parliament as a primary object of advice. This is a reflection of a system with a strong executive power, but also of a divided executive with strong governmental agencies partly independent of the ministries.

A large number of bodies are connected to the policy areas of the environment, health and research. There are no type A bodies that are related to transport, and only one that are connected to fisheries and agriculture. Bodies connected to environmental or research policies are more dominating at the A1 level (committees/councils at the ministry level), while bodies connected to the health policy area are dominating at the A2 level (committees at agency level).

Most of the bodies were established during the 1980s and 1990s, although most also had predecessors.

75.2 Structural issues

75.2.1 Secretariat

Most type A1 bodies have their own secretariats, although they are most often connected to a Ministry. They usually have a staff of between 2 and 5 people. In a couple of these type A1 bodies, for example the National Research Committee, the Ministry provides the secretary function. Within the type A2 bodies, secretariat functions are provided by the agency that it is connected to. The Medical Products Agency does for example provide the Advisory Committee on Drugs with a secretariat function. The research councils (B1 bodies) have large secretariats of between 20-100 people.

The function of the secretariats is often not only to prepare meetings, but also to prepare decisions. In many cases the members of the secretariat are highly qualified civil servants, or even scientific experts. In almost all A bodies and B1 bodies “background work of the secretariat” are one of the major inputs to the advice of the bodies. In the research councils (type B1 bodies) the secretariats have a number of

functions. Besides administrating research projects and preparing decisions, they also work with dissemination of research and research policy analysis.

75.2.2 Membership

In the A-type bodies the number of members tends to be between 9 and 20, with one exception: the Advisory Committee on Drugs with 57 members. For the type B bodies the membership numbers depends on what is counted. If the organisation as a whole is considered then the membership are between 35 (the Swedish Council on Technology Assessment in Health Care) to almost 400 (the National Veterinary Institute). However, if the top decision making body within these organisations is considered then the numbers are similar to type A bodies.

In the type A bodies a majority of the members are usually “academic experts in natural and physical sciences” (around 60 % of the total number of members). A majority of the type A bodies also have members that are “academic experts in social science”, and “civil servants”. Considering Sweden’s tradition of being a corporatist political system (even though this system changed dramatically during the 1980s and 1990s), surprisingly few bodies have representatives from the industry or NGO-members. One body, the Swedish Gene Technology Advisory Board, has a large proportion of members from the parliament.

The type A2 bodies (committees at the agency level) tend to be more focused than the A1 committees at the ministry level. They are also to a higher extent dominated by academic experts in natural and physical sciences. Committees with a broader scope, at the ministry level, tend to have a broader representation. One exception is the Swedish National Council for Nuclear Waste, which is fairly focused, but also have a fairly broad representation. Could be related to degree of political focus.

The proportion of advisors being women is fairly large in the type A bodies: in most cases around 40 to 50 %. This is partly due to a law stating that half of the members of boards of governmental agencies and committees should be women. This law do not, however, regulate the committees at the agency level.

Many type A1 bodies have members form the body requesting advice, but also from other advisory bodies. It is unusual that the members of the committees are from other countries or international advisory bodies, although there are a few examples.

75.2.3 Budgets

Most of the type A bodies are funded within the budgets of specific ministries or agencies. The two councils established by law (one type A1 and one type A2) are funded by specific grant decided on by the parliament. The budgets of the type A1 bodies are between 100,000 to 500,000 Euros. The budgets of the type A2 bodies are integrated within the budgets of governmental agencies, and are difficult to estimate.

The budgets in the type A bodies are mostly spent on the secretary function and expenses for the members. In the type A1 bodies it is usually also possibilities to

require extra funding for investigations. In a few of the type A bodies the chairman is working part time.

75.3 Functional Issues

75.3.1 Scope of work

Half of the type A bodies covered in this study are “broad”, and half are “focused”. None of the bodies can be categorized as “open” in scope. A majority of the type A2 bodies are broad, while all of the type A2 bodies are focused in scope. Among the research councils (type B1), the Swedish Research Councils is considered as broad, while the other two are focused. The institutes (type B2), except the Swedish Council on Technology Assessment in Health Care, are considered as broad in scope.

Most of the type A1 level bodies are also working actively with information to the public. As mentioned before, the main objective of the research councils is funding, but they are also working with, for example, research dissemination and evaluations. The main objective of the institutes is research performance, but they also often work with, for example evaluation and information.

Concerning relation scope and membership, see earlier section.

75.3.2 Independence

As mentioned before many type A1 bodies have secretariats, but are strongly connected to ministries, while most A2 bodies do not have separate secretariats. Two of the type A bodies, the Gene Technology Advisory Board and the Toxicological Council, have strong formal status since they are established by law, but also the Swedish National Council on Medical Ethics and the Swedish National Council for Nuclear Waste, are permanent committees with large secretariats and strong status. All of the type B bodies are established by law and have relatively large resources, and hence have strong independence.

The members of the type A1 bodies are appointed by the Government (the cabinet collectively). The type A2 bodies are appointed by respective agency. The members of the boards of the research councils are partly selected through a peer review system (a majority of the members), partly through appointment by the Government. The boards of the institutes are appointed by the Government.

All except one of the bodies can select subjects for investigation.

The relationship between those requesting the advice is most often characterised by both giving final propositions and engaging in dialogue. It all depends in the issue. Some bodies are primarily giving advice by dialogue, for example the National Research Committee and the Toxicological Council. The type A1 bodies, the type B1 and the type B2 bodies, are usually also disseminating advice wider than those originally requesting the advice. Type A1 bodies (at agency level) are usually not.

75.3.3 Transparency

The type A1 bodies are governed by instructions from the Government, but not really any code of practice. Some of the type A2 bodies, connected to the Medical Products Agency, do have some code of practice. In these cases there are also demands about conflict of interest, and some documents and discussions are confidential. The reasons for this are industrial secrecy.

Due to the openness of the Swedish system, all public documents are open to the public unless there is specific legislation stating secrecy. Advisory and activity reports of the type A1 level bodies are also often published on the web-site of the body. In some cases agendas and minutes of type A bodies are also published on the web.

No bodies do have meetings in public, but some arrange conferences, seminars, hearings etc., that can be categorised as communication with the public.

75.3.4 Generation, delivery and responses to advice

Most of the bodies operate with either a consensus decision-making model, or present a number of options. Only one has a majority vote decision-making model. As mentioned before most bodies work with both dialogue and present final statements. The most important sources for the advice are the expertise of the members and the background work of the secretariat.

The type A2 bodies rely more on the expertise of the members than the type A1 bodies. Bodies with a broader mandate rely more on the background information of the secretariat and sometimes on external experts. The major type A1 bodies work more with policy formulation and priority setting, while the minor type A2 bodies work more with risk assessment and technological standards.

There are a couple of cases where a policy response is required, but this is not the overall trend.

75.3.5 Evaluation and impacts of advice

For most bodies it is hard to give concrete examples of impact. It is often a matter of impact on a process or the development within a specific policy area. What concerns impact on the work of other countries or of international bodies there are also few examples; these concern medical and ethical issues. In these cases it seems to exist an international network, due to common international legislation and on going international discussions about, for example, gene technology. Some representatives of bodies also mention that there are cases of organisational diffusion.

75.3.6 *Changes in the advisory system*

Some agencies are abolishing permanent advisory bodies, especially within the area of health policy. A more common procedure is to use a “pool” of scientific advisors connected to an agency. The motive is to enhance flexibility for the agency, and avoid being limited by the opinions of a limited number of scientists, representing a limited number of disciplines.

UK

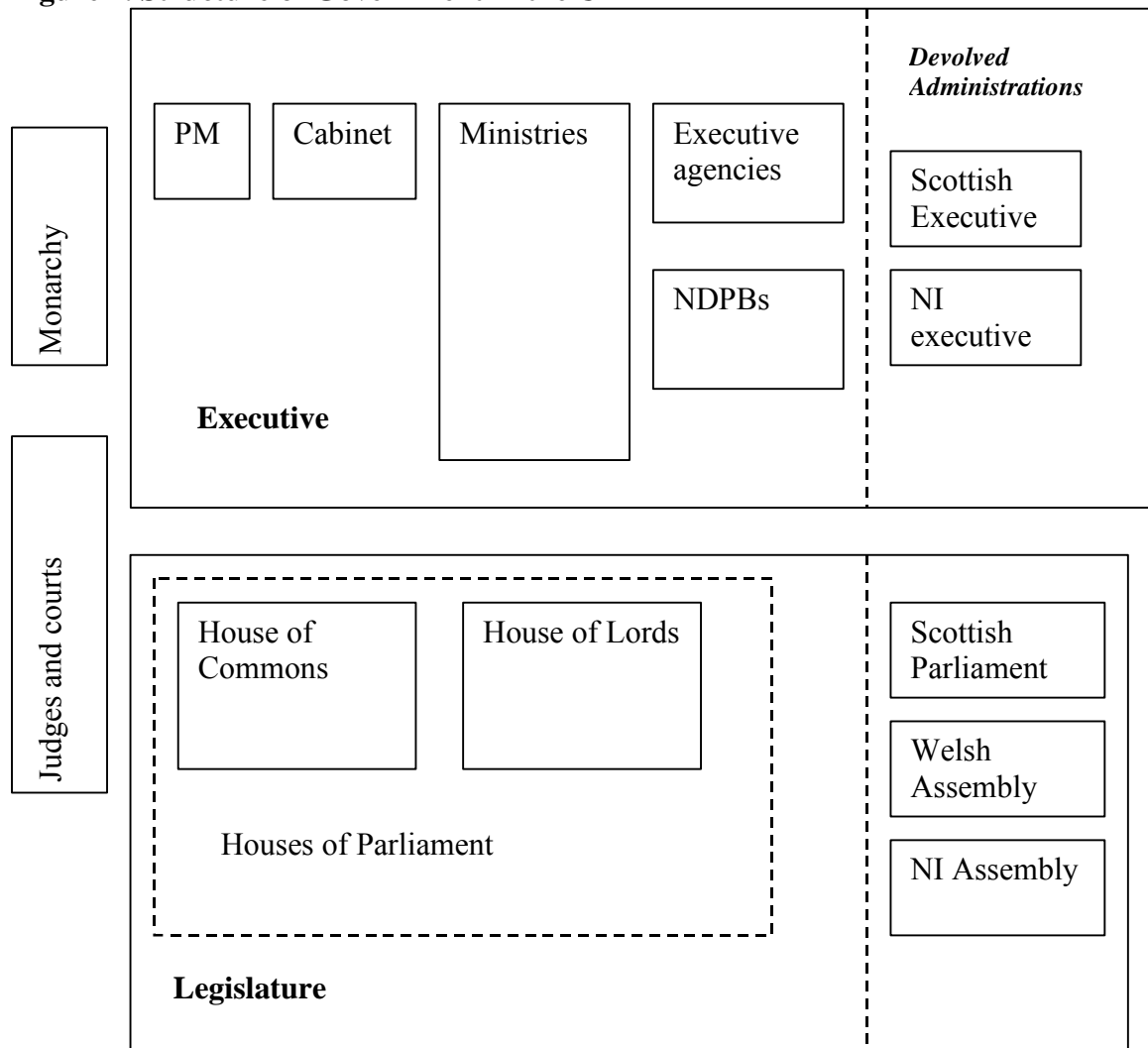
General Overview

76 Background

76.1 General

The United Kingdom is a Constitutional Monarchy.

Figure 1. Structure of Government in the UK

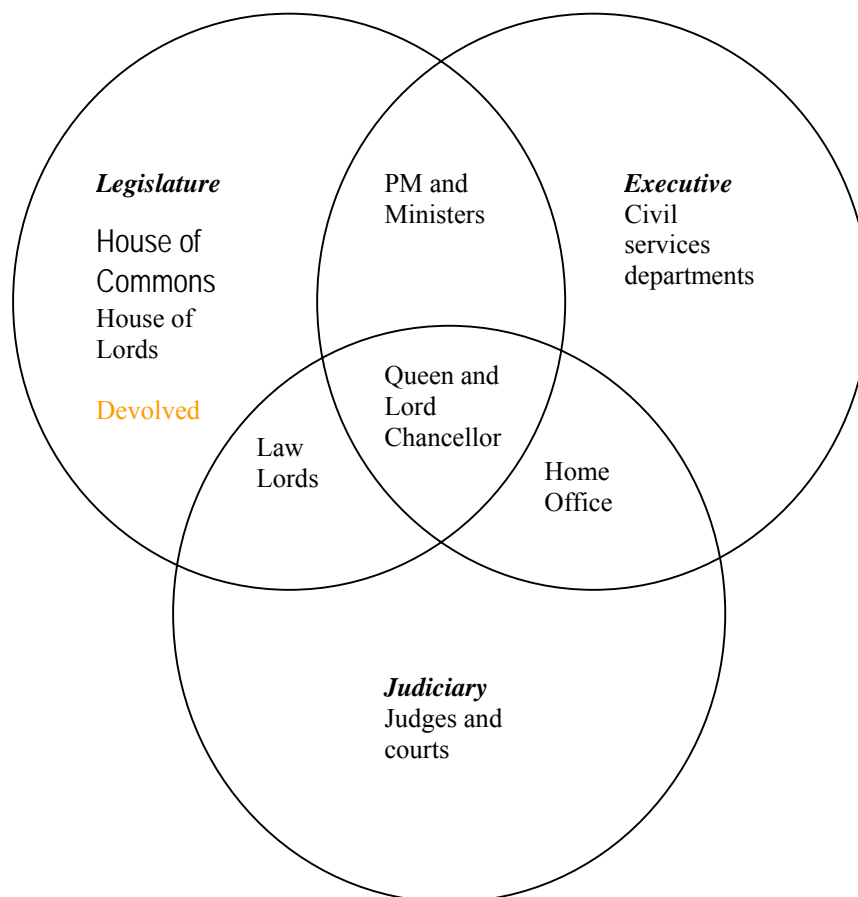


It is relatively unusual in having an “unwritten constitution”, or more precisely, no single, written constitution but rather an assemblage of written and unwritten (customs and practices) elements. A significant feature of the UK system of government is the overlap between Legislature, Executive and Judiciary. The majority party in the House of Commons, the lower, elected chamber of Parliament, form the Government (more precisely, are “invited” to form the Government by the Monarch). The leader of that party becomes the Prime Minister, a position of uncertain legal

status but of enormous power, much of it exercised on behalf of the Monarch. An illustration of the way in which the “unwritten constitution” evolves by convention is the fact that the Prime Minister (and most key cabinet ministers) is now always a member of the House of Commons. There is no legal barrier to the Prime Minister being a member of the upper House but the primacy of the House of Commons as the elected chamber is now recognised in the current convention that the Prime Minister must be a member of that chamber.

The Prime Minister selects a Cabinet of senior ministers from members of his own party in Parliament. Prime Minister and Cabinet are answerable to Parliament, and more specifically depend on the support of their party in the House of Commons. This was illustrated when Mrs. Thatcher was replaced as leader of the Conservative Party, and therefore as Prime Minister, by John Major. To further illustrate the incomplete separation of powers, one cabinet minister, the Lord Chancellor, is effectively the head of the judiciary, and is the speaker of the House of Lords (the upper chamber of Parliament), as well as the head of the Government department responsible for the administration of the judicial system.

Figure 2. The links between the Executive, Legislature and Judiciary



76.1.1 Departments

The main functions of Government are undertaken by the Government departments, which are headed by a Cabinet Minister. In addition, there is a second tier of Ministers, called Ministers of State who work for Cabinet Ministers within particular departments, and are normally allocated a set of the department's functions to supervise and answer for in the House of Commons or House of Lords. It is important to note that departments do change, with responsibilities being altered and new departments created. The most recent example of this has been in the areas of environment, transport, agriculture and the regions. Before June 2001 the responsibilities for these areas were split between the Department of Environment, Transport and the Regions (DETR) and the Ministry for Agriculture, Fisheries and Food (MAFF). However subsequent changes have seen the creation of two new departments covering these areas – the Department for Environment, Food and Rural Affairs (DEFRA) and the Department of Transport, Local Government and the Regions (DTLR). The main departments are:

- The Treasury
- The Foreign and Commonwealth Office
- The Home Office
- The Department for Environment, Food and Rural Affairs
- The Department of Transport, Local Government and the Regions
- The Department for International Development
- The Department for Work and Pensions
- The Department of Health
- Northern Ireland Office
- Wales Office
- Scotland Office
- The Ministry of Defence
- The Department of Trade and Industry
- The Department for Education and Skills
- The Department for Culture, Media and Sport

76.1.2 Devolution

Recent years have seen major changes in the UK with power being devolved, to different degrees, to Scotland and Wales. The Scotland Act 1998 and the Government of Wales Act 1998 define the respective functions of the UK Government and the devolved administrations in Scotland and Wales. UK Ministers are accountable to the UK Parliament for all functions which have not been devolved.

The Scotland Act saw the creation of the Scottish Executive and the Scottish Parliament. The relationship between the Scottish Executive and the Scottish Parliament is similar to the relationship between the UK Government and the UK Parliament. The Scottish Executive is the devolved government for Scotland. It is responsible for most of the issues of day-to-day concern to the people of Scotland, including health, education, justice, rural affairs, and transport and manages an annual budget of around 20 billion (it is important to note that the Scottish Executive has tax raising powers). The Scottish Executive is formed from the party or parties holding a majority of seats in the Parliament. The Scottish Parliament is made up of all 129

MSPs (Members of the Scottish Parliament). Like the UK Parliament, the Scottish Parliament passes laws. It also scrutinises the work and policies of the Scottish Executive.

Less power has been devolved to Wales than Scotland. There is no Welsh Executive, instead there is the Welsh Assembly, which cannot pass primary legislation and does not have tax raising powers. The Assembly has 60 members elected every four years by the Additional Member System (AMS). The Assembly is led by the First Minister, who, with the Deputy First Minister, forms the nine member Cabinet. The Assembly budgetary decisions, allocating the block grant allocated to Wales by the UK Treasury and can pass subordinate legislation.

76.2 Policy areas

In thinking about policy making in the areas that have been selected for this study, it should be noted that the areas do not mirror the Ministerial structure in the UK. Hence, where the general operation of a Ministry has been described for one policy area this will not be repeated for other areas.

76.2.1 Agriculture

Responsibility for Agriculture policy currently lies with the Department for Environment, Food and Rural Affairs (DEFRA). DEFRA has seven main objectives.

- To protect and improve the rural, urban, marine and global environment and conserve and enhance biodiversity, and to lead integration of these with other policies across Government and internationally;
- To enhance opportunity and tackle social exclusion through promoting sustainable rural areas with a dynamic and inclusive economy, strong rural communities and fair access to services;
- To promote a sustainable, competitive and safe food supply chain which meets consumers' requirements;
- To improve enjoyment of an attractive and well-managed countryside for all;
- To promote sustainable, diverse, modern and adaptable farming through domestic and international actions and further ambitious CAP reform;
- To promote sustainable management and prudent use of natural resources domestically and internationally;
- To protect the public's interest in relation to environmental impacts and health, including in relation to diseases which can be transmitted through food, water and animals and to ensure high standards of animal health and welfare (DEFRA 2001).

In addition to the Secretary of State, DEFRA has two Ministers of State, one for Environment and one for Rural Affairs. In terms of its operation, DEFRA is split into nine main divisions: Environmental Protection; Food, Farming and Fisheries; Land Use and Rural Affairs; Animal Health and Welfare, which is led by the Chief Veterinary Officer; Policy and Corporate Strategy Unit; Operations and Service Delivery; Financial Planning and Resources; Science Directorate, which is led by the Chief Scientist; and General and Legal Services.

Relevant Executive Agencies – Agricultural Wages Board for England and Wales, Agricultural Wages Committees for England

DEFRA is a major funder of science, spending around £250 million annually on research and on surveillance and monitoring.

76.2.2 Fisheries

See previous section

76.2.3 Energy

The Department of Trade and Industry has responsibility for energy policy. The responsibility for the different energy areas is broken down between the Nuclear Industries Directorate, the Oil and Gas Directorate and the Cleaner Coal Technologies Unit. The Department also runs the Sustainable Energies Programmes.

76.2.4 Transport

Responsibility for Transport policy now lies with the Department for Transport, Local Government and the Regions (DTLR). The aim of DTLR is to ensure better transport and thriving, prosperous, safe communities and in support of this aim it has the objects of:

- Reliable, safe and integrated transport for everyone, which respects the environment;
- A sustainable pattern of land use, promoted by an efficient planning system;
- A high quality of life for all in our towns and cities;
- The renewal of our most deprived communities;
- A decent home for everyone;
- Effective community leadership and high quality public services through elected local government;
- Successful regions, which develop a strategic vision for the future;
- Improved health and safety by reducing risks from work activity, buildings and fire; and
- Improved transport safety and crime prevention (DTLR 2001).

In addition to the Secretary of State, DTLR has Ministers of State for Transport, for Housing, Planning and Regeneration, and for Local Government and the Regions. Policy in DTLR is divided into seven main groups, in which are included a number of directorates. The seven Groups are: the Transport Strategy, Roads and Local Transport Group; the Railways, Aviation, Logistics and Maritime Group; the Local and Regional Government Group; the Housing, Urban Policy and Planning Group; the Neighbourhood Renewal Unit; the Strategy and Corporate Service Group; and Finance, Legal and Communications.

The Transport Strategy, Roads and Local Transport Group, the most relevant for transport policy, is made up from the Transport Strategy Directorate, the Integrated

and Local Transport Directorate, the Road Transport Directorate, the Driver Vehicle and Operator Group, the Traffic Area Network, and the Mobility and Inclusion Unit. The recently published *Transport 2010: The 10 Year Plan*, sets out a spending programme of £180 billion for railways, roads and local transport up until 2010.

76.2.5 Environment

Policy responsibility for environment falls to DEFRA (see 68.2.1 for details about DEFRA).

76.2.6 Health and the consumer

The main policy responsibility here falls to the Department of Health (DH). The DH:

- Sets the standards and broad working practices of the NHS and local social services;
- Monitors how these standards are being met at local level and take action to improve services when they are poor or failing; and
- Works on ways to prevent disease and help people live longer healthier lives.

Working under the Secretary of State, the Department has two Ministers of State, one for the NHS and Delivery and one for Social Care, Long-term Care, Disability and Mental Health. The Department's work is organised in three main areas – the NHS, social care, and public health – and within the Department there are twelve directorates: the Strategy Unit; the Chief Operating Officer's Directorate; the Directorate for Children, Older people and Social Care Services; the Directorate of Public Involvement, Nursing, Mental Health, Disability and Allied Health Professionals; the Policy Directorate; the Directorate of External and Corporate Affairs; the Communications Directorate; the Modernisation Agency; the Finance Directorate; the Research, Analysis and Information Directorate; the Human Resources Directorate; and the Public Health and Clinical Quality Directorate.

Also of relevance is the Food Standards Agency (FSA), an independent food safety watchdog set up by an Act of Parliament in 2000 to protect the public's health and consumer interests in relation to food. The FSA does not report to a specific minister but is accountable to Parliament through Health Ministers. The FSA's key aims for the period 2001-2006 are to:

- Reduce foodborne illness by 20% by improving food safety right through the food chain;
- Help people to eat more healthily;
- Promote honest and informative labelling to help consumers;
- Promote best practice within the food industry;
- Improve the enforcement of food law; and
- Earn people's trust by what we do and how we do it.

76.2.7 Research

Unlike the other policy areas, research policy cuts across virtually all sectors of the economy. As noted below, those Government departments or ministries having significant science or technology elements within their portfolios will undertake or commission research according to their specific missions and objectives. However, a broader view of national research policy is essential to avoid duplication and to ensure complementarity between the multiplicity of research funders and performers. This oversight role is provided, at the highest level, by the Secretary of State for Trade and Industry who, in their cross-Departmental role as the Cabinet Minister for Science and Technology, has overall responsibility for the Government's science policy and support for Science and Technology (S&T) as a whole.

The Secretary of State for Trade and Industry is chairperson of the Council for Science and Technology (CST), the Government's top-level advisory body on major science and technology issues. The CST is tasked with advising the Prime Minister about the UK's strategic policies and framework for supporting science and technology. The Chief Scientific Adviser is the Deputy Chairperson of the CST and its membership comprises leading representatives of industry and academia.

Operational support on S&T policy matters is provided by the Department of Trade and Industry's (DTI) Minister for Science, and the Office of Science and Technology (OST).

In 1991, DTI published a *Science and Innovation Strategy* which set out the broad aims of its support and policy for Science, Engineering and Technology. One of the key objectives within the strategy was: "To make the most of the UK's science, engineering and technology". Under this objective, the DTI strategic science and innovation priorities are to:

- "Invest in the **science base** to reverse years of decline, particularly:
 - investing in the science research **infrastructure**;
 - funding **basic SET research** that advances knowledge for its own sake, playing to the UK's strengths and for the UK's long-term interest, and is also sufficiently flexible for future science and technology options;
 - increasing the pool of talented **people** trained by and working in the science and engineering base, while raising skills and increasing expertise.
- Create incentives and build capacity for **knowledge transfer** to maximise the contribution of the science and engineering base to economic development and quality of life."

At the more specific operational level, the Office of Science and Technology (located within the DTI since 1996) is responsible for the Science Budget, the Research Councils and the development and trans-departmental coordination of government policy on science, engineering and technology. The OST is headed by the Chief Scientific Adviser, whose duties are to advise the Prime Minister, Cabinet, the Secretary of State for Trade and Industry, and the Minister for Science on science, engineering and technology (SET) matters.

In these tasks, the CSA is supported by the Trans-departmental Science and Technology Group (TDSTG) within OST. The TDSTG's work includes:

- providing advice to Ministers on the UK's overall performance in S&T and the extent to which it meets national needs; and ensuring that S&T issues which cross Departmental boundaries are handled efficiently and effectively;
- encouraging more effective exploitation of S&T to meet the needs of business, Government and the Public Services;
- pursuing the UK's S&T interest in the European Union and promoting the scientific, commercial and diplomatic interests of the UK through strengthening S&T links with the rest of the world;
- assisting Government Departments and agencies in improving the way in which S&T are used in support of policy, regulation, operations and procurement;
- contributing to activity to improve the public understanding of the role of S&T and ensuring that across Government the regulation of new technologies takes due account of social, ethical, health and safety, environmental and economic considerations⁸⁰.

Also located within the OST is the Director general of the Research Councils (DGRC). The DGRC is responsible for advising the Secretary of State for Trade and Industry, and the Minister for Science on the allocation of the Science Budget and for overseeing the successful operation of the Research Councils in pursuit of their missions. He is supported by the Science and Engineering Base Group (SEBG). The SEBG “aims to ensure Science Budget funded programmes, together with the Education Departments”⁸¹ support for the Science and Engineering Base (SEB), meet the country's future requirements, taking account of Foresight and other expressions of user needs”.

Major issues covered by the SEBG include:

- the quality, number and subject balance of scientists and engineers qualified at postgraduate and post-doctoral levels;
- fundamental and strategic research, the maintenance of the scientific and technical knowledge base; and
- access to advances in science, engineering and technology being generated outside the UK.

The SEGB works closely with other major UK research funders, particularly the Wellcome Trust, a research charity which has made a major contribution to the UK Science Budget, and the national Higher Education Funding Councils and their equivalents in the devolved administrations, which provide “block grant” funding to universities.

77 Scientific advice

77.1 General background

Scientific advice is playing an increasingly important role in the formulation of policy at both the national and international level. The UK has seen much reflection on the use of scientific advice in policy making in recent years, partly due of this increase in

⁸⁰ <http://www.dti.gov.uk/ost/aboutost/index.htm>

⁸¹ These include the Department for Education and Skills, in England, and equivalent bodies in Wales, Scotland and Northern Ireland.

importance, and partly due to the loss of public confidence in the Government's use of scientific advice resulting from the BSE issue. The problems associated with scientific advice have been highlighted over the last few years by a number of reports including: the "Science and Society" report by the House of Lords Select Committee on Science and Technology (House of Lords, 2000); a review of the scientific advisory system by the House of Commons Select Committee on Science and Technology (House of Commons, 2001); the publication of the final report of the Philips Inquiry into actions taken over BSE (Philips, 2000); a review of the advisory and regulatory framework, specifically for biotechnology (OST, 1999), which has led on to a number of changes to the advisory structures; and a review of the risk procedures used by advisory committees dealing with food safety (May, 2000). In response to these concerns the government has responded with three major initiatives: the publication of guidelines for the use of scientific advice in policy making; the publication of a code of practice covering scientific advisory committees; and the establishment of three strategic advisory bodies.

It should be noted that although certain powers have been devolved to the respective bodies in Scotland and Wales, and these bodies do have advisory structures, the most important advisory bodies still operate at the UK level, advising UK, Scottish and Welsh governments.

77.1.1 Guidelines on the use of scientific advice in policy making

One response to the issues surrounding scientific advice was the publication in 1997 of guidelines on the use of scientific advice in policy making by the Office of Science and Technology (OST) (OST, 1997). The implementation of these guidelines was reviewed in 1998 (OST, 1998) and 1999 (OST, 1999). These reviews found that, in general, there was good level of awareness of, and compliance with the Guidelines, although it was recognised that there should be more systematic assessment of performance. In light of these reviews and a public consultation, an updated version of the Guidelines, "Guidelines 2000", was published (OST, 2000a).

The Guidelines set out "key principles applying to the development and presentation of scientific advice for policy making" (*ibid.*, p.1) and covers the processes of:

- identifying issues requiring scientific advice;
- obtaining the best possible advice from a wide variety of sources;
- handling of advice by departments; and
- implementation and review.

The Guidelines apply to all areas where scientific advice is required, whatever the source of the advice, but it is seen as particularly important that they are followed when there is significant scientific uncertainty, a range of scientific opinion, or where there are potentially significant implications for sensitive areas of public policy (*ibid.*, p.2).

The implementation of the Guidelines is seen as a priority of the Ministerial Science Group, which was established by the current Minister for Science, Lord Sainsbury. The establishment of this informal ministerial committee, which includes members from all Government departments with an interest in science, engineering and

technology, is seen as a reflection of Lord Sainsbury's commitment to restoring the public's confidence in the Government's use of scientific advice (OST, 1999).

77.1.2 Code of practice for scientific advisory committees

The recently issued code of practice aims to provide "detailed guidance specifically focused on the operation of scientific advisory committees and their relationship with Government, and to help translate the Guidelines into day-to-day practice" (OST, 2001, p.1). The code is wide ranging, encompassing many aspects of the operation of advisory committees including, amongst others: the committees role and remit; the balance of expertise; conflicts of interest; members rights and responsibilities; the role of the secretariat; working practices; the reporting of risk and uncertainty; procedures for arriving at conclusions; and the publication of documents. However, the code is not overly prescriptive, rather it aims to raise the issues that Committees themselves need to consider and agree a position on.

77.1.3 The new strategic advisory bodies

The Food Standards Agency (FSA), the Human Genetics Commission (HGC) and the Agriculture and Environment Biotechnology Commission (AEBC) are the three new 'strategic' advisory bodies that have been established by the Government. They are seen as having a wider role compared with other advisory bodies, with responsibility for looking at, in addition to science, relevant ethical and social issues. To reflect this, these groups have a wider range of members including journalists and representatives of consumer, green and other interest groups. However, while they are often grouped together, the three bodies do not have the same status. While the HGC and AEBC may have a wider role than most advisory bodies, structurally they do not differ greatly from many other advisory committees. However, the FSA is a non-Ministerial Government Department, established by an Act of Parliament and with a range of executive functions in addition to any advisory role (House of Commons, 2001). Reflecting this the FSA has a substantial research budget and acts as the sponsoring body for a number of advisory committees.

77.1.4 Wider context

This interest in the area of scientific advice is taking place in the context of wider changes in Government. The White Paper on Modernising Government laid out the Government's view on the operation of public services, focusing on three main aims: to ensure that policy making is more joined up and strategic; to make sure that public service users, not providers, are the focus, by matching services more closely to peoples lives; and to deliver public services that are high quality and efficient (Cabinet Office, 1999). The 'Better Regulation Guide' is another area that may have an influence the scientific advisory structures. The guide is aimed at policy makers and emphasises the importance of; transparency, accountability, targeting, consistency, and proportionality.

77.2 Advice provision in relevant policy areas

77.2.1 Advice provision across Government

At the highest level, The Chief Scientific Adviser (CSA), who is as head of the Office of Science and Technology, provides advice to the Prime Minister, Cabinet, the Secretary of State for Trade and Industry, and the Minister for Science on science, engineering and technology matters. The Transdepartmental Science and Technology Group of OST support the CSA in this task. As head of OST, the CSA is responsible for co-ordinating strategy on science and technology matters across Government. To try and ensure that such matters are being handled properly the CSA has regular meetings with the departmental Chief Scientists through the Chief Scientific Adviser's Committee (CSAC). However, in their report on the science advisory system, the House of Commons Select Committee on Science and Technology expressed concerns that the contact between the CSA and Chief Scientists was not adequate, going on to comment, "it is essential that Chief Scientists in Departments should have direct day-to-day access to the Chief Scientific Adviser" (House of Commons, 2001). The CSA does not have line management responsibility for the network of chief scientists – the CSA is not the head of profession in the same way as other heads of professional specialisms such as law or economics. Hence, while there are mechanisms for dealing with cross-departmental issues, this falls short of a formal, controlling superstructure.

In addition there is the Chief Medical Officer (CMO), the Government's principal adviser on medical issues. While this appointment is located in the Department of Health, the CMO has direct access to Ministers in all departments.

77.2.2 Advice provision in Departments

The UK has a devolved structure of responsibility for science matters. "Each Government Department is responsible for the provision and use of the scientific advice it needs to discharge its individual mission. Departments themselves are in the best position to decide what systems and processes best suit their needs" (OST, 1998). Within most departments there is a position of Chief Scientist or equivalent, whose role is to: "ensure that the research commissioned by the Department addresses and underpins policy needs; that it is good science and makes up a balanced programme; that it represents value for money; and that it is commissioned, monitored, reviewed, and evaluated effectively" (*ibid.*). However, it should be noted that despite the seeming importance of this role in some cases it is still a relatively junior, low profile position. Many cases where a scientific input is needed in the policy process are relatively humdrum and can be dealt with in-house by a department's own staff. However, if issues are particularly contentious or there is just not the required in-house expertise then departments will rely on external experts. For all departments there are a variety of ways through which advice can be sought. These include:

- Department's own research programmes – Individual departments have their own research budgets which can be used to help maintain adequate support for

broadly-based long term research and to allow for the commissioning of short term, policy relevant studies. There are some variations between departments in the way that research is co-ordinated. For example, before they were merged into DEFRA, MAFF had a centralised research programme managed by a central unit. While in DETR, R&D responsibilities were devolved to individual programmes within the Department and the programme managers took decisions regarding the need for external advice. DEFRA is currently in the process of deciding on the model that will be adopted. DTLR has maintained the DETR model of decentralised research programmes with control maintained by the various divisions. R&D funding in Health is complicated with both the DH and the NHS having research programmes. One particular difference with the DH is that, unlike other departments, it funds outside centres, generally based in universities (for example, the Sheffield Medical Care Research Unit). DTI differs from other departments in that much of its money spend on research is not geared at answering particular policy questions but is instead aimed at programme deliver objectives, namely to promote innovation. There are different models for procuring research but they tend to boil down to the same thing. A proportion of the research will be put out to competitive tender, some work will be directly commissioned, and most departments still have links with the old public sector laboratories. In many areas this research represents one of the main sources of information on scientific issues. For example, the DEFRA funded Climate Prediction Programme at the Met Office's Hadley Centre is the primary information source on climate change science.

- Non-Departmental Public Bodies (NDPBs) – Probably the most important sources of scientific advice are the NDPBs. “An NDPB is a body that has a role in the process of national Government but is not a Government Department or part of one and which accordingly operates to a greater or lesser extent at arm’s length from Ministers. There are four types of NDPB: executive NDPBs, which carry out executive or commercial duties; advisory NDPBs, which provide independent, expert advice to Ministers and officials; tribunal NDPBs, which have semi-judicial functions; and boards of visitors to penal establishments” (Cabinet Office, 2002, p.iv). Both the executive and advisory NDPBs are relevant for this study. One issue that could effect the future use of NDPBs is that they are becoming increasingly formalised, with rules on appointments etc., and it is possible that in the future departments may be put off from establishing new NDPBs unless they see a policy issue being particularly long term.
- Executive Agencies – These have discrete responsibility for particular business areas, but, distinguishing them from executive NDPBs, they are part of a Department and are accountable to it.
- Other sources of advice – These can include the Learned Bodies (e.g. the Royal Society, the Royal Academy of Engineering etc.), international bodies, and discussion with interested stakeholders and stakeholder groups, including groups representing the interests of consumers and members of the public. The Science and Technology Select Committees of the Houses of Commons and

Lords and the Parliamentary Office of Science and Technology (POST) can also be sources of advice for Government (OST, 1998).

78 References

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79 Advisory Bodies covered in database

Name of body	Policy areas covered	Who advised	Full/basic coverage	Nature of body	Type A or B
Spongiform Encephalopathy Advisory Committee (SEAC)	Health Agriculture	Ministry	Full	Non-statutory permanent	A
Commission for Integrated Transport (CfIT)	Transport	Ministry	Full	Non-statutory permanent	A
Advisory Committee on Business and the Environment (ACBE)	Environment	Ministry	Full	Non-statutory permanent	A
Advisory Committee on Releases to the Environment (ACRE)	Environment Agriculture Health	Ministry	Full	Statutory permanent	A
Agriculture and Environment Biotechnology Commission (AEBC)	Environment Agriculture	Ministry	Full	Non-statutory permanent	A
Radioactive Waste Management Advisory Committee (RWMAC)	Environment Health	Ministry	Full	Non-statutory permanent	A
Royal Commission on Environmental Pollution (RCEP)	Environment	Head of government Legislature Ministry Other	Full	Statutory permanent	A
Advisory Committee on Novel Foods and Processes (ACNFP)	Environment Health	Ministry Agency	Full	Non-statutory permanent	A
Committee on Carcinogenicity of Chemicals in Food, Consumer Products and the Environment (COC)	Environment Agriculture Health	Ministry Agency	Full	Non-statutory permanent	A
National Radiological Protection Board (NRPB)	Health	Ministry Other	Full	Statutory permanent	B
Committee on Medical Aspects of Radiation in the Environment (COMARE)	Health	Ministry	Full	Non-statutory permanent	A
Committee on the Safety of Medicines (CSM)	Health	Ministry Agency	Full	Statutory permanent	A
Human Genetics Commission (HGC)	Health	Ministry	Full	Non-statutory permanent	A
Council for Science and	Research	Head of	Full	Non-	A

Technology (CST)		government		statutory permanent	
Biotechnology and Biological Sciences Research Council (BBSRC)	Research	Ministry Other	Full	Statutory permanent	B
Advisory Committee on Animal Feedingstuffs (ACAF)	Agriculture Health	Ministry	Basic		A
Farm Animal Welfare Council (FAWC)	Agriculture	Ministry	Basic		A
Advisory Committee on Pesticides (ACP)	Agriculture Environment Health	Ministry	Basic		A
Pesticides Residues Committee (PRC)	Agriculture Health	Ministry Agency	Basic		A
Advisory Committee on Cleaner Coal Technology (ACCCT)	Energy	Ministry	Basic		A
Energy Advisory Panel (EAP)	Energy	Ministry	Basic		A
Fuel Cells Advisory Panel (FCAP)	Energy	Ministry	Basic		A
Renewable Energy Advisory Committee (REAC)	Energy	Ministry	Basic		A
Disabled Persons Transport Advisory Committee (DPTAC)	Transport	Ministry	Basic		A
Advisory Committee on Consumer Products and the Environment (ACCPE)	Environment	Ministry	Basic		A
Expert Panel on Air Quality Standards	Environment Health	Ministry	Basic		A
Advisory Committee on the Microbiological Safety of Food (ACMSF)	Health	Ministry Agency	Basic		A
Committee on Mutagenicity of Chemicals in Food, Consumer Products and the Environment (COM)	Agriculture Environment Health	Ministry Agency	Basic		A
Scientific Advisory Committee on Nutrition (SACN)	Health	Ministry Agency	Basic		A
Committee on Toxicity of Chemicals in Food, Consumer Products and the Environment (COT)	Agriculture Environment Health	Ministry Agency Other advisory body	Basic		A
Advisory Committee on Borderline	Health	Ministry	Basic		A

Substances (ACBS)					
Advisory Committee on Dangerous Pathogens (ACDP)	Health Agriculture	Ministry	Basic		A
Advisory Committee on NHS Drugs	Health	Ministry	Basic		A
Advisory Group on Hepatitis	Health	Ministry Other advisory body	Basic		A
Committee on the Medical Effects of Air Pollutants	Health	Ministry Agency	Basic		A
Expert Advisory Group On AIDS	Health	Ministry	Basic		A
Gene Therapy Advisory Committee	Health Research	Ministry Agency	Basic		A
Human Fertility and Embryology Authority (HFEA)	Health	Ministry Other	Basic		B
Joint Committee on Vaccination And Immunisation	Health	Ministry	Basic		A
Medicines Commission	Health	Ministry	Basic		A
Scientific Committee on Tobacco and Health	Health	Ministry Other	Basic		A
UK Xenotransplantation Interim Regulatory Authority	Health Research	Ministry	Basic		A
National Institute of Clinical Excellence (NICE)	Health	Ministry Other	Basic		B
Parliamentary Office of Science and Technology (POST)	Agriculture Transport Environment Research Health Energy Fisheries	Legislature	Basic		A
Engineering and Physical Sciences Research Council (EPSRC)	Research	Ministry Other	Basic		B
Particle Physics and Astronomy Research Council (PPARC)	Research	Ministry Other	Basic		B
Natural Environment Research Council (NERC)	Research Environment	Ministry Other	Basic		B
Medical Research Council (MRC)	Research Health	Ministry Other	Basic		B
Economic and Social Research Council (ESRC)	Research	Ministry Other	Basic		B

English Nature	Environment	Ministry Other	Basic		B
Sustainable Development Commission	Agriculture Environment	Head of government	Basic		A

79.1 General trends

As has been discussed previously in the overview of scientific advice in the UK, post-BSE there have been a number of changes in the UK advisory system. The introduction of the May guidelines in 1997 prompted the changes that have seen an increasing openness, reflected in the publication of materials on the web, registers of member's interests etc. This process has continued with the recently published code of practice for scientific advisory committees. Part of these broader changes, recently established advisory bodies, e.g. the Human Genetics Commission and the Agriculture Environment Biotechnology Commission, have had much broader membership and wider scope.

Reflecting the increasing prominence of scientific advice in policy-making, many of the bodies have been established since 1985. As would be expected in the UK with its strong executive, the vast majority of bodies advise Government Departments.

The analysis of the information from the database is broken down to reflect the two categories of advisory bodies that have been distinguished – type A bodies that are solely concerned with scientific advice and type B bodies that, in addition to an advisory function, also perform other roles.

79.2 Structural issues

79.2.1 Secretariat

All type A UK bodies have a secretariat of between 5-10 staff. In general this is supplied by the relevant government department, although it can be provided by another body, as is the case with the Committee on Medical Aspects of Radiation in the Environment whose secretariat is provided by the National Radiological Protection Board. For the type B bodies there is not a secretariat in the same sense, although there will be a number of administrative staff. However, for the two type B bodies studied here, a high level board or council can be identified which may well have dedicated support staff in the manner of a secretariat.

The secretariats tend to undertake functions such as providing members with relevant documentation, producing minutes of meetings, and providing general administrative backing for the body (i.e. for finances etc.). However, the secretariat's role tends to go beyond purely administrative tasks. The background work done by the secretariat tends to a major input into the generation of advice. To ensure that all relevant documentation is supplied to the body, it is necessary for members of the secretariat to undertake research in the relevant area, identifying important /issues areas that can then be brought to the attention of the body. In some cases, it is specifically mentioned in the published material on the body that the secretariat contains qualified

scientists so that the necessary support can be provided. For example: “the Secretary to the Commission, three Assistant Secretaries (one a scientist) and seven support staff (two of them scientists) - supports the Chairman and Members...” (Royal Commission on Environmental Pollution). For others the expertise of the secretariat is stressed, “The secretariat has expertise which enables them to provide members with comprehensive background information and briefing papers...” (Committee on Medical Aspects of Radiation in the Environment).

79.2.2 Membership

For type A bodies the number of members tends to be between 13 and 22, with one body (the Committee on the Safety of Medicines) having 38 members. For the type B bodies the membership numbers are dependent on what is counted. If the organisation as a whole is considered then the memberships are over 2000 for BBSRC and around 300 for NRPB. However, if the top decision making body within these organisations is considered then the numbers are similar to type A bodies.

There is no particular overall trend regarding the backgrounds of members of type A bodies. However, it is found that in general the bodies tend to either be dominated by ‘academic experts in natural and physical sciences’ or they have a fairly broad spread of backgrounds (although the natural and physical scientists may still be the largest group). The UK database contains two exceptions to this; the Commission for Integrated Transport (CIT), and the Advisory Committee on Business and the Environment (ACBE). These bodies are not really scientific but are included to reflect the broad definition of scientific advisory body that is being employed in this study. With its role of “providing dialogue between Government and business on environmental issues”, it is unsurprising that the ACBE is dominated by industry representatives. The CIT’s main role is to provide advice on the implementation of an integrated transport policy and to do this its membership includes academic experts in social science and humanities, industry representatives, NGO representatives and a number of others.

It is worth mentioning that of the bodies that are dominated by natural and physical scientists, all are focused in their scope. Those with a broader spread of expertise tend to have a broader scope to their work, with the only exception being the Radioactive Waste Management Advisory Committee, an area which, despite being quite focussed, encompasses many social issues.

In terms of the gender of members, in all cases there were at least two women on the body and generally the number was higher (the highest number of women was 11 but this was for the body with the highest overall membership). Beyond this overall breakdown there do not appear to be any specific trends as to the backgrounds of the female members.

For the UK it seems to be unusual for an advisory body to contain experts who work in other countries. There are three cases where this does happen, although for one it is because a member changed jobs and moved abroad. In 5 cases there are members that are also members of other advisory bodies. In general, this is found where the work of two bodies may overlap and it appears to be a deliberate attempt to ensure that these

overlaps are recognised. Examples include: the chair of the Advisory Committee on Novel Foods and Processes also being on the Advisory Committee on Releases to the Environment; the chair of the Human Fertility and Embryology Authority also being on the Human Genetics Commission; the Chair of the Disabled Persons Transport Advisory Committee and a member of the Scottish Offices National transport Forum also being on the Commission for Integrated Transport. It is important to note that one respondent indicated that that this was not simple to answer as no such information was systematically kept.

As mentioned previously, for the type B bodies in the database these questions on membership are difficult to answer. While information on the top-level decision making bodies of these organisation has been included in the database it has not been analysed here. Overall for the BBSRC, of the 2079 staff on indefinite contracts, 871 are in the science category. For the NRPB, of the 311 staff 209 are classified as “scientific staff”.

79.2.3 Budgets

For the advisory NDPBs that make up the majority of the type A bodies budgets are not large, falling between 250,000 and 650,000 Euro. The Royal Commission on Environmental Pollution has a larger budget of 1.6 million euros and the Commission for Integrated Transport has a budget of nearly 3.2 million euros. The budgets are provided through government departments.

For the majority of type A bodies members are paid part-time – that is they are paid when they are working for the body. These payments tend to be around 200-300 Euro per day for ordinary members with the Chair receiving more (up to 370 Euro per day). The Commission for Integrated Transport members have a yearly salary (Chairman – 42,875 Euro; Deputy Chairman – 30,017 Euro; other members – 9025 Euro). For the Council for Science and Technology and for the Advisory Committee on Business and the Environment members are only reimbursed their expenses.

It is rare for type A bodies to fund research with only the Human Genetics Commission, the Agriculture and Environment Biotechnology Commission and the Commission for Integrated Transport doing so.

The costs of the secretariat are not easy to ascertain in most cases as it is not paid for out of the body’s budget, rather, a government department employs the members of the secretariat and their time may not be wholly devoted to the advisory body. The three bodies where the costs are know are: the Royal Commission on Environmental Pollution – 642,000 euro; the Human Genetics Commission – 265,000 euro; and the Commission for Integrated Transport – 450,000 euro.

As expected, the overall budgets for type 2 bodies are considerably higher – 23,565,000 euro for NRPB and 390,000,000 euro for BBSRC.

79.3 Functional Issues

79.3.1 Scope of work

For the bodies that are covered in detail in the database, 7 are focused in their scope (they cover one main issue), and 8 are broad in their scope (they can cover a variety of issues within a particular area). All of the focused bodies work in specific scientific areas (e.g. Committee on Safety in Medicines, Spongiform Encephalopathy Advisory Committee, Advisory Committee on Novel Foods and Processes etc.). In contrast of the 8 broad bodies 2 are bodies that are not covering scientific areas (ACBE and CIT), 2 are the HGC and AEBC which are seen as having a more strategic role, one is the RCEP which can examine any topic with the 'environment area', one is the Council for Science and Technology, which is a very high level body, and the remaining two are the 2 type B bodies, BBSRC and NRPB.

See section 71.2.2 for a discussion of scope and membership.

Six type A bodies can be seen as undertaking other activities. Four of these bodies can commission research to help them in developing advice, three help to raise public awareness, two input in regulatory decisions, two update reviews on the state of the art, two undertake ethical reviews and one engages in a limited amount of education and training. Of course, other activities form a main part of the work of type B bodies, with both the NRPB and BBSRC undertaking research performance, research funding, education and training and raising public awareness.

79.3.2 Independence

The responsible Minister in general, officially appoints members of advisory bodies in the UK. There are exceptions to this, with, for example, the members of the RCEP being officially appointed by the Queen. However, it is becoming increasingly common for appointments to be made after an open application process where posts may be advertised in the press. In any case, appointment procedures are strictly governed through the Commissioner for Public Appointments and the 'Code of Practice for Ministerial Appointments to Public Bodies'. This code is underpinned by seven principles:

- Ministerial responsibility – the ultimate responsibility for appointments is with ministers
- Merit – all appointments should be governed by the overriding principle of selection based on merit
- Independent scrutiny – No appointment will take place without first being scrutinised by an independent panel
- Equal opportunities
- Probity – members of public bodies must be committed to the principles and values of public service
- Openness and transparency – the appointment process must be transparent and information should be provided about the appointments that are made
- Proportionality – appointments should be appropriate for the nature of the post and the size and weight of its responsibilities.

While bodies may be asked to look at particular issues or topics, practically all bodies that have been covered in the database are able to select topics for examination themselves. Indeed the only body that does not appear select its own topics is the Committee on the Safety of Medicines and this is because it examines new medicines or medicines that are referred to it. The RCEP stands out in terms of selection as, rather than having matters referred to it, the body selects only one topic that they will then examine in depth.

In general it appears that advice from the bodies studied is presented to policy makers in its final form. The research council's do engage in a dialogue with the relevant government departments.

For the bodies covered in the database it appears to be the norm that information is not only presented to policy body requesting the advice but is distributed more widely, through press releases and websites. In some cases bodies also produce information leaflets targeted at the general public. Although apparently rare, the outputs from advisory bodies do occasionally appear in academic journals.

79.3.3 Transparency

All type A bodies have a code of practice in place that details operational issues. Seven of the bodies studied have a code of practice specific to that body, while five have agreed to follow the new Code of Practice for Advisory Committees that was introduced in 2001 (see country overview for more details). However, the principles behind these codes of practice do not differ and the official Code is not overly prescriptive, rather it raises issues on which the advisory body should have a position. Hence it is left to the body itself to formalise procedures in line with the Code.

For all type A bodies members have to declare any interests that may potentially conflict with the business of the advisory body. These registers of member's interests are then made publicly available either in annual reports or on the bodies' websites. Where a potential conflict of interest arises, the chairman of the body can, after consulting with other members, chose to exclude a member from discussions.

Issues of confidentiality appear to be more complicated. For example for the case of the RCEP there are no formal requirements regarding keeping information confidential. In the case of SEAC particular papers that are used in discussion may be for members use only – these could be pre-publication scientific papers or commercial and patient information released solely for the purposes of the committee. In addition, the discussions of SEAC are confidential until a summary or a press briefing has made the information public.

For eight of the type A bodies covered in the database the remit, advice reports, activity reports (e.g. annual reports), agendas, and minutes are published on the websites. Three further bodies publish all but agendas on the website. For the Commission for Integrated Transport, neither agendas nor minutes are available on the web. For the Committee on Medical Aspects of Radiation in the Environment

advice reports and annual reports are published and available on request but not on the website, while agendas and minutes do not appear to be available.

The two newly established, more strategic advisory bodies, the Human Genetics Commission and the Agriculture and Environment Biotechnology Commission, hold all their meetings in public. The Committee on Carcinogenicity of Chemicals in Food, Consumer Products and the Environment holds open generic meetings with its sister committees COM and COT approximately every 18 months. The Advisory Committee on Novel Foods and Processes holds occasional open meetings, with one in 2001 being attended by 26 different organisations including campaign groups and industry. SEAC is to start holding public meeting in Autumn 2002 and only confidential information (see above) will be discussed in private. The other bodies did not hold open meetings.

79.3.4 Generation, delivery and response to advice

Regular meetings, between 3-6 a year, and the formation of sub-groups is the standard way of operation for type A bodies. The sub-groups are formed to examine specific areas and it is possible in some cases for non-members to be included.

With regards to the generation of advice, it appears that the most important sources are firstly (and unsurprisingly), the expertise of the members themselves, and secondly, background work by the secretariat. Reviewing existing literature also figures highly. Four bodies often commission new research to gather information, while for another 2 this is an occasional source. Consultations with national experts, with international experts and with the public were regular activities for 3 bodies.

For the majority of bodies a common position is agreed through consensus. None of the bodies studied agreed a position by majority vote and it does seem as though a common position is always presented, rather than a range of opinions. However, dissenting opinions are documented in minutes, which, as was mentioned earlier, are generally available on websites. Once the final advice has been agreed it is most common that it is then presented, in its final form, to those who requested it.

Most bodies studied deliver policy recommendation that feed into the development of policy. Many of these also engage in providing forecasts and risk assessments within their areas of competence.

79.3.5 Evaluation and impacts of advice

It is required that, every five years, sponsoring departments review the role of the non-departmental public bodies that fall under their umbrella. Hence, all the advisory bodies studied do undergo an evaluation to ascertain whether there is still a need for that body and whether the existing body is the best means of addressing that need.

All bodies studied, could unsurprisingly, highlight work that they had done that had had some degree of impact on the policy situation, ranging from a direct impact on policy development to raising the public profile of particular policy issues that will need to be addressed in the future.

79.3.6 Changes to the advisory system

Beyond the general changes that have been introduced into the UK advisory system since the publication of the May guidelines in 1997, many bodies have not undergone any major reforms. One area that has seen change is food safety, where a number of advisory bodies have moved under the auspices of the recently established Food Standards Agency.