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**RCN budgets, policy instruments and operations**  
Background report No 7 in the evaluation of the Research  
Council of Norway

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### Synthesis report

Erik Arnold, Stefan Kuhlman and Barend van der Meulen, **A Singular Council? Evaluation of the Research Council of Norway**, Brighton: Technopolis, 2001

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**Egil Kallerud**

**The Budgets for Research and Development of the  
Research Council of Norway (RCN), 1993 - 2000**  
Report prepared for the evaluation of the RCN in 2001  
by Technopolis Ltd.

Oslo, 7 June, 2001

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## Preface

This report is the second and final version of a report prepared by NIFU for the panel and team that in 2001 evaluate the Research Council of Norway under the leadership of Technopolis Ltd. A first draft version of the report was presented and discussed at the panel meeting in Oslo 9 - 10 April 2001. Substantial revisions of and additions to the first version have in particular been made in chap. 2.2., 2.3, 3.1, and 3.4. The final report includes a new appendix with data on R&D income in research institutes (appendix 2).

Oslo, 10 December 2001

Petter Aasen  
Director

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Research director

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# 1 Introduction

This report provides key data on the R&D budgets of the Research Council of Norway (RCN). The report is predominantly an analysis of budget data as presented in budget documents by the RCN. Its results are, therefore, limited to information available by this source, and is primarily intended to provide a picture the overall structure of R&D resources channelled through the RCN. In another report, more disaggregate data on how the RCN spend its R&D allocations will be presented, based upon the FORISS system of the Council, i.e., its internal data system for project management.

In this report, we use the following acronyms for Norwegian ministries:

- AAD – Arbeids- og administrasjonsdepartementet (Ministry of Labour and Government Administration)  
[AD and PSD – from an earlier organisation of the ministries, by which Government administration was in a separate ministry (AD, and Government administration and Societal planning were in one ministry (PSD)]
- BFD – Barne- og familiedepartementet (Ministry of Children and Family Affairs))
- FIN – Finansdepartementet (Ministry of Finance)
- FID – Fiskeridepartementet (Ministry of Fisheries)
- FD – Forsvarsdepartementet (Ministry of Defence)
- JD – Justis- og politidepartementet (Ministry of Justice and the Police)
- KUF – Kirke-, utdannings- og forskningsdepartementet (Ministry of Education, Research and Church Affairs)
- KRD – Kommunal- og regionaldepartementet (Ministry of Local Government and Regional Development)  
[KAD – from an earlier organisation of the ministries, in which local government, regional development and labour affairs were organised in one ministry]
- KD – Kulturdepartementet (Ministry of Cultural Affairs)
- LD – Landbruksdepartementet (Ministry of Agriculture)
- MD – Miljøverndepartementet (Ministry of the Environment)
- NHD – Nærings- og handelsdepartementet (Ministry of Trade and Industry)
- OED – Olje- og energidepartementet (Ministry of Petroleum and Energy)  
[NOE – from an earlier organisation of the two last ministries, by which industry and energy/oil were part of a single ministry]
- SD – Samferdselsdepartementet (Ministry of Transport and Communications)
- SHD – Sosial- og helsedepartementet (Ministry of Health and Social Affairs)
- UD – Utenriksdepartementet (Ministry of Foreign Affairs))

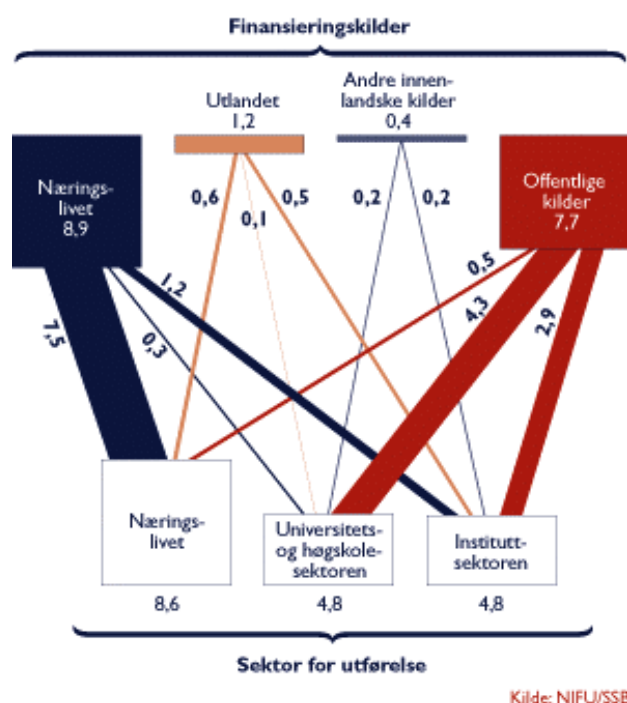
## 2 R&D funding in Norway

As a background to the analysis of the R&D budgets of the RCN, we provide in this chapter general information on the structure of national R&D funding in Norway, within which the budgets of RCN play, as will be seen, an important part.

### 2.1 National R&D expenditure

First, an overview figure on sources and targets of R&D funds (in bill NOK) (figure 2.1.)<sup>1</sup>

**Figure 2.1.1. Main sources and recipients of R&D funds in Norway (1999). 1000 Mill NOK**



Translation of Norwegian terms in Figure 2.1:

Finansieringskilder = sources of funds;

Næringslivet = Industry;

Utlandet = Foreign sources;

<sup>1</sup> Note on sector classification (quoted from NIFUs web-site on R&D statistics):

In Norwegian R&D statistics, resources are classified in three sectors of performance: *The Industry Sector*, *the Higher Education Sector*, and *the Institute Sector*. The Norwegian classification somewhat differs from the OECD's: OECD's *Business Enterprise Sector* includes both industry and private institutes that are business-oriented (However, these institutes are included in the Institute Sector in Norway). OECD's *Higher Education Sector* corresponds to the Norwegian classification, while its *Government Sector* and *Private Non-Profit Sector (PNP)* together cover the rest of the Institute Sector in Norway. The PNP Sector is rather small in Norway, and it is therefore included in the Government Sector of OECD's statistics.

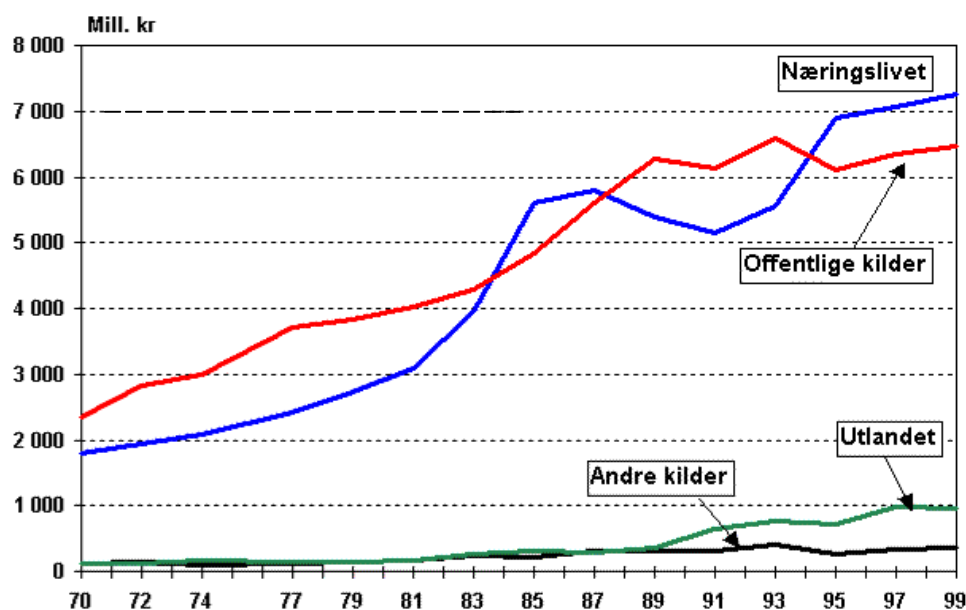


Offentlige kilder = Public funding;  
 Sektor for utførelse = R&D performing sectors;  
 Universitets- og høyskolesektoren = Higher Education Institutions (HEIs);  
 Instituttsektoren = The institute sector (includes independent research institutes both in the public and the business sectors).

Figure 2.1.2 shows the relative roles of private, public and other funding.

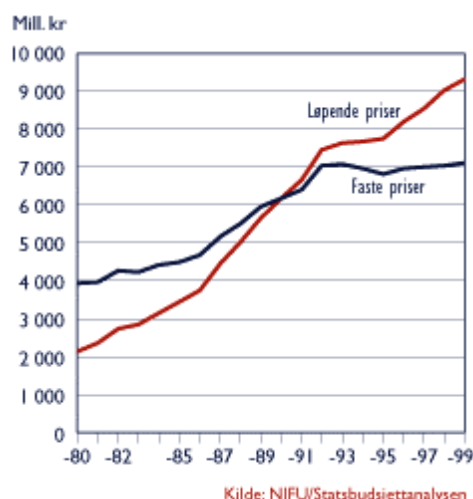
**Figure 2.1.2. Funding of R&D by main sources , 1970 – 1997. Fixed 1990 prices.**

For translation of terms, see notes to fig 2.1.



In figure 2.1.3. the growth in public funding (based on annual budget appropriations) since the early 1980s is shown. We also see that the period of growth during the 1980s, was – in real terms - replaced by a period of levelling out of public R&D funding in the 1990s. This applies in particular for the first years of after the establishment of the RCN in 1993.

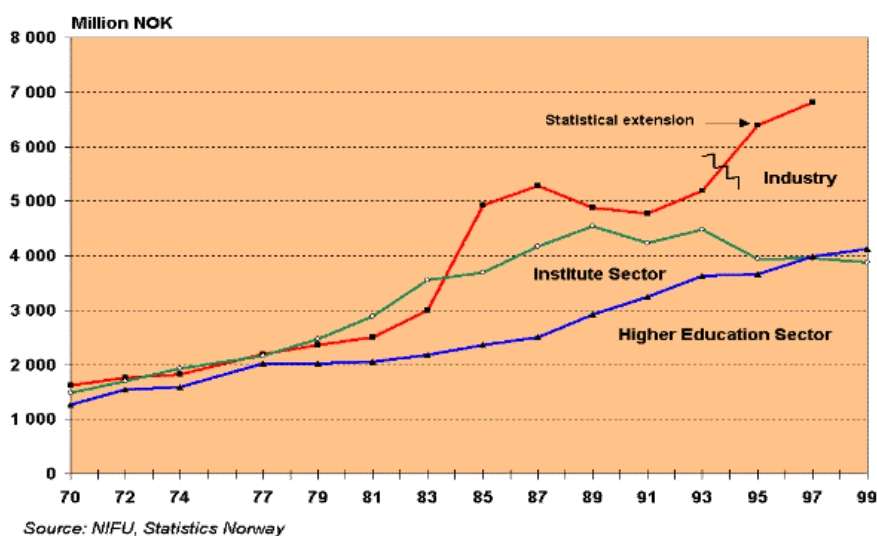
**Figure 2.1.3. Government funding of R&D (annual budget appropriations)**



(Løpende priser = current prices, faste priser = fixed prices)

Figure 2.1.4. shows the distribution of resource expenditure among the main R&D performing sectors.

**Figure 2.1.4. R&D expenditure in Norway by sector of performance 1970-1997. Fixed 1990-prices**



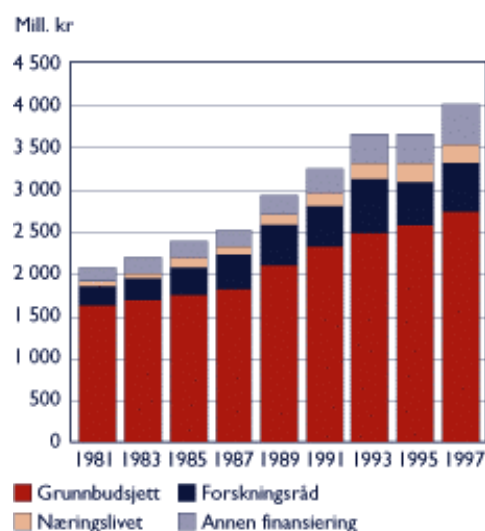
We observe a decline in R&D expenditure in industry from 1987 to 1993. Part of the increase since 1993 is due to technical changes in the statistical methods used for collecting information on R&D expenditure in industry. There has also been a marked decline in the relative size of the institute sector from 1993, although a part of the decline from 1995 to 1997 as shown in figure 2.4. is due to the privatisation of the public Telecommunication Company, by which its (large) R&D unit was reclassified from institute to industry. The increase on the part of the higher education institutions (HEIs) is mainly caused by the strong

increase during the 90s in student enrolment, on which a large part of the funding of research in HEIs depends.

## 2.2 R&D in Higher Education Institutions (HEIs)

The relative role of various sources for R&D funding in HEIs is shown by figure 2.5.

**Figure 2.2.1 Sources of funding of R&D in HEIs (1981-1997) Fixed 1990 prices.**

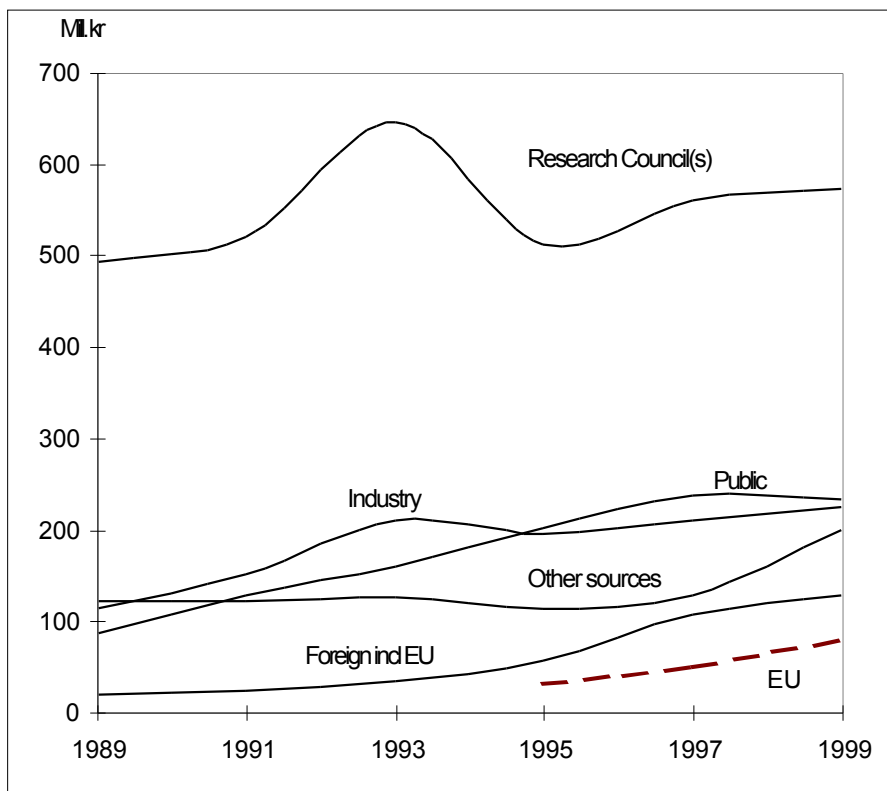


Kilde: NIFU/FoU-statistikk

(Translation of Norwegian terms: Grunnbudsjett = Core funding (i.e. calculated as a part of funding by student enrollment); næringslivet = industry; Forskningsråd = research council(s); Annen finansiering = other)

While R&D resources from the core budget has increased steadily throughout the last two decades, sources from research councils peaked in 1993. Resources from industry is a relatively small part of the total R&D expenditure in HEIs, although they have increased, in particular during the 1990s. In figure 2.2.2. “other sources” are broken down in “foreign sources” and “other sources”, and R&D income from “foreign sources” is depicted in two versions, foreign sources in total including funding from EU, and funding from EU separately (from 1995).

**Figure 2.2.2. R&D in HEIs – sources 1989 – 1999 other than core funding. Fixed 1990 prices.**

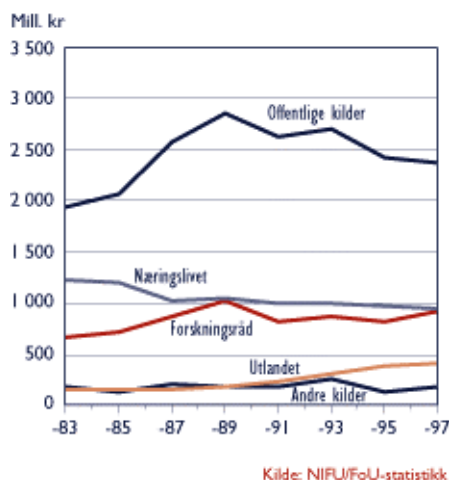


The increasing role of EU funding is evident from this chart. Part (23,6 Mill NOK) of the increase from 1997 to 1999 in “other sources” is due to the re-classification of one research institution in the 1999 R&D statistics from research institute to HEI.

## 2.3 R&D in research institutes

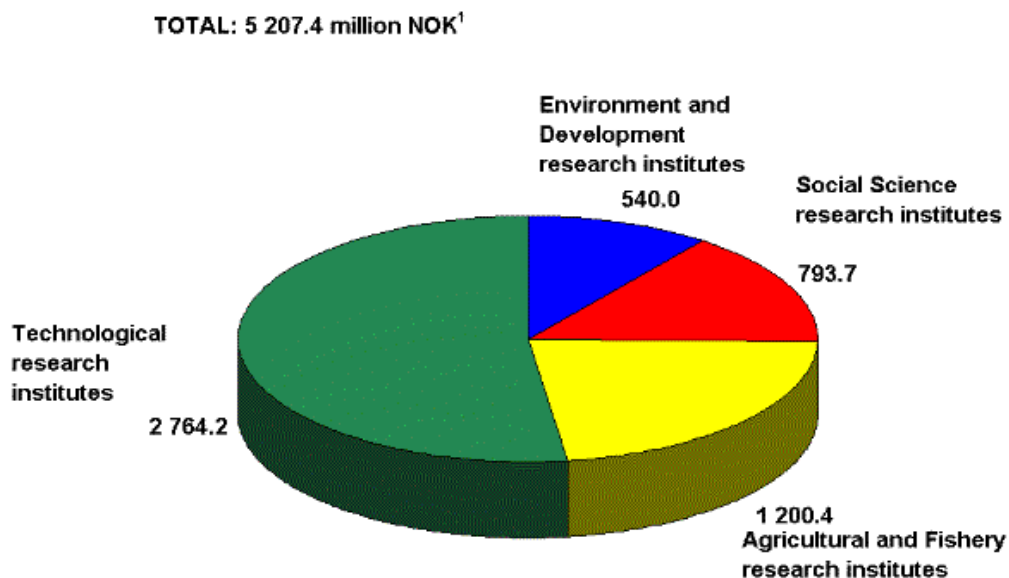
Figure 2.3.1 shows changes in the sources of funding in the institute sector:

**Figure 2.3.1. Total R&D expenditure in the institute sector by source of funding (1983 – 1997). Fixed 1990 prices.**



The structure, in terms of income, of the Norwegian institute sector, is shown in figure 2.3.2.:

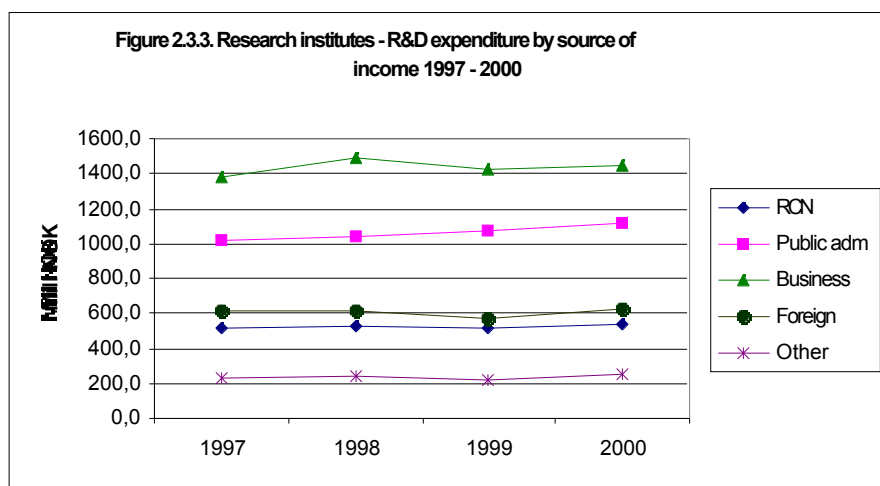
**Figure 2.3.2 Income of research institutes in Norway by field: 1999, million NOK**



<sup>1</sup> The total is corrected for double entries and includes medical and health institutes.

Source: NIFU

Figure 2.3.3. provides an overview of funding of research institute by sources.



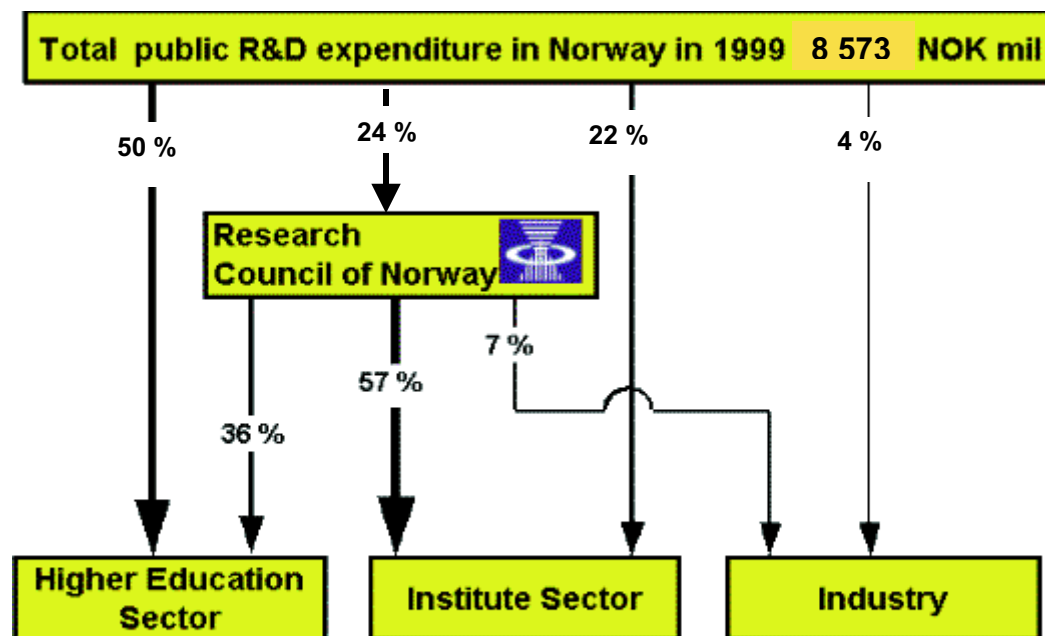
More detailed information on the funding of research institutes is given in Appendix 1.

### 3. The budgets of the RCN

#### 3.1 The RCN within the structure of public funding of R&D in Norway

Figure 3.1.1. indicates the role that the RCN play in the structure of public R&D funding in Norway:

Figure 3.1.1. Public resources on R&D in 1999, by sector of performance



Source: NIFU

By figure 3.1.1. it is seen that 50 percent of total public funding of R&D is channelled directly to the HEIs as core funding, one fourth is channelled through the RCN, which subsequently distributes these resources to – in order of the size of funding – research institutes, HEIs and industry. A little less than a fourth of public funding of R&D is channelled directly to institutes, in large part as core funding. A small proportion, both of public funds and of RCN funds, is direct funding of industrial R&D.

Figure 3.1.2. and 3.1.3 indicate changes that have taken in the relative size of public funds to HEIs, research councils (before and after the establishment of RCN in 1993), institutes and industry as primary recipients of public R&D funds:

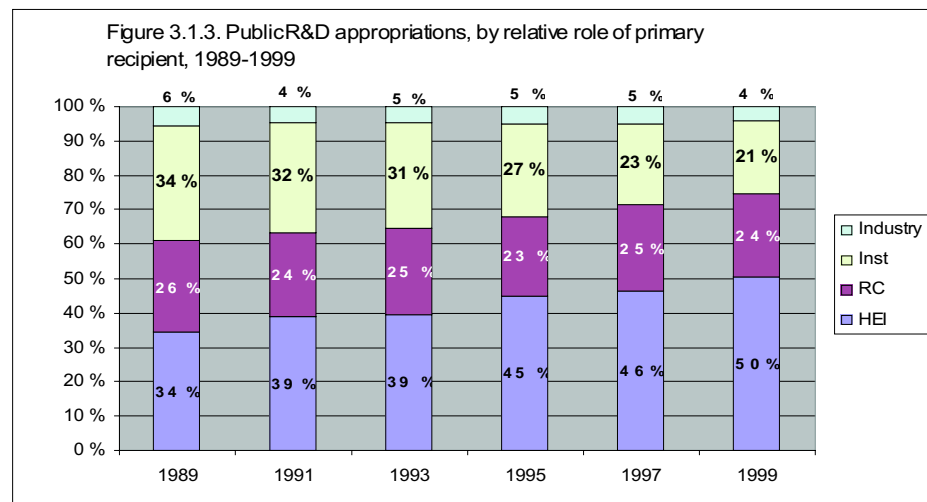
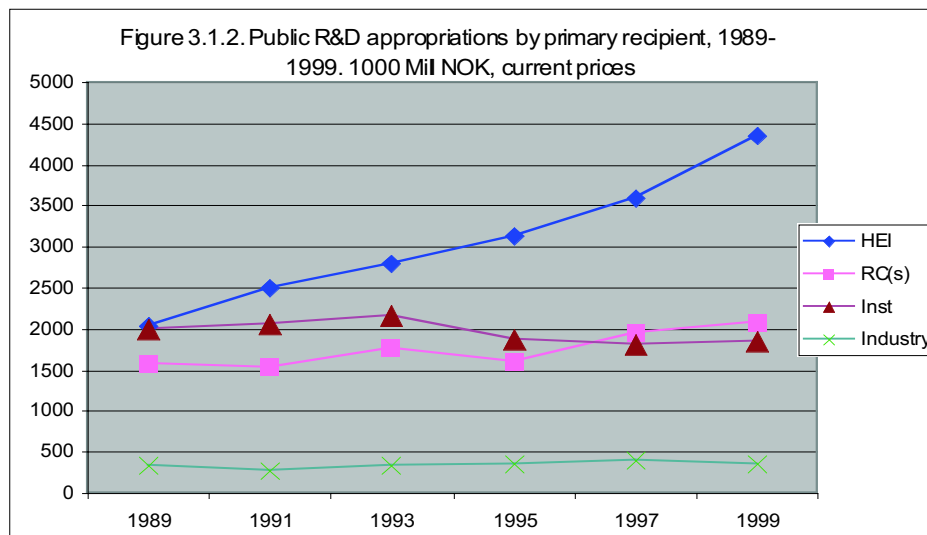
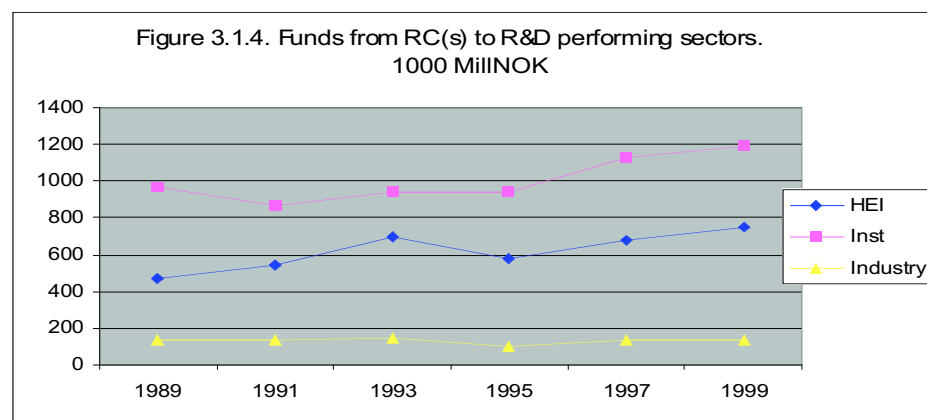


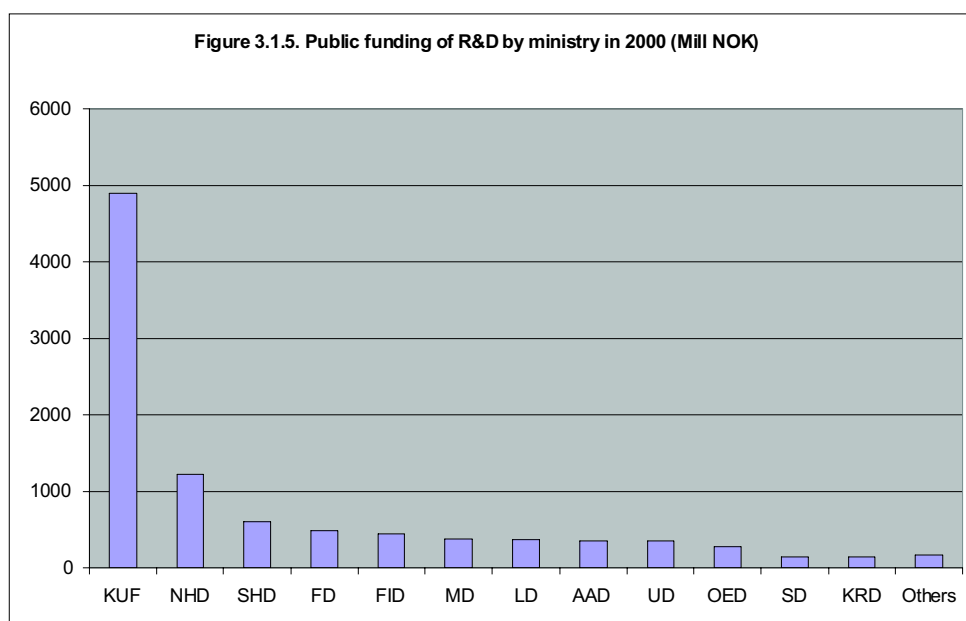
Figure 3.1.4. shows changes from 1989 to 1999 in the size of funds allocated to HEIs, institutes and industry as secondary recipients of RC funding:



The reason why RCN funding of institutes have increased while their overall public funding has decreased, is that since 1997, a large part of public resources for core funding of institutes have been transferred from three ministries to the RCN. Thus funding that was part of public funding of institutes as primary recipients are now being channelled through the RCN to institutes as secondary recipients (see 3.2.3 below).

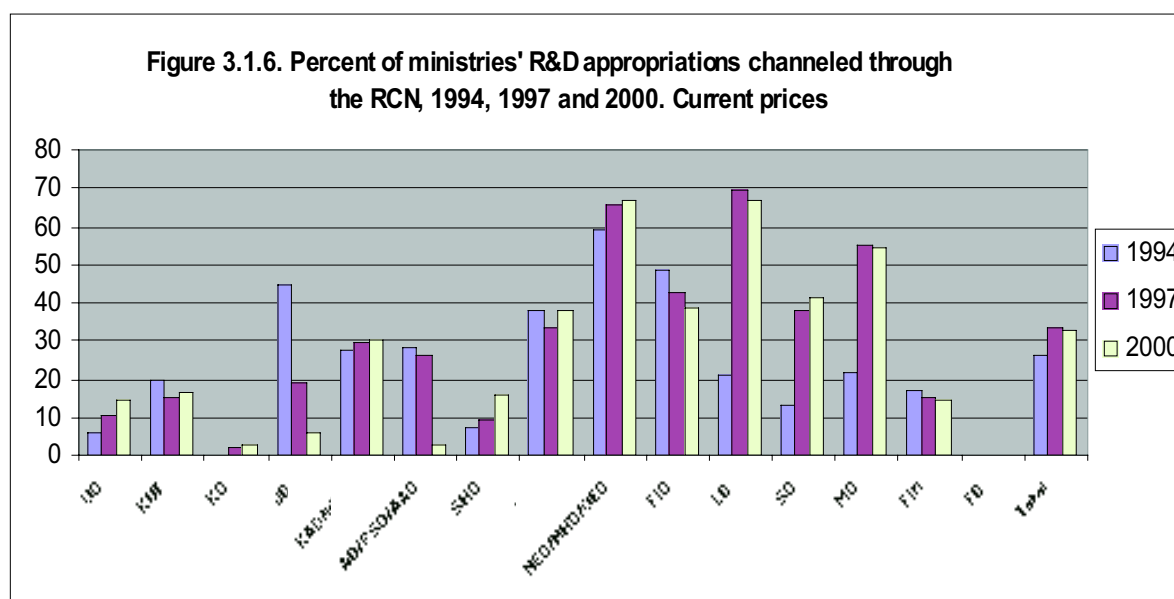
Norway's system for public R&D builds on what is in Norwegian science policy discourse called "the sectoral principle". This strongly emphasises the distributed responsibility of each ministry for the funding and effective exploitation of R&D as integral part of general policy within the particular societal sectors for which they are politically responsible. A consequence of the sectoral principle as it is practised within the Norwegian R&D system is the large differences between ministries in terms of funding of R&D as well as in terms of organisational forms by which ministries deal with R&D. Part of this variety is the extent and forms of RCN involvement in sectoral R&D on different sectors.

Figure 3.1.5. indicates the relative roles of the major R&D intensive ministries in terms of public funding of R&D in total.



In figure 3.1.6, the percentage of each ministry's R&D appropriation channelled through the RCN is shown.

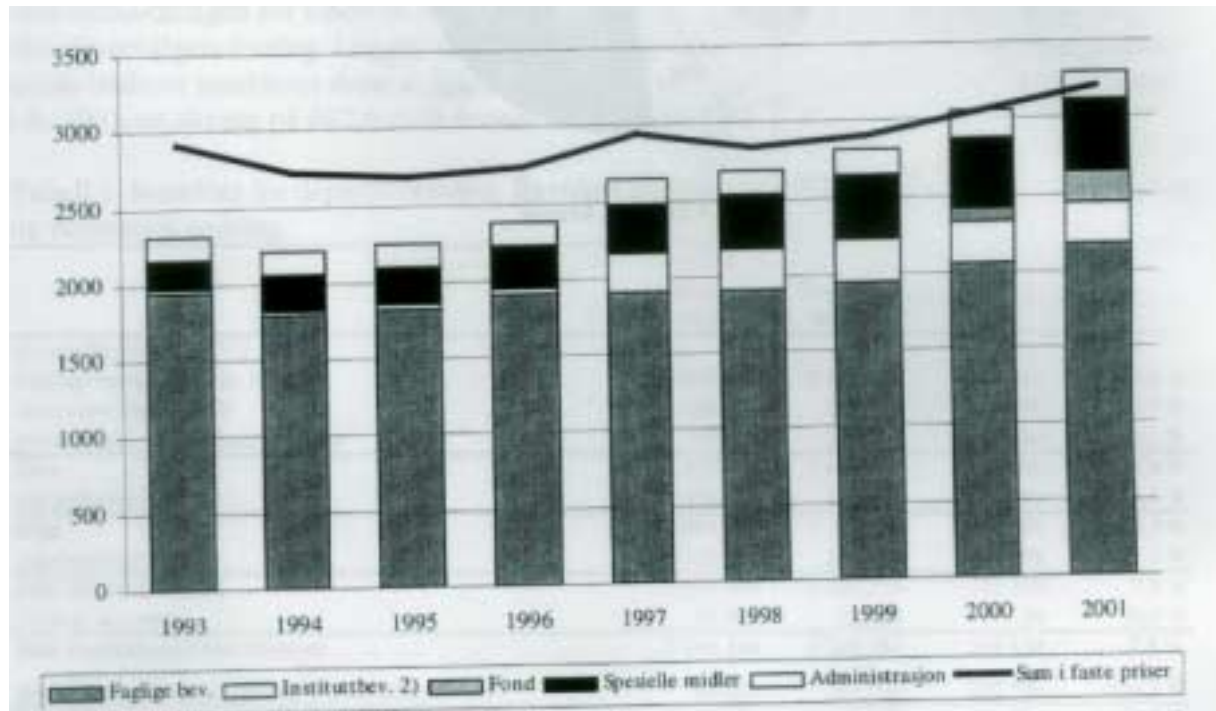




As is seen, RCN involvement – in financial terms - with sectoral R&D policy varies considerably between ministries. While the Ministries of Trade and Industry, and of Agriculture channel 2/3 or more of their R&D budgets through the Council, the Ministry of Defence channels literally nothing. For several ministries that are small in terms of R&D funding, only a small fraction of their R&D budget, in themselves fairly small in absolute terms (KD, JD, FIN etc), is channelled through the Council. For some ministries, the proportion of their R&D funds that is channelled through the Council has changed markedly during the period that the RCN has existed. In some cases (JD, e.g.), this may reflect the large proportional effect of minor changes in funding from one year to the next, rather than overall changes in policy as for the use of the RCN as “their” agency for dealing with strategic R&D matters. In some cases, however, changes over time may be seen to reflect changes in long-term policies by individual ministries. This applies, for example, for the large increase in the proportion of R&D funding by MD and LD that is channelled through the RCN. In 1997 the responsibility for core funding of agricultural and environmental research institutes was transferred from these ministries to RCN, as a consequence of new guidelines set down by Government in 1995 for the public funding of research institutes. In the case of SD, the increasing role of the RCN may be explained as a compensation for the effects on public funding of R&D in the telecom sector of the privatisation of the public national telecom company, Telenor, after which it withdrew from its previous role as an agency doing public research. The increasing role of RCN as for the R&D appropriations by SHD reflects the increasing commitment of that ministry to R&D, after having been criticised for a number of years for having neglected its sectoral responsibility for R&D. The reasons for these changes are not, however, well documented in written sources, and will have to be explored in more detail by the team and panel with the methods available to them.

As has been emphasised elsewhere <sup>1</sup>, the RCN was the victim of a political “breach of promise” when in 1994 in particular its budget was seriously cut down. It was not until 2000 (all appropriations) or 2001 (administration and core institute funding excluded) that its budgets returned, in real prices, to the level of 1993. This is indicated in the following two figures, which are copied from the 2001 budget document of the Council:

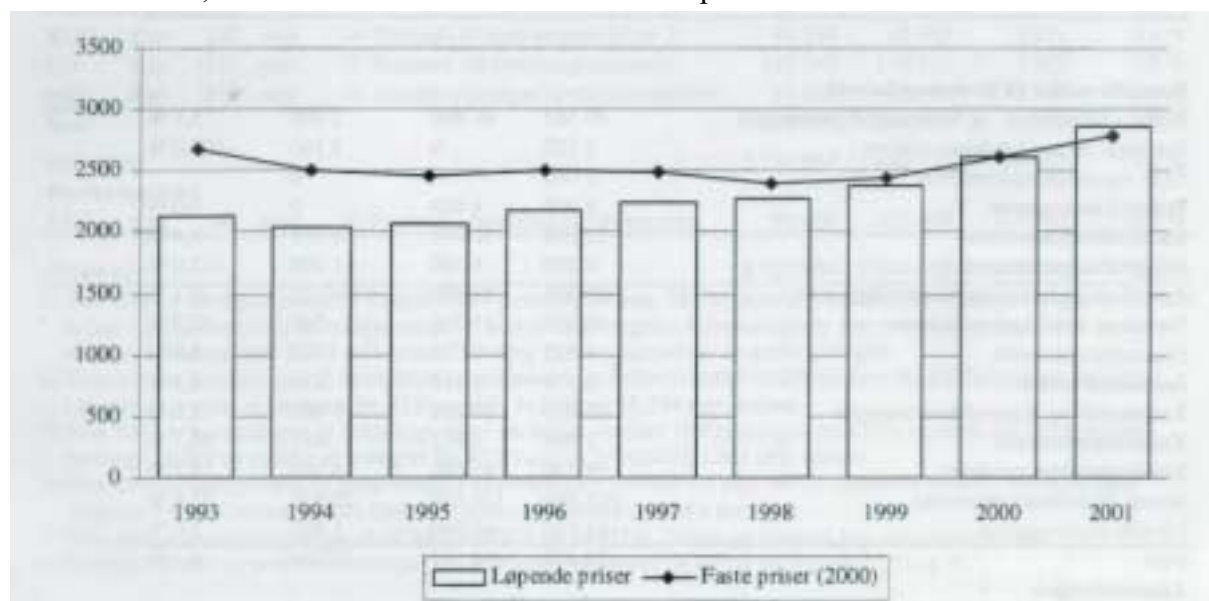
Figure 3.1.7. Total RCN budgets (general funds, w/core institute funds specified, proceeds from the Research Fund, special funds and administration), 1993 – 2001. Current and fixed 2000 prices. <sup>2</sup>



<sup>1</sup> Egil Kallerud: Norges forskningsråd 1989 - 1995. En dokumentanalyse om etableringen av Norges forskningsråd. NIFU report to Technopolis, p. 32.

<sup>2</sup> The item "core institute funding" is in this figure been reconstructed for 1993-1996, although they were not specified as such until 1997, when funds for core funding of a number of new institutes were transferred to the RCN. The item as depicted in this figure only such funds from KUF, LD and MD, and not the NHD/NOE/OED funding of technical institutes, neither before nor after 1997.

Figure 3.1.8. General funds (excl. core institute funds), special funds and proceeds from the Research Fund, 1993 – 2001. Current and fixed 2000 prices.



### 3.2. The structure of the RCN budget

The budget of RCN has five main components: general funds, special funds, core funds for public research institutes, proceeds from the Research Fund and its administrative budget.

#### General funds

Ministries that give their appropriations to the RCN as "general funds" are the ministries that in the previous research council system were the "owners" of their "own" research councils:

- Ministry of Education, Research and Church Affairs (henceforward: KUF, previously the "owner" of NAVF and NORAS)
- Ministry (-ies) of Trade, Industry, Petroleum and Energy, presently the Ministry of Trade and Industry and the Ministry for Petroleum and Energy (henceforward: NHD and OED respectively, previously the "owner(s)" of NTNF),
- Ministry of Agriculture (henceforward: LD, previously the "owner" of NLVF)
- Ministry of Fisheries Affairs (henceforward: FID, previously the "owner" of NFFR)
- Ministry of the Environment (henceforward: MD, previously the "owner" of the National Committee for Environment, a semi-autonomous part of the NAVF).

These funds constitute by far the largest part of the RCN appropriations. In 2000 it made up 70 percent of the total RCN funding for scientific activities (the RCN administrative budget excluded). This is the most stable and predictable part of the RCN budget, being to a much larger extent than the special funds (below) considered as a total sum, rather than as a sum of single programme budget items. Hence it is also the part of the budget that is the least specified/earmarked, although the Government's annual budget proposal indicate to a

considerable extent how it is to be used. There is no simple rule, however, as to what extent and in what ways each ministry specifies its instructions for the use by the RCN of their appropriations. This part of the budget structure, seen in conjunction with that of the specific funds (below), has remained generally stable, compared with the prevailing budget structure of the earlier research council system.

### **Special funds**

This is the sum of single items of appropriations to specific research programmes and activities. The RCN receive special funds from all ministries, except the Ministry of Defense, including from those ministries whose RCN appropriations are mainly allocated as general funds. While NHD, OE and FID allocate almost all their resources as general funds, the appropriations by LD and KUF also include considerable special funds. These funds are less stable and predictable than general funds. This part of the RCN funding has increased during the years that RCN has existed.

### **Core funding of public research institutes**

Since 1997 a new main item was included in the RCN budget for scientific activities: core funding of public research institutions. In late 1995 a new regulatory framework for the funding of public sector research institutions was approved by the Government. Part of this framework was a recommendation that the core funding of such institutes should by default be channelled through the research council. According to these regulations, institute core funding consists of a budget item for basic funding (“grunnbudsjett”) as well as specific, 3 – 5 year appropriations for one or more so-called “strategic institute programmes”. This budget structure is modelled on that which has been in existence in the technical-industrial institute sector since the mid-eighties. The core funding of these latter institutes has been, and still is, a research council responsibility, but in today’s budget structure it is, somewhat confusingly, not part of the budget item for the core funding of institutes (but built into the general funds of NHD and OED). Although this is not reflected in the formal structure of the budget of the Council, it should be noted that this represents a considerable part of the budget of NHD and NT division. In 2000, basic funds (“grunnbudsjett”) for institutes amounted to 83,7 Mill NOK, and strategic institute programs 118,4 Mill NOK, i.e., an aggregate amount of 202,1 Mill NOK, that should be added to the *formal* item for core institute funding of 282,4 Mill. NOK as the total financial responsibility of the RCN for core funding of research institutes. The sum total of 477,5 Mill NOK is almost 17 percent of the total budget for the RCN, administration excluded. The formal item as currently specified covers only the new allocations from 1997 on by KUF, MD and LD for core funding of public research institutes for which they are financially responsible. These funds were before 1997 allocated from these ministries directly to the institutes. This increase in RCN budgets do not, therefore, in itself reflect increasing activities by the institutes concerned. Several public research institutes still get their core funding from (other) ministries, despite the recommendation that these allocations should normally be channelled through the RCN. The items for the core funding transferred to the RCN items are earmarked by the allocating ministries, and closer scrutiny is needed to assess to what extent the transfer authority to the RCN is more than nominal.

## **Proceeds from the Research Fund**

In July 1999 the Government established a new foundation for the funding of research and innovation ("forskning og nyskaping"), initially with a capital of 3 billion NOK. Its capital was increased by 1 billion NOK from July 2000, and by another 3,5 billion NOK from January 2001. In the proposal for the revised national budget for 2001 that has recently been submitted to Stortinget, the Government announces its plan to increase the capital of the foundation to 15 bill. NOK in total by 2005. The estimated proceeds from the capital were 90 mill NOK in 2000 and 203,5 mill NOK in 2001, and will be about 450 mill NOK in 2002. All proceeds from the capital are allocated to research activities by the RCN. Activities eligible for support from the proceeds are "basic ("grunnleggende"), long-term research, generally as well as within the four thematic priority areas designated by the Government: medicine and health, marine research, ICT research, and research at the interface between energy and the environment. It is indicated by the Government and Stortinget that this should be an additional source of funding to the regular, annual budget proposal, although the proceeds are allocated as a new item in the annual proposal document. There is an emergent public debate about whether these proceeds shall continue to be allocated by the Council, or by some new, independent research funding mechanism.

## **Other budget items**

*Administration.* The main budget transfer between ministries that took place in 1993 as a consequence of the merger of five research councils into one, was the transfer to KUF of the administrative budgets of the three councils that were owned by other ministries than KUF (NTNF, NLVF, NFFR). Since 1993, the KUF appropriations to the RCN have included a separate item for the RCN administration. This item does not include, however, the funding on programme budgets of programme coordination and management. This item is left out in subsequent analyses.

*3<sup>rd</sup> EU Framework Programme.* In addition, the budget of the RCN during the period 1993 – 1995 included an item for funding Norwegian participation in European research projects. Norway took part in the 3<sup>rd</sup> EU Framework Programme for R&D on the basis of national funding of Norwegian participants in EU supported projects. Hence, 1993 – 1995 appropriations to Norwegian participants were provided on a post hoc basis by the RCN. When Norway became a full member of the EU FRP in 1996, and Norwegian project participants got their funding from the EU Commission in the same way as project partners from other participant countries, Norwegian appropriations were taken out of the RCN budget. We consider this part of the RCN budget a technicality, and have left it out in subsequent analyses.

## **3.3 RCN appropriations 1993 – 2000**

In the following we provide some key figures of the development of RCN budgets from 1993 to 2000. We have used the figures provided by the RCN administration on the annual "revised (final) budget" appropriations. These include changes in the budget available to the council

that take place during the year, including those that are a consequence of the approval by Stortinget in June of the "revised national budget". Hence, our overview does not include figures for 2001 for which no revised budget exists. Additionally, our figures do not account for the considerable transfers of funds from one accounting year (regnskapsår) to another, as reflected in the actual accounts of the council.

Figure 3.3.1 indicates the dominance of the general funds in the RCN budget, and, hence, of the appropriations by ministries which allocate this part of the RCN budgets.

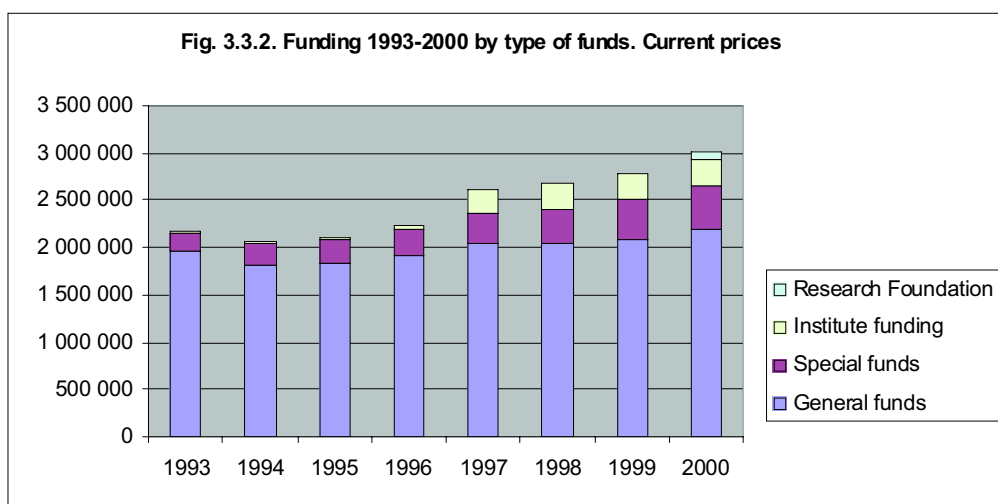
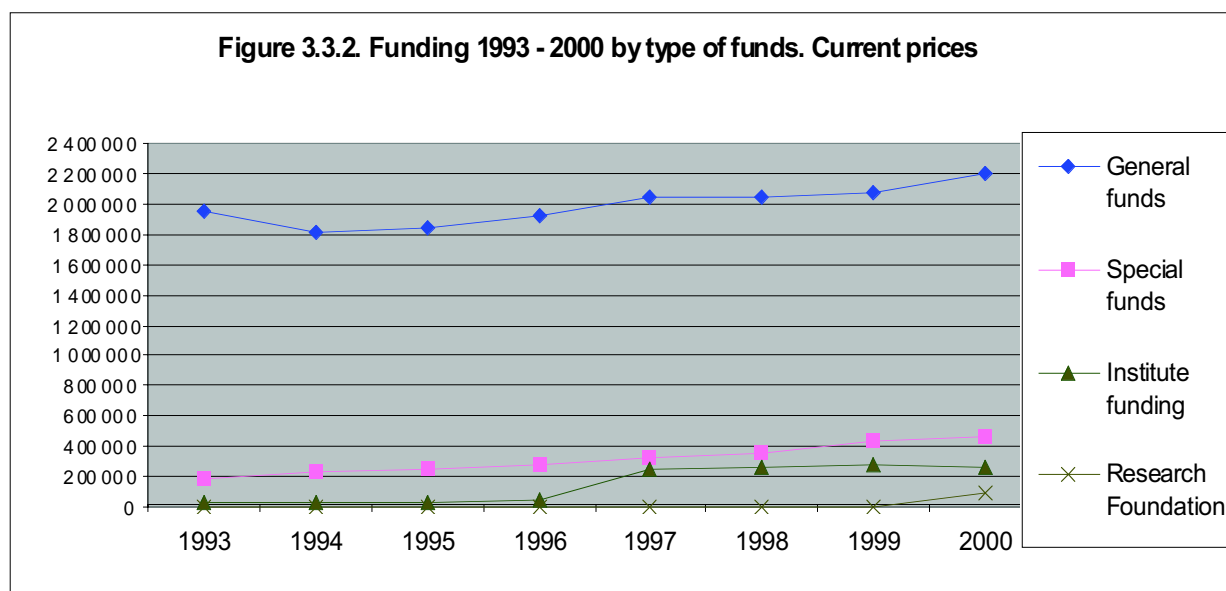


Figure 3.3.2. indicates how each type of funding has developed during the 1993 – 2000 period.



Figures 3.3.3.-3.3.4 provide more details on the general funds.

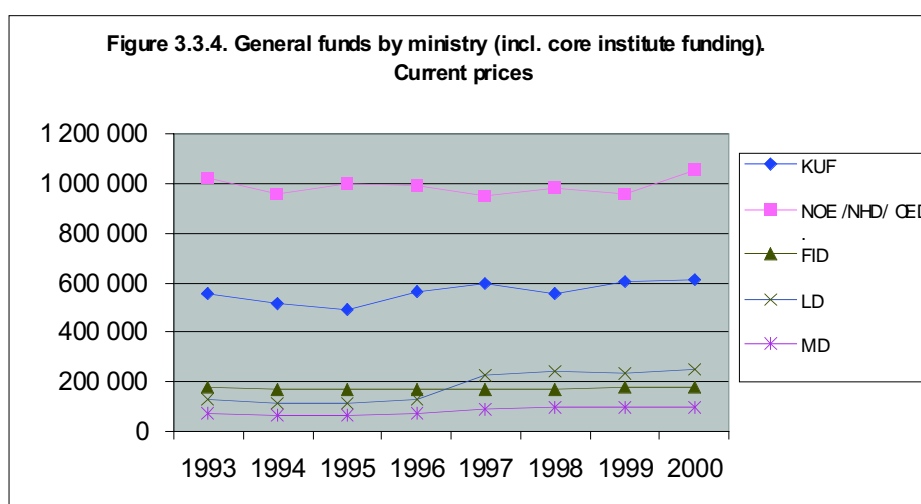
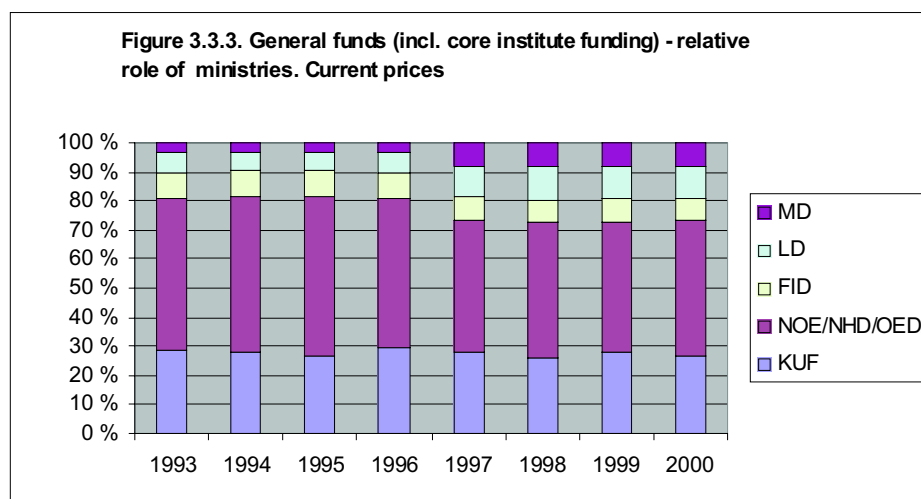
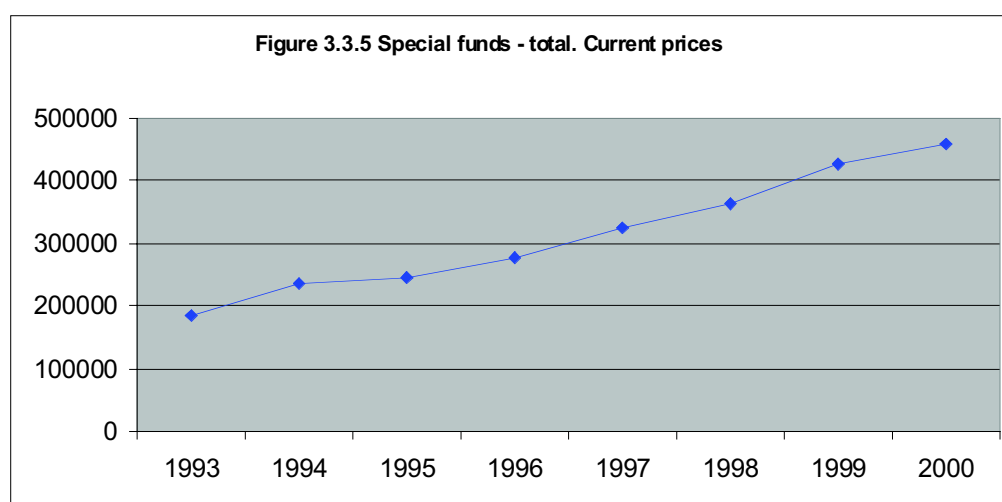
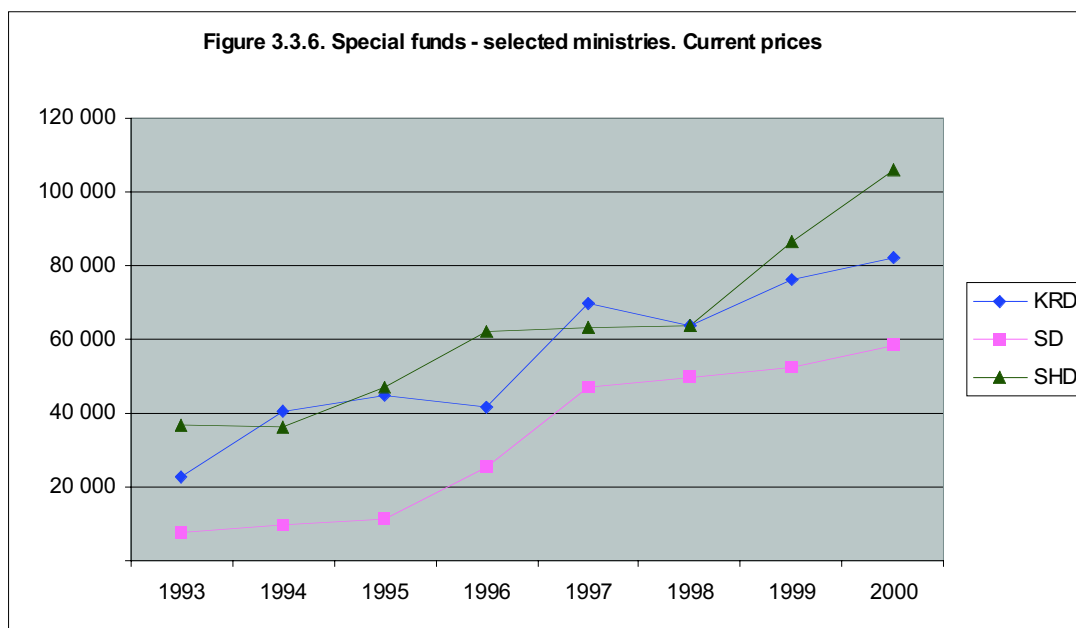


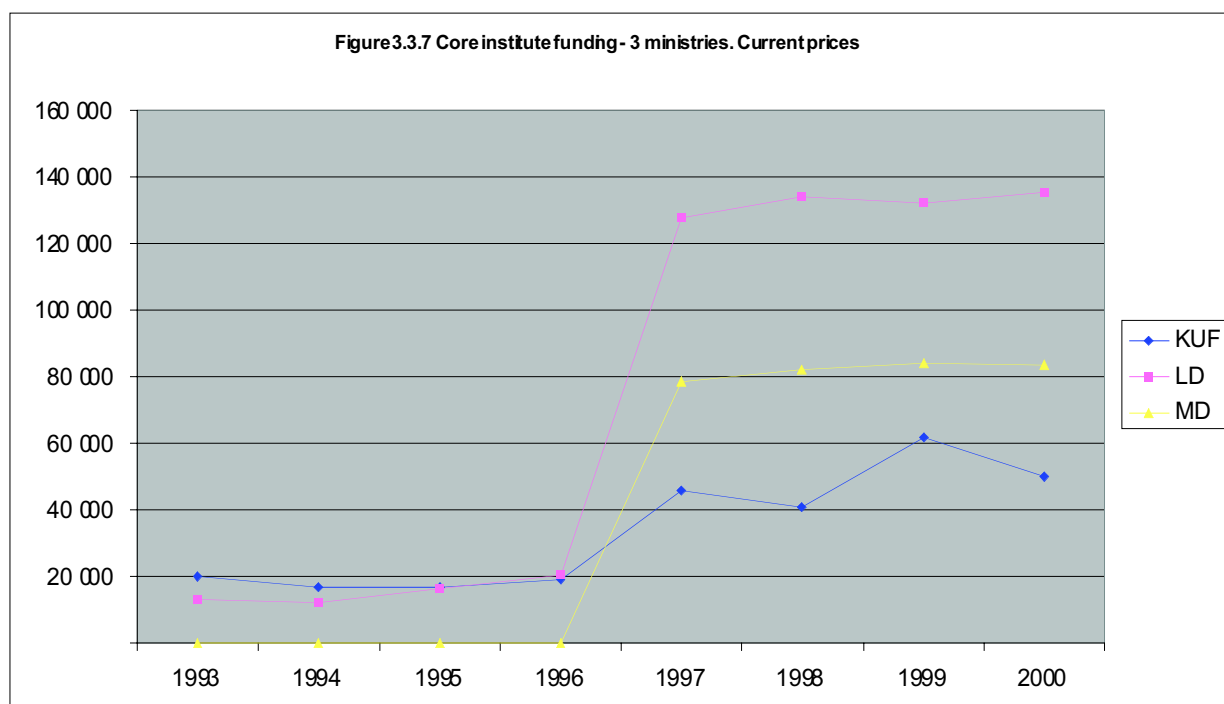
Figure 3.3.5. indicates the growth in special funds:



Three ministries in particular have increased their RCN appropriations within the special funds category, see figure 3.3.6



The core funding of a number of institutes that had received this funding from one of three ministries (KUF, LD, MD) was transferred to the RCN in 1997 (figure 3.3.7.) Core funding of institutes make up a major part of the RCN's appropriations for "infrastructure".

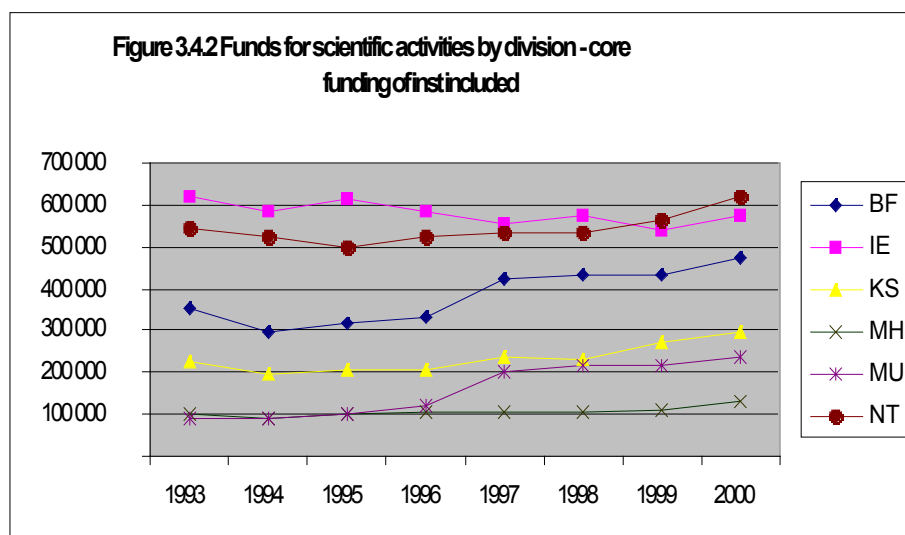
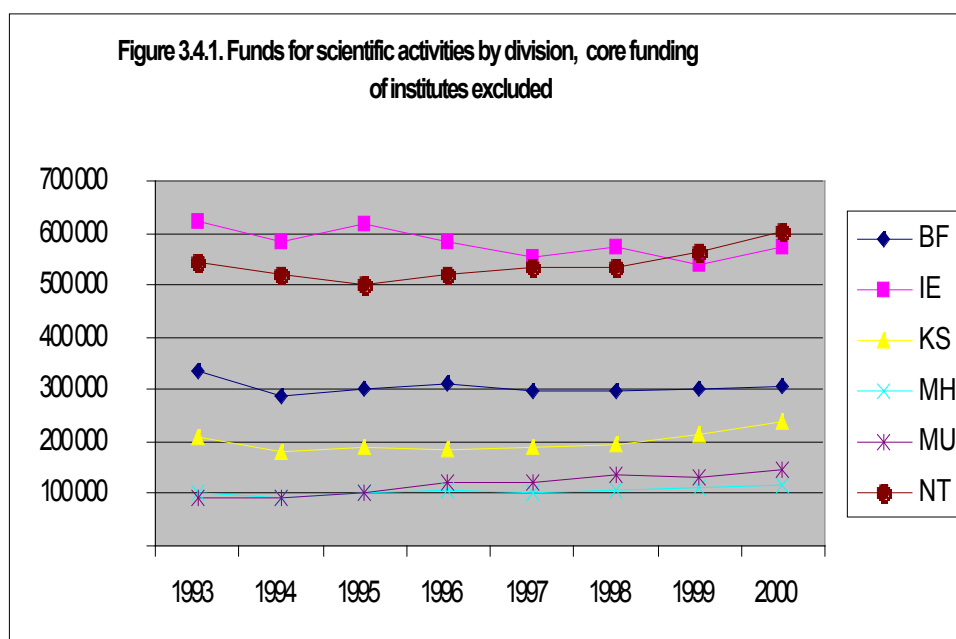


The decline from 1999 to 2000 in core institute funding by KUF is due to a transfer of R&D funds from KUF to NHD which included core funding for a number of regional R&D institutions.



### 3.4 The budgets of RCN divisions

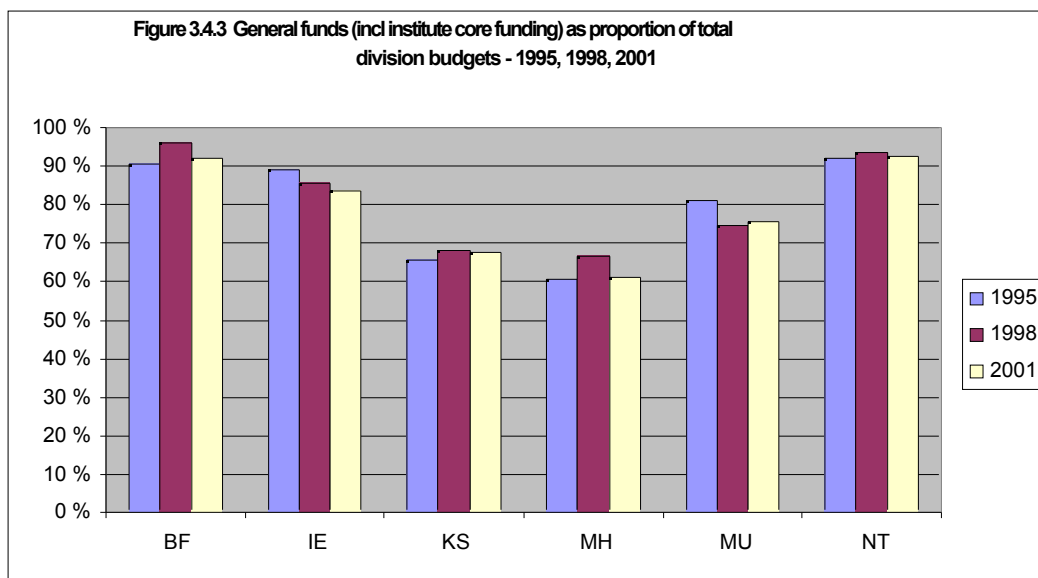
In this chapter we provide information on the general structure of the budget of each of the six RCN divisions, i.e. Bioproduction and processing (BF), Industry and energy (IE), Culture and society (KS), Medicine and health (MH), Environment and development (MU) and Science and technology (NT).



The divisions' budgets differ considerably in terms of which ministries they get the bulk of their funding from. The following six figures depict, for each division, their appropriations from the ministries in 2000. This year is chosen to indicate the overall structure only. (0% means a small appropriation of less than 1% of the total division budget). In addition, we

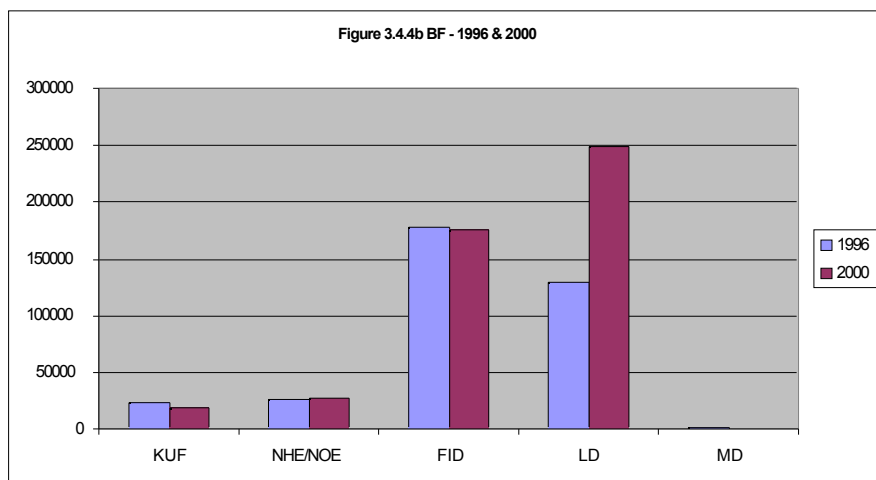
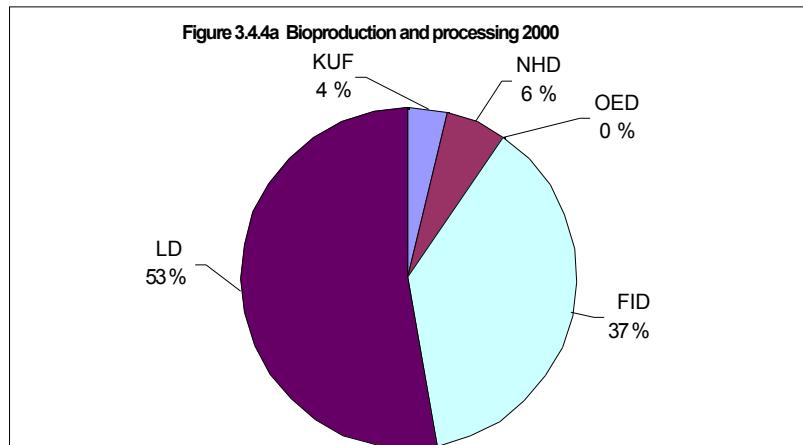
provide an impression of changes that may have taken place, by a separate set of figures that compare for each division their income in 1996 and 2000 .

In addition, a third type of figure is provided on the proportion of general funds of each division's budget. The overall picture which these figures specify on more detail, is this (figure 3.4.3):

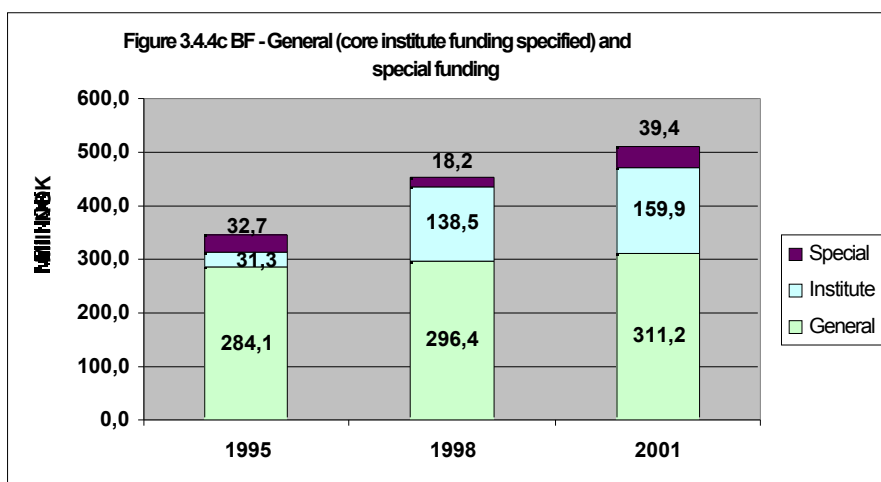


In subsequent figures, the part that corresponds to the responsibility of the relevant divisions for core funding of research institutes has been specified on the basis of information which is for a large part not included in the standard presentation of RCN budgets, and must hence be interpreted indicatively.

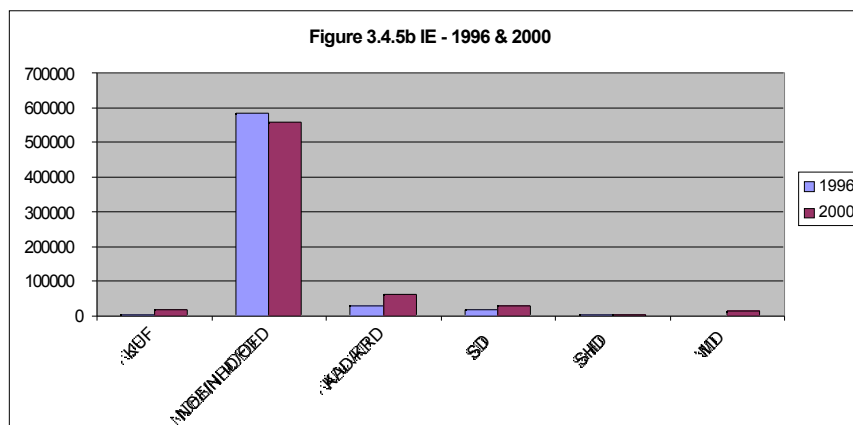
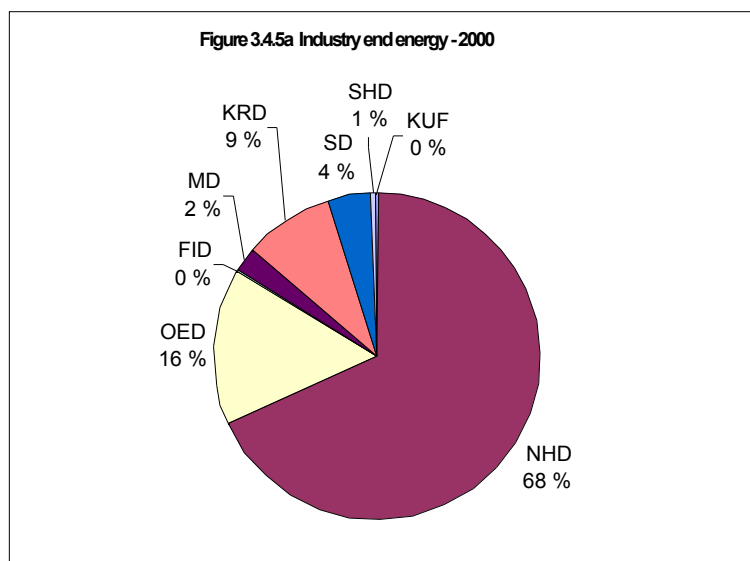
## Bioprocessing and –production (BF)



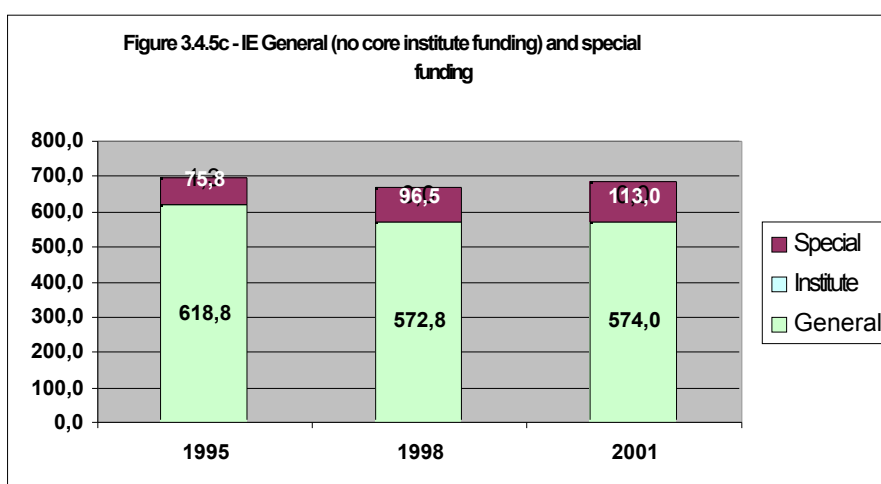
Major changes in the relative role of ministries for the funding of the BF division occurred as a consequence of the 1997 transfer from LD to the RCN of core funding of research institutes, after which the funding by LD went up from 36 percent in 1996 (the year chosen for comparison) to 53 percent in 2000, and that of FID declined correspondingly from 51 to 37 percent. This is also reflected by the large appropriation by BF for core institute funding, see figure 3.4.3c.



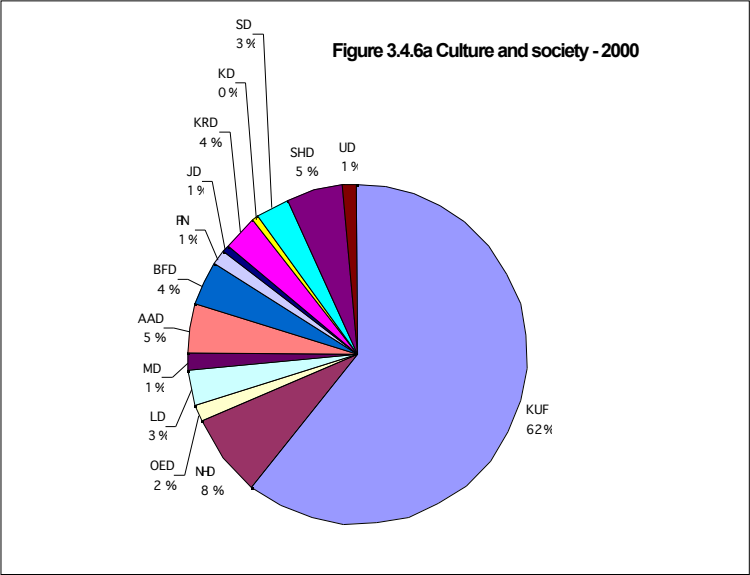
## Industry and energy (IE)



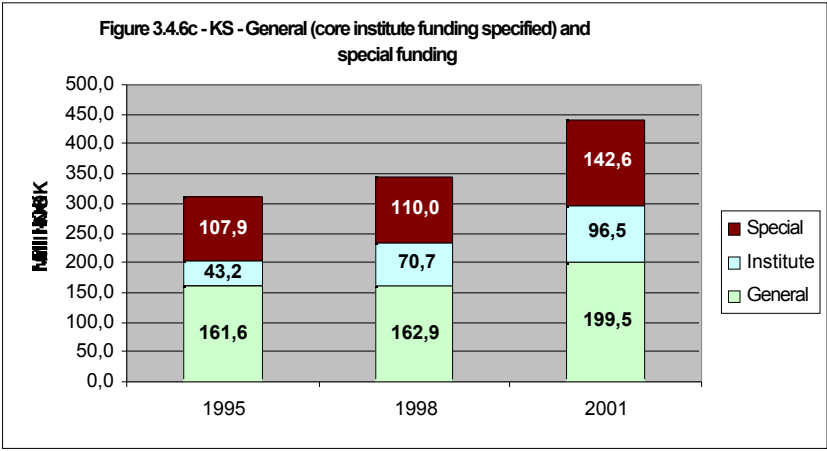
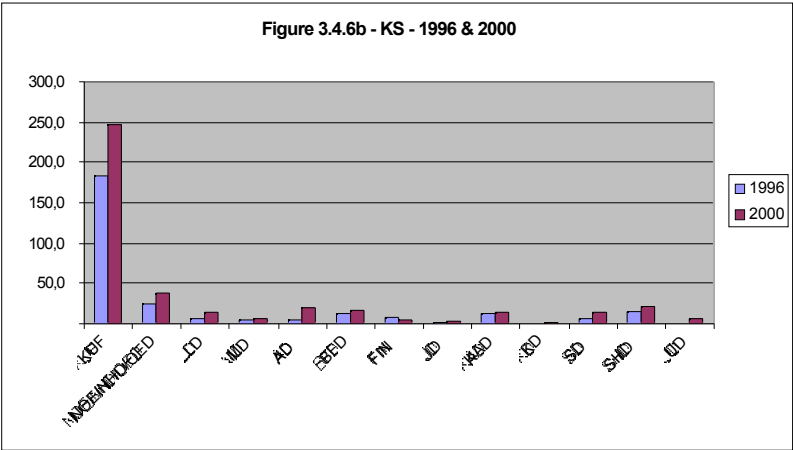
Since 1996, the relative role of NHD/NOE/OED declined from 92 to 84 percent, and that of KRD/KAD increased from 4 to 9 percent. MD is added in 2000.



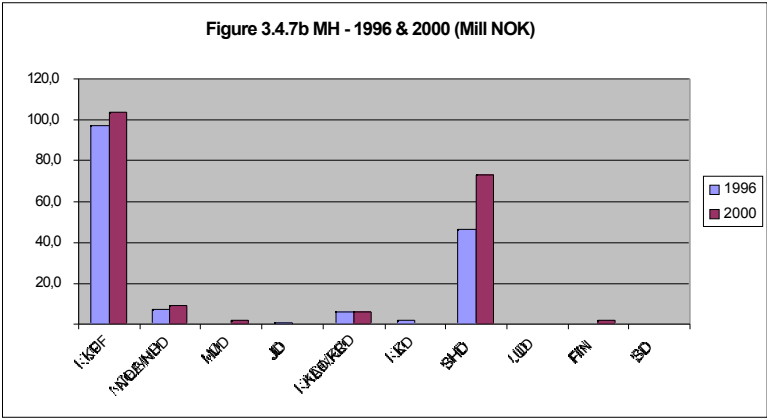
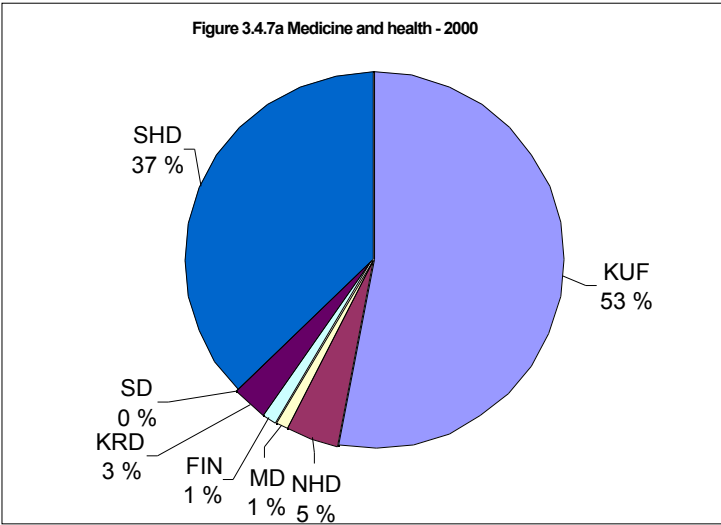
Culture and society (KS)



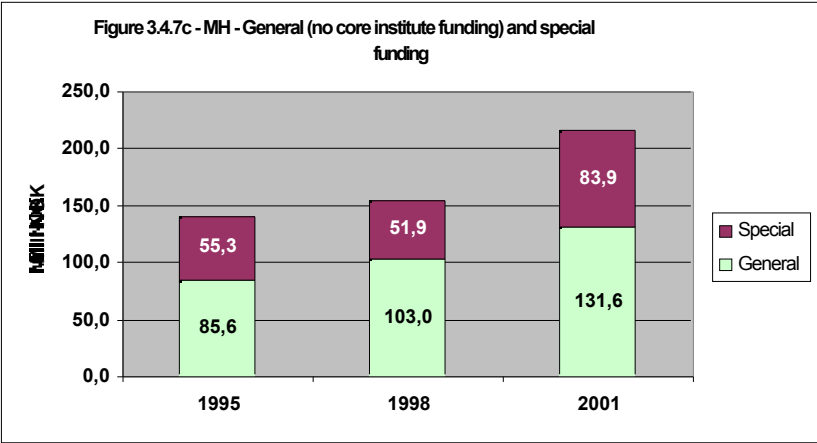
The extreme number of ministries, each channelling relatively small appropriations, both in absolute terms and as a proportion of their total R&D budgets (see figure 3.1.5), is the most striking feature of the KS budgets. The increase in KUF funding is partly explained, as is seen in figure 3.4.6.c, by the transfer of core institute funding for new institutes.



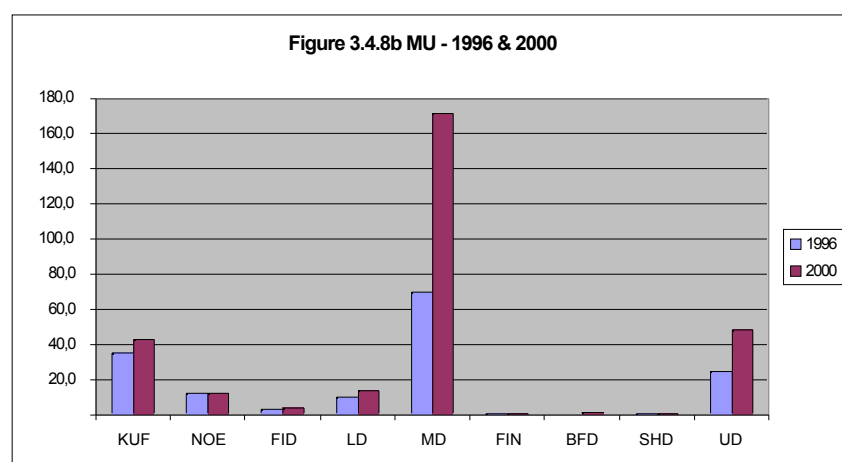
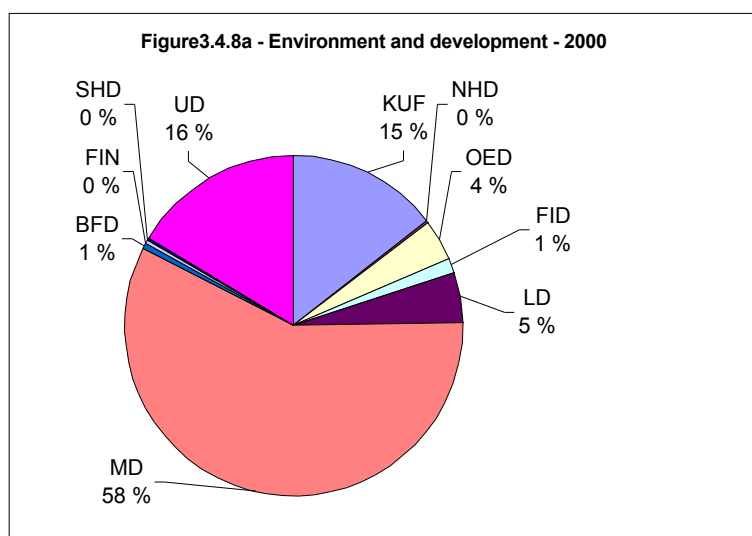
Medicine and health (MH)



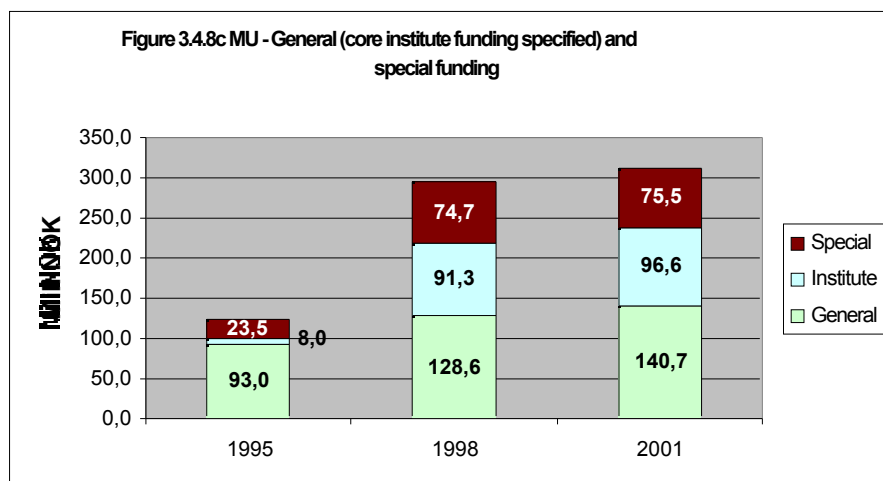
Being the smallest RCN division in budgetary terms, MH has seen a considerable increase in its budgets the latest, particularly through an increase in "special funds" from SHD.



## Environment and development (MU)



The strong increase in MD funding is due to the transfer of core institute funding in 1997.



Science and technology (NT)

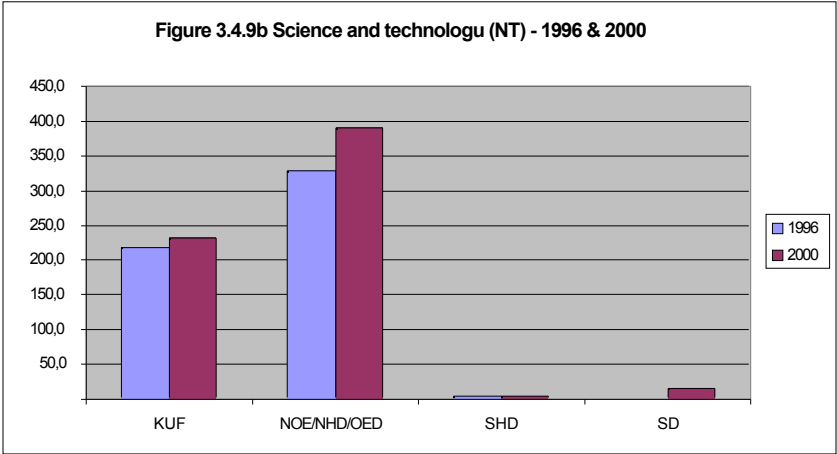
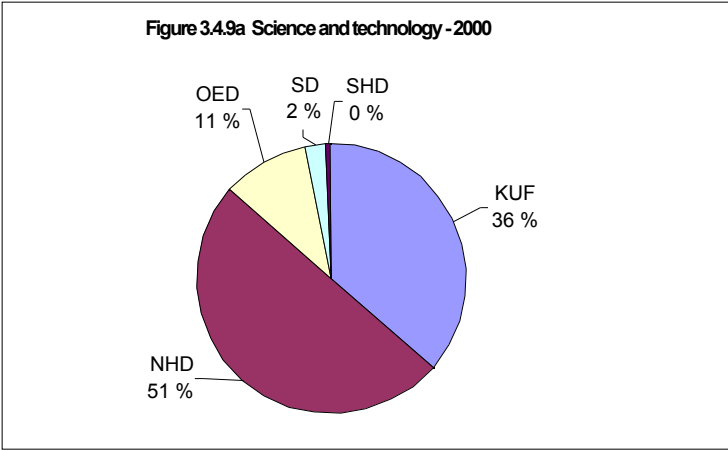
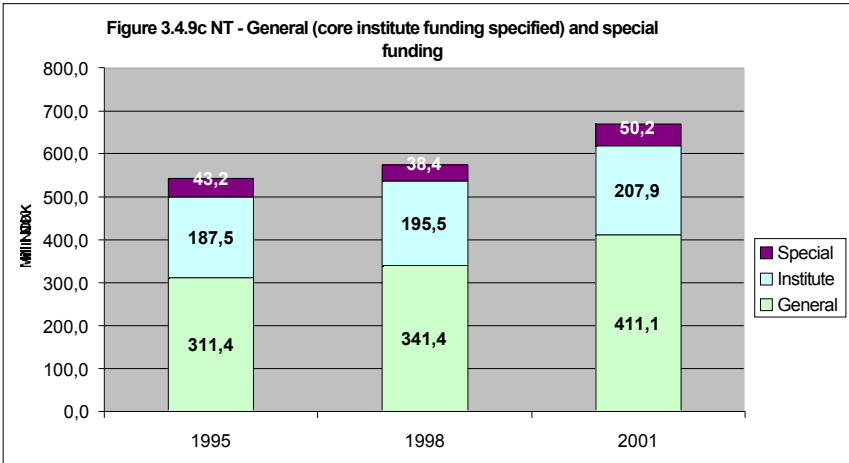


Figure 3.4.9c indicates, as the standard presentation of RCN do not, the large part of NT budgets which is core funding of technical institutes, on the basis of general funds from NHD and NOE (and their previous equivalents).





The appropriations for each division are budgeted in terms of *instruments* (virkemidler), i.e. programmes, free projects, infrastructure and various R&D activities. Each instrument is subdivided into *main activities* (hovedaktiviteter).

The main categories, and the main activities that they comprise, are defined by the RCN as follows:

### Programmes

- A research programme is a strategic, goal-oriented, co-ordinated and temporary research effort (forskningsinnsats) to produce new knowledge or competence within a delineated field (topic and/or branch).

There are three kinds of programmes:

#### *Basic research programmes:*

- These are network programmes established to produce knowledge or competence within prioritized fields

#### *Action oriented (handlingsrettet) programmes:*

- These programmes are primarily geared towards the public sector or organisations, and shall make contributions to the enhancement of the knowledge base for societal planning on various levels of government (forvaltningsnivå), for the development of public sectors and for political decisions.

#### *User controlled programmes (brukerstyrte program):*

- These programmes are geared towards industrial (næringslivet) R&D. In these programmes users and researchers collaborate, and users contribute to the funding of projects.

While these categories indicate their general affiliation to basic research, public sector research and industrial research respectively, their diffuse and overlapping definitions indicate that the categorisation of research expenditure in these broad categories provide little specific information on the activities that they include. They do not, e.g., reflect major changes in programme policy, such as the recent reorganisation of BF programmes into so-called "value chain programmes" (verdikjedeprogrammer), which may encompass all types of R&D activities, oriented towards the public as well as the business sectors. These are, somewhat confusingly, labelled action oriented programmes. This explains the apparent strong shift in emphasis in BF policy from user controlled programmes to action oriented programmes.

### **Independent projects**

These are negatively defined as single projects that are *not* part of research programmes. They comprise, confusingly, both responsive mode funding of basic research, as well as user controlled single projects. For several divisions, (responsive mode) funding of various forms of individual scholarships (student, doctoral, post-doctoral) is a major part of this category. Such scholarships are also to an extensive degree funded within programmes.

### **Infrastructure**

This category reflects the expanding role of the RCN in core funding of research institutes. "Strategic programmes" are also available for university departments (strategiske universitetsprogrammer, SUPs), as well as for consortia for collaboration between universities and institutes. The infrastructure category also comprises funding of scientific instruments. A new main activity within the infrastructure category is funding of "centres of excellence". This item is new, and do not for 2001 cover funding of actual centres. The deadline for the first call for proposal for establishing centres of excellence is 4 April 2001.

### **Comments on the structure of division budgets by instrument**

We provide, as appendix, the data available from the budget documents of the RCN concerning the distribution of RCN resources among these instruments and main activities. The provide some information on the underlying structure of instruments and funding mechanisms used by each division. Due to the reservations indicated above, they should be read as a coarse-grained indication of the structure of the project portfolio of the RCN divisions. A more detailed analysis by NIFU of the project portfolio of the divisions, based upon FORISS data, is presented in a separate report. As a guide to the interpretation of the tables in Appendix I, we provide a few comments on general aspects of divisions' (changing) practices concerning the use of the major items in the RCN policy instrument toolbox.

#### *Bioprocessing and –production (BF)*

While the structure of the BF portfolio show a distribution of programmes among the two main categories of user controlled and action oriented programmes, this is replaced in 1999 and 2000 by what seems to be a complete reorientation towards action oriented programmes. This, however, is the technical result of the reorganisation of BF programmes in 1999 and 2000, by which they created the new type of programmes, "value chain programmes" which is not (yet) reflected in the formal budget presentation of the RCN. The result of the reorganisation was that the approx. 4-5 user controlled programmes and approx. 10-13 action oriented programmes from the previous years resurfaced in 2000 as approx. 8 large value chain programmes. Another noteworthy aspect of BF instrument practice is its virtual abolition of independent projects, the equivalent activities having been integrated into other instruments (mainly strategic programmes). BF has also effected a shift in their core funding appropriations, by which SIPs have increased at the cost of base funds (grunnbevilgning). Another feature that calls for comment is the large increase in funds for "strategic programmes", which reflects not only the increasing responsibility of BF for core institute

funding (since 1997), but also an increasingly generalised use of strategic institute programmes as organisational framework for channelling research appropriations, even beyond the “formal” BF responsibility for core institute funding. This is a parallel to the generalised use by NT in particular of “strategic programme” as organisational framework for university research funding (“SUPs”), as well as for institute research.

#### *Industry and energy (IE)*

The consistent and all-dominant use by IE of user controlled programmes is evident. The budgets structure does not, however, reflect major reorganisations of IE use of RCN instruments that may to be explored more extensively in division interviews.

#### *Culture and society (KS)*

KS operates a large number of basic research and action oriented research programmes, between (approx) 12-18, and 16-18 respectively. The increase in “basis institute funding” in 1997 reflects the often cited transfer of institute funding the RCN, while the increase in strategic programme funding in 1999 reflects an earmarked increase in core funding for some regional research institutions. Apparently large changes in funds for “other R&D activities” are merely technical.

#### *Medicine and health (MH)*

Not explicitly reflected in the tables is a major reorganisation of MH programmes, by which what had been between 14 – 18 separate programmes (mostly action oriented programmes) became 9 programmes (incl. one small user controlled programme). Strategic programmes is used by MH in other ways than the other divisions, and do not include formal SIP appropriations (but appropriations that may be similar to SUP appropriations).

#### *Environment and development (MU)*

The transfer of core funds to RCN in 1997 caused a large increase in the overall MU budgets. MU reorganised its programme structure in 2000, by which 18 programmes were reduced to 12.

#### *Science and technology (NT)*

The basic research profile of NT is evident from its use of basic research programmes only. The NT use of “strategic programmes” includes an extensive use of this instrument for university research funding, besides its original and continued use as part of the formal core funding responsibility for technical institutes (with funds from NHD and OED).

Underlying similarities and differences between the divisions as for the use of the sub-categories of the “independent projects” cannot immediately be interpreted from the budget sheets themselves, and needs to be explored in more detail through other sources (interviews). While KS mainly assigns appropriations for responsive mode funded projects to the sub-category of scholarships, MH generally assigns its similar appropriations to the sub-category

“other projects”. NT avoids choosing between the sub-categories by linking such appropriations directly to the category “independent projects”.

## **Appendix I**

### **Budget of RCN divisions by instruments, 1994 - 2000**

**Bioprocessing and production (BF)**

	Rev.budsj. 1994	Rev.budsj. 1995	Rev.budsj. 1996	Rev.budsj. 1997	Rev.budsj. 1998	Rev.budsj. 1999	Rev.budsj. 2000
User controlled programmes	78 290	97 481	97 715	94 566	95 485	19 750	
Basic research programmes							5 500
Action oriented programmes	112 710	149 874	167 229	168 768	173 297	258 392	265 033
Sum programmes	191 000	247 355	264 944	263 334	268 782	278 142	270 533
Scholarships	49 675	39 216	35 650	24 840	18 627	14 390	5 150
Project support	58 217	2 513	70	70	1 020	1 575	150
EU projects	100	6 500	3 229				
Other projects							
Sum independent projects	107 992	48 229	38 949	24 910	19 647	15 965	5 300
Basic institute funding (grunnbudsjetter)	32 700	33 150	38 800	119 482	110 000	106 125	100 200
Strategic programmes		16 780	20 630	32 194	49 790	60 230	115 722
Equipment and instruments			4 000				
Other infrastructure				4 000	7 800	5 150	5 100
Centres of excellence							
Sum Infrastructure	32 700	49 930	63 430	155 676	167 590	171 505	221 022
Subscriptions internat. coll.	120	120					
Information/publication		350	500			28	1 682
Planning/evaluation	655	2 425	3 100	1 708	2 619	3 785	3 500
Stimulation/networks	1 780	2 230	2 690	2 810	4 217	3 770	5 706
Sum various R&D activities	2 555	5 125	6 290	4 518	6 836	7 583	10 888

**Industry and energy (IE)**

	Rev.budsj. 1994	Rev.budsj. 1995	Rev.budsj. 1996	Rev.budsj. 1997	Rev.budsj. 1998	Rev.budsj. 1999	Rev.budsj. 2000
User controlled programmes	518 682	599 302	656 892	655 549	676 289	647 049	660 310
Basic research programmes							
Action oriented programmes							
Sum programmes	518 682	599 302	656 892	655 549	676 289	647 049	660 310
Scholarships							
Project support	80 482	71 389	82	1 110	483	10 014	26 648
EU projects	46 517	36 918	4 824				
Other projects	8 000	8 300					
Sum independent projects	134 999	116 607	4 906	1 110	483	10 014	26 648
Basic institute funding (grunnbudsjetter)	1 500	1 300					
Strategic programmes		0					
Equipment and instruments		0					
Other infrastructure							
Centres of excellence		0					
Sum Infrastructure	1 500	1 300	0	0	0	0	0
Subscriptions internat. coll.		0					
Information/publication		0					
Planning/evaluation		0					
Stimulation/networks		0					
Sum various R&D activities		0	0	0	0	0	0

**Culture and society (KS)**

	Rev.budsj. 1994	Rev.budsj. 1995	Rev.budsj. 1996	Rev.budsj. 1997	Rev.budsj. 1998	Rev.budsj. 1999	Rev.budsj. 2000
User controlled programmes			4 000	3 800	3 800	3 700	3 700
Basic research programmes	41 280	50 375	68 868	64 050	63 835	67 943	74 822
Action oriented programmes	132 667	132 290	92 324	107 849	110 926	128 656	142 150
Sum programmes	173 947	182 665	165 192	175 699	178 561	200 299	220 672
Scholarships	44 349	46 984	48 536	56 955	62 000	69 600	69 800
Project support	10 261						
EU projects							
Other projects	12 196		1 158	702	1 300	2 800	14 200
Sum independent projects	66 806	46 984	49 694	57 657	63 300	72 400	84 000
Basic institute funding (grunnbudsjetter)	40 000	42 000	44 950	62 508	63 482	65 599	68 138
Strategic programmes		1 200	2 900	5 928	7 200	27 050	28 346
Equipment and instruments							
Other infrastructure	2900						
Centres of excellence							
Sum Infrastructure	42 900	43 200	47 850	68 436	70 682	92 649	96 484
Subscriptions internat. coll.	804	819	809	895	875	875	650
Information/publication	3 010	4 310	4 150	4 650	4 700	4 800	3 500
Planning/evaluation	6 148	2 017	2 542	3 300	2 850	1 050	3 900
Stimulation/networks	3 805	36 290	34 382	31 516	34 958	27 425	28 445
Sum various R&D activities	13 767	43 436	41 883	40 361	43 383	34 150	36 495



**Medicine and health (MH)**

	Rev.budsj. 1994	Rev.budsj. 1995	Rev.budsj. 1996	Rev.budsj. 1997	Rev.budsj. 1998	Rev.budsj. 1999	Rev.budsj. 2000
User controlled programmes		1 100	1 500	1 500	3 000	2 295	3 000
Basic research programmes	10 967	10 554	10 000	8 500	9 200	10 200	10 200
Action oriented programmes	57 012	61 167	77 853	81 650	74 330	86 570	87 210
Sum programmes	67 979	72 821	89 353	91 650	86 530	99 065	100 410
Scholarships	2 200	2 689	2 700	2 236	2 300	2 200	7 200
Project support			0	0	0		
EU projects			0	0	0		
Other projects	46 375	51 399	57 554	57 830	60 888	68 507	71 150
Sum independent projects	48 575	54 088	60 254	60 066	63 188	70 707	78 350
Basic institute funding (grunnbudsjetter)			0		0		
Strategic programmes	13 175	15 275	12 900	13 271	11 300	12 600	23 600
Equipment and instruments			0	0	0		
Other infrastructure			0	0	0	0	0
Centres of excellence							9 000
Sum Infrastructure	13 175	15 275	12 900	13 271	11 300	12 600	32 600
Subscriptions internat. coll.		400	400	400	635	400	335
Information/publication	300	1 100	1 100	1 100	1 100	1 100	1 100
Planning/evaluation	300	300	300	300	300	550	1 370
Stimulation/networks	800	990	955	900	900	1 408	1 200
Sum various R&D activities	1 400	2 790	2 755	2 700	2 935	3 458	4 005

**Environment and development (MU)**

	Rev.budsj. 1994	Rev.budsj. 1995	Rev.budsj. 1996	Rev.budsj. 1997	Rev.budsj. 1998	Rev.budsj. 1999	Rev.budsj. 2000
User controlled programmes	4 500	5 200	6 800	3 640	800		
Basic research programmes	21 586	24 612	18 089	16 500	28 675	33 000	39 500
Action oriented programmes	62 814	72 527	97 343	95 998	117 395	107 670	115 314
Sum programmes	88 900	102 339	122 232	116 138	146 870	140 670	154 814
Scholarships	9 140	9 770	12 460	11 700	15 650	15 850	16 600
Project support	11 010	9 400	12 190	15 700	14 750	15 000	15 000
EU projects	14 700	5 397	8 000	9 670	5 670	4 781	4 950
Other projects	7 130	600	1 700	1 600	5 245	4 170	4 340
Sum independent projects	41 980	25 167	34 350	38 670	41 315	39 801	40 890
Basic institute funding (grunnbudsjetter)		8 000	8 000	60 248	60 720	60 928	60 660
Strategic programmes			3 000	28 790	32 584	34 000	38 450
Equipment and instruments			0	0	0		2 000
Other infrastructure	3 150	3 960	1 640	1 600	800		5 500
Centres of excellence							
Sum Infrastructure	3 150	11 960	12 640	90 638	94 104	94 928	106 610
Subscriptions internat. coll.	200	215	140	5 000	5 365	5 000	5 000
Information/publication		500	657	1 500	1 807	1 700	2 100
Planning/evaluation	3 916	2 479	1 450	1 497	2 550	1 682	1 552
Stimulation/networks	700	1 061	1 170	1 000	1 297	2 090	1 800
Sum various R&D activities	4 816	4 255	3 417	8 997	11 019	10 472	10 452

**Science and technology (NT)**

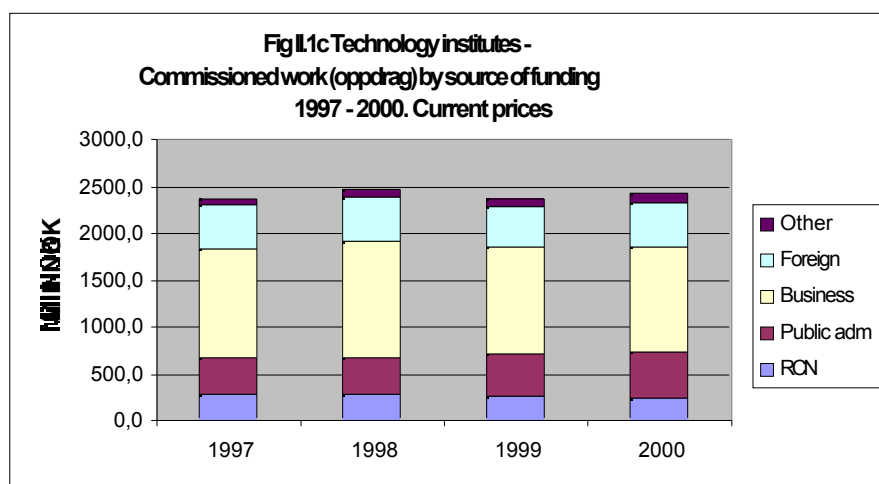
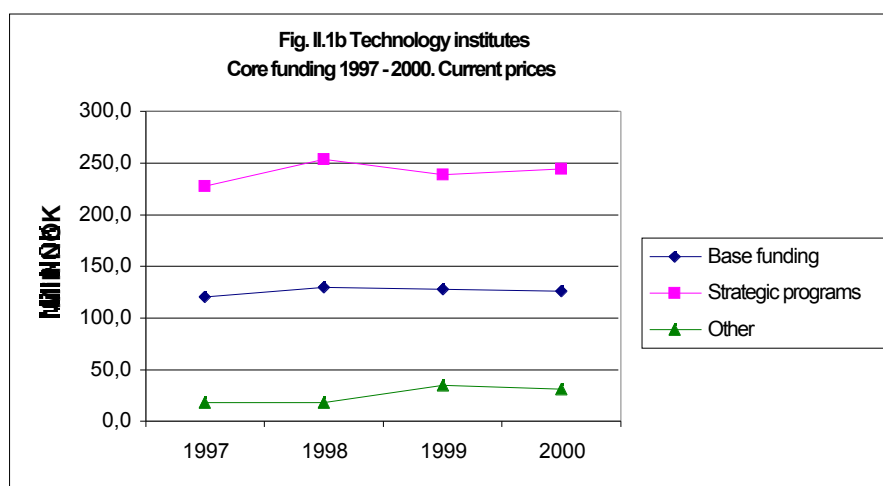
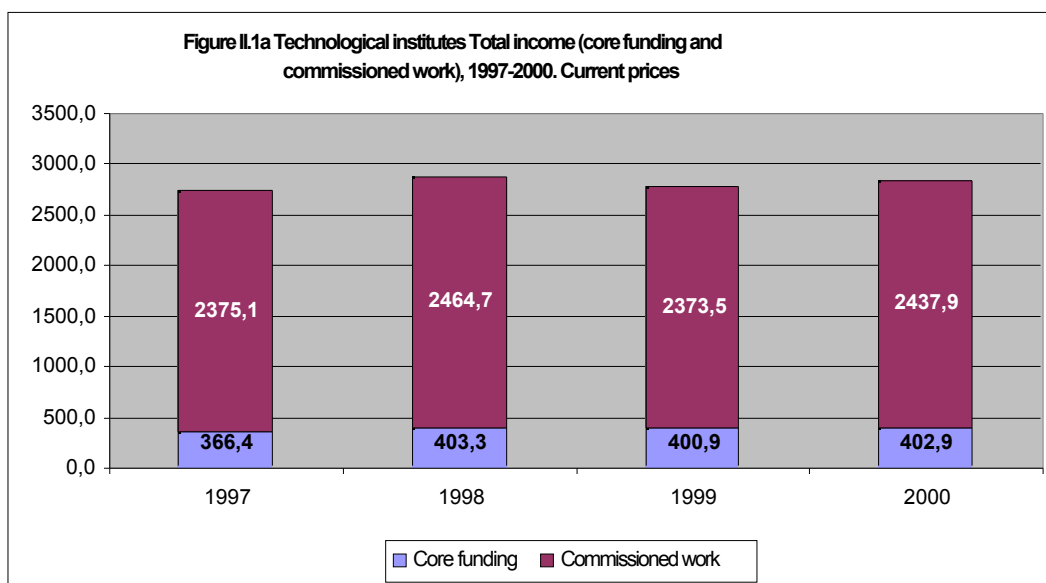
	Rev.budsj. 1994	Rev.budsj. 1995	Rev.budsj. 1996	Rev.budsj. 1997	Rev.budsj. 1998	Rev. budsjett 1999	Rev.budsj. 2000
User controlled programmes							
Basic research programmes	103 112	88 400	101 500	111 100	113 700	115 790	135 759
Action oriented programmes							
Sum programmes	103 112	88 400	101 500	111 100	113 700	115 790	135 759
Scholarships	70 200	66 162	62 379	64 043			
Project support	34 800	37 008	37 730	38 237			
EU projects	23 427	11 505	870				
Other projects	1 123	1 145	2 522	520	105 352	111 185	112 200
Sum independent projects	129 550	115 820	103 501	102 800	105 352	111 185	112 200
Basic institute funding (grunnbudsjetter)	91 550	78 900	85 000	83 800	85 600	82 800	83 700
Strategic programmes	137 000	214 464	216 600	217 700	228 960	236 434	217 567
Equipment and instruments	9 868	8 000	10 000	10 000	10 000	25 011	10 000
Other infrastructure	18 650	15 750	16 050	26 206	16 878	11 108	69 625
Centres of excellence						7 308	17 500
Sum infrastructure	257 068	317 114	327 650	337 706	341 438	355 353	398 392
Subscriptions internat. coll.	18 974	19 815	17 568	8 950	9 050	8 850	8 850
Information/publication	860	785	765	2 735	2 720	2 665	2 202
Planning/evaluation	3 936	2 000	1 269		450	2 820	2 725
Stimulation/networks	100	200	200	2 584	4 180	6 690	7 180
Sum various R&D activities	23 870	22 800	19 802	14 269	16 400	21 025	20 957

## **Appendix II.**

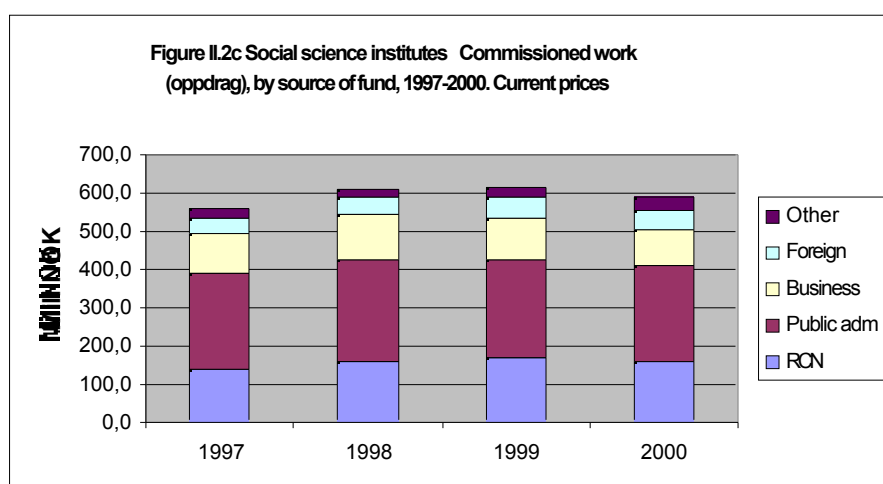
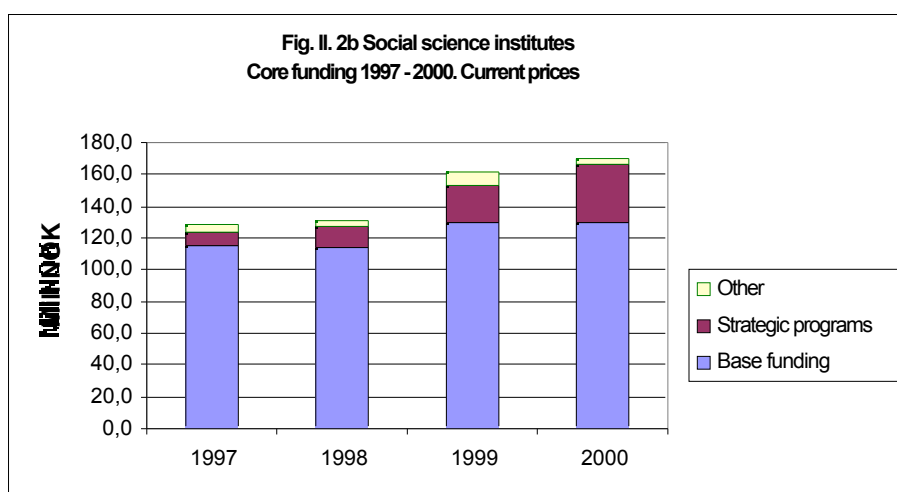
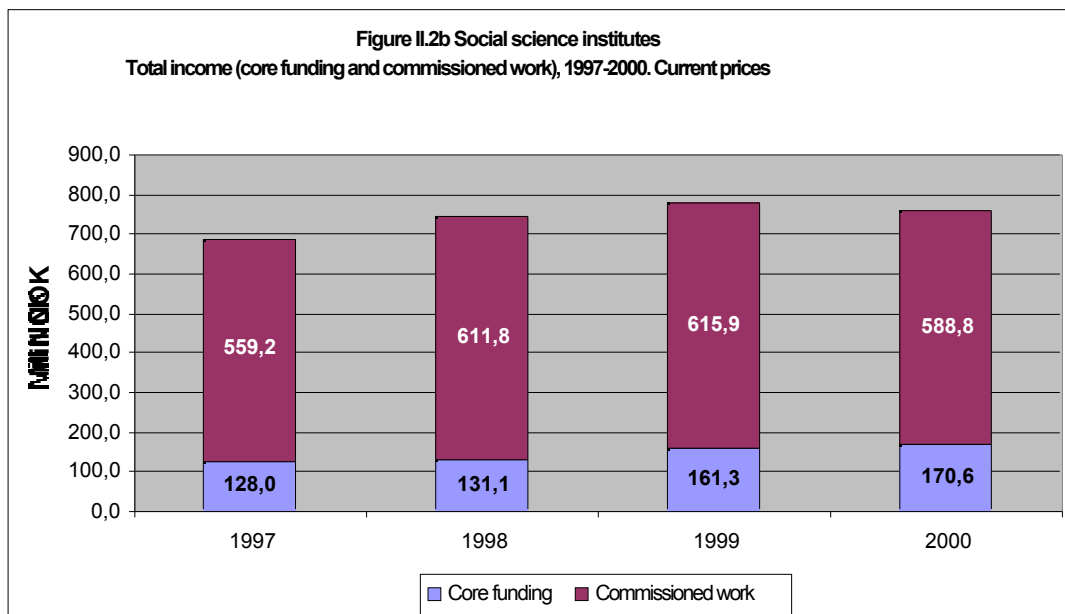
### **The income of Norwegian research institutes 1997 – 2000**

Uncommented figures on the income structure of Norwegian research institutes, based upon key indicators ('nøkkeldata') collected by NIFU since 1997 by commission from the RCN.

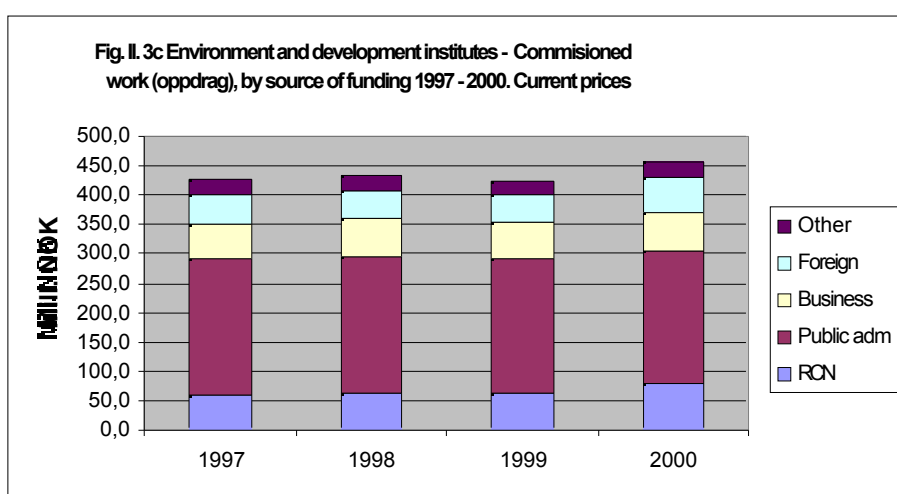
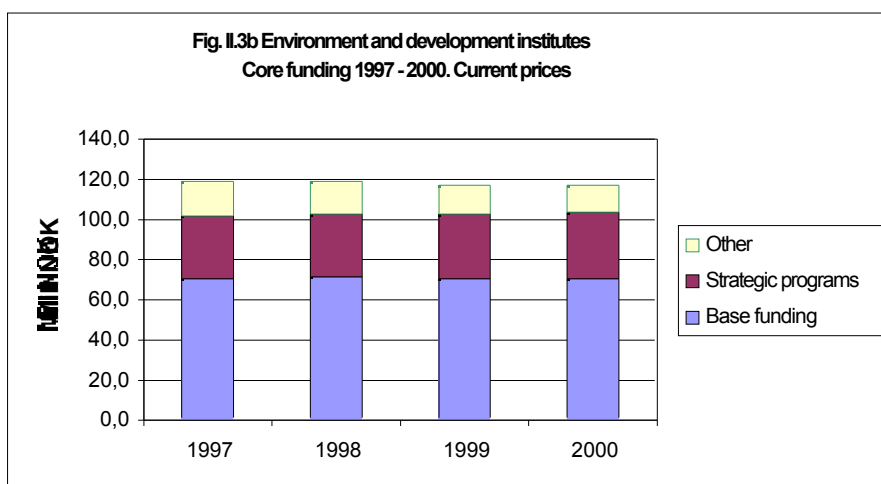
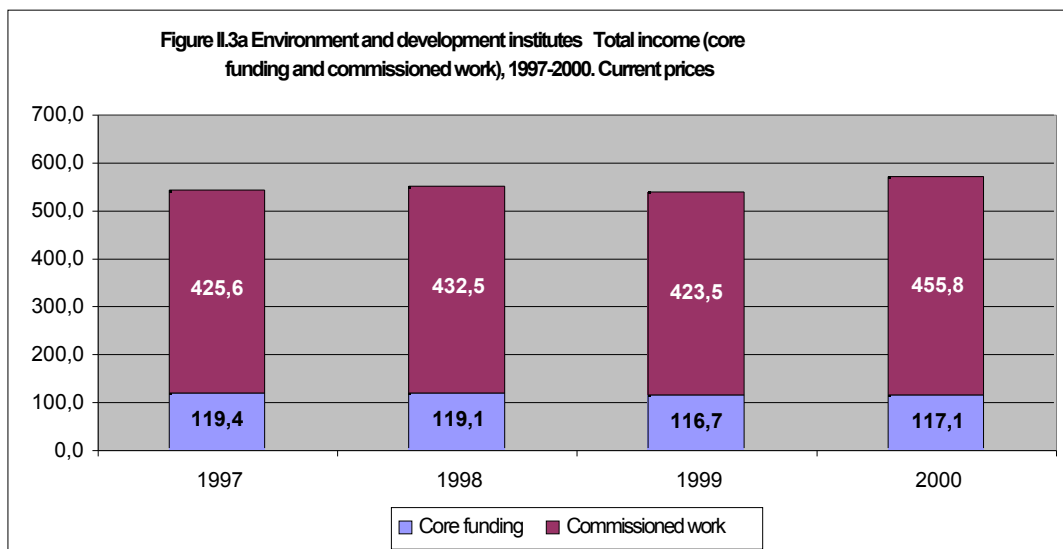
## 1. Technological institutes



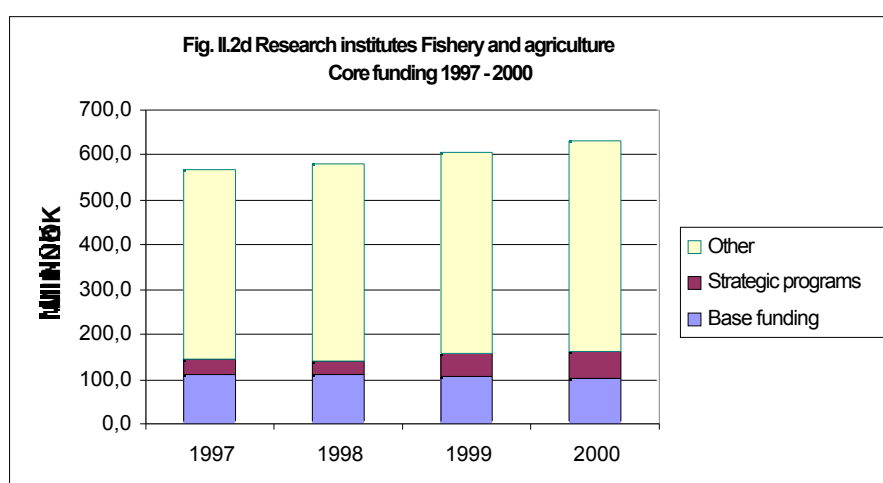
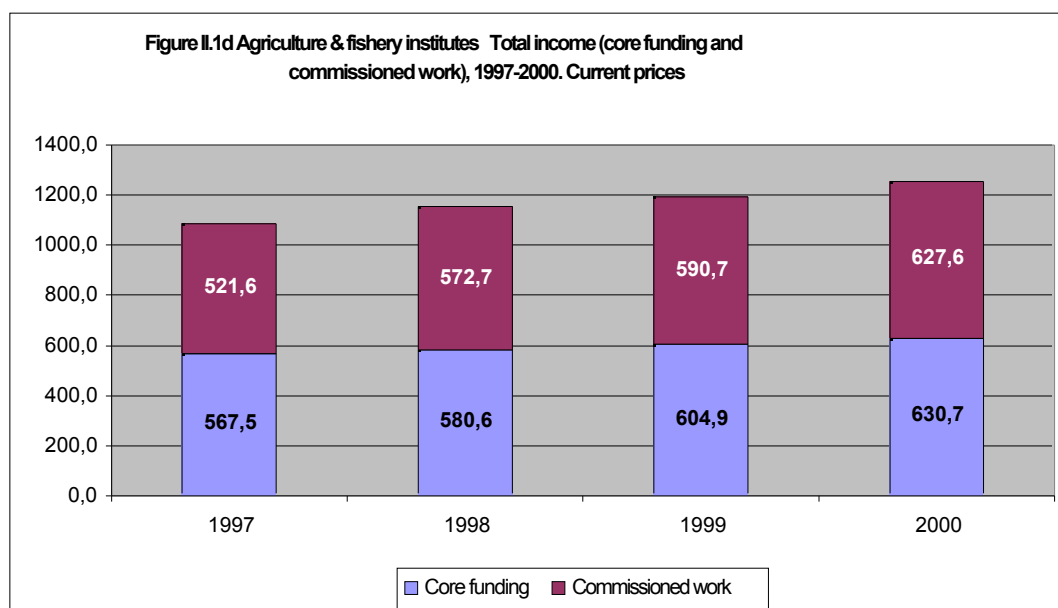
## 2. Social science institutes



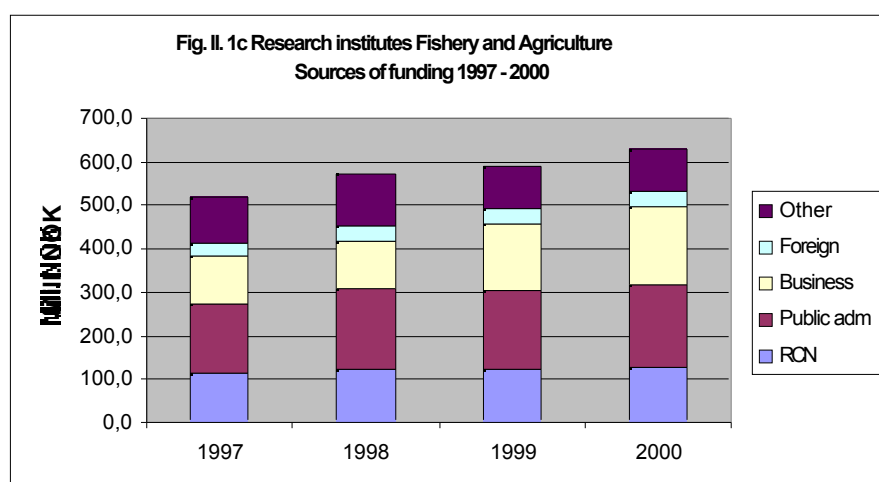
### 3. Environment and development institutes



#### 4. Agricultural and fishery research institutes

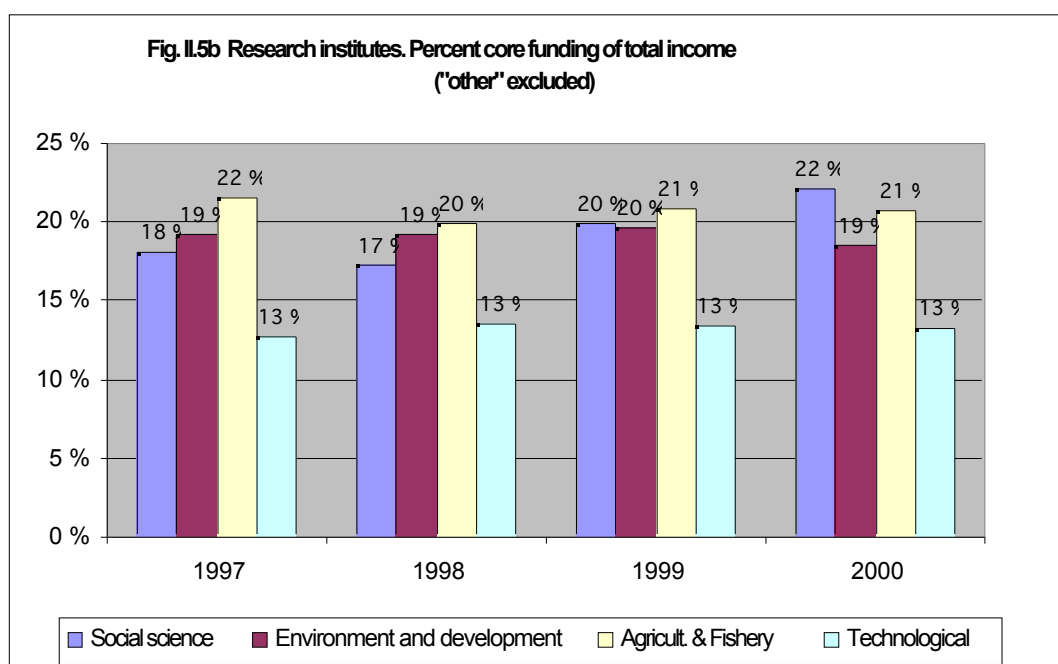
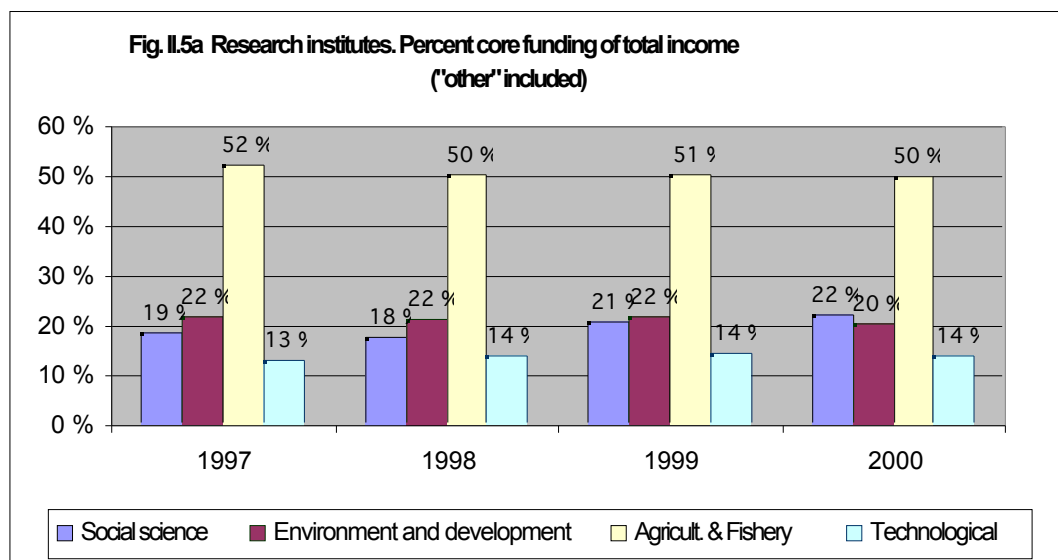


Note: "Other" includes "national tasks", non-R&D public management tasks etc





## 5. Core funding as proportion of total income



**Report 14 June 2001, prepared for the evaluation of the Research Council of Norway (RCN), part of projects 4.1 and 7.1.**

# **RCN grant statistics**

Based on the Foriss data base

*Liv Langfeldt*

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## Executive summary

The report is prepared for the evaluation of the Research Council of Norway (RCN) in 2001 by Technopolis Ltd. It presents data on RCN applications and grants from 1994 to 2000, restricted to applications registered in the RCN project data base (Foriss) as “Project grants”, “Fellowships” or “Indirect R&D projects” within one of the six RCN divisions.

### *Applications and applicants*

The study includes 35 800 applications (1994-2000). Half of the applications came from universities, 25 percent from the institute sector, 12 percent from industry, 5 percent from scientific colleges, 3 percent from regional colleges and 1 percent from other colleges.

46 percent of the applications came from Oslo and the surrounding county. The other regions with a university sent most of the remaining applications: Western Norway 22 percent, Trøndelag 16 percent and Northern Norway 10 percent.

78 percent of the applications had a male principal investigator (PI), 20 percent a female PI. The highest percentage of female applicants (PI) was within the humanities (33 percent), the lowest within technology (11 percent). The average age of female applicants (PIs) is somewhat lower than for male applicants – 42 years for female and 47 years for male.

### *Grants distributed*

The average size of granted RCN projects for the period 1994 to 2000 is 0,8 MNOK. Half of the projects are below 0,33 MNOK. The average size of RCN programme projects in the period is 1 MNOK (median 0,5 MNOK), whereas the average independent project is at 0,5 MNOK (median 0,2 MNOK). The average project is largest within IE and smallest within KS (whereas the median is highest in BF). The sum of the analysed project budgets granted in the period is 11,7 billions NOK.

### *Rejection rates*

The overall rejection rate for RCN applications varied between 51 and 58 percent during the period from 1994 to 2000. It has been lower for programme projects than for independent projects. The total rejection rate for the period was 47 percent for applications to programmes, whereas 63 percent of applications for independent projects were rejected.

Within MH, NT, KS and MU, 60 to 63 percent of all applications has been rejected. Within BF the overall rejection rate was somewhat lower (55 percent), whereas IE which is the most “proactive” division had the lowest rejection rate, at 25 percent.

The overall rejection rate for female applicants (PIs) was 59 percent in the period, whereas the rejection rate for males was 55 percent. Most of these differences seem to be explained

by the fact that male and female applicants tend to apply for different categories of grants, and these have different rejection rates.

# 1 Note on data and problems

The RCN project data base – Foriss – has been used for the present grant statistics. As Foriss is primarily a project management tool and data are not registered for statistical purposes, there are numerous data problems. These are discussed below.

## 1.1 Selection of cases

All applications/projects in the RCN project data base (Foriss) registered as “Project grant”, “Fellowship” or “Other” (indirect R&D projects) within the six RCN divisions<sup>1</sup> were imported to SPSS. This included 50 897 cases (applications or granted projects). When analysing the data, cases with a starting date before 1994 or after 2000 were excluded, as data were not considered sufficient to make statistics for these years. Furthermore, projects registered with a RCN internal contractor were not considered interesting for this kind of analysis and excluded from the analysed data set. With these exclusions, 35.800 of the 50.897 cases remained for analysis.

## 1.2 Missing information

A central problem with the data is the amount of applications where information on “Policy instrument” is missing. This problem regards particularly applications for “project funding” within BF<sup>2</sup> and KS for the years 1994 to 1996 (see Appendix 1, Table A1). Nearly all the applications missing information on policy instrument are rejections (93 percent). Before 1996 applications were often not registered on policy instrument unless they were granted.<sup>3</sup> The problem is most prevalent for BF and KS data. What does this amount of missing information about the policy instrument of rejected applications mean? As for BF, RCN staff comment that nearly all the missing cases most probably are programme applications. Independent projects are a minor part of BF’s policy instruments and the distinction between programmes and independent projects is not vital to the analysis of BF rejection rates. For KS, on the other hand, both programmes and independent projects are major policy instruments, and there are no pinpoints as to which the missing cases belong. *In conclusion, rejection rates for KS cannot be made separately for applications for independent projects and programme projects for the years 1994 to 1996.*

---

<sup>1</sup> These include Bioproduction and processing (BF), Industry and energy (IE), Culture and society (KS), Medicine and health (MH), Environment and development (MU) and Science and technology (NT). Projects registered within the Strategic Planning Division are *not* included (this division includes “The Group for international fellowships”).

<sup>2</sup> See note 1 for abbreviations.

<sup>3</sup> When Foriss was established in 1996, data from the old data bases were transferred to Foriss. Generally data before 1997 may be problematic because of missing information.



There are also problems related to missing information on *funding mode*.<sup>4</sup> These problems are solved by constructing a new variable combining information from two different project categories used for registration in Foriss (“Project type” and “Funding mode code”).<sup>5</sup> The new variable, which will be used in this analysis, categorises projects as follows:

**Table 1.1**      *Total number of RCN applications 1994-2000. By funding mode and RCN division.*

	BF	IE	MH	NT	KS	MU	Total
Project grants	4604	4389	2762	3164	4622	3501	23042
Student fellowships		3	203		524	36	766
Doctoral fellowships	300	41	1595	1605	1894	594	6029
Post docs	22		519	647	179	146	1513
Senior fellowships	5		9	22	13	3	52
Guest researcher fellowships	24	1	65	317	33	30	470
Stay abroad	169	1	363	311	321	47	1212
Other or unknown fellowship types	213	19	75	121	365	193	986
Other funding modes	229	158	48	146	896	253	1730
<b>Total</b>	<b>5566</b>	<b>4612</b>	<b>5639</b>	<b>6333</b>	<b>8847</b>	<b>4803</b>	<b>35800</b>

In addition to the missing information on policy instrument and funding mode, information on the age of principal investigator (PI, “prosjektleder”) is missing for 30 percent of the applications (see “Limitations to comparisons” below). For other central variables in the analysis, missing information is marginal. Information on contracting sector is missing for 3,1 percent of the applications. Information on project budget is missing for 6,2 percent of the funded applications (there is no information on budget in Foriss unless the application is funded). Information on gender of PI is missing for 2,1 percent of the applications.

<sup>4</sup> This is especially related to “project grants”: 28 percent of the studied applications that are registered as “Project grant” according to Project type, lack registration on “Funding mode code”. Applications and granted projects are registered by a number of project categories in Foriss:

- (1) “Policy instrument”, including “Research programme”, “Independent project” and “Infrastructure”.
- (2) “Main activity” (includes for instance kind of programme)
- (3) “Activity” (includes for instance name of programme)
- (4) “Project type”. Three project types are relevant for the RCN grant statistics: “Project grant”, “Fellowship” and “Other” (indirect R&D projects). “Infrastructure” and “RCN administration” are not included in the analysis.
- (5) “Funding mode code” which is more detailed than “Project type” and includes the kind of fellowship applied for/granted (e.g. doctoral or post doc).

<sup>5</sup> This variable uses only the “Funding mode code” information with regard to type of fellowships. For “Project grants” and “Other”, the “Project type” information was used. 651 applications that were registered as Fellowship applications with regard to “project type”, but lacked registration on “Funding mode code”, were coded as “other or unknown fellowships”. 96 applications that were registered as Fellowship applications with regard to “project type”, but as other kinds of applications with regard to “Funding mode code”, were coded as “other or unknown fellowships” regardless of this inconsistent registration. Counts are from the total set of data taken out of Foriss, and not restricted to the data analysed. (Data analysed are restricted to 1994 to 2000, and projects registered on an internal RCN contractor are excluded.)

Information on research area is missing for 1,2 percent of the applications. Information on funding or rejection is missing for 1,2 percent of the studied applications (Table 1.2).

**Table 1.2** Cases with missing information on central variables, by funding/rejection of the application. Number of RCN applications 1994-2000.

Variable	Funded	Rejected	Withdrawn	Info missing*	Total
Missing 'Age of PI'	5.262	4.959	269	266	10.756
Missing 'Contracting sector'	411	637	25	51	1.124
Missing 'Project budget'	914	-	-	-	-
Missing 'Gender of PI'	303	434	2	19	758
Missing 'Research area'	144	130	46	108	428
<b>N (all studied cases)</b>	<b>14.823</b>	<b>19.998</b>	<b>533</b>	<b>445</b>	<b>35.800</b>

\*Applications registered with 'project phase' 'received' or 'being reviewed'. These are most probably rejections.

### 1.3 Data interpretation: Limitations to comparisons

Below, the limits to the use of the data are explained. Missing information on applicants' age is considered to be the only *serious* limitation to the present use of the data. It should be noted however, that it has not been possible to measure the amount of faulty or misleading information in the data base.

#### *Average project budgets*

In some cases (in IE) outsourced programmes are registered as one project in Foriss, and will give too high average project budgets.

In a few cases project income seems to have been registered along with spending, which for technical reasons may reduce the actual spending on the project. When the result is a negative project budget, the project is excluded from the analysis of average project budgets.

With these sources of error in mind, more weight should be put on the median than the mean when reading Tables 2.1, 2.3, 2.4 and 2.7 (average project size).

#### *Rejection rates*

The policy regarding use of "pre-qualifications" and proactive programmes vary between RCN division and affect "rejection rates." When projects are partly initiated from the RCN side, or participants in "pre-qualifications" are not registered, rejection rates will be irrelevant or misleading. Proactive programmes are most prevailing in IE which consequently has the lowest rejection rates. Whether or not "sketches" for pre-qualifications are registered in Foriss is said to vary both in time and between divisions (said to be currently registered in MU but not in KS), and complicates comparisons further.

Additional applications to projects already granted by RCN may also give misleading rejection rates. When granted, these are normally registered as *rejected* in Foriss, and the grant is registered on the original project.

When reading the tables, it should also be noted that NT has had an explicit policy-aim to *reduce* the amount of applications, whereas KS has increased their amount of applications (probably by more use of open calls for programme projects).

#### *Policy instrument and funding mode*

Foriss was established in 1996. Applications and projects before 1997 were transferred from two different former data bases into Foriss. As explained above, data from 1994 to 1996 is far from complete with regard to information on policy instrument and funding mode code.

Projects containing several funding modes will normally be registered only as the kind of funding mode which “dominates” the project (in terms of size of grants). Especially “doctoral fellowships” and “stay abroad”, may be invisible in the statistics as they often are part of larger programme projects. However, in some cases the project is split up in one project for each funding mode.

#### *Region/county and contracting sector*

For projects with participants from more than one institution, there is only information on the sector and county of that participant who is registered as the formal contractor. There might be systematic biases as to which sector and region such projects are registered, especially for IE where the large majority of projects have participants from several institutions.

#### *Applicants age and gender*

The data only contains information on PI’s (“prosjektleder”) age and gender. In the case of doctoral fellowship, the adviser will normally be registered as PI, but in some cases the doctoral student will be registered as PI (mostly for the earlier years, for KS and for candidates who take their degree abroad).

Information about PI’s age is missing for 10.756 cases (30 percent). The table below seems to tell us that the age of RCN applicants has increased during the period, but should be interpreted in light of less demands for registration of age in Foriss and change in rules for being PI. More advisers registered as PI and lack of information on age of new applicants (while prior applicants are registered with age in the data base), may explain the decrease in young applicants in Table 1.3 as changes in registration, and not necessarily any changes in applicants’ age.

*Table 1.3 RCN applications 1994-2000. By age of Principal Investigator.*

<b>Age of PI</b>		<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>Total</b>
<b>Below 35</b>	Count	1.109	736	524	481	329	298	297	3.774
	%	23,4	13,2	9,8	8,7	7,1	6,1	5,8	10,5
<b>35-50</b>	Count	1.741	2.218	1.946	2.035	1.756	1.618	1.721	13.035
	%	36,7	39,8	36,6	36,9	37,7	33,4	33,5	36,4
<b>Above 50</b>	Count	776	1.256	1.216	1.293	1.191	1.222	1.281	8.235
	%	16,4	22,5	22,8	23,4	25,5	25,2	25,0	23,0
<b>Age unknown</b>	Count	1.114	1.368	1.637	1.711	1.387	1.708	1.831	10.756
	%	23,5	24,5	30,8	31,0	29,7	35,2	35,7	30,0
<b>Total</b>	Count	4.740	5.578	5.323	5.520	4.663	4.846	5.130	35.800
	%	100	100	100	100	100	100	100	100

As a consequence, we can say nothing about possible changes in applicants' age and the funding rates for different age groups from 1994 to 2000. However, the totals for the period may be used as a rough check on rejection rates for the different age groups and also control age against other categories (i.e. gender).

## 2 Overview of applications and grants

### 2.1 By year

The average size of granted RCN projects for the period 1994 to 2000 is 0,8 MNOK. There is an extreme variation in project size, due to some very large projects.<sup>6</sup> As registered budgets both for some of the seemingly largest and smallest projects probably are misleading (cf. Section 1.3), the median is probably a better measure of project size than the mean. It should be noted that the median is far less than the mean: Half of the projects are below 0,33 MNOK.

The increase in project size during the period is shown in Table 2.1. The sum of the project budgets in the period is 11,7 billions NOK. This is the sum of the total budgets of all projects (“Project grants”, “Fellowships” or “Other”) that started up during the period (for which a budget is registered in Foriss).<sup>7</sup>

*Table 2.1 Number of grants and average project size, new RCN projects 1994-2000.*

New projects in year	N projects	Project size NOK		Std. Deviation	Sum budgets NOK
		Mean	Median		
1994	1866	713 027	162 911	2 399 775	1 330 508 072
1995	2103	707 964	250 000	1 914 765	1 488 848 268
1996	2238	883 160	300 000	2 125 221	1 976 511 344
1997	2197	931 056	422 254	2 057 494	2 045 530 851
1998	1784	865 736	477 768	1 584 384	1 544 473 585
1999	1785	847 410	300 000	2 517 340	1 512 626 614
2000	1933	964 273	500 000	1 595 335	1 863 939 750
Total	13906	845 853	326 137	2 054 013	11 762 438 484

Note: The table is based on each project's total “disponibelt budsjett”, the amount to be granted for the entire project period. Granted projects that for technical reasons have a negative budget are excluded from the calculations.

The overall rejection rate for RCN applications has been around 51-58 percent in the period (Table 2.2).

<sup>6</sup> Among the studied cases there are 23 projects with a budget above 20 MNOK. Of these, 4 seem to be infrastructure projects that by mistake are registered as project grants (they are at 30 to 85 MNOK each). 15 are registered as user-controlled programmes projects within IE (these are at 20 to 80 MNOK each). As outsourced IE programs are coded and counted as single projects in Foriss, part of these IE projects are programmes that should not be included in project size statistics (but this is nevertheless done). The four remaining projects includes two BF action oriented programme projects and one NT and one MU basic research programme project (these are at 21 to 32 MNOK).

<sup>7</sup> Excluding projects registered as internal to RCN, see Section 1.1.

*Table 2.2 Rejection and funding rates, new RCN applications 1994-2000.*

[illegible]

## 2.2 By policy instrument and funding mode

The median RCN *programme project* in the period was 0,5 MNOK (mean 1 MNOK), whereas the median *independent project* was at 0,2 MNOK (mean 0,5 MNOK) (Table 2.3).

Due to a number of very large programme projects that are all registered as project grants, there is much more variation in projects size within programmes than within independent projects, and within project grants than within other funding modes (see note above). For the various kinds of fellowships there are fixed annual or monthly rates. As shown in Table 2.4, there are much more variation in the size of project grants than in the various kinds of fellowships. It should be noted that the category “project grant” probably cover a substantial amount of the other kinds of grants, foremost “doctoral fellowships” and “stay abroad” (when such grants are part of larger projects, see Section 1.3).

*Table 2.3 Number of grants and average project size, by policy instrument. New RCN projects, totals for 1994-2000.*

Policy instrument	N projects	Project size NOK		Std. Deviation	Sum budgets NOK
		Mean	Median		
Programme projects	8558	1 035 378	500 000	2 144 633	8 860 760 946
Independent projects	3952	507 555	206 000	613 434	2 005 855 826
Total	12510	868 634	400 000	1 823 569	10 866 616 772

Note: The table is based on each project's total "disponibelt budsjett", the amount to be granted for the entire project period. Granted projects that for technical reasons have a negative budget are excluded from the calculations.

**Table 2.4**     *Number of grants and average project size, by funding mode. New RCN projects, totals for 1994-2000.*

Funding mode	N projects	Project size NOK		Std. Deviation	Sum budgets NOK
		Mean	Median		
Project grants	8 589	1 031 811	390 000	2 552 630	8 862 222 819
Student fellowships	443	90 304	71 000	180 796	40 004 607
Doctoral fellowships	1 901	1 019 459	1 093 500	466 540	1 937 991 904
Post docs	435	1 043 867	1 020 000	536 759	454 082 116
Senior fellowships	36	542 331	417 000	494 873	19 523 910
Guest researcher fellowships	189	123 090	90 000	160 796	23 264 037
Stay abroad	747	141 501	80 000	265 206	105 701 093
Other or unknown fellowship type	281	435 804	190 000	636 646	122 460 789
Other funding modes	1 285	153 453	50 000	407 695	197 187 209
<b>Total</b>	<b>13 906</b>	<b>845 853</b>	<b>326 137</b>	<b>2 054 013</b>	<b>11 762 438 484</b>

Note: The table is based on each project's total "disponibelt budsjett", the amount to be granted for the entire project period. Granted projects that for technical reasons have a negative budget are excluded from the calculations.

The overall rejection rate in the period was 47 percent for applications to RCN programmes, whereas 63 percent of applications for independent projects were rejected (Table 2.5). Table 2.6 shows large variations in rejection rates for the various funding modes.

*Table 2.5 Rejection and funding rates, by policy instrument. New RCN applications, totals for 1994-2000.*

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**Table 2.6** *Rejection and funding rates, by funding mode. New RCN applications, totals for 1994-2000.*

[illegible]

Note: "Unknown fellowship type" probably contain a substantial amount of applications that are not registered according to fellowship type *because* they are not granted, which may explain the high rejection rate within this category. "Other funding modes" contain some indirect R&D projects for which rejection rates are of minor interests, e.g. evaluations, "utredninger" and information.

### 2.3 By RCN division

The *median* project size for the period varies between the RCN divisions. It is highest within BF at 0,55 MNOK and lowest within KS at 0,18 MNOK (Table 2.7). IE has the largest variation in project size, which may be explained by IE programmes that are counted as projects in the statistics. The *average* (mean) IE project is at 1,4 MNOK, whereas within the other divisions it varies between 0,88 and 0,57 MNOK.



**Table 2.7**     *Number of grants and average project size, by RCN division. New RCN projects, totals for 1994-2000.*

Division	N projects	Project size NOK		Std. Deviation	Sum budgets NOK
		Mean	Median		
BF	2 205	881 938	554 996	1 222 959	1 944 673 795
IE	2 792	1 397 382	448 059	3 232 861	3 901 490 875
MH	2 017	620 255	300 000	1 115 853	1 251 054 473
NT	2 206	843 288	225 000	2 881 333	1 860 292 563
KS	3 023	567 691	180 000	791 621	1 716 129 543
MU	1 663	654 719	300 000	1 160 689	1 088 797 235
Total	13 906	845 853	326 137	2 054 013	11 762 438 484

Note: The table is based on each project's total "disponibelt budsjett", the amount to be granted for the entire project period. Granted projects that for technical reasons have a negative budget are excluded from the calculations.

Within MH, NT, KS and MU, 60 to 63 percent of all applications has been rejected. Within BF the overall rejection rate is somewhat lower (55 percent), whereas IE which is the most “proactive” division has the lowest rejection rate, at 25 percent (Table 2.8).

**Table 2.8** *Rejection and funding rates, by RCN division. New RCN applications, totals for 1994-2000.*

[illegible]

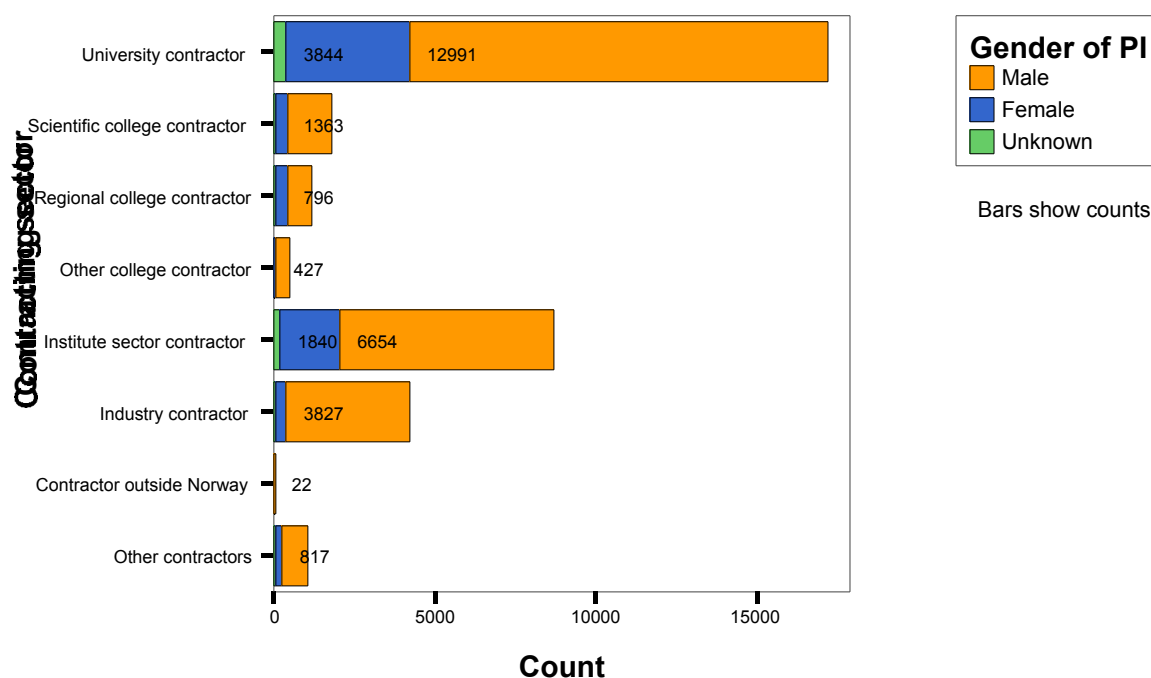
## 3 Who applies?

### 3.1 By sector

Half of the applications to RCN within the period came from universities, 25 percent from the institute sector, 12 percent from industry, 5 percent from scientific colleges, 3 percent from regional colleges and 1 percent from other colleges.

78 percent of the applications had a male principal investigator, 20 percent a female PI. 38 percent of the applications had a male principal investigator and a university contractor. Female PI's were most common for applications from the regional colleges (31 percent female), and most seldom for applications from industry (8 percent female).

*Figure 3.1 Number of applications, by sector and gender. Totals for 1994 to 2000. N=34 676.*

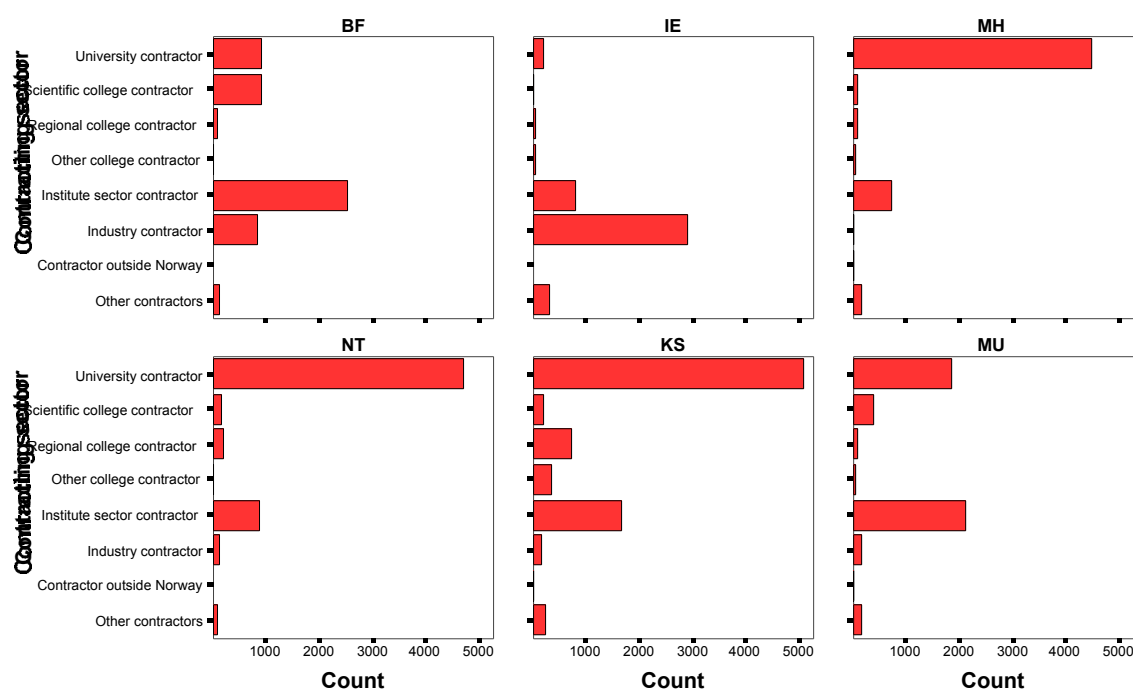


Note: Other contractors include organisations, public contractors, “research parks”, museums, the university studies at Svalbard and other applicants that are not covered by the main categories.

The large majority of applications to MH, NT and KS came from universities (MH 80 percent, NT 77 percent and KS 60 percent from universities). The institute sector had most

of the remaining part here with 13 to 20 percent). 67 percent of applications to IE came from industry. MU's applications were dominated by the institute sector (44 percent) and the universities (39 percent). BF applications are divided between the institute sector (47 percent), the universities and the scientific colleges (17 percent each) and industry (16 percent).

**Figure 3.2** *Number of applications, by sector and RCN division. Totals for 1994 to 2000. N=34 676.*



## 3.2 By region

46 percent of the applications came from Oslo and the surrounding county. The other regions with a university sent most of the remaining applications: Western Norway (Bergen) 22 percent, Trøndelag (Trondheim) 16 percent and Northern Norway (Tromsø) 10 percent (Figure 3.3).<sup>8</sup>

Figure 3.4 shows the regional distribution of applications by RCN divisions. NT had the highest percentage of applications from Trøndelag (31 percent). BF had the highest percentage of applications from Western Norway (28 percent) and from Northern Norway (15 percent). IE had the highest percentage of applications from Eastern Norway outside Oslo/Akershus (14 percent).

<sup>8</sup> Northern Norway includes Svalbard. The regional distribution of *total Norwegian R&D man-years* was as follows in 1997: Eastern Norway including Oslo 59,7 percent, Southern and Western Norway 20,9 percent, Trøndelag 14,7 percent and Northern Norway 4,7 percent (RCN 1999: "Det norske forsknings- og innovasjonssystemet – statistikk og indikatorer" Table A.2.14).

Figure 3.3 Number of applications, by region and gender. Totals for 1994 to 2000. N=35 800.

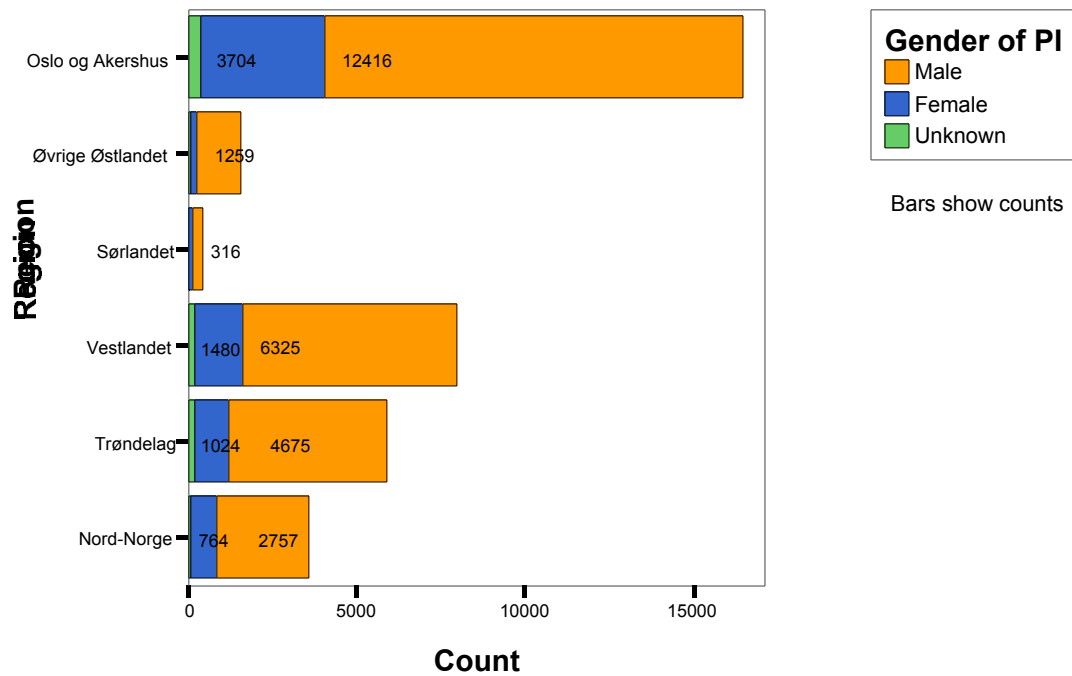
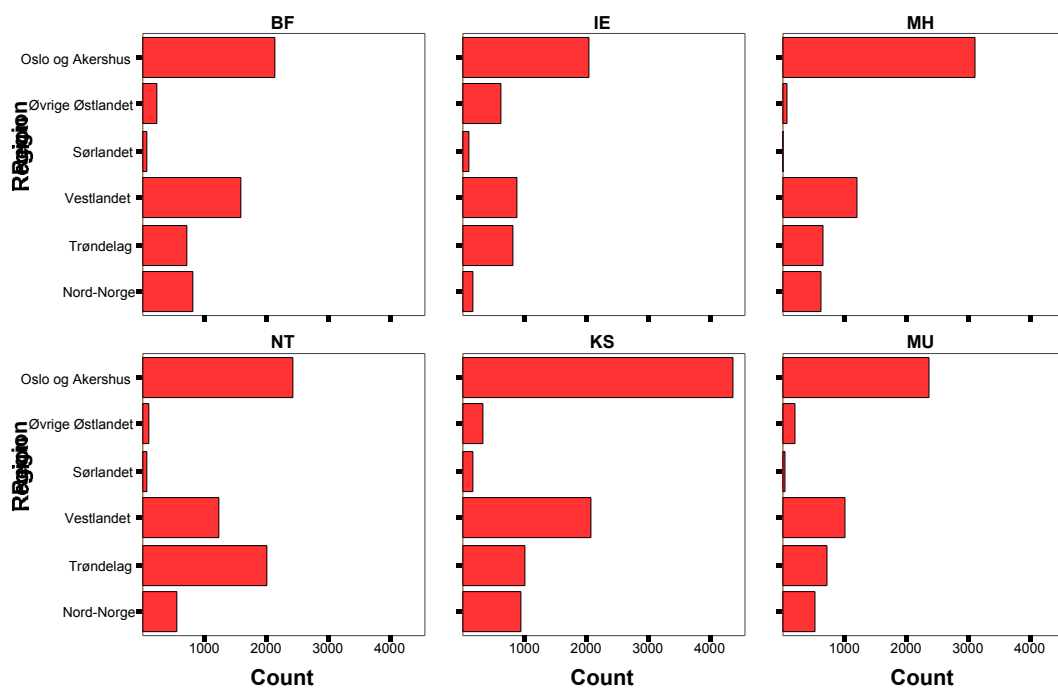


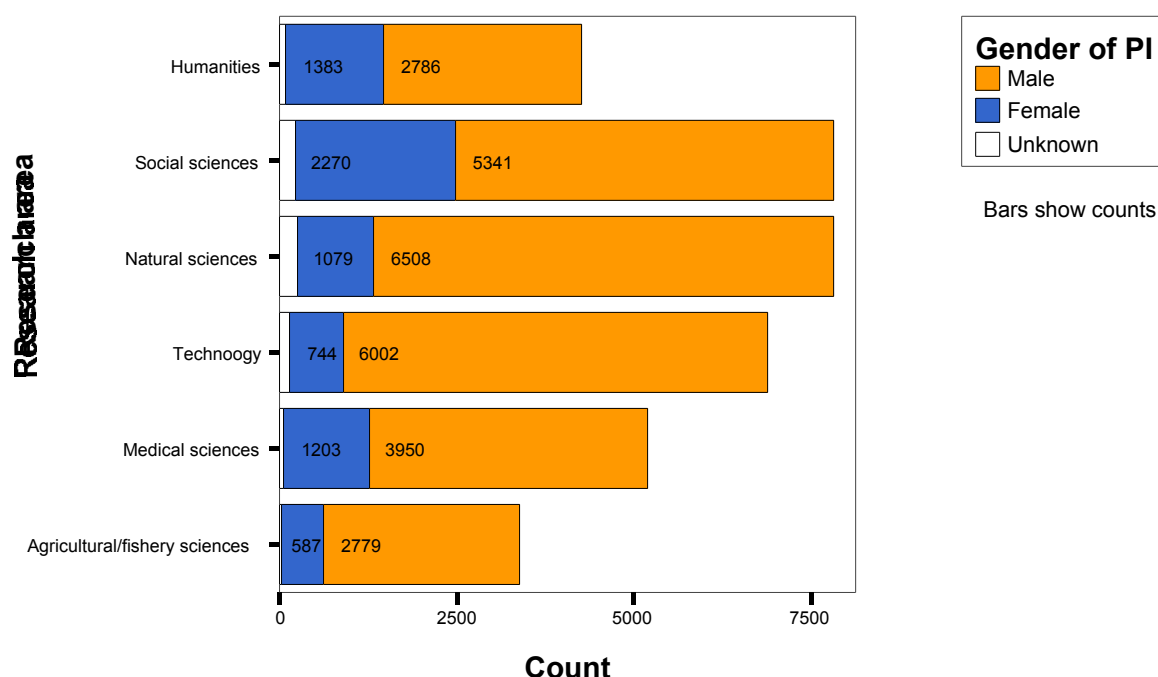
Figure 3.4 Number of applications, by region and RCN division. Totals for 1994 to 2000. N=35 800.



### 3.3 By research area

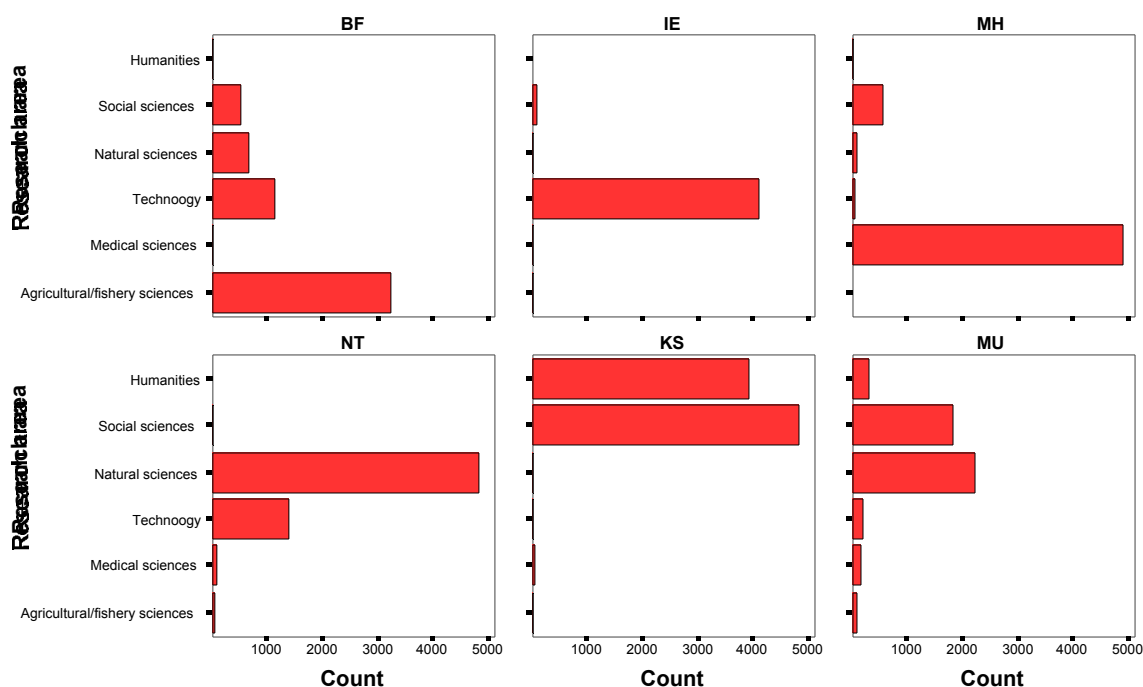
22 percent of the applications were within the social sciences, 22 percent the natural sciences, 20 percent technology, 15 percent medical sciences, 12 percent humanities, and 10 percent agricultural or fishery sciences. The highest percentage of female PI was within the humanities (33 percent), the lowest within technology (11 percent).

**Figure 3.5** *Number of applications, by research area and gender. Totals for 1994 to 2000. N=35 372.*



96 percent of the RCN applications within the agricultural/fishery sciences were sent to BF. 94 percent of the applications within the medical sciences were sent to MH. 93 percent of the applications within the humanities were sent to KS. 62 percent of the applications within the natural sciences were sent to NT, and 62 percent of the applications within the social sciences were sent to KS. 60 percent of the RCN applications within technology were sent IE. Within MU, 46 percent of the applications were within the natural sciences and 38 percent within the social sciences (Figure 3.6).

Figure 3.6 Number of applications, by research area and RCN division. Totals for 1994 to 2000. N=35 372.



### 3.4 By age

For 36 percent of the applications the principal investigator (PI) was between 35 and 50 years old. For 11 percent of the applications the PI was below 35, and for 23 percent above 50 (for 30 percent of the applications there is no information about the age of PI, see Section 1.2). The average age of female applicants (PIs) was somewhat lower than for male applicants – 42 years for female and 47 years for male. 21 percent of female applicants were below 35, whereas only 8 percent of male applicants. 25 percent of male applicants were above 50, whereas 17 percent of female applicants<sup>9</sup> (Figure 3.7).

From Figure 3.8 we see that there is very little information about age of IE applicants. KS had the highest amount of PIs below 35. One explanation may be that doctoral fellows within KS in some cases are registered as PI (cf. Section 1.3).

<sup>9</sup> It should be noted that the “age unknown” category is included in the calculations (except for the average age). Age is unknown for 31 percent of male PIs, whereas only for 20 percent of female PIs.

Figure 3.7 Number of applications, by age and gender. Totals for 1994 to 2000. N=35 800.

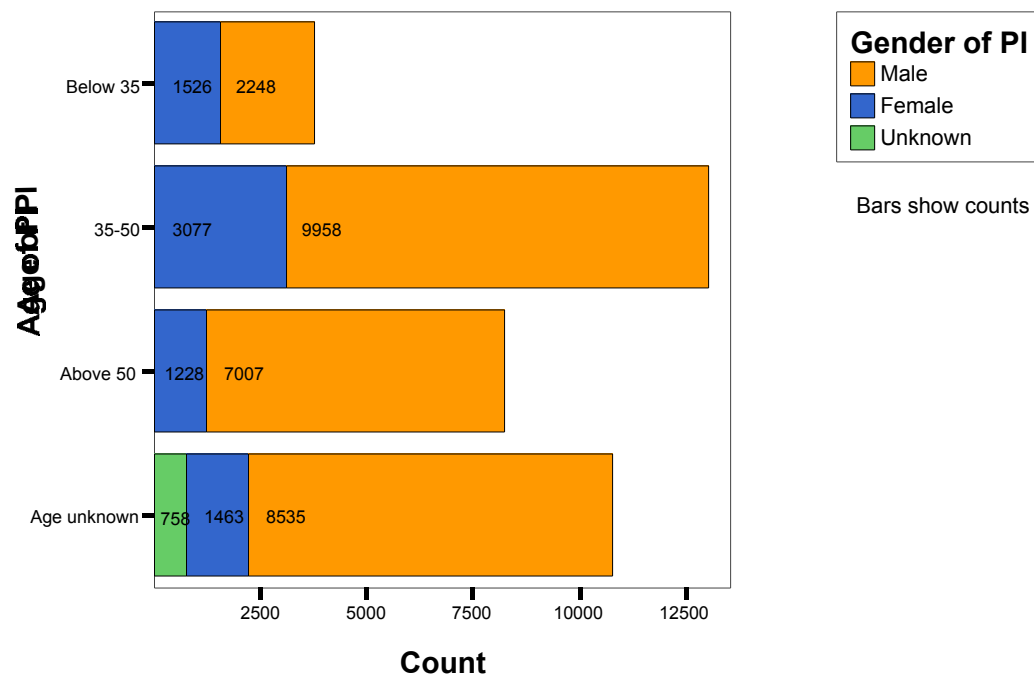
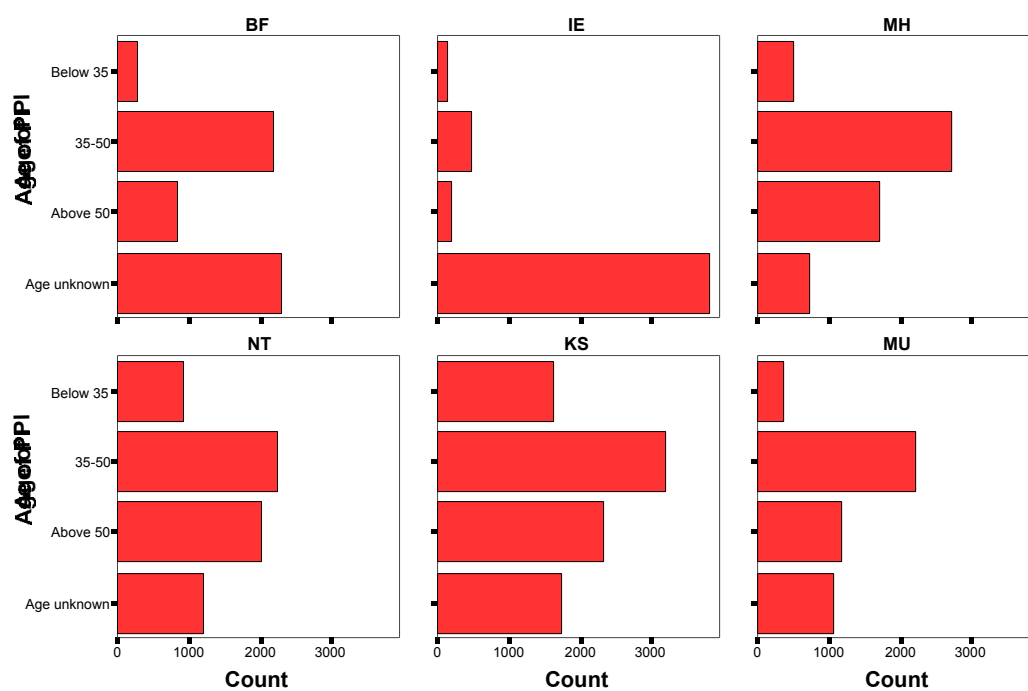


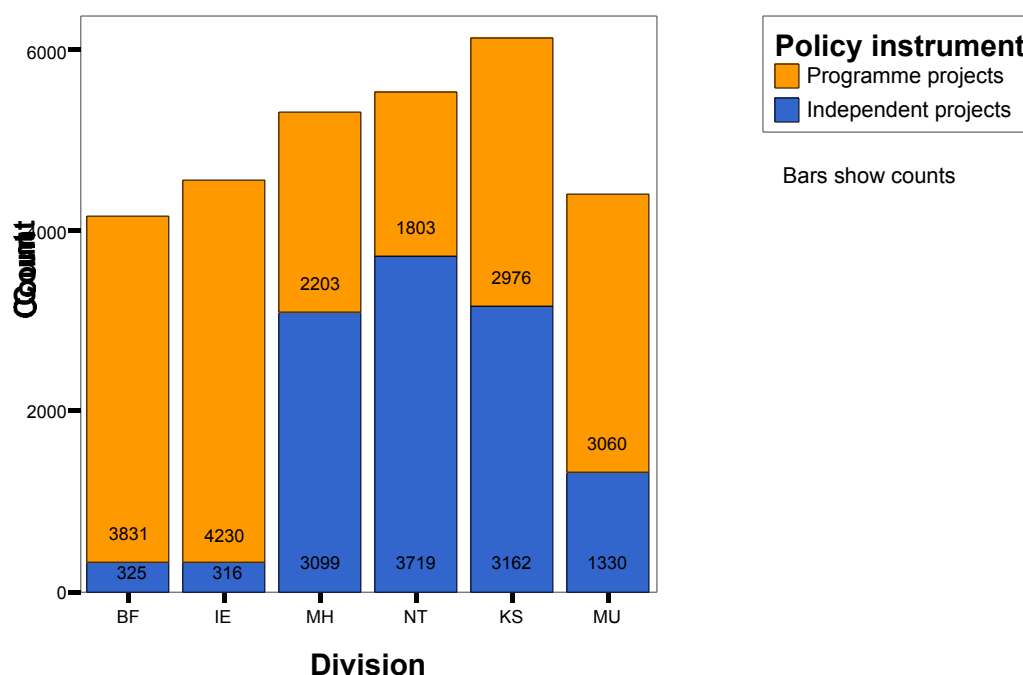
Figure 3.8 Number of applications, by age and RCN division. Totals for 1994 to 2000. N=35 800.



## 4 What do applicants apply for?

There are substantial variations between the RCN divisions in what applicants apply for. 93 percent of applications for programme projects or independent projects within IE are registered as applications for programme projects. The corresponding percent for BF is 92, 33 for NT, 42 for MH, 49 for KS and 70 for MU (cf. Figure 4.1). Funding modes also vary considerably between the divisions. For BF, IE and MU the large majority of applications concern project grants, whereas only about half of the applications within the three other divisions concern project grants. The other major funding mode is doctoral fellowships, with 17 percent of the total number of applications (Table 4.1, see also Table 1.1 for counts).

*Figure 4.1* Number of applications, by policy instrument and RCN division. Totals for 1994 to 2000. N=30 054.



Note: 3 007 applications without information on policy instrument and 2 739 applications registered as concerning other policy instruments than programmes or independent project are excluded from the counts.



**Table 4.1**      *Distribution of RCN applications by funding mode and RCN division.  
Percent, totals for 1994-2000 (based on number of applications, not applied  
sums).*

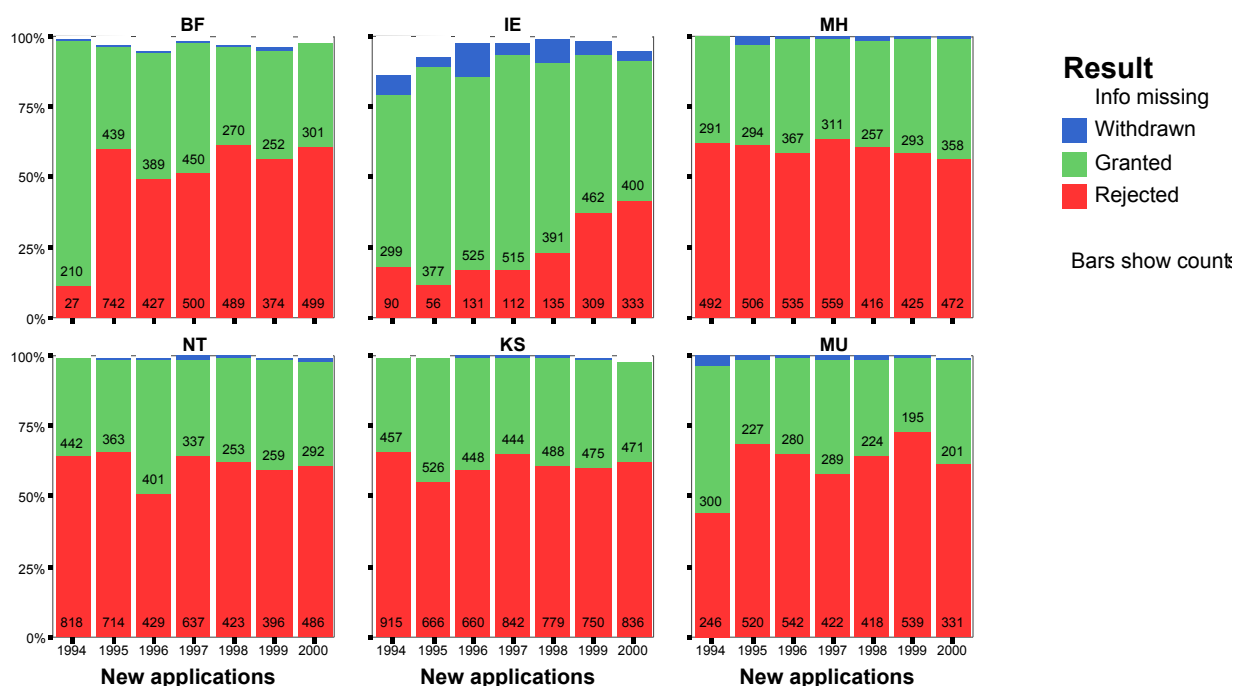
	<b>BF</b>	<b>IE</b>	<b>MH</b>	<b>NT</b>	<b>KS</b>	<b>MU</b>	<b>Total</b>
Project grants	82,7	95,2	49,0	50,0	52,2	72,9	64,4
Student fellowships		0,1	3,6		5,9	0,7	2,1
Doctoral fellowships	5,4	0,9	28,3	25,3	21,4	12,4	16,8
Post docs	0,4		9,2	10,2	2,0	3,0	4,2
Senior fellowships	0,1		0,2	0,3	0,1	0,1	0,1
Guest researcher fellowships	0,4	0,0	1,2	5,0	0,4	0,6	1,3
Stay abroad	3,0	0,0	6,4	4,9	3,6	1,0	3,4
Other or unknown fellowship types	3,8	0,4	1,3	1,9	4,1	4,0	2,8
Other funding modes	4,1	3,4	0,9	2,3	10,1	5,3	4,8
<b>N</b>	<b>5566</b>	<b>4612</b>	<b>5639</b>	<b>6333</b>	<b>8847</b>	<b>4803</b>	<b>35800</b>

## 5 What gets funded?

### 5.1 By division and year

Within IE the rejection rate has increased from 18 percent in 1994 to 42 percent in 2000. Within MH the rejection rate is reduced from 63 percent in 1994 to 56 percent in 2000. Within NT the number of applications is reduced from 1272 in 1994 to 798 in 2000. Within the other divisions there are no clear tendencies (Figure 5.1).

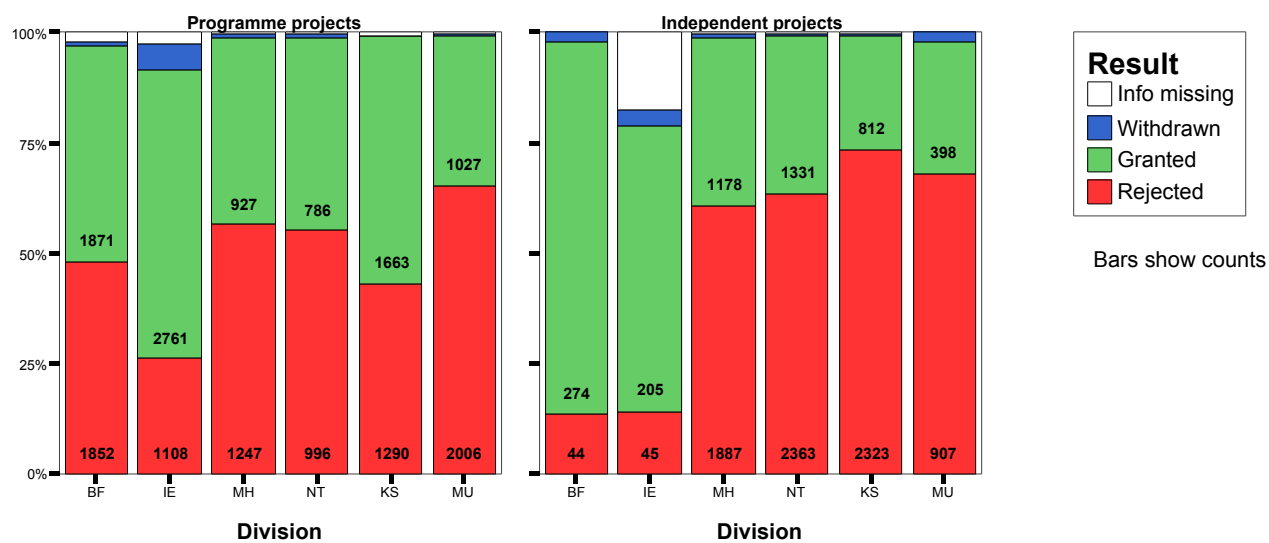
**Figure 5.1** Rejection and funding rates by year and RCN division. New applications 1994 to 2000. N=35 800.



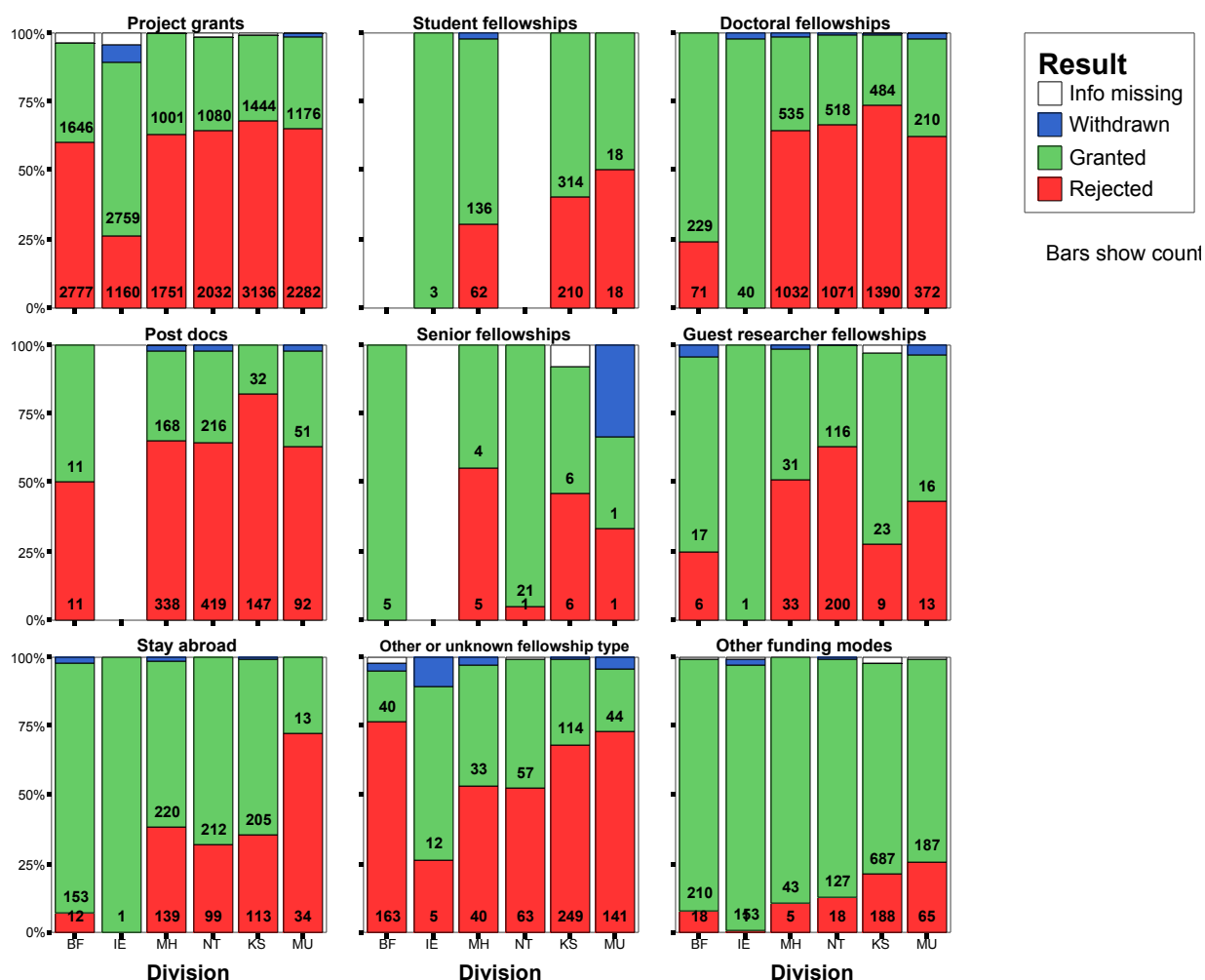
### 5.2 By policy instrument and funding mode

Within MH, NT, KS and MU the rejection rate is higher for independent projects than for programme projects (Figure 5.2). The gap is largest within KS with a rejection rate for independent projects on 74 percent, whereas only 43 percent of applications to programmes were rejected. Within BF and IE only 14 percent of applications for independent projects were rejected (it should be added that the large “info missing” category of 17 percent within IE probably also are rejections). Rejections by funding mode and division are shown in Figure 5.3.

Figure 5.2 Rejection and funding rates by policy instrument and RCN division. Totals for 1994 to 2000. N=30 054.



**Figure 5.3** Rejection and funding rates by funding mode and RCN division. Totals for 1994 to 2000. N=35 800.



### 5.3 By sector, region and research area

The overall rejection rate both for applications from the institute sector and from universities is at 59 to 66 percent in the divisions. The exceptions are IE with its proactive funding and generally low rejection rates, and the KS rejection rate for institute sector applications. KS rejects 65 percent of applications from universities, whereas only 50 percent of applications from the institute sector (Figure 5.4). This may be explained by Figure 5.2: KS has a rejection rate for independent projects (mainly university contractors) on 74 percent, whereas only 43 percent of applications to programmes (more institute sector contractors) are rejected.

Industry contractors seem to have the lowest chances of receiving grants within MU and the best chances within IE.

Figure 5.4 Rejection and funding rates by sector and RCN division. Totals for 1994 to 2000. N=34 676.

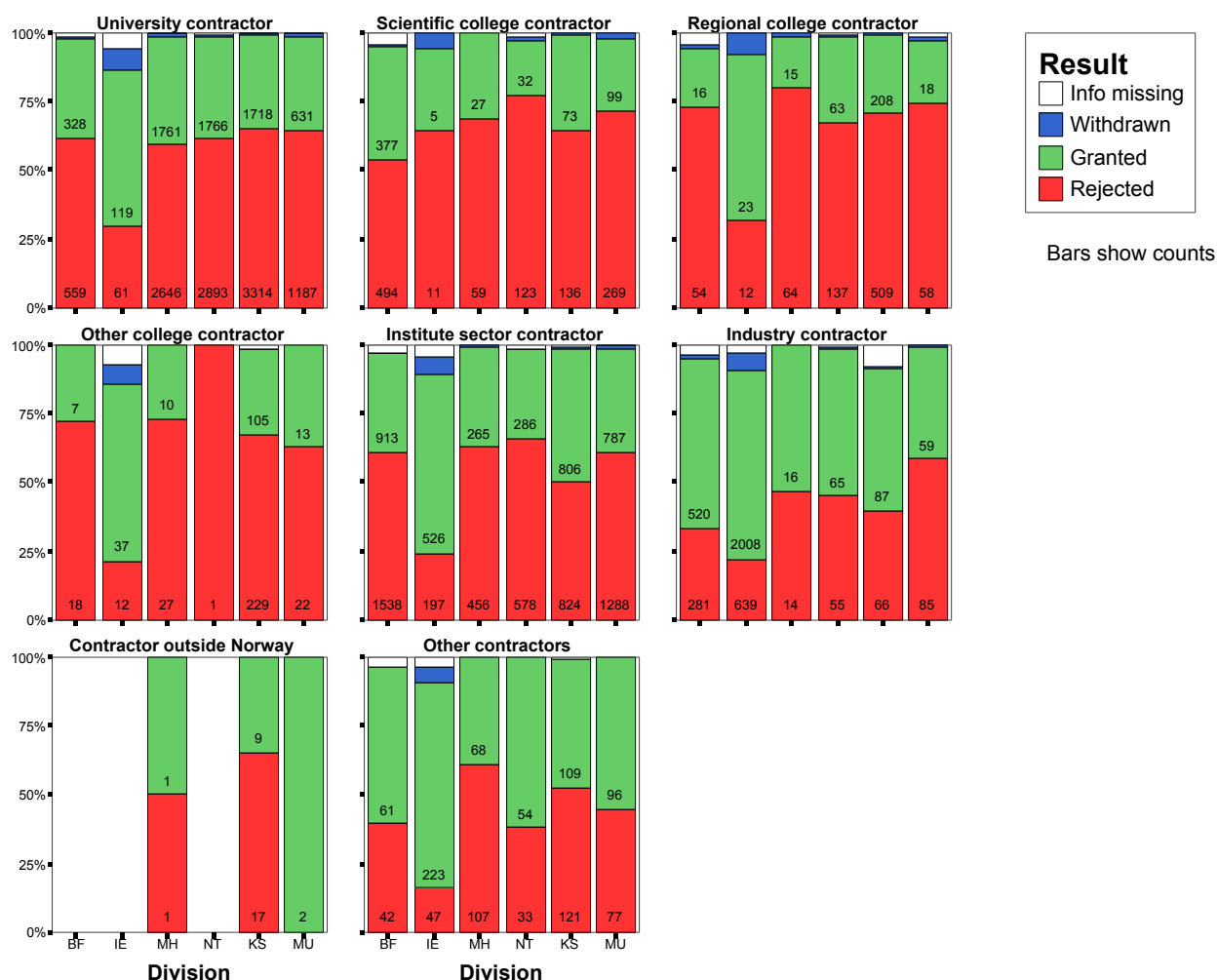


Figure 5.5 shows rejection rates by region and division. Within MH, KS and MU the rejection rate is lowest for applications from Oslo and surroundings, and highest for applications from Southern Norway (for MH 60 versus 100 percent; for KS 59 versus 76 percent; for MU 61 versus 91 percent). Also for IE the rejection rate is lowest for Oslo and surroundings (but highest for Western Norway). For BF the rejection rate is lowest for Eastern Norway excluded Oslo and surroundings, and highest for applications from Trøndelag (40 versus 61 percent). For NT the rejection rate is lowest for Southern Norway, and highest for applications from Eastern Norway excluding Oslo and surroundings (48 versus 66 percent).

Rejection rates by county are presented in Appendix 4.

Figure 5.5 Rejection and funding rates by region and RCN division. Totals for 1994 to 2000. N=35 800.

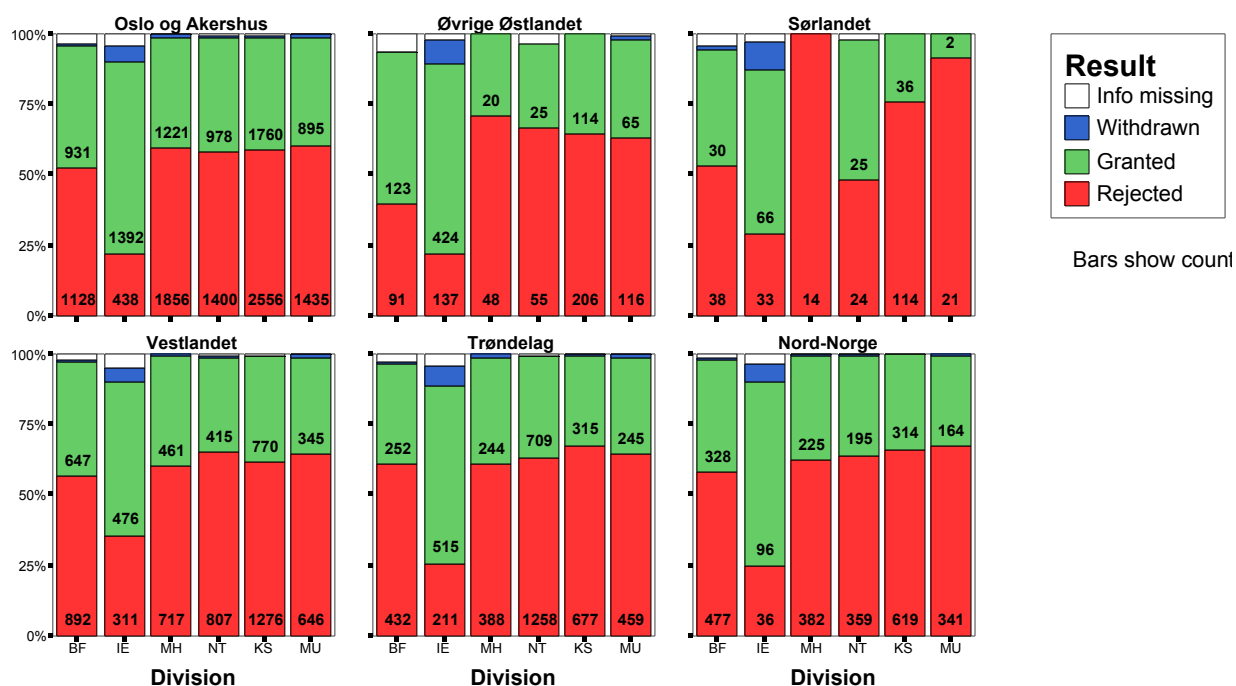
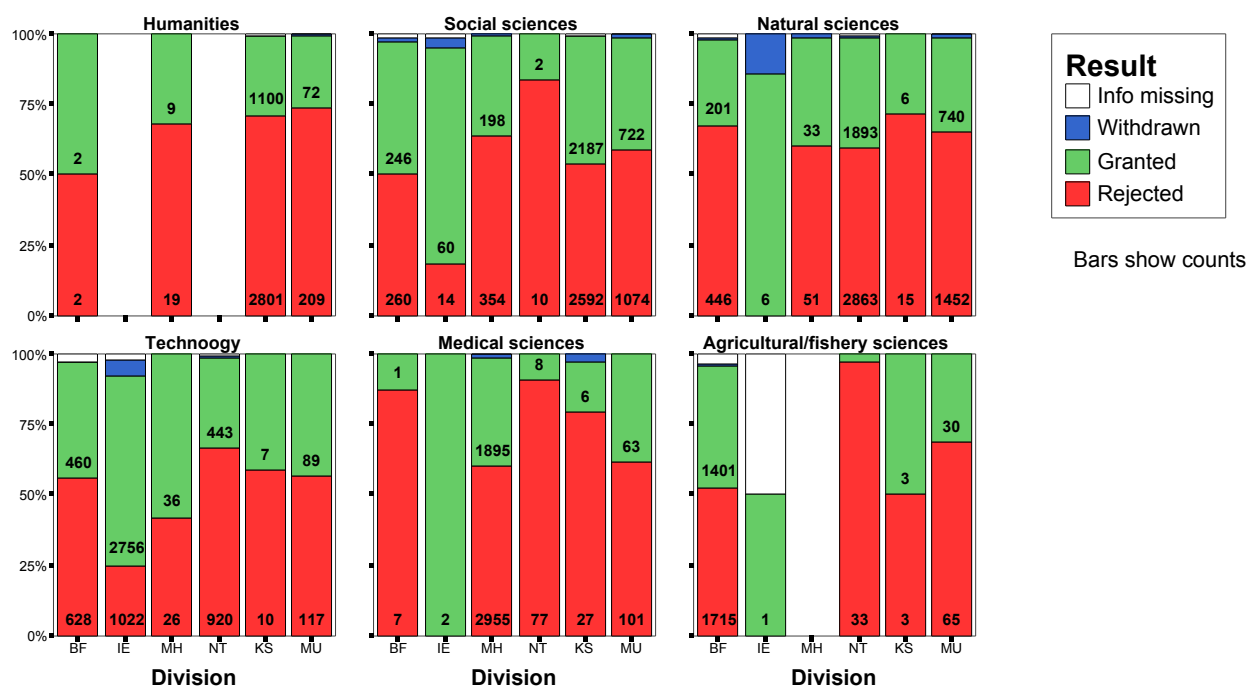


Figure 5.6 shows rejections by research area and division. In general each research area seems to have the best chances for funding within its “own” division (e.g. medical sciences within MH and natural sciences within NT). 67 percent of the technology applications were rejected within NT, whereas 59 percent of the natural science applications were rejected. 71 percent of humanities applications and 54 percent of the social science applications were rejected within KS (there are more applications for independent projects within the first category, and more applications for programme within the latter). Within MU, 59 percent of the social science applications and 65 percent of the natural science applications were rejected.

There are large differences in rejection rates for the various research disciplines, see Appendix 3, Table A3.

Figure 5.6 Rejection and funding rates by research area and RCN division. Totals for 1994 to 2000. N=35 372.



## 5.4 By gender and age

The overall rejection rate for female applicants (PIs) was 59 percent in the period, whereas the rejection rate for males was 55 percent. Female applicants below 50 seem to have somewhat lower chances of getting grants than male applicants in the same age group, whereas female above 50 seem to have somewhat higher chances for grants than male above 50 (Table 5.1).

**Table 5.1** *Rejection and funding rates by gender and age. Totals for 1994-2000.*

Age of PI	Gender of PI	Rejected		Granted		Withdrawn		Info missing		Total Count
		Count	%	Count	%	Count	%	Count	%	
Below 35	Male	1363	60,6	829	36,9	36	1,6	20	0,9	2248
	Female	987	64,7	521	34,1	15	1,0	3	0,2	1526
	Total	2350	62,3	1350	35,8	51	1,4	23	0,6	3774
35-50	Male	5768	57,9	4013	40,3	100	1,0	77	0,8	9958
	Female	1833	59,6	1181	38,4	41	1,3	22	0,7	3077
	Total	7601	58,3	5194	39,8	141	1,1	99	0,8	13035
Above 50	Male	4344	62,0	2546	36,3	66	0,9	51	0,7	7007
	Female	744	60,6	471	38,4	7	0,6	6	0,5	1228
	Total	5088	61,8	3017	36,6	73	0,9	57	0,7	8235
Age unknown	Male	3776	44,2	4304	50,4	238	2,8	217	2,5	8535
	Female	749	51,2	655	44,8	29	2,0	30	2,1	1463
	Unknown	434	57,2	303	40,0	2	0,3	19	2,5	758
	Total	4959	46,1	5262	48,9	269	2,5	266	2,5	10756
Total	Male	15251	55,0	11692	42,1	440	1,6	365	1,3	27748
	Female	4313	59,1	2828	38,8	92	1,3	61	0,8	7294
	Unknown	434	57,3	303	40,0	2	0,3	19	2,5	758
Total		19998	55,9	14823	41,4	534	1,5	445	1,2	35800

There is also some variation in male and female chances to get grants depending on RCN division. Within IE and MU female PIs seem to have slightly better chances than male (IE rejection rate for males at 25,4 percent and for female at 22,8 percent; MU rejection rate for males at 63,2 percent and for female at 61,5 percent). Within NT and KS male PIs seem to have slightly better chances than female (NT rejection rate for males at 61,5 percent and for female at 62,7 percent; KS rejection rate for males at 61,2 percent and for female at 63,5 percent). For BF and MH the differences in male and female rejection rates are marginal (Figure 5.7).



**Figure 5.7** Rejection and funding rates by gender and RCN division. Totals for 1994 to 2000. N=35 800.

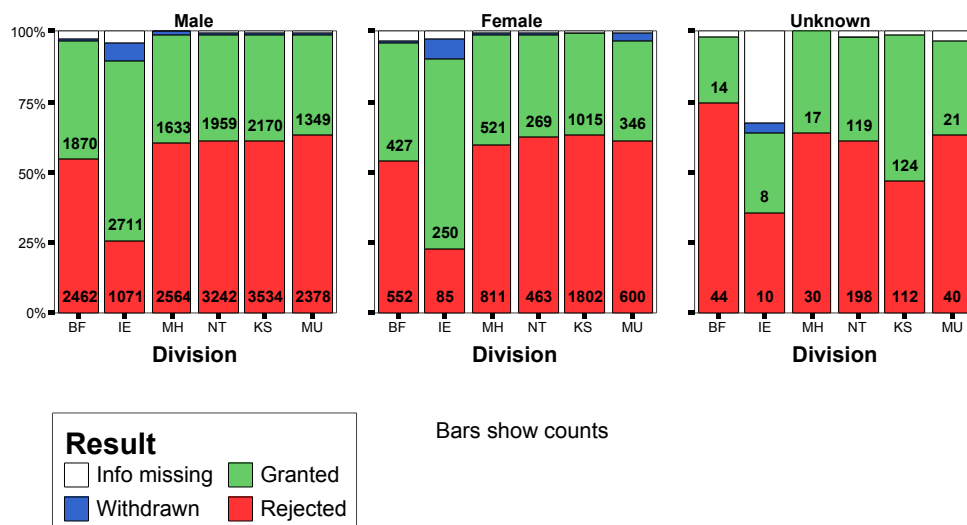
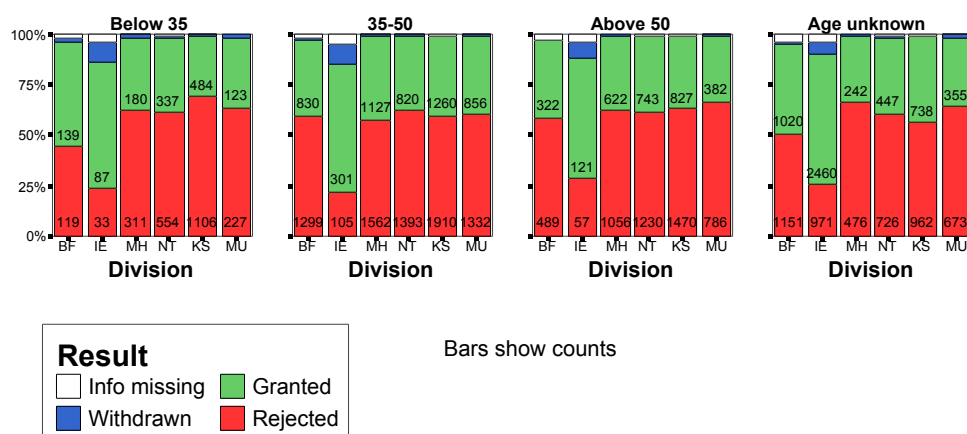


Figure 5.8 shows funding by age and RCN division. Within MH, KS and MU, applicants between 35 and 50 seem to have the best chances of obtaining grants. Within BF, applicants below 35 seem to have the best chances, whereas the rejection rates are quite even for all age groups within NT. Within IE there is very little information about applicants age.

**Figure 5.8** Rejection and funding rates by age and RCN division. Totals for 1994 to 2000. N=35 800.



### *Explaining gender differences*

It should be noted that male and female applicants tend to apply for different categories of grants – categories with very different rejection rates – and the reason for the different rejection rates (55 percent for male and 59 percent for female) may be found here. There are more female applicants for independent projects (higher rejection rates) than for programme projects (lower rejection rates).<sup>10</sup> There are also far less female applicants for IE grants (lowest rejection rates) than for KS grants (higher rejection rates).<sup>11</sup> Splitting up the data on gender, policy instrument and RCN division simultaneously, no substantial differences in male and female rejection rates in the disfavour of female applicants remain, except for programme projects within NT and KS (Table 5.2). Within NT programmes 54 percent of male applicants were rejected, whereas 64 percent of female applicants. Within KS programmes 42 percent of male applicants were rejected, whereas 47 percent of female applicants. Whether or not these differences may be explained by male and female tending to apply to programmes with different rejection rates has not been explored.<sup>12</sup>

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<sup>10</sup> Within programmes 18 percent of applicants (PI) are female, whereas there are 22 percent female applicants within independent projects.

<sup>11</sup> Within IE 8 percent of applicants (PI) are female, whereas there are 32 percent female applicants within KS.

<sup>12</sup> When splitting the KS data up in basic research programmes and action oriented programmes (and restrict the analysis to 1997 to 2000, cf. Section 1.2), the differences remain for the basic research programmes (rejections rates 56 percent for males and 66 percent for females). For the action oriented programmes, on the other hand, the rejection rates is in favour of female applicants. 45 percent of male and 40 percent of female applicants were rejected. The same kind of analysis were not done for NT as all NT programmes are basic research programmes.

**Table 5.2** *Rejection and funding rates by policy instrument, RCN division and gender. Totals for 1994-2000. N=30 054.*

Policy instrument	Gender	PI		BF	IE	MH	NT	KS	MU	Total
Programme Projects	Male	Rejected	Count	1502	1018	947	862	856	1625	6810
			%	48,3	26,3	57,5	54,4	41,9	65,9	46,3
		Granted	Count	1521	2522	682	704	1167	826	7422
			%	48,9	65,2	41,4	44,4	57,2	33,5	50,4
		Withdrawn	Count	21	228	18	13	6	13	299
			%	0,7	5,9	1,1	0,8	0,3	0,5	2,0
		Info missing	Count	64	101		5	12	3	185
			%	2,1	2,6		0,3	0,6	0,1	1,3
		Total	Count	3108	3869	1647	1584	2041	2467	14716
			%	100	100	100	100	100	100	100
	Female	Rejected	Count	347	82	293	110	420	357	1609
			%	48,8	24,0	53,9	64,0	47,1	63,6	50,0
		Granted	Count	342	231	240	60	466	193	1532
			%	48,1	67,5	44,1	34,9	52,3	34,4	47,6
		Withdrawn	Count	3	24	10	2	2	8	49
			%	0,4	7,0	1,8	1,2	0,2	1,4	1,5
		Info missing	Count	19	5	1		3	3	31
			%	2,7	1,5	0,2		0,3	0,5	1,0
		Total	Count	711	342	544	172	891	561	3221
			%	100	100	100	100	100	100	100
	Unknown	Rejected	Count	3	8	7	24	14	24	80
			%	25,0	42,1	58,3	51,1	31,8	75,0	48,2
		Granted	Count	8	8	5	22	30	8	81
			%	66,7	42,1	41,7	46,8	68,2	25,0	48,8
		Withdrawn	Count		1		1			2
			%		5,3		2,1			1,2
		Info missing	Count	1	2					3
			%	8,3	10,5					1,8
		Total	Count	12	19	12	47	44	32	166
			%	100	100	100	100	100	100	100
Independent projects	Male	Rejected	Count	36	40	1438	1903	1543	667	5627
			%	14,5	14,3	60,4	63,3	74,8	68,8	62,9
		Granted	Count	207	186	915	1080	499	287	3174
			%	83,5	66,4	38,4	35,9	24,2	29,6	35,5
		Withdrawn	Count	5	10	26	21	19	16	97
			%	2,0	3,6	1,1	0,7	0,9	1,6	1,1
		Info missing	Count		44	1	1	1		47
			%		15,7	0,0	0,0	0,0		0,5
		Total	Count	248	280	2380	3005	2062	970	8945
			%	100	100	100	100	100	100	100
	Female	Rejected	Count	5	3	433	300	750	227	1718
			%	7,1	11,1	62,2	62,5	71,9	67,2	64,7
		Granted	Count	63	19	256	177	286	102	903
			%	90,0	70,4	36,8	36,9	27,4	30,2	34,0
		Withdrawn	Count	2	1	7	3	6	9	28
			%	2,9	3,7	1,0	0,6	0,6	2,7	1,1
		Info missing	Count		4			1		5
			%		14,8			0,1		0,2
		Total	Count	70	27	696	480	1043	338	2654
			%	100	100	100	100	100	100	100
	Unknown	Rejected	Count	3	2	16	160	30	13	224
			%	42,9	22,2	69,6	68,4	52,6	59,1	63,6
		Granted	Count	4		7	74	27	9	121
			%	57,1		30,4	31,6	47,4	40,9	34,4
		Info missing	Count		7					7
			%		77,8					2,0
		Total	Count	7	9	23	234	57	22	352
			%	100	100	100	100	100	100	100

## Appendix 1 Missing information on 'policy instrument'

*Table A1* Number of applications missing value on 'policy instrument', new applications 1994-2000

Division	Funding mode		1994	1995	1996	1997	1998	1999	2000	Total
BF	Project funding	Total	180	1102	742	715	656	501	732	4628
		Missing	24	778	416	0	0	1	0	1219
	Fellowships	Total	41	65	108	227	111	90	66	708
		Missing	0	1	0	0	0	0	0	1
IE	Project funding	Total	460	463	729	643	549	785	764	4393
		Missing	37	5	6	0	0	0	0	48
	Fellowships	Total	13	7	2	10	11	8	10	61
		Missing	0	0	0	0	0	0	0	0
MH	Project funding	Total	611	393	428	431	385	349	370	2967
		Missing	149	72	4	0	0	0	0	225
	Fellowships	Total	154	425	464	438	298	370	456	2605
		Missing	0	0	0	0	0	0	0	0
NT	Project funding	Total	826	407	398	605	389	290	371	3286
		Missing	171	20	9	0	0	0	0	200
	Fellowships	Total	423	653	427	372	275	354	397	2901
		Missing	0	0	0	0	0	0	0	0
KS	Project funding	Total	1029	843	696	475	570	524	572	4709
		Missing	216	583	481	0	1	0	0	1281
	Fellowships	Total	241	257	317	714	621	543	545	3238
		Missing	40	0	0	0	0	1	1	42
MU	Project funding	Total	498	573	655	512	454	512	356	3560
		Missing	5	2	2	0	0	0	0	*9
	Fellowships	Total	43	153	134	178	165	186	131	990
		Missing	0	0	0	0	0	0	0	0
Total	Project funding	Total	3604	3781	3648	3381	3003	2961	3174	23552
		Missing	602	1440	918	0	1	1	0	2962
	Fellowships	Total	915	1560	1452	1939	1481	1551	1605	10503
		Missing	40	1	0	0	0	1	1	43

\*Initially 218 applications in this category lacked information about policy instrument, but with the help of MU-staff this information was reconstructed for 209 cases.

## **Appendix 2 Funding and rejections rates by year, for each RCN division separately**

This appendix is on a separate file (63 pages, Tables A2.1-A2.35). For each RCN division and year Appendix 2 shows rejection and funding rates by policy instrument, by funding mode, by sector, by region, by research area and by gender.

## Appendix 3 Funding and rejections rates by research discipline

*Table A3 Funding and rejections rates by research discipline. New RCN applications, totals for 1994-2000.*

Discipline/field	Rejected		Granted		Withdrawn		Info missing		Total Count
	Count	%	Count	%	Count	%	Count	%	
Språkvitenskapelige fag	617	70,7	252	28,9	2	0,2	2	0,2	873
Litteraturvitenskapelige fag	410	75,9	124	23,0	5	0,9	1	0,2	540
Kulturrkunnskap	61	61,0	39	39,0					100
Historie	429	66,1	214	33,0	4	0,6	2	0,3	649
Arkeologi	121	75,6	38	23,8	1	0,6			160
Folklorestikk, etnologi	82	66,7	38	30,9	1	0,8	2	1,6	123
Musikkvitenskap	108	77,1	31	22,1			1	0,7	140
Kunsthistorie	155	78,7	39	19,8	3	1,5			197
Arkitektur	67	79,8	16	19,0			1	1,2	84
Teologi, religionshistorie	267	72,4	97	26,3	1	0,3	4	1,1	369
Filosofiske fag	359	71,5	137	27,3	2	0,4	4	0,8	502
Filmvitenskap	13	72,2	5	27,8					18
Teatervitenskap	30	85,7	5	14,3					35
Felles fag humaniora	312	67,0	148	31,8	2	0,4	4	0,9	466
Samfunnskunnskap	5	14,7	24	70,6	5	14,7			34
Økonomi	748	49,3	748	49,3	10	0,7	11	0,7	1517
Sosiologi	599	56,5	447	42,2	6	0,6	8	0,8	1060
Fysisk planlegging, arkitektur	14	31,8	30	68,2					44
Statsvitenskap	406	53,9	336	44,6	6	0,8	5	0,7	753
Sosialantropologi	398	62,9	229	36,2	4	0,6	2	0,3	633
Psykologi	275	59,7	182	39,5	4	0,9			461
Pedagogiske fag	366	69,3	161	30,5	1	0,2			528
Samfunnsgeografi	157	48,5	161	49,7	4	1,2	2	0,6	324
Demografi	16	37,2	27	62,8					43
Medievitenskap	75	68,8	32	29,4	1	0,9	1	0,9	109
Informasjonsvitenskap	35	61,4	20	35,1	1	1,8	1	1,8	57
Juridiske fag	136	44,7	162	53,3	6	2,0			304
Fellesfag samfunnskunnskap	1074	54,9	856	43,8	15	0,8	10	0,5	1955
Matematikk og naturvitenskap	20	22,2	55	61,1	15	16,7			90
Matematikk	288	58,5	197	40,0	6	1,2	1	0,2	492
Informatikk	161	57,3	118	42,0	1	0,4	1	0,4	281
Fysikk	637	52,2	564	46,2	11	0,9	8	0,7	1220
Geofag	783	63,8	427	34,8	14	1,1	4	0,3	1228
Kjemi	678	64,4	362	34,4	10	0,9	3	0,3	1053
Biofag	1926	70,1	799	29,1	10	0,4	12	0,4	2747
Fellesfag naturvitensk. og matem.	334	46,9	357	50,1	6	0,8	15	2,1	712
Teknologi	46	15,8	225	77,1	19	6,5	2	0,7	292
Berg- og petroleumsfag	403	60,3	215	32,2	11	1,6	39	5,8	668
Materialteknologi	94	31,8	144	48,6	56	18,9	2	0,7	296
Bygningsfag, arkitektur	239	40,5	345	58,5	5	0,8	1	0,2	590
Elektroniske fag	144	33,7	266	62,3	15	3,5	2	0,5	427
Informasjonsteknologi	293	25,3	801	69,2	60	5,2	4	0,3	1158
Kjemisk teknologi	139	39,0	202	56,7	14	3,9	1	0,3	356
Maskinfag	128	51,0	117	46,6	5	2,0	1	0,4	251
Marin teknologi	148	32,7	292	64,5	9	2,0	4	0,9	453
Bioteknologi	323	52,4	281	45,6	4	0,6	8	1,3	616
Næringsmiddelteknologi	359	58,0	235	38,0	5	0,8	20	3,2	619
Miljøteknikk/teknologi	123	32,7	237	63,0	6	1,6	10	2,7	376
Fellesfag teknologi	284	36,4	431	55,2	43	5,5	23	2,9	781
Medisinske fag	37	50,7	36	49,3					73
Basale medisinske/odontolog. fag	1581	62,0	934	36,6	34	1,3	1	0,0	2550
Kliniske medisinske fag	737	60,7	468	38,6	9	0,7			1214
Samfunnsmedisin og helsefag	608	60,1	391	38,7	11	1,1	1	0,1	1011
Kliniske odontologiske fag	25	62,5	15	37,5					40
Idrettsfag	42	62,7	25	37,3					67
Diverse medisin/helse	15	39,5	23	60,5					38
Fellesfag medisin/helse	122	59,2	83	40,3	1	0,5			206
Landbruks- og fiskerifag	3	50,0	1	16,7			2	33,3	6
Landbruksfag	626	48,1	601	46,2	9	0,7	65	5,0	1301
Fiskerifag	1034	56,9	728	40,1	14	0,8	41	2,3	1817
Veterinærmedisin	125	55,6	97	43,1	1	0,4	2	0,9	225
Fellesfag landbruk og fisk	28	70,0	9	22,5			3	7,5	40
<b>Total</b>	<b>19868</b>	<b>56,2</b>	<b>14679</b>	<b>41,5</b>	<b>488</b>	<b>1,4</b>	<b>337</b>	<b>1,0</b>	<b>35372</b>

## Appendix 4 Funding and rejections rates by county

**Table A4** *Funding and rejections rates by county. New RCN applications, totals for 1994-2000. Sorted by funding rates.*

County	Rejected		Granted		Withdrawn		Info missing		Total
	Count	%	Count	%	Count	%	Count	%	Count
Vestfold	61	30,3	128	63,7	9	4,5	3	1,5	201
Buskerud	77	32,1	141	58,8	13	5,4	9	3,8	240
Hedmark	59	37,6	88	56,1	2	1,3	8	5,1	157
Østfold	106	44,0	116	48,1	17	7,1	2	0,8	241
Oppland	165	49,4	160	47,9	5	1,5	4	1,2	334
Møre og Romsdal	207	49,2	196	46,6	9	2,1	9	2,1	421
Finnmark	87	55,1	71	44,9					158
Oslo	7022	54,0	5684	43,7	186	1,4	122	0,9	13014
Akershus	1791	52,1	1493	43,4	68	2,0	87	2,5	3439
Aust-Agder	84	54,5	64	41,6	3	1,9	3	1,9	154
Telemark	185	54,7	138	40,8	9	2,7	6	1,8	338
Sogn og Fjordane	100	56,2	72	40,4	3	1,7	3	1,7	178
Hordaland	3748	59,0	2480	39,0	60	0,9	63	1,0	6351
Sør-Trøndelag	3323	58,2	2224	38,9	93	1,6	70	1,2	5710
Nordland	240	58,7	159	38,9	5	1,2	5	1,2	409
Rogaland	594	59,4	366	36,6	17	1,7	23	2,3	1000
Troms	1860	62,3	1085	36,4	22	0,7	17	0,6	2984
Vest-Agder	160	59,5	95	35,3	10	3,7	4	1,5	269
Nord-Trøndelag	102	61,1	56	33,5	3	1,8	6	3,6	167
Svalbard	27	77,1	7	20,0			1	2,9	35
	19998	55,9	14823	41,4	534	1,5	445	1,2	35800

**Table A5** *Funding and rejections rates by county. New RCN applications, totals for 1994-2000. Sorted by number of applications.*

County	Rejected		Granted		Withdrawn		Info missing		Total
	Count	%	Count	%	Count	%	Count	%	Count
Oslo	7022	54,0	5684	43,7	186	1,4	122	0,9	13014
Hordaland	3748	59,0	2480	39,0	60	0,9	63	1,0	6351
Sør-Trøndelag	3323	58,2	2224	38,9	93	1,6	70	1,2	5710
Akershus	1791	52,1	1493	43,4	68	2,0	87	2,5	3439
Troms	1860	62,3	1085	36,4	22	0,7	17	0,6	2984
Rogaland	594	59,4	366	36,6	17	1,7	23	2,3	1000
Møre og Romsdal	207	49,2	196	46,6	9	2,1	9	2,1	421
Nordland	240	58,7	159	38,9	5	1,2	5	1,2	409
Telemark	185	54,7	138	40,8	9	2,7	6	1,8	338
Oppland	165	49,4	160	47,9	5	1,5	4	1,2	334
Vest-Agder	160	59,5	95	35,3	10	3,7	4	1,5	269
Østfold	106	44,0	116	48,1	17	7,1	2	0,8	241
Buskerud	77	32,1	141	58,8	13	5,4	9	3,8	240
Vestfold	61	30,3	128	63,7	9	4,5	3	1,5	201
Sogn og Fjordane	100	56,2	72	40,4	3	1,7	3	1,7	178
Nord-Trøndelag	102	61,1	56	33,5	3	1,8	6	3,6	167
Finnmark	87	55,1	71	44,9					158
Hedmark	59	37,6	88	56,1	2	1,3	8	5,1	157
Aust-Agder	84	54,5	64	41,6	3	1,9	3	1,9	154
Svalbard	27	77,1	7	20,0			1	2,9	35
	19998	55,9	14823	41,4	534	1,5	445	1,2	35800

## **RCN policy instruments – overview of preliminary data**

*The first version of this document was based on available written sources (mainly prior NIFU-studies and the RCN document data base “Doksy”) and the author’s prior knowledge about RCN’s policy instruments.*

*Contact persons in the six RCN divisions have commented on the earlier version of the document. The present document is a revised version including information from these comments and from RCN Annual Reports.*

*Chapter 5 and 6, and Appendix 1 are new and there are additions and revisions throughout the document. Major additions include the introducing text to Sections 3.1 and 3.2, and Tables 1.3, 2.5 Updated, 3.2, 3.3 and 3.13.*

### **Abbreviations used for RCN divisions:**

BF: Bioproduction and processing

IE: Industry and energy

KS: Culture and society

MH: Medicine and health

MU: Environment and development

NT: Science and technology



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# 1 Introduction

## 1.1 Overview of RCN's policy instruments and funding modes

RCN have three main policy instruments ("virkemidler"): Independent projects, research programmes and infrastructure. There are three "official" categories of research programmes: Basic research programmes, Action-oriented programmes and User-controlled programmes. In addition BF have a fourth category which is a combination of the three ("Value chain programmes"). The "Infrastructure" category consists of Basic funding for research institutes, Strategic institutional programmes (SUP and SIP) and Advanced scientific equipment. In addition Centres of excellence are planned within this category from 2001. The table below shows which instruments are used by the various RCN-divisions.

*Table 1.1 Overview of policy instruments, by RCN division 2000*

	BF	IE	KS	MH	MU	NT
<b>Independent projects</b>		x	x	x	x	x
<b>Research programmes</b>						
User-controlled programmes		x		x		
Basic research programmes			x	x	x	x
Action-oriented programmes			x	x	x	
"Value chain programmes" ("Verdikjedeprogram")	x					
<b>Infrastructure</b>						
Basic institute funding	x		x		x	x
Strategic institutional programmes (SUP and SIP)	x		x	x <sup>1</sup>	x	x
Advanced scientific equipment				x		x
Centres of excellence (planned from 2001)						

Sources: RCN web pages 2000 and "Doksy".

Note: According to their budgets some of the RCN divisions also apply policy instruments not checked off here, cf. Appendix 1 to Preliminary report from Egil Kallerud of 02 April 2001.

RCN also have different *funding modes used within the policy instruments*. Table 1.2 gives an overview of such funding modes.

<sup>1</sup> Includes MHs version of SUP, called "Miljøstøtte" (0,8-1 million NOK per year in three years to specially selected research groups at universities) "MH-groups", The Top Research programme and some other special priorities.

Table 1.2 Overview of funding modes, by RCN division

	BF	IE	KS	MH	MU	NT
<b>Project funding</b>	x	x	x	x	x	x
<b>Fellowships</b>						
Student fellowship		(x)	x	x	x	
Doctoral fellowship	x	x	x	x	x	x
Postdocs	x		x	x	x	x
Guest researchers	x		x	x	x	x
Senior fellowship (no webinfo)*	(x)		(x)	(x)	(x)	(x)
Stay abroad	x		x	x	x	x
Other fellowships (bilateral agreements etc)	(x)		(x)	x	(x)	x
<b>Other funding modes</b>						
Seminars/conferences	(x)	(x)	x	(x)	(x)	x
International R&D cooperation (not in "kodeplan")	x	x	x	x	x	x
Funding for information or publishing	(x)	(x)	x	(x)	(x)	(x)
Research training courses (not in "kodeplan")			x		x	

Source: RCN web pages 2000 and "Kodeplan 2001 Norges forskningsråd."

x = use the funding mode according to RCN web pages 2000

(x) = projects/applications registered in this category in the RCN project database (Foriss) within the period 1994-2000.

\*Oral information from RCN-staff says that senior fellowships have low priority or is no longer used. 7 senior fellowships are registered in Foriss as starting up in 2001.

Table 1.3 Number of funded RCN projects, by funding mode and RCN division. Total for 1994-2000

	BF	IE	KS	MH	MU	NT	Sum
<b>Project funding</b>	<b>1652</b>	<b>2763</b>	<b>1462</b>	<b>1026</b>	<b>1197</b>	<b>1119</b>	<b>9219</b>
<b>Fellowships</b>	<b>448</b>	<b>53</b>	<b>1158</b>	<b>1101</b>	<b>332</b>	<b>1101</b>	<b>4192</b>
Student fellowship		1	191	123	16		
Doctoral fellowship	223	32	462	534	201	492	
Postdocs	11		30	162	51	194	
Guest researchers	13		21	24	13	85	
Senior fellowship	5		6	4	1	21	
Stay abroad	102		125	107	10	140	
Other fellowships (bilateral agreements etc)	2		61	19	4	5	
<b>Other funding modes</b>	<b>211</b>	<b>153</b>	<b>689</b>	<b>44</b>	<b>187</b>	<b>127</b>	<b>1411</b>
Seminars/conferences	12	1	127	8	33	35	
Funding for information or publishing	7	5	104	7	20	2	
<b>Sum</b>	<b>2311</b>	<b>2969</b>	<b>3309</b>	<b>2171</b>	<b>1716</b>	<b>2347</b>	<b>14823</b>

Source: Foriss. Internal RCN projects are excluded, i.e. projects with an internal RCN "contractor".

Note: 14.823 funded projects are registered as either project funding, fellowships or "other indirectly R&D related projects" in Foriss. As illustrated in Table 1.3, a substantial amount of these projects are registered without information about the kind of fellowship/other funding mode that are used. The table has not been commented by RCN. A table with comments regarding the reservations and sources of error will be given in another document (funding statistics based on Foriss). For instance, it seems that the projects of several IE-programmes are not registered in Foriss.

## 1.2 Response to applicants

The RCN standard for feedback to applicants is stated in Doksy as follows (“Doksy” 3-6-1-2 and 3-12-3 “Standard brevmaler FoU”):

- Rejections of applications *not fulfilling formal demands* (administrative rejection, application will not be reviewed): the application is returned to applicant with a letter describing the reasons why it can not be reviewed/what must be changed before review. Examples: RCN has no call for the kind of funding applied for/applicant does not have the formal competence requested for funding/the project has no or incorrect institutional affiliation/missing CV or publication list/missing or insufficient project description.
- Rejection of applications that are reviewed and assessed as *fundable*: The application is assessed as good, but was not ranked high enough in the competition for available funds. More details on the review may be given orally by [name of RCN staff].
- Rejection of applications that are reviewed and assessed as *non-fundable*: The letter shall summarise the main points of the reviews and aim at helping the applicant to better success if s/he applies again. This may be done either by: Alternative A: specifying and describing the criteria on which the application failed (e.g. problem formulation/originality/methods/theory/foundation in prior research/applicants scientific qualifications). Alternative B: Statement from panel or mail reviewers enclosed the letter.

Within this standard, the RCN-divisions have different rules for whether applicants are given access to the review documents or not. NT, MU and MH give some access, whereas KS only give written reviews to those assessed as “non fundable” (see table 2.1).

## 2 Independent projects/responsive mode funding

### 2.1 Funding modes

RCN's "independent projects" is a heterogeneous category. It includes all research projects not attached to any programme or infrastructure funding. According to RCN terminology it may be researcher initiated or user initiated and include various funding modes: project funding and fellowships for doctoral students, postdocs, guest researchers and stay abroad are the most central ones.

Within KS, MH, MU and NT *independent researcher initiated projects* has always been a central policy instrument. Within BF and IE the picture is somewhat more diffuse. IE has in some periods had separate review of proposals that do not fit within any of the IE research programmes. If we define independent projects/responsive mode funding as researcher initiated basic research not restricted by programme definitions, IE does not apply this policy instrument. BF has gradually organised more and more applications under programme committees, and has reduced the budget for independent projects from 108 mill NOK in 1994 to 1,8 mill NOK in 2001 (according to its information to applicants BF does not apply this policy instrument).

### 2.2 Organisation, processes and criteria

Today's models for reviewing proposals for independent projects within RCN are partly adopted from the old councils, partly results of reforms after the merger. In short, the models of the four divisions where independent researcher initiated projects is a central policy instrument, look like this:

- *Medicine and Health Division:* There are 4 medium sized peer panels (10 members) that review applications in their area. There is no mail review. Each of the panel members marks all applications on a fine graded scale (1.0-4.0) and tables of these individual marks and average marks are set up before the panel meetings. Panel decisions are based on average marks, discussion and the chairman's discretion or majority rule<sup>2</sup>.
- *Culture and Society Division:* There are 15 small discipline-based peer panels (3-5 members) that review applications, usually without any prior mail reviews. A review of each application, with marks on a 4-graded scale, is written by one of the panel members before the panel meeting. Panel decisions are based on discussion, negotiation and/or majority rule. (The model has recently been changed. From 2001

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<sup>2</sup> Various decision procedures possible.

there will be 3 multi-disciplinary panels and in addition mail reviews on all applications.)

- *Science and Technology Division:* There are two-three mail reviews per application. A 5-graded scale is used and there are extensive guidelines for reviewers. The administrative staff ranks the applications based on the mail review reports and a list of priority criteria.<sup>3</sup> An advisory panel comments on the ranking and may suggest changes in the ranking, before the administration makes its recommendations to the Division Board.
- *Environment and Development Division:* There is one medium sized peer panel (9 members) with members from a broad scale of disciplines, that review all applications with the help of normally two mail reviews per application<sup>4</sup>. A 5-graded scale is used and there are extensive guidelines for reviewers. The responsibility for each application is divided between the panel members, who also present their assessments. Panel decisions are based on discussion, negotiation and/or majority rule.

The relative weight of the various funding modes (regular project grants and the different kinds of fellowships), the ratio between applications and funded projects, appointment rules and mandates of panels, and the formal written criteria for review vary between the divisions. In all divisions the Division Board allocates between the panels and makes the final funding decisions. In reality these boards do not alter the outcome, but may influence the assessments by setting criteria and guidelines. There is one proposal submission deadline each year, so that all proposals in a field are reviewed simultaneously. The exception is the Science & Technology Division, which accepts proposals twice a year for some of the funding modes. Overviews of differences between the divisions are given in tables 2.1 – 2.5.

Compared to the models of the grant review processes within the previous Norwegian basic research council (NAVF, the Norwegian Research Council for Science and the Humanities), the procedures within the Science and Technology Division are the most striking innovation with its administrative ranking of proposals. There were substantial changes in the review processes at NAVF from its start in 1949 to its end in 1993. These changes are characterised by increase in formalisation of procedures and rating scales, increased specialisation, more explicit rules for handling conflicts of interests and more preparation by administrative staff.

Initially (before 1970), the members of the NAVF council formed five groups (language and history; social science; psychology, youth- and education research; natural science; medicine). Each group had an executive committee with responsibility for preparative review of proposals. In some cases also ad hoc panels were formed to review proposals. In

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<sup>3</sup> Mostly related to doctoral and postdoctoral fellowships: age, institutional and national affiliation, prior grants and exams/marks, etc. cf. <http://www.forskningssradet.no/fag/nt/prioriteringskriterier.html>.

<sup>4</sup> Until 2000 there were one mail review per application.

this way, all proposals were discussed at several levels with overlapping membership: firstly the executive committee of the group (which might have been helped by ad hoc panels that partly consisted of council members), secondly the group, thirdly the board (consisting of the chairs of each group, and the president and the vice president of the council) and lastly in plenary council meetings.

At the time of the RCN merger in 1993, NAVF had four councils, each with a number of separate review panels (of 3-8 members). The panels had tentative budgets, though final priorities of proposals were set by the separate councils. Review models varied between the councils. Mail review reports were for instance obligatory in the humanities, but unusual in the social sciences. In medical science, all panel members rated all proposals (as they still do). In the other councils, only one panel member rated each proposal in advance of the panel meetings.

**Table 2.1** *RCN review panels and review procedures, independent projects.*

<b>Division</b>	<b>Review panel</b>	<b>Mail reviews</b>	<b>Grading procedure</b>	<b>Ranking decisions</b>	<b>Response to applicants<sup>#</sup></b>
<b>MH</b>	4 panels of 10 members (A separate panel reviews small fellowship applications twice a year <sup>5</sup> )	Mail reviews only in special cases.	All panel members mark all proposals in advance of meeting	Panel discussions, average marks/the point of view of the chair.	Review committees use a separate form for response to applicants (from 2000).
<b>KS</b>	15 panels of 3-5 members (3 panels of 5-9 members from 2001)	Seldom mail reviews (2 per application from 2001)	Only one panel member mark each proposal	Panel discussions, negotiations or majority rule	*The review panel's assessments are enclosed rejections assessed as "non-fundable". Other applicants may get information orally (see RCN standard below).
<b>NT</b>	No review panels (but a pool of about 400 reviewers). An advisory committee that is not involved in assessing and grading applications <sup>6</sup> .	2 or 3 mail reviews per applications	2 or 3 mail reviewers grade each application. 3 reviewers are standard on postdoc applications. For other kinds of applications a 3 <sup>rd</sup> reviewer is consulted in cases of large differences in grading by the two first.	Administrative staff ranks applications based on mail review.	Anonymous reviews are enclosed all rejections (from 1999). From 2000 anonymous reviews are also enclosed grants.
<b>MU</b>	*1 crossdisciplinary panel with 10 members	*2 mail reviews per applications	Only one panel member mark each proposal before the meeting.	Panel discussions, negotiations or majority rule	*Anonymous reviews on request, and enclosed all rejections (from 1999).

Sources: NIFU-report 12/98<sup>7</sup> and RCN internal documents. \*Oral information from KS-staff.

<sup>#</sup>The divisions practices regarding response to applicants are normally the same for applications for programme projects and for independent projects.

Note: In BF and IE there are no review panels or mail review for independent projects. Applications that do not fit any programme are handled by administrative staff.

<sup>5</sup> The kind of fellowships reviewed by this panel are student fellowships, guest researchers and stay abroad. The panel has six members. Four of these are the chairs of the four review panels.

<sup>6</sup> Earlier committees commented on RCN staff ranking without seeing applications or reviews. Now applications and reviews are available during the committee meeting. The present committee (SUNT, in operation from 1998) has 9 members supposed to cover all NT disciplines. There was an internal evaluation of the NT review system for independent projects in 1998/99, including an applicant survey.

<sup>7</sup> Liv Langfeldt: "Fagfellelvurdering som forskningspolitisk virkemiddel. En studie av fordelingen av frie midler i Norges forskningsråd". NIFU Report 12/98.



**Table 2.2**      *Review guidelines, criteria and grading scales for independent projects*

Division	Guidelines to	Review criteria	Grading scale	Minimum demand for funding
<b>MH</b>	Panel members	15 specified criteria. One grade (total).	Fine-graded scale: 1.0-4.0	No formal rule. Practice is no funding below "2.5".
<b>KS</b>	Panel members	16 specified criteria. One grade (total).	4-graded scale (non-num). (5-graded scale from 2001)	Best grade: "clearly fundable"
<b>NT</b>	Mail reviewers	Separate grades on 4 specified criteria.	5-graded scale (1-5).	"2"
<b>MU</b>	Mail reviewers	Separate grades on 10 specified criteria	5-graded scale (1-5).	"2"

Sources: NIFU-report 12/98 and RCN internal documents (Doksy). Doksy contains review forms/criteria only for MU. "Review criteria" in MH and KS are based on data from 1997 (NIFU-report 12/98).<sup>8</sup>

- <sup>8</sup> NT's review criteria are specified as follows in the division's guide for referees: "1.a) *Project manager*: What has been the contribution of the project manager to his or her area of research the last years? Does the project manager have sufficient knowledge, experience and drive to contribute significantly to this field? Has the group where the project manager works the necessary resources to carry the project through? The ability and resources of the project manager may be compared to other recognised research groups in the field. For applications for doctoral grants, the ability of the project manager as a thesis adviser should also be mentioned. 1.b) Should only be filled out if there are named candidates for fellowships. *Candidates for fellowship*: Comment on the strong and weak points of the candidate. For fellowships grant applicant, previous academic career, grades and research experience may be relevant. For guest scientists, their know-how bearing on the project should be appraised. 2 *Scientific quality and importance*: Does the application state well-defined goals, is it clear on the methods and theory to be used, does it have some originality and can the project be done in the stated time-span? Is it probable that the project will lead to new knowledge or significant progress in the field? Is research in this area important for the development of the field (the area of research in question may no longer be of importance or, at the other end of the scale, be new and rapidly expanding)? 3. *Usefulness and contribution to the research community*: Will the project recruit researchers, in terms of Ph.D.s, postdoctors or in other ways strengthen research in Norway? Can the project have bearing outside its field, on development of new technology or to solution of problems of national (Norwegian) importance? If the project succeeds, could it be of importance to industrial needs after some time? What is the minimum support necessary to start the project or part of the project? Indicate which parts of the project you would support if it gets a reduced grant?"

MU's review criteria: "1. *Scientific importance*: Will the project help to establish new knowledge or make substantial progress within the field, thus significantly furthering the subject? Does this research lie at the forefront of international research? Does the application concern objectives and problems that have been well studied previously? Does the project description state that the project will help to establish knowledge that, in the short or long term, will be of great importance for developing new methods or techniques? 2. *Objectives and problems*: Are the objectives precisely formulated and measurable? Can the problems be solved? Can the hypotheses be tested? Will the applicant attain his/her objectives by solving the problems stated? 3. *Methodology and theoretical approach, proposed manner of solving the problems, data analysis*: Is the choice of methodology good, or do other methods exist that could have been better? Is the proposed manner of solving the problems good, or could the experimental design have been changed to enable the problems concerned to be solved in a better way? Does the applicant state how he/she has envisaged analysing the resulting data? Are these analyses adequate for obtaining sufficient information from the material? 4. *Literature/references*: Has the applicant cited relevant references? Are important references omitted? 5. *Feasibility*: Is the project feasible a) based on a scientific evaluation b) within the stated budget c) within the period planned? 6. *Contribution to development of discipline and research group(s)*: Will the project further the recruitment of researchers in the form of doctoral or postdoctoral candidates, or in some other way strengthen the national infrastructure for research? To what extent can it be expected that this research will be of significance for work outside the specific research field, for example by helping to develop new technology or know-how that may help to solve important problems in society? 7. *International co-operation in the project*: Will the project contribute to an internationalisation of Norwegian research in the field, and how? Will the choice of international co-operating partners help to enhance the feasibility of the project? 8. *Ability of the project manager/supervisor*: What contribution has the project manager made to this field of research in recent years? Has the project manager the necessary knowledge, experience or potential to be able to contribute significantly to this research? You may draw comparison between the qualifications of the project manager and those of other recognised research groups in the field. In the case of applications for doctoral scholarships, the ability of the project manager as a

## 2.3 Actors and resources in operating the policy instrument

Table 2.3 Appointment of review panels/advising committees for independent projects

Division	Who proposes members	Period of appointment	Criteria for selecting members	Partly or full change of members	Formal appointment
MH	RCN staff. *Some central research institutions.	3 years	Cover the research fields. Gender, geography. *Research competence/preferably professors.	Partly change (time overlap between new and old members)	Division board
KS	National organisations and area meetings. Some research institutions.	3 years	Cover the research fields. Legitimacy in the research community.	*Reappointment of some members to secure some continuity.	Division board (also appoints chair)
NT	*RCN staff with some external consultations.	*3 years	*Cover the research fields. Gender, geography.	*Reappointment possible.	Division board
MU	*RCN staff	*3 years	*Cover the research fields. Gender, geography.	*Reappointment of some members to secure some continuity.	Division board

Sources: RCN internal documents (Doksy) and NIFU-report 12/98. \*Oral information from RCN-staff.

Note: In BF and IE there are no review panels or advising committees for independent projects.

Table 2.4 Selection of mail reviewers for independent projects

Division	Who proposes reviewers?	Formal authority to select reviewers	Established pool of mail reviewers?
MH	*RCN-staff and chair of review panel	*No formal rule.	No, but a register of consulted reviewers
KS	*RCN-staff and chair of review panel (RCN staff from 2001)	*No formal rule, in practice chair of review panel. (RCN staff from 2001)	No  (Being established for 2001)
NT	RCN staff <sup>9</sup>	RCN staff	Yes
MU	RCN staff	RCN staff	*Being established for 2001

Sources: RCN internal documents (Doksy) and NIFU-report 12/98. \*Oral information from RCN-staff.

supervisor should also be commented on. 9. *Ability of the institution/research group*: Does the project manager's research group have the required expertise to carry out the project? Does the project manager have access to the infrastructure needed to use the methods stated? 10. *Scholarship candidate*: Assess the candidate's strong/weak points that are of significance for implementing the project. Candidates for doctorates may, for example, be assessed relative to earlier study progression, marks, research experience, and so on. Visiting researchers should be appraised relative to the scientific and technical expertise they can infuse in the project.” (These are the criteria for *all* mail reviewers, also within programmes (Doksy 5.12.1 MU). The list has been in use since 1998. In 1997 there were 3 criteria.

<sup>9</sup> The reviewers are mostly selected from a panel of about 400 members, who have been appointed for a 5 year period. All universities and colleges in Norway and the RCN staff have suggested members to this panel. The appointments to the panel have been discussed and approved by the advisory committee. *Ad hoc* reviewers are used if necessary. The applicant may suggest *ad hoc* reviewers.

**Table 2.5** *Panel members' sector affiliation, number of members 1996<sup>10</sup>*

Division	UiO	UiB	NTNU	UiTø	Colleges	Institutes/hospitals	Other	Sum
KS	21	10	8	11	9	2	1	62
MH	15	9	6	7	0	2	1	40
MU	1	2	1	1	1 (NLH*)	2	1	9
Sum	37	21	15	19	10	6	3	111

Source: NIFU Report 12/98.

Note: NT had three advisory committees that are not included in the table. The committees consisted of both users and researchers.

\*NLH = The Agriculture University.

**Table 2.5 Updated** *Panel members' sector affiliation, number of members 2000*

Division	UiO	UiB	NTNU	UiTø	Colleges	Institutes/hospitals	Other	Sum
KS*	8	4	4	3	2	1	0	22
MH	11	7	7	6	0	8	1	40
NT	1	1	2	1	1	2	1	9
MU	3	2	1	1	1 (NLH)	1	1	10
Sum	23	16	16	11	4	12	3	81

Source: The RCN web sites and internal documents (MU).

\*The panels appointed from 2001.

10 Based on RCN's lists of Committee members. If affiliation to more than one institution is listed for a member, only the university affiliation is counted (both for 1996 and 2000).

## 3 Research programmes

### 3.1 Funding modes

The RCN policy for research programmes is stated in “Policy for forskningsprogrammer” 30.05.96 (Doksy document 2-5-1, here in Appendix 1):

*“The research programme is a central policy instrument of RCN. Policy and guiding principles shall be common for all RCN programmes:*

*A research programme is a strategic, purpose-built, co-ordinated and time limited research effort to provide new knowledge or competence within a defined field, topic or branch. A programme committee appointed by the Division Board is responsible for the execution of the programme within fixed economic and scholarly (“faglig”) frameworks.*

*The research shall be based on specific programme plans and carried out within a number of projects that shall all contribute to the objective of the programme. A programme’s portfolio of projects may be based on review of quality and relevance of received applications and/or on the programme committee’s project initiatives” (author’s translation).*

RCN have three kinds of research programmes:

- *Basic research programmes* are network programmes established to produce knowledge or competence within prioritised fields.
- *Action oriented* (“handlingsrettet”) *programmes* are primarily geared towards the public sector or organisations, and shall make contributions to the enhancement of the knowledge base for societal planning on various levels of government (forvaltningsnivå), for the development of public sectors and for political decisions.
- *User controlled* (“brukerstyrte”) *programmes* are geared towards industry (næringslivet), in which users and researchers collaborate, and in which users contribute to the financing of projects.

In addition BF have a forth category which is a combination of the three (“Value chain programmes”). In practice programmes within other RCN-divisions may also combine the categories.

The normal program period is 4 to 6 year, and the normal annual budget for a programme varies between 5 and 70 mill. NOK (Doksy-document 2-5-1).

In the annual report from RCN, *the total number of programmes* is reported to be 112 in 1996 and 1997, 105 in 1998, 102 in 1999 and 96 in 2000. As the number of programmes has been reduced, the programme size has increased. Average programme size was 12,6 mill. NOK in 1997 and 15,8 mill. NOK in 2000 (RCN Annual reports for 1999 and 2000, Part I). See also Table 3.13 on programme size.

**Table 3.1** *RCN programmes categories 1996. Number of programmes by RCN division.*

	Basic research - programmes	Action-oriented programmes	User-controlled programmes	Combi- nation**	Other	Total
BF	1	6	2	8		17
IE		*1	16	*1	*1	19
KS	7	13		2	1	23
MH	2	10	1	1		14
MU	3	19	2		1	25
NT	6	*1	*1			8
Total	19	50	22	12	3	106

Source: Table 5, NIFU Skriftserie 5/98 (Programme survey).<sup>11</sup>

\*\* The "Combination" category is used in cases where to or all the categories (basic research - programmes; action-oriented programmes; user-controlled programmes) on the questionnaire are checked off by the RCN programme contact. "Other" is used in cases where none of the three categories are checked off by the RCN programme contact. *In the following tables split by programme type, "Combination" and "Other" are not included.*

\* IE comment that *all* their programmes should be categorised as user-controlled and NT that *all* their research programmes should be categorised as basic research. In Foriss all NT programme projects are categorised under basic research programmes and there are no projects categorised under action-oriented programmes within IE. The NT-programme that was defined as user-controlled by the RCN programme contact in 1996, was a mobility programme and not a research programme. The NT programme that was defined as action-oriented deals with drinking water research and has a somewhat different profile than other NT research programmes. See Table 3.2 for updated information on programme categories.

**Table 3.2** *RCN programme categories in RCN annual report 1999. Number of programmes by RCN division.*

	Basic research - programmes	Action-oriented programmes	User-controlled programmes	Total
BF				15*
IE	0	0	20	20
KS				25**
MH	1	11	1	13
MU	2	15		17
NT	10	0	0	10
Total	13***	26***	21***	100

Source: RCN Annual Report for 1999, Part III.

\* All BF programmes are "value chain programmes".

\*\* The annual report from KS does not categorise programmes/use several categories on single programmes.

\*\*\* Not including BF and KS programmes.

Table 3.3 shows financing of RCN programmes in 1999 by number of ministries contributing. In addition, the aims for 1999 and for 2000 are given. 11 programmes received appropriations from 4-7 ministries in 1999.

<sup>11</sup> Anna Hagen & Elin Sjønnesen: "Organisering av forskningsprogrammer i Norges forskningsråd. En kartlegging av trekk ved formell struktur og beslutningsprosesser i programmene" NIFU skriftserie 5/98.

**Table 3.3** *Number of RCN research programmes by number of ministries giving appropriations.*

Number of ministries contributing	Number of programmes		
	Plans for 1999	Obtained in 1999	Plans for 2000
4-7	8	11	10
2-3	49	49	41
1	43	42	41
0*	2	0	1
Sum programmes	102	102	93

Source: RCN Annual Report for 1999 (Part I, Table 5.1). The corresponding information is not given in the Annual Report for 2000. If we try to read the numbers "Obtained in 2000" out of the RCN Budget for 2000, we end up with 9 programmes with appropriations form 4-7 ministries, 37 programmes with appropriations form 2-3 ministries, and 55 programmes with appropriations form 1 ministry. It should be noted that what count as a programme may differ between the Budget-data and the data used for producing the table in the Annual Report, and the numbers may not be comparable.

\*Programmes financed without contribution from any ministry.

## 3.2 Organisation, processes and criteria

It should be noted that tables 3.4 to 3.8 of this section contains "historic" data. There might have been substantial changes in the operation of research programmes since 1996, but updated information has not been available, except for the divisions' comments on the tables:

- NT comments that their research programmes are all based on open calls and that programme committees only by exception initiate projects.
- Since 1997 there is no longer a two-stage-review of applications to MH programmes (cf. note to Table 3.8). MH has reduced the number of programmes to 9 from 2001. Their aim is to increase programme size and reduce administrative costs.
- IE comments that they will have a new programme structure from 2002. The programme portfolio will be reduced to 9 programmes with a programme period of 8 years. Members of the programme committees will be appointed for 4 years.
- BF now has 8 broad programmes, that go for 5 years. They all start and end at the same time. Their activity plans ("programmenes handlingsplaner") are updated each year. The structure is said to give flexibility in budget allocations and choice of topics.

**Table 3.4** *RCN programme periods. Number of years. Programme portfolio 1996.*

	Mean	Longest	Shortest	N
BF	5,2	8	3	17
IE	4,6	8	3	19
KS	6,9	12	3	23
MH	5,1	10	3	14
MU	5,2	9	3	25
NT	5,4	8	4	8
Total	5,4	12	3	106

Source: Data from Programme survey 1996.

Note: KS comments that average and maximum given here probably are too high (both in 1996 and now).

**Table 3.5** *Programmes where open call dominates project initiation. Percent of programme portfolio 1996, by RCN division and programme type. N = 90.*

	Basic research - programmes	Action-oriented programmes	User-controlled programmes
BF	100*	100	100
IE	—	100*	63
KS	43	0	—
MH	100	90	100*
MU	100	61	0
NT	83	100*	100*
Total	74	57	64

Source: Data from Programme survey 1996.

\* Percent based on the one programme within the category.

The categories in the questionnaire were open call, tender and direct commission. 67 of the 105 programmes from which data were obtained answered open call. 8 percent answered tender, 8 percent answered direct commission, 9 percent answered various combinations of the given alternatives, and 11 percent answered other ways of project initiation.

Note: KS comments that open call probably dominates more than 43 percent of the basic research programmes (both in 1996 and now).

**Table 3.6** *To what degree does the programme committee initiate concrete projects (towards research groups)? Percent of programme portfolio 1996, by RCN division and programme type. N = 87.*

	Basic research - programmes			Action-oriented programmes			User-controlled programmes		
	Never	In some cases	Often/ always	Never	In some cases	Often/ always	Never	In some cases	Often/ always
BF	100*	0	0	0	80	20	50	50	0
IE	—	—	—	0	100*	0	31	56	13
KS	0	83	17	0	69	31	—	—	—
MH	0	100	0	0	100	0	0	100*	0
MU	0	100	0	6	82	12	0	100	0
NT	17	83	0	100*	0	0	0	100*	0
Total	11	83	6	4	81	15	27	64	9

Source: Data from Programme survey 1996.

\* Percent based on the one programme within the category.

**Table 3.7** *Programme committee's dialogue with potential grantees on project drafts in advance of application review. Percent of programme portfolio 1996, by RCN division and programme type. N = 86.*

	Basic research - programmes			Action-oriented programmes			User-controlled programmes		
	Never	In some cases	Often/always	Never	In some cases	Often/always	Never	In some cases	Often/always
BF	100*	0	0	0	80	20	0	100*	0
IE	—	—	—	0	0	100*	36	63	0
KS	0	67	33	0	54	46	—	—	—
MH	0	100	0	0	70	30	0	100*	0
MU	33	67	0	18	65	18	0	50	50
NT	0	100	0	0	100*	0	0	100*	0
Total	11	78	11	6	64	30	29	67	5

Source: Data from Programme survey 1996.

\* Percent based on the one programme within the category.

**Table 3.8** *Use of mail reviewers. Percent of programme portfolio 1996, by RCN division and programme type. N = 88.*

	Basic research - programmes			Action-oriented programmes			User-controlled programmes		
	Never	In some cases	Often/always	Never	In some cases	Often/always	Never	In some cases	Often/always
BF	0	0	100*	0	67	33	0	100	0
IE	—	—	—	0	100*	0	25	25	50
KS	0	83	17	31	69	0	—	—	—
MH**	0	0	100	0	0	100	0	0	100*
MU	0	50	50	28	56	17	0	100	0
NT	17	33	50	0	100*	0	100*	0	0
Total	6	47	47	18	51	31	23	36	41

Source: Data from Programme survey 1996.

\* Percent based on the one programme within the category.

\*\*In 1996 all MH programme proposals were sent to quality assessment in one of the four panels for independent projects before the programme relevance assessments and funding decisions were made by the programme committee. When filling in the survey the programmes' RCN contact has interpreted the first stage of this 2 stage review process as "external review", which in this table's heading is somewhat confusingly labelled "mail review". The 2 stage procedure is no longer used. The *present* review practice of MH includes mail review "in some cases".



**Table 3.9** *Review, criteria and grading, RCN research programmes.*

<b>Division</b>	<b>Mail reviews</b>	<b>Grading/ranking procedure</b>	<b>Review criteria</b>	<b>Grading scale</b>
<b>BF</b>	*Used for all researcher controlled and some of the user-controlled projects. Reviews are sent to the programme committee together with the recommendation for funding.	Recommendations for funding are made by programme co-ordinator/ RCN staff in advance of meeting.  Members of the programme committee are not allowed to assess proposals (i.e. to write the reviews).	Programme relevance; relevance for user groups; ethics and environmental effects; scientific originality; methods and theory; data-analysis; literature references; plans for co-operation and communication of results. If user controlled project also: environmental and economic value; chance of successful commercialisation; patent situation/competition/market potential.	*5-graded scale: 1: Outstanding 2: Very good 3: Good 4: Inferior 5: Poor
<b>IE</b>	Each proposal is assessed by "at least two persons". *These are normally RCN-staff.	Recommendation for funding are made by RCN staff/programme co-ordinator in advance of meeting. Some programmes have a separate research panel ("fagutvalg") that contributes with assessments. Members of the programme committee do not assess proposals.	10 aspects: general project quality; degree of innovation; research content; international orientation; practical economic value; societal economic value; risks; other concerns; additionality; programme relevance. In addition total assessment.	1-7 (7 best).  Grades on 8 separate aspects in addition to total grade.
<b>MH</b>	Used if conflict of interests or lack of competence. Proposals may also be reviewed by one of the panels for independent projects.	All committee members mark all proposals in advance of meeting. Ranking/recommendations for funding are made by the programme committee.	Research quality and programme relevance.  *The same research quality criteria as for independent projects.	Research quality: 1.0-4.0 (1 best)  Programme relevance: A-D
<b>KS</b>	Programme committees are encouraged to consult external reviewers/-members of the panels for independent projects.	*Ranking/recommendations for funding are made by programme co-ordinator before the meeting or by the programme committee in the meeting.	Programme relevance; PI's competence; group/institutional competence; project description: objectives, research questions, theory, methods, data, relation to the research area nationally/internationally, expected importance and originality, research ethics, plans for communication of results, budget and progress plans.	4-graded scale: Clearly fundable Fundable Low fundability Not fundable  Only total grade.
<b>NT</b>	For most of the proposals. Pool of 400 referees of which about 220 are non-Norwegian (This pool is also used for independent projects and SUP)	*Programme co-ordinator summarises the applications and the review reports. Programme committee ranks the applications.	*Programme relevance and scientific quality. The guidelines for the external reviewers are the same as for independent projects. The programme committee evaluates the relevance.	5-graded scale on scientific quality: 1: Excellent 2: Very good 3: Good 4: Fair 5: Poor
<b>MU</b>	*Each proposal is assessed by at least two mail reviewers.	Assessments are done by the members of the programme committee, by mail reviewers, or a combination of these alternatives. Ranking/recommendations for funding are made by programme co-ordinator before the meeting or by the programme committee in the meeting.	Separate grades on 10 specified criteria. These are the same as for independent projects (see note to table 2.2).	5-graded scale: 1: Outstanding 2: Very good 3: Good 4: Inferior 5: Poor

Sources: RCN internal documents (Doksy and Programme Review 1999, see Section 5.2).

\*Oral information from RCN staff.

### 3.3 Actors and resources in operating the policy instrument

Programme committees are appointed by the division boards. According to Doksy-documents the committees should not have more than 7 members, consist of researchers and user representatives within the programme area, and at least 40 percent of each gender (Doksy 2-5-1, see Appendix 1).

**Table 3.10** *Appointment of programme committees*

Division	Who proposes members	Period of appointment	Criteria for selecting members	Formal appointment
<b>BF</b>	*RCN-staff	*5 years	*Competence (members from the research sector must have a doctoral degree), user/branch representation, gender, avoid conflict of interests, geography, broad institutional representation.	Division board
<b>IE</b>	*RCN-staff, possibly with some external consultations.	*Normally 3 years (may vary between programmes). *4 years from 2002.	*Researchers: Research competence, engagement in research policy, gender, avoid conflicts of interests. *Users: strategic important/leading position.	Division board
<b>MH</b>	RCN staff *Some central research institutions	2 years (may be prolonged to end of programme period)	Research competence, engagement in research policy, gender, avoid conflicts of interests, (avoid persons with leading positions at Norwegian research institutions), geography, broad institutional representation, more than 7 members if needed.	Division board
<b>KS</b>	*RCN-staff, possibly with some external consultations.	*3 years	*Same as for MH.	Division board
<b>NT</b>	*RCN-staff, possibly with some external consultations.	*Normally 3 years	*Research competence, gender, geography, institutional affiliation.	Division board
<b>MU</b>	*RCN staff	*Normally 3 years (may be prolonged to end of programme period).	*Same as for MH.	Division board

Sources: RCN internal documents (Doksy). \*Oral information from RCN-staff.

**Table 3.11** *Programme committees' size, average for each division, 1996\*, N = 102. Percent of researchers in programme committees 1996\*, by RCN division and programme type, N = 88.*

	Number of members: mean (minimum and maximum)	Percent of researchers in programme committees.		
		Basic research programmes	Action-oriented programmes	User-controlled programmes
BF	7,9 (5-10)	63	46	39
IE	7,9 (5-10)	–	–	27
KS	7,3 (4-10)	89	45	–
MH	7,1 (5-11)	85	61	43
MU	7,4 (4-11)	75	57	14
NT	7,3 (6-8)	73	50	–
<b>Total</b>	<b>7,5 (4-11)</b>	<b>80</b>	<b>53</b>	<b>27</b>

Source: Data from Programme survey 1996.

Note: The remaining part of the committee members are user representatives: 20 percent in basic research programmes, 46 in action-oriented programmes and 76 in user-controlled programmes.

\*Updated data would probably show substantial changes, as most divisions have reorganised their programme structure since 1996 (such has not been available). An updating of the MH figures for instance, may show a higher percentage of researchers in programme committees – a result of the new MH review model (one stage in stead of two stage review), broader programmes and larger programme committees.

**Table 3.12** *Programme secretariat internal or external to RCN? Percent of programme portfolio 1996, by RCN division and programme type. N = 90.*

	Basic research programmes			Action-oriented programmes			User-controlled programmes		
	Internal	External	Partly external	Internal	External	Partly external	Internal	External	Partly external
BF	0	100*	0	0	83	17	50	50	0
IE	–	–	–	0	100*	0	75	19	6
KS	43	0	57	92	8	0	–	–	–
MH	100	0	0	100	0	0	100*	0	0
MU	33	0	67	72	17	11	0	100	0
NT	50	17	33	0	100*	0	100*	0	0
Total	47	11	42	71	22	6	68	27	5

Source: Data from Programme survey 1996.

\*Percent based on the one programme within the category.

**Table 3.13** *Programme size and administrative costs, RCN research programmes 1999. By RCN divisions.*

	BF	IE	KS	MH	MU	NT	Total
Number of programmes	15	20	25	14	11	10	95
Number of programmes with RCN-staff as programme co-ordinator	4	5	15	13	5	4	46
Percent of programmes with RCN-staff as programme co-ordinator	27 %	25 %	60 %	93 %	45 %	40 %	48 %
Programme administrative costs in percent of programme costs ("programbevilgning" 1999)	5,2 %	5,5 %	*7,0 %	3,3 %	4,1 %	4,1 %	5,3 %
Average programme size, mill NOK in 1999 budget.	18	**33	8	7	13	12	15

Source: RNC internal document of 25.10.99 (note to "Direktørmøtet" November 1).

\*KS says that their correct programme administrative costs are 4,7 percent, and not 7.

\*\*Includes only the RCN part of the programme, which in average is 37 percent of the total programme budget.

60 percent of the programmes had RCN-staff as programme co-ordinator in 1997, 56 percent in 1998 and 51 percent in 1999. In 1999 the average administrative costs were 777 000 NOK per programme, which means 4,7 percent of programme costs. In 2000 the average administrative costs were 4,8 percent of programme costs (RCN Annual reports for 1999 and 2000, Part I).

## 4 Infrastructure

### 4.1 Funding modes

Within the infrastructure category there are three main funding modes:

- *Basic funding for research institutes.* These are general appropriations to public sector research institutes. Part of the basic funding may be earmarked strategic institute programmes (“SIP”).
- *Strategic institutional programmes,* which comprise “SUP” for universities and “SIP” for institutes. The institutions apply the RCN for 3-6 year programmes appropriations.
- *Advanced scientific equipment:* funding for instruments/equipment above 0,7 mill NOK.

In addition Centres of excellence are planned within this category from 2001. As this funding mode is not in operation it will not be dealt with here.

### 4.2 Organisation, processes and actors

#### *Basic funding for research institutes*

KS and MU have separate committees for basic institute funding (“Basisbevilgningsutvalg”). BF had a separate committee until 2001. NT have no separate committee for this funding mode. See table 4.1.

The appropriations shall cover:

- Institute initiated research and scientific equipment.
- Network/research cooperation, rise of research competence, including advising and qualification for doctoral degrees.
- Securing the research quality.
- Communication of results/publishing of institute initiated research.

Table 4.1 RCN Committees for basic institute funding

Division	Committee members	Terms of reference/mandate	Review	Institutes receiving basic funding
<b>BF</b> Committee until 2001	7 members of which at least two shall be user representatives (i.e. agriculture practice). The 1997-99 committee includes three members from the research sector.	Review applications for basic institute funding, including "SIP". Advise the Division Board in questions regarding basic institute funding/"SIP".	*RCN staff retrieve reviews from outside the committee and make recommendations for funding in advance of the committee meeting. From 2001 the recommendations go directly to the Division Board.	8
<b>KS</b>	2 separate committees: <i>Social science institutes:</i> 6 members, of whom 4 are from the research sector. <i>Foreign policy institutes:</i> 6 members, of whom 5 are from the research sector.	<i>For both:</i> Review applications for basic institute funding, including "SIP". Advise the Division Board in questions regarding basic institute funding/"SIP".	*Mail reviews on all SIP applications. The committee rank applications and make recommendations to the Division Board.  *There are specific criteria for the allocation of basic funds to the regional institutes.	*16  4
<b>NT</b>	No separate committee for "Grunnbevilgning" (basic funding excluded SIP), but a separate committee for SIP/SUP ("RUSP" see below).	"Grunnbevilgning" handled directly by the Division Board.	3-5 external referees on applications for strategic programmes. RCN staff from NT and IE ranks the applications prior to the meeting in RUSP.	14
<b>MU</b>	*The committee has 7 members, 5 from the research sector and 2 representing the users.	Review applications for basic institute funding, including "SIP". Advise the Division Board in questions regarding basic institute funding/"SIP".	*1 or 2 mail reviews for each SIP.	6

Sources: RCN internal documents (Doksy). The number of institutes receiving basic funding from NT is taken from the RCN Annual Report 1999, part IV.

Note: IE and MH do not apply this policy instrument, cf. table 1.1.

\*Oral information from RCN-staff.

### Strategic institutional programmes

NT has a separate committee for SIP and SUP – The Committee for Strategic Programmes ("RUSP – Rådgivende Utvalg for Strategiske programmer"). The committee has 4 members, of which 3 are from the research sector. Each proposal is sent to 3-5 mail reviewers, mostly non-Norwegians. RCN staff assesses programme relevance and make recommendations for funding. The Committee for Strategic Programmes comment on/modify these recommendations before they are sent to the Division board.

The BF Committee for basic funding also included SUP. From 2001 both SIP and SUP within BF are dealt with without a separate committee.<sup>12</sup>

In KS and MU the responsibilities of the Committees for basic institute funding include SIP (see table 4.1), but *not* SUP. SUP is little used within these two divisions and there are no separate bodies for this instrument.<sup>13</sup>

<sup>12</sup> RCN-staff make recommendations to the Division Board on the basis of mail reviews.

<sup>13</sup> SUP is in some instances (3 for 2001) used within ordinary KS research programmes. The KS Division Board allocate one SUP temporary (to NOSEB). MU has two SUPs, both have been treated individually as special cases by the Division Board.

MH does not fund SIP or SUP, but place “*Miljøstøtte*” – Milieu support – and “*Toppforskning*” – Top research – within this category. “*Miljøstøtte*”<sup>14</sup> consist of 0,8-1 million NOK per year in three years to specially selected research groups at universities. Proposals are reviewed and ranked by an international committee.<sup>15</sup> 11 research groups received MH “*Miljøstøtte*” in 1999 (RCN Annual Report, Part III, 6.1).

*Advanced scientific equipment (NT and MH)*

This is a programme for scientific equipment above 0,7 mill NOK. The research institutions themselves rank their lists of applications. The RCN *Advising Committee for Advanced Scientific Equipment* (called “*Utstyrsutvalget*”) reviews applications and make recommendations within all fields. Institutional size is a central allocation criterion. The committee has 8 members, all researchers. All Norwegian universities, as well as the Agriculture and Veterinary colleges are represented. Formal funding decisions are made by the NT Division Board. The first programme period was from 1996 to 2000. 317 mill. NOK has been distributed. The programme has recently been evaluated (Helge Godø: “Er utstyret i orden? En evaluering av Norges forskningsråds satsing på avansert vitenskapelig utstyr” NIFU Skriftserie 4/2001).<sup>16</sup>

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<sup>14</sup> Also MU used this funding mode until 1999.

<sup>15</sup> Members are appointed ad hoc, according to applications. Each member is preferably appointed more than one year. In 2000 a committee of 11 members reviewed “*Miljøstøtte*” applications as well as the applications for “*MH-groups*” and for a special cancer research priority

<sup>16</sup> Apart from the programme sketched here, MU in 2000 received 2 mill NOK for scientific equipment from the Research Foundation. The money was allocated by one of the MU research programmes.

## 5 Note on information available on RCN policy instruments

### 5.1 Public information

#### *Information to applicants*

Each year RCN publishes an extensive brochure with information to applicants. This contains overview of RCN's organisation, overview and descriptions of policy instruments and funding modes, general guidelines for applications, formal demands to applications and applicants, and information about the review process. In addition each division has a separate chapter in which the central information is overview of their programmes, funding modes and their contact persons ("Forskningsmidler 2002" is the latest edition).

The section about the review process says:

- RCN decides which area shall review the application.
- The applicant will as soon as possible receive a note with information on expected review time, which RCN division will review the application and the name of a RCN contact person.
- Each proposal is thoroughly reviewed.
- Review is normally done by a programme committee or a subject panel ("fagkomité")<sup>17</sup>, which consists of researchers and users within the area. Many applications are also reviewed by external experts.
- Funding decisions are made by a programme committee or by the Division Board.
- What kind of response is given to different kind of applications:
  - Funded projects: standard letter and contract.
  - Positively assessed applications that are not ranked high enough in the competition for funds: standard letter and on demand an oral explanation.
  - Applications that are assessed as non-fundable and rejected: a letter explaining the main points in the reviews/assessments.

In addition to this extensive brochure there is a brief document called "Guidelines for completing application form" which is also available in English. In these guidelines there is a paragraph giving the impression that most of the applications are reviewed by mail reviewers of whom the applicant may propose some:

*"Most of the Research Council's divisions wish to be able to consult referees proposed by applicants in addition to their own appointed experts when handling applications. It is essential that the referees are not disqualified by their relationship to the applicant/application. Please list the names, titles and addresses of three persons with a thorough knowledge of the applicant's research field who may be consulted as referees" (Guidelines for completing application form, 2002).*

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<sup>17</sup> Called "review panel" in Chapter 2 of this document.

### *RCN's web sites*

Most RCN-programmes have their own web site with information on the programme's priorities and list of the members of the programme committee. Several sites also provide annual reports and lists of funded projects.

The information on the independent projects is more scarce. MH and NT provide information on their review system<sup>18</sup>. This kind of information is not found on the KS and MU web-sites. All except MU list the members of their panels for independent projects.

Brief project descriptions and budget of *funded projects* are available in the NSD data base (<http://www.nsd.uib.no/nfi/program/>).

### *RCN Annual Reports*

Part III of the RCN annual reports<sup>19</sup>, consist of separate reports for each division. The information about programmes and independent projects vary:

- BF: Separate information on each programme (budget, aims, activities, results). No information about applications/funding.
- KS: Separate information on each programme (budget, aims, activities, results), in some cases containing information about applications/funding. Summary tables for independent projects show budgets for each review panel, funding by the various funding modes, and by institution. There is no information on application/funding for the independent projects.
- MH: Separate information on each review panel and programme (budget, activities, examples on projects' results), in most cases containing information about applications, priorities and funding.
- MU: Several pages on each programme and the independent projects (budget, activities, results), some with information on applications/funding.
- NT: Information on each programme (budget, aims, activities, results), summary tables with number of funded fellowships and female fellowships, institutional distribution of funds, and results in terms of number of publications and doctoral degrees. There are no information on application/funding within programmes. For the independent NT projects the total number of applications/funding is given. In addition there are summary figures with number of funded fellowships and female fellowships and number of doctoral degrees obtained.
- IE: There are no information on application/funding<sup>20</sup>, but extensive reports on results (tables on publications, funded fellowships and female fellowships, obtained doctoral degrees, obtained patents, new firms, etc.).

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<sup>18</sup> MH also lists funded projects.

<sup>19</sup> The text is based on the content of the division reports for 1999. After 1999 these reports are not written for all division.



## 5.2 Internal information that has been available to the author

### *Doksy*

Doksy – the RCN electronic document system is part of the RCN Intranet. It is organised on 5 levels:

1. The RCNs laws (“vedtekter”)
2. The strategy and policy documents of RCN
3. The procedures and operations of RCN
4. The strategy and policy documents of each RCN division
5. The procedures and operations of each RCN division

Documents concerning the *review of applications* found at the third Doksy-level states that:

- each division makes their guidelines for review
- referees may be used to the extent the divisions find it useful
- the national committees for research ethics may assist RCN in the review process

Relevant common guidelines found on the second and third level concern the registration of applications in “Foriss”, the allocation of applications between the divisions, response to applicants, appeal on rejections and conflicts of interests.

On the 4<sup>th</sup> and 5<sup>th</sup> level, the content varies between the divisions. MH, for instance, has a document containing the rules for appointing review panels and programme committees, a kind of document not found in any of the other areas. KS have an extensive document containing guidelines for programme committees (“verktøykasse” (tool box) of 25 pages) not found elsewhere.

### *Programme review 1999*

All divisions were in 1999 involved in a review of their programme operations. The main topic was the pros and cons for the delegation of administrative tasks (i.e. internal or external programme co-ordinator). For this review each division made a document describing what they meant by a ‘programme’, their different programme types, their programme phases (from initiation to completion), the tasks of the programme committee, the programme co-ordinator and RCN staff. The review concluded that many (perhaps most) programmes departed from the “pure” (official) programme types. The divisions vary with regard to the degree of formality of processes initiating programmes and the role of RCN staff and programme committees respectively.

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<sup>20</sup> IE comment that this is because of their proactive strategy. Less use of open call for applications makes information on rejection rates less meaningful.

The review concluded that common rules for delegation of programme administrative tasks were not needed. After the review, revisions of programme structure has mainly been a task for the divisions themselves (for changes, see the comments from the divisions at the beginning of Section 3.2).

## **6 Summary of central points where updated information is missing**

- The role of programme committees in initiating research (tables 3.5 – 3.7).
- Use of mail review within research programmes (table 3.8).
- Programme periods' length (table 3.4).

## Appendix 1 Doksy-document on RCN programme policy

<b>Policy for forskningsprogrammer</b>		
		<i>Dokumentnr: 2-5-1</i>
<b>Dokumentansvarlig</b>	<b>Godkjent av</b>	<b>Dato</b>
<b>Tone Vislie</b>	<b>adm. direktør</b>	<b>30. mai 1996</b>
<b>Hensikt (3-5 linjer)</b> Dokumentet beskriver Forskningsrådets policy, retningsgivende prinsipper og terminologi for forskningsprogrammer og arbeidet i forskningsprogrammer i Forskningsrådet. Disse skal legges til grunn ved utformingen av mer detaljerte og områdevis arbeidsrutiner, og bidra til et løpende utviklingsarbeid for å forbedre arbeidet i forskningsprogrammer.		

Organisering av FoU-aktiviteter i programmer gir økt synliggjøring av Forskningsrådets prioriterte forskningsoppgaver, bidrar til økt målretting av innsatsen med kanalisering av midler til spesielt prioriterte områder, fremmer koordinering, samarbeid og informasjonsutveksling mellom ulike fagmiljøer, og gir store muligheter for synergieffekter. Dette er gevinster som tilsier at forskningsprogrammer er, og fortsatt vil være, et sentralt virkemiddel i Forskningsrådet.

Forskningsrådet skal være et nasjonalt utøvende og rådgivende forskningsstrategisk organ og skal legge stor vekt på overordnede strategiske oppgaver. Ved etableringen av Norges forskningsråd ble denne forskningsstrategiske funksjonen fremhevet av Regjering og Storting. Det ble påpekt at Forskningsrådet må konsentrere arbeidet om overordnede strategiske oppgaver og delegere visse faglige oppgaver, f.eks. programadministrasjon, til forskningsinstitusjoner (St. meld. nr. 43, 1991-92). Hovedstyret har også lagt vekt på disse uttalelsene og understreket at Forskningsrådet i større grad må ha hovedfokus på overordnede strategiske oppgaver.

I sak HS 5/96 gjorde Hovedstyret følgende vedtak angående programadministrasjon: "Hovedstyret er av den oppfatning at spørsmålet om intern eller ekstern programadministrasjon bør avgjøres ut fra hva som i det konkrete tilfelle vil gi de beste resultater. Over tid ønsker Hovedstyret en forsiktig reduksjon i andelen programmer som administreres internt."

Forskningsrådet skal ha felles policy, retningsgivende prinsipper og terminologi for forskningsprogrammer og arbeidet i forskningsprogrammer. Disse skal legges til grunn

for utformingen av mer detaljerte og områdevis arbeidsrutiner, og bidra til et løpende utviklingsarbeid for å forbedre arbeidet i forskningsprogrammene.

Forskningsrådet legger følgende overordnede styringsprinsipper og retningslinjer til grunn for arbeidet i forskningsprogrammer:

Forskningsprogrammer er et sentralt virkemiddel i Forskningsrådet. Felles policy, retningsgivende prinsipper og terminologi skal gjelde for forskningsprogrammer i Forskningsrådet.

Et forskningsprogram er en strategisk, målrettet, koordinert og tidsbegrenset forskningsinnsats for å fremskaffe ny kunnskap eller kompetanse innen et avgrenset felt (tema og/eller bransje) der ansvaret for gjennomføringen, innen fastlagte økonomiske og faglige rammer, er delegert til et programstyre oppnevnt av et områdestyre.

Forskningsarbeidet er basert på konkrete program- og arbeidsplaner og utføres i et antall enkeltprosjekter som alle har det til felles at de bidrar til programmets måloppnåelse. Prosjektporteføljen kan settes sammen på basis av mottatte søknader gjennom vurdering av det enkelte prosjekts faglige kvalitet og relevans og/eller ved at Forskningsrådet initierer prosjekter.

Forskningsrådet har følgende tre hovedtyper forskningsprogrammer:

*Grunnforskningsprogram:* nettverksprogram som skal sikre faglig kunnskap og kompetanse på prioriterte områder.

*Handlingsrettet program:* primært innrettet for offentlig sektor og interesseorganisasjoner, skal bidra til å bedre kunnskapsgrunnlaget for planlegging på forskjellige forvaltningsnivå, for utvikling av offentlig sektor og for politiske beslutninger.

*Brukerstyrt program:* program rettet mot utvikling av næringslivet, hvor brukere og forskere i samarbeid legger premissene, og hvor brukere deltar i finansieringen.

Innen enkelte fagfelt kan det være aktuelt med grunnforskning, handlingsrettet og brukerstyrt forskning i ett og samme program.

Strategiske programmer (strategiske institutt- og universitetsprogram - SIP og SUP) regnes ikke som forskningsprogram.

Følgende legges til grunn for Forskningsrådets programmer:

Prosjekter i et program kan finansieres ved forskningsrådsmidler (dvs. bevilgning fra departementer), egenfinansiering fra institusjoner og/eller annen offentlig/privat finansiering (brukerfinansiering)

Minimum totalt årlig budsjett bør som hovedregel være i størrelsesorden 5 mill. kroner og maksimalt totalt årlig budsjett i størrelsesorden 50-70 mill. kroner (brukerfinansiering inkludert)

Normal programperiode er 4-6 år

Arbeidet i et forskningsprogram har normalt tre faser: initierings-/planleggingsfasen, gjennomføringsfasen og avslutningsfasen. Hovedoppgavene i de enkelte fasene er:

*Initierings-/planleggingsfasen:* Fastlegge programmets mål og utarbeide konkret programplan/handlingsplan for programmet med vekt på konkretisering av mål (delmål), sentrale problemstillinger, samt forskningsoppgaver. Dette utviklingsarbeidet krever god faglig kunnskap i det aktuelle emnet og godt kjennskap til kunnskapsstatus og utfordringer/fremtidige kunnskapsbehov hos aktuelle forsknings- og brukergrupper. For brukerstyrte programmer inngår oppgaver knyttet til det å få ekstern (bruker-) finansiering til programmet noe som krever betydelig kjennskap til aktuelle brukermiljøer.

*Gjennomføringsfasen:* Avsluttende strategisk planlegging med utarbeidelse av arbeidsplan o.l., utvelgelse av prosjekter og eventuell initiering av prosjekter, koordinering og oppfølging av programarbeidet, samt utarbeidelse av budsjettforslag, budsjett, årsrapport, og informasjon om programmet (inkludert oppnådde resultater). I tillegg kommer driftsmessige oppgaver knyttet bl.a. til programstyrets arbeid og oppfølging av enkeltprosjekter. Den løpende styringen og oppfølgingen ivaretas av et programstyre oppnevnt av et områdestyre.

*Avslutningsfasen:* Utarbeide sammenfattende sluttrapport (administrativ og faglig). Den faglige sluttrapporten skal gi en samlet fremstilling av resultatene i de mange enkeltprosjektene, anbefale formidling og anvendelse av forskningsresultatene, og foreslå hvordan oppbygget kompetanse kan ivaretas.

Nye forskningsprogrammer initieres som hovedregel gjennom vedtak i et områdestyre som ledd i det årlige arbeidet med budsjettforslag. Nye forskningsprogrammer vil være en oppfølging av Forskningsrådets

strategiske planer, men ideer og konkrete forslag vil også kunne komme fra forskningsmiljø(er) og/eller brukere som etterspør ny/mer kunnskap innen aktuelle områder. Områdestyret vedtar faglig retning for nye programsatsinger og opplegg for konkretisering av programideen og øvrig planleggingsarbeid.

Sentrale fagfolk og representanter fra brukermiljøer (næringsliv, forvaltning og/eller organisasjoner) deltar i arbeidet med planleggingen av et program. En gruppe som nedsettes for å ivareta dette arbeidet gis betegnelsen planleggingsgruppe.

Den overordnede styringen av et forskningsprogram skal ligge i Forskningsrådet og utøves gjennom vedtak i et områdestyre. Områdestyrets oppgaver er:

fastsette overordnede retningslinjer og prosesser for planleggingen av et forskningsprogram

fastsette mål og faglige og økonomiske rammer for programmet gjennom vedtak av programplan (arbeidsplan), budsjettforslag og årlige budsjett. I programplanen fastsettes mål, delmål, sentrale problemstillinger, framdriftsplan etc. Planen må være så konkret at gjennomføringen kan delegeres til programstyret.

oppnevning og vedtak av mandat for programstyret

oppfølging av arbeidet i programmet gjennom rapport om arbeidets fremdrift, oppnådde resultater mv.

Programstyret forestår ledelsen av programmet og er ansvarlig for faglig innhold og fremdrift. Programstyret må gis beslutnings- og bevilgningsfullmakter til å utøve nødvendig handling slik at de oppsatte målene kan nås gjennom valg av prosjekter mv. Programstyret rapporterer til områdestyret gjennom områdedirektør og arbeider selvstendig innen de optrukne rammene. Områdestyret og Forskningsrådets administrasjon griper kun inn ved avvik fra vedtatte planer.

Medlemmer i et programstyre er fagpersoner (forskere) og representanter fra næringsliv og/eller forvaltning/organisasjoner innen programmets arbeidsområde. Antall medlemmer bør normalt ikke overstige syv. Ligestillingslovens bestemmelser om kjønnsfordeling legges til grunn. Et medlem i programstyret kan ikke benyttes som ekstern faglig sakkyndig for de tilrådninger administrasjonen vil fremlegge for det aktuelle programstyret.

Områdestyret vedtar mandat for programstyret der det angis hvilke fullmakter som er delegert til programstyret. Mandat og oppgaver for et programstyre må være i overensstemmelse med de til enhver tid gjeldende prinsipper for 3. styringsnivå. Ved vedtak av programstyrets mandat bør områdestyret vurdere om det er aktuelt å be programstyret benytte eksterne sakkyndige i den faglige vurderingen av prosjektsøknader/-forslag. Innen mandatets rammer fastlegger programstyret selv sin arbeidsform.

Til å bistå ved gjennomføringen av programmet, oppnevner områdeadministrasjonen i samråd med programstyret et programsekretariat. Dette består normalt av en programkoordinator med nødvendig kontorstøtte. Programkoordinatoren utfører sine oppgaver i samsvar med retningslinjene som er trukket opp av programstyret, utfører sekretariatsfunksjonen og rapporterer til programstyret. Det utarbeides instruks for Forskningsrådets programkoordinatorer der fullmakter og oppgaver spesifiseres.

Programkoordinatoren skal være en person som ut fra habilitetsmessige betraktninger kan godtas av aktuelle miljøer som vil stå som søkere til programmidler. I saker som gjelder programarbeidet rapporterer programkoordinatoren til programstyret.

En programkoordinator kan enten være ansatt i Forskningsrådets administrasjon eller være en ekstern person som engasjeres til oppgaven. Sekretariatet bør som hovedregel knyttes til den institusjonen hvor programkoordinatoren arbeider. I de tilfeller hvor det er en ekstern programkoordinator skal Forskningsrådets administrasjon etter behov møte med observatør på programstyremøtene. Observatøren er programmets kontaktperson i Forskningsrådets administrasjon og skal holde Forskningsrådet orientert om programarbeidet samt informere om gjeldende policy og rutiner i Forskningsrådet til programstyret. Det utarbeides retningslinjer for observatørfunksjonen.

Hvorvidt et program skal ha intern eller ekstern programkoordinator avgjøres i hvert enkelt tilfelle ut fra hva som i den konkrete sak vil gi best resultat. Dersom forholdene tilsier det kan områdedirektør bestemme at en Forskningsrådsansatt skal være programkoordinator og at sekretariatet skal ligge i Forskningsrådet. Fordelingen mellom programmer med intern og ekstern programkoordinator (sekretariat) synliggjøres i forbindelse med den årlige budsjettbehandlingen.

Dersom programkoordinatoroppgaven tillegges en person ordinært tilsatt i Forskningsrådets administrasjon, må forholdet mellom programstyret og administrasjonen avtales særskilt slik at programstyret fortsatt vil ha ansvar som beskrevet.



Ved eksternt programsekretariat inngår Forskningsrådet kontrakt med institusjonen hvor ansvar, oppgaver og plikter, samt Forskningsrådets forpliktelser som oppdragsgiver er nedfelt.

Følgende prosjektadministrative oppgaver i gjennomføringen av et forskningsprogram ivaretas av Forskningsrådets administrasjon også ved eksternt programsekretariat:

Mottak av prosjektsøknader

Oppfølging av bevilgningsvedtak gjennom utstedelse og utsendelse av tildelingsbrev og kontrakter

Utbetaling av bevilgning til prosjektmottakere i henhold til gjeldende rutiner

I avslutningsfasen ivaretas ansvaret for utarbeidelsen av faglig og administrativ sluttrapport av programstyret. Rapporten skal inkludere en vurdering av måloppnåelse og erfaringer. Områdestyret vedtar eventuell evaluering av programmet som skal skje i henhold til Forskningsrådets retningslinjer.

Utgiftene forbundet med driften av et program (driftsmidler for programstyret som honorar, reise- og møteutgifter samt sekretariatsutgifter (bl.a. lønn til programkoordinator) og øvrige driftsutgifter) samles i et eget prosjekt. . For de programmer hvor sekretariatet legges til Forskningsrådet skal de administrative kostnadene på tilsvarende måte samles i ett prosjekt.

Både ved ekstern og intern programkoordinator og programsekretariat belastes utgifter til programadministrative oppgaver (drift) programmets budsjett. Beløpet refunderes Forskningsrådets administrasjonsbudsjett. Refusjon av kostnader skal skje med basis i gjennomsnittskostnader (fastsettes årlig i budsjettsammenheng).

Det arbeides videre med detaljert opplegg, retningslinjer og prosedyrer for Forskningsrådets arbeid med forskningsprogrammer basert på de ovennevnte retningslinjene. Dette skal også omfatte retningslinjer for områdestyrenes tilsyn med programgjennomføringen.