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Typifying Scientific Advisory Structures and Scientific Advice Production Methodologies

The Cases of Denmark, Finland, and Sweden

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1. Introduction

Policy issues are becoming increasingly complex and science and technology today have an impact on most core government functions. The need for scientific advice has increased and at the same time questions over the validity of advice have often appeared on the political agenda. While in the past the opinions of experts may have been accepted by both policy makers and the public, this is no longer the case. Recent environmental and public health scares (e.g. BSE in the UK, AIDS and blood transfusions in France) have highlighted the problematic nature of providing, and dealing with, scientific advice. This then raises the question of the utility of scientific advice. Advice is required to inform decisions but how should that advice be formulated? Questions have begun to be asked as to whether current advisory structures are adequate in light of the changing context in which they are operating. Expert advice is required at all levels of policy-making and can be sought in a variety of ways. Moreover, such variety increases as cultural differences between countries are considered.

In this report results from a study of scientific advisory structures in Denmark, Finland and Sweden, are presented. The purpose of the study was firstly to analyse the overall functioning of the science advice structures in the policy making process, secondly to analyse a selection of scientific advisory bodies in the three countries. For the purpose of the study a scientific advisory body was defined as any body, that, when requested, provided scientific advice to government (executive, or legislature) as one of its main, although not necessarily only, functions; where “scientific” is deemed to cover social as well as natural sciences; and where the bodies covered in the study were ones that play a significant policy role at the national level. We only examined advisory bodies that have been formalised, however temporarily. By using this definition the aim was to be as inclusive as possible of different sorts of advisory bodies, however, it does specifically excludes certain bodies (for example lobby groups and regional advisory bodies). The analysis furthermore focused on seven policy areas where there is clearly a major scientific component in policy-making, and hence, ones where scientific advice is of particular importance: Agriculture, Fisheries, Energy, Transport, Environment, Health and the consumer, and, finally, Research.

The study has been a sub-project within a larger comparative project about scientific advisory structures in Europe (“Typifying scientific advisory structures and scientific advice production methodologies”) commissioned by the Science Advice Unit of DG Research. The project involved a consortium of groups led by the Institute for Policy Research in Engineering, Science and Technology (PREST), University of Manchester – UK; and including: Atlantis Consulting - Greece; Austrian Research Centers Seibersdorf, Systems Research Division (ARCS) – Austria; Fraunhofer Institute for Systems and Innovation Research (ISI) – Germany; Fondazione Rosselli – Italy; and Swedish Institute for Studies of Education and Research (SISTER) – Sweden. The Swedish part of the project was led by docent Ulf Sandström. Further information from other parts of the projects is to be published at the PREST website.

The results of the sub-projects are presented in six separate chapters. The first three chapters consist of *country overviews*, where the scientific advisory structures of the three countries are described and analysed. The following three chapters consist of results from the analysis of a selection of scientific advisory bodies in each country. Below some important conclusions about similarities and differences between the Scandinavian countries are summarised.

In general there is a high degree of similarity in the structure of advisory systems across the Scandinavian countries reviewed. Firstly informal working groups, *ad hoc* committees and informal networks play a more significant role than in many other European countries. The committee system and the referral system (whereby the work of advisory commissions is referred to relevant stakeholders) are, to varying extent, important mechanisms for scientific advice in these countries. Secondly the structures for scientific advice in the Scandinavian countries are also characterised by a fairly high level of openness and gives major opportunities for public discussion. Thirdly, as most other European countries, the Scandinavian countries have set up commissions or similar bodies to examine recent scientific developments such as Bio-Ethics, and Gene Technology. Fourthly, the scientific advisory bodies reviewed are also characterised by a fairly strong equality between men and women. The proportion of advisors being women is fairly large: in most cases around 40 to 50 %.

There are however also important differences between the structures of the scientific advice in the three countries. *Firstly*, even though all countries have a high level scientific advisory body with a broad remit encompassing S&T issues in general, there are important differences between the status and mission of these bodies. The Finnish S&T Policy Council (chaired by the Prime minister, and closely connected to the Finnish cabinet) and the Danish Council for Research Policy have strategic missions and are “high profile institutions” within their systems, while the Swedish National Research Committee has a more informal and low profile role. *Secondly* the committee system is more formalised, and more open for scrutiny, in Sweden than in Denmark and Finland. In Denmark the committee system is more flexible and it is also, as in Finland, more common with informal working groups closely connected to the Ministries. *Thirdly* different kinds of sectorial research institutes play more important roles as scientific advisory structures in Denmark and Finland than in Sweden. In Sweden a large number of public agencies, with explicit roles as expert bodies, and the informal networks connected to these agencies are more important structures for scientific advice in the Swedish system.

There are also differences in how the scientific advisory bodies, which have been reviewed in this study, are composed in the three countries. One important observation is the high number of civil servants in the Finnish committee-type bodies (almost as high as the proportion of academic experts), which is an indication of the close relation between ministry and advisory body. Academic experts normally dominate the committee-type scientific advisory bodies in Denmark and Sweden. While several bodies in Finland and Sweden have members from the parliament, Denmark has none. This seems to be in line with a Danish political tradition of not mixing preparation and decision-making in the policy process. The number of members from interest groups is higher in Denmark and Finland than in Sweden. These differences between the countries seem to a large extent reflect differences in the structure of the central bureaucracy and the variations in the type, and degree of, corporatist-oriented structures.

And important trend in especially Finland and Sweden is that the committee system has undergone important changes during the last decades. In Sweden, the increasing speed of the policy process has led to shorter time scales for the operation of commissions of enquiry, and also to greater reliance on the use of individuals. At the same time, the structure of these commissions has changed with a greater representation from civil servants and less from experts and researchers. The Finnish committee system has also undergone changes, with more work delegated to shorter-lived (and less formalised) working groups or projects.

2. Sweden – Country Overview

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:¹

- 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 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 im-

¹ In April 2002.

plementation 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 imposed 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.

Policy areas

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 deci-

sions 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.

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

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 have, 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 procurement and R&D funding within the energy sector.

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.

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.

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.

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.

Scientific Advice

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.² 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

² It sometimes happened that PhD projects were financed within the work of larger committees (Helander & Johansson 1998).

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 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.

Advice Provision in Relevant Policy areas

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.

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.

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.

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).

Environment

An important standing scientific advisory committee on the ministry level in this area is the Swedish Environmental Advisory Council (Miljövärdsberedningen) 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.

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.

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.

Scientific Advisory Bodies

In this section bodies that can be defined as important scientific advisory bodies in each policy field, or have roles similar to a scientific advisory body, are presented, and also some examples of temporary, ad-hoc, bodies.

Agriculture

The National Veterinary Institute (Statens veterinärmedicinska anstalt)

The Swedish Research Council for Environment, Agriculture Sciences, and Spatial Planning (Forskningsrådet för miljö, areella näringar och samhällsbyggande, FORMAS)

The Swedish Gene Technology Advisory Board (Gentekniknämnden)

The Swedish Board of Agriculture (Jordbruksverket)

Fisheries

The Swedish Board of Fisheries (Fiskeriverket)

Energy

- The National Council for Nuclear Waste (Statens råd för kärnavfallsfrågor)
- The Swedish Energy Agency (Energimyndigheten)
- The Swedish Agency for Innovation Systems (Verket för innovationssystem, VINNOVA)
 - Innovation System Analysis Division

Transport

- The Swedish Institute for Transport and Communication Analysis (Statens institut för kommunikationsanalyser, SIKA)
- The Swedish Agency for Innovation Systems (Verket för innovationssystem, VINNOVA)
 - Innovation System Analysis Division

Environment

- The Swedish Environmental Advisory Council (Miljövårdsberedningen)
- The Swedish Environmental Protection Agency (Naturvårdsverket)
 - Research Secretariat/Research Council
 - Scientific Council for Biological Diversity
- The Swedish Research Council for Environment, Agriculture Sciences, and Spatial Planning (Forskningsrådet för miljö, areella näringar och samhällsbyggande, FORMAS)
- The Committee about System and Rules for the Flexible Mechanism of the Kyoto Protocol (ad-hoc)

Health/the consumer

- The National Food Administration (Livsmedelsverket)
 - Group of "External scientific advisors"
 - Expert group on diet- and health issues
 - Expert group on pediatric nutrition
- The Swedish Council on Technology Assessment in Health Care (Statens beredning för utvärdering av medicinsk teknik)
- The Medical Products Agency (Läkemedelsverket)
 - The Advisory Committee on Drugs
 - The Swedish Adverse Drug Reactions Advisory Committee
- The Medical-Ethical Advisory Board (Statens medicinsk-etiska råd)
- The Swedish Council for Working Life and Social Research (Forskningsrådet för arbetsliv och socialvetenskap, FAS)
- The National Institute of Public Health (Folkhälsoinstitutet)
- The Swedish Gene Technology Advisory Board (Gentekniknämnden)
- The Committee on Genetical Investigations (Kommittén angående genetiska undersökningar, ad-hoc)

Research

- The National Research Committee (Forskningsberedningen)
- The Swedish Research Council (Vetenskapsrådet)
- The Royal Swedish Academy of Engineering Sciences (Ingenjörsvetenskapsakademien, IVA)
- The Royal Swedish Academy of Sciences (Kungliga vetenskapsakademien, KVA)
- The Swedish Agency for Innovation Systems (Verket för innovationssystem, VINNOVA)
 - Innovation System Analysis Division
- The Swedish Council for Working Life and Social Research (Research (Forskningsrådet för arbetsliv och socialvetenskap, FAS)

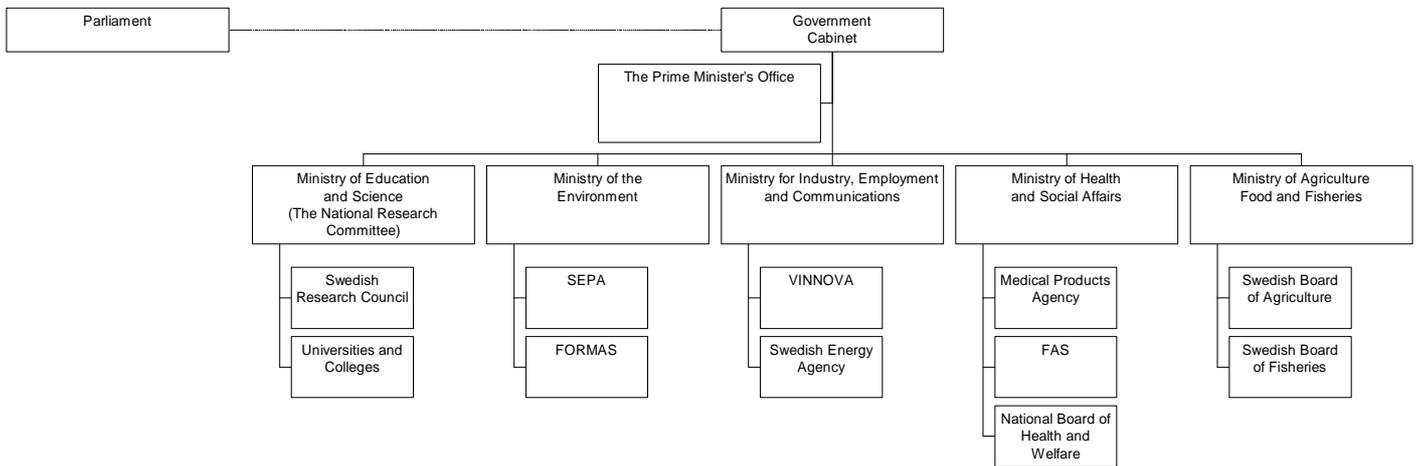
The Swedish Research Council for Environment, Agriculture Sciences, and Spatial Planning
(Forskningsrådet för miljö, areella näringar och samhällsbyggande, FORMAS)
The Swedish National Space Board (Rymdstyrelsen)

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Appendix.

The structure of the government of Sweden (includes important ministries and governmental organisations in the relevant policy areas Agriculture, Fisheries, Energy, Transports, Environment, Health/the Consumer, and Research).



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

3. Database information: Sweden

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	Environ.	Agency	Full	Statutory- permanent

	Council	Health			
<i>Type B1 (Research council)</i>	The Swedish Research Council for Environment, Agriculture Sciences and Spatial Planning	Agri. Energy Environ.	Ministry	Full	Statutory-permanent
	The Swedish Research Council	Research	Ministry	Full	Statutory-permanent
	The Swedish Council for Working Life and Social Research	Health Research	Ministry	Full	Statutory-permanent
<i>Type B2 (Gov. Institutes)</i>	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

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 funding of research, 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, and 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 types of 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.

Structural issues

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.

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 has a fairly broad representation. This could be related to the 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 from 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.

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.

Functional Issues

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 A1 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.

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.

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.

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.

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.

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.

4. Denmark – Country Overview

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:³

- 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 organisation divided

³ Information from April 2002.

into departments, directorates and boards.⁴ 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.

Policy areas

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 handle 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 coordination 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.

⁴ 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.

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.

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.

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.

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.

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).

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 (UUVU) 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.

Scientific advice

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.⁵ 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.

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.

Advice provision in relevant policy areas

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.

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.

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.

⁵ In the last two decades the Danish universities have, however, become more involved in application oriented issues.

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.

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.

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.

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).

Examples Scientific Advisory Bodies

In this section bodies that can be defined as important scientific advisory bodies in each policy field, or have roles similar to a scientific advisory body, are presented, and also some examples of temporary, ad-hoc, bodies.

Agriculture

The Advisory Committee on Agriculture, Fisheries and Food Research
The Danish Agriculture and Veterinary Research Council

Fisheries

The Danish Institute for Fisheries Research (Danmarks Fiskeriundersøgelser)
The Danish Institute of Agriculture and Fisheries Economics
The Advisory Committee on Industrial Fishery (Rådgivende udvalg vedrørende det danske industrifiskeri)

Energy

The Advisory Council of Energy Research (Det rådgivende energiforskningsudvalg)
The Danish Energy Authority
- The Climate Change Advisory Team of the Danish Energy Agency

Transport

The Danish Transport Research Institute (Danmarks transportforskning)

Environment

The Danish Environmental Research Institute
The Pesticide Research Committee (Miljøstyrelsens rådgivende Pesticidforskningsudvalg)
The Pesticide Board (Bekæmpelsesmiddelrådet)

Health/the consumer

The Danish Council of Ethics (Det etiske råd)
The Danish Council on Nutrition
The Danish Committee on Gene Technology (Genteknologiudvalget, ad-hoc)
The Danish Pharmacopoeia Commission
The Danish Centre for Evaluation and Health Technology Assessment
The National Institute of Public Health

Research

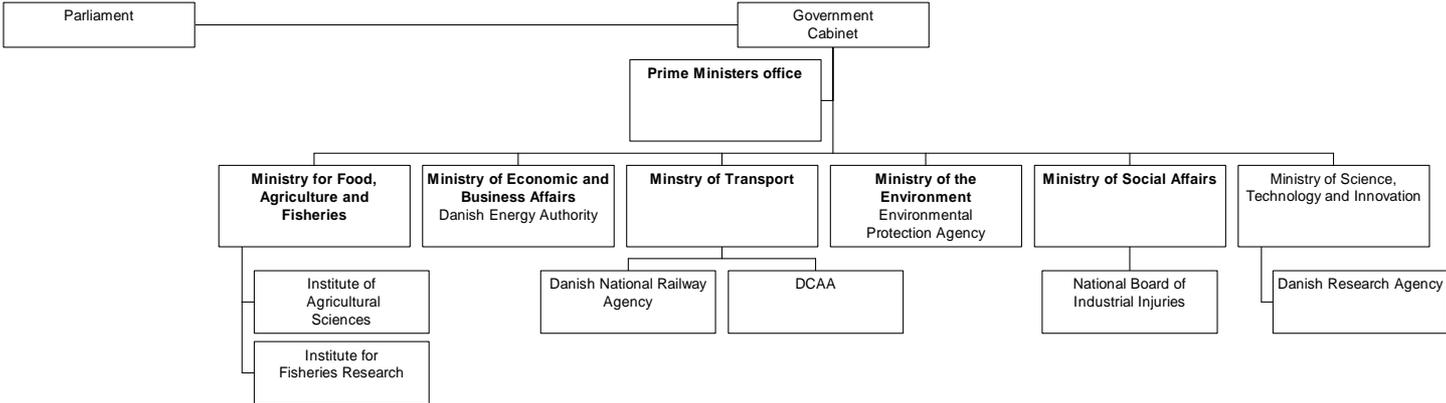
The Danish Council for Research Policy (Danmarks forskningsråd)
The Danish Research Agency (Forskningsstyrelsen)
- The Research Councils
- The Board of Danish Research Councils (Forskningsforum)
- The Central Scientific Ethical Committee
- The Danish Committee of Gene Technology
- The Danish Committees on Scientific Dishonesty
The Danish Institute for Studies in Research and Research Policy
The Advisory Council of Energy Research (Det rådgivende energiforskningsudvalg)
The Advisory Committee on Agriculture, Fisheries and Food Research

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Appendix.

The structure of the government of Denmark (includes important ministries and governmental organisations in the relevant policy areas Agriculture, Fisheries, Energy, Transports, Environment, Health/the Consumer, and Research).



DCAA= Danish Civil Aviation Administration

5. Database information: Denmark

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
	The Danish Council on Nutrition	Health Agri.	Ministry Agency	Basic	Statutory permanent
<i>Type A2 (committee at agency level)</i>	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

*Type B1
(Research
council)*

The Board of Danish Research Councils	Research	Legisl. Ministry	Full	Statutory-permanent
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
<i>Type B2 (Gov. Institute)</i>				
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

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, and 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.

Structural issues

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.

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.

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).

Functional Issues

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.

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.

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.

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.

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 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.

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.

6. Finland – Country Overview

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:⁶

- 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 structure.

⁶ Information from April 2002.

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, which means that 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 (Petersson 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 is to a large extent converging with the development in the other Nordic countries (Petersson 2001, s. 176).

Policy areas

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).

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.

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 (Energi-marknadsverket) and the National Technology Agency (TEKES, Statens tekniska utvecklingscentral).

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.

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).

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.

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.

Scientific Advice

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 has undergone significant changes. To make the policy formulation process more flexible, the number of committees has 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.

Advice provision in relevant policy areas

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).

Fisheries

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

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).

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.

Environment

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

Health and the Consumer

Important actors are the are the Medical Agency (Läkemedelsverket) and the National Research and Development Centre for Welfare and Health (Forsknings- och utvecklingscen-

tralen 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.

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.

Examples Scientific Advisory Bodies

In this section bodies that can be defined as important scientific advisory bodies in each policy field, or have roles similar to a scientific advisory body, are presented, and also some examples of temporary, ad-hoc, bodies.

Agriculture

AgriFood Research Finland (Forskningscentralen för jordbruk och livsmedelsekonomi).

Fisheries

The Finnish Game and Fisheries Research institute (Vilt- och fiskeriforskningsinstitutet).

Energy

The Advisory Committee on Nuclear Energy

The Advisory Committee on Nuclear Safety

The National Technology Agency (Teknologiska utvecklingscentralen, TEKES)

Transport

The National Technology Agency (Teknologiska utvecklingscentralen, TEKES)

Environment

Finland's Advisory Committee on Chemicals (Kemikaliedelegationen)

The Finnish Environment Institute (Finlands miljöcentral)

The Finnish Committee on the Kyoto Mechanisms (ad-hoc)

Health/the consumer

The National Public Health Institute (KTL)

The Medical Agency

- Different expert committees

Scientific Committee on Health Effects of Chemicals

The Delegation for Biotechnology (Delegationen för bioteknologi)

The National Food Agency

- The Advisory Board on Food

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

Research

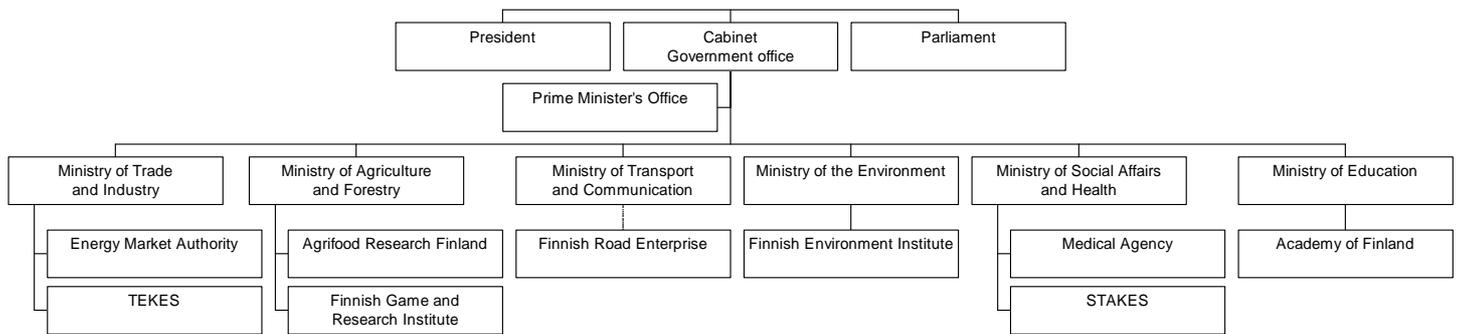
The Science and Technology Policy Council of Finland (Statens vetenskaps- och teknologiråd)
The Academy of Finland (Finlands akademi)
The National Technology Agency (Teknologiska utvecklingscentralen, TEKES)
The National Research Ethics Council (Forskningsetiska delegationen)

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Appendix.

The structure of the government of Finland (Includes important ministries and governmental organisations in the relevant policy areas Agriculture, Fisheries, Energy, Transports, Environment, Health/the Consumer, and Research).



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)

7. Database information: Finland

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

Type B2
(Gov. Institutes)

The Finnish Game and Fisheries Research Institute	Fisheries	Ministry	Basic+ relevant questions in other sections	Statutory-permanent
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

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, and 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.

Structural issues

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.

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 (Agri-food 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.

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.

Functional Issues

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.

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 its 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.

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.

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.

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.

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.

TIDIGARE ARBETSRAPPORTER/WORKING PAPER

- 2001:1 Alexander Kanaev & Albert Tuijnman : *Prospects for Selecting and Using Indicators for Benchmarking Swedish Higher Education*
- 2001:2 Lillemor Kim, Robert Ohlsson & Ulf Sandström : *Kan samverkan mätas? Om indikatorer för bedömning av KK-stiftelsens satsningar*
- 2001:3 Jenny Beckman, Mats Brenner, Olle Persson & Ulf Sandström : *Nya arbetsformer inom diabetesforskning – studier kring en nätverkssatsning*
- 2001:4 Ulf Sandström : *Om den svenska arkitektur-, bostads- och stadsbyggnadsforskningens karaktär*
- 2001:5 *Verksamhetsberättelse 1999-2000, Föreningen för studier av forskning och utbildning*
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