

Chapter 8

Norwegian Centres of Excellence

Siri Brorstad Borlaug and Liv Langfeldt

Nordic Institute for Studies in Innovation, Research and Education (NIFU)

Conducted on behalf of the Research Council of Norway

This chapter presents the Norwegian Centre of Excellence (CoE) scheme and its impact on research activities and organisational structures. The scheme is found to increase the visibility, reputation and internationalisation of Norwegian research, but the temporary nature of the CoEs presents challenges for the organisational structures of universities and their faculties. These challenges relate particularly to the allocation of financial resources, the boundaries and autonomy of the centres, the wind-up of centres and responsibility for personnel.

Introduction

The Norwegian Centres of Excellence (CoEs) scheme is one of Norway's three research excellence initiatives (REIs). Its primary aims are high scientific quality and internationalisation. The other two schemes are the Centres for Research-based Innovation and the Centres for Environment-Friendly Energy, which also aim at innovation and include a requirement of formal collaboration with industry and/or public agencies.

There are presently 21 CoEs located at various host institutions (universities, university hospitals, research institutes). They are very diverse and the scheme's impact on research and organisation depends on the disciplines involved and the characteristics of the host institution. The following gives a general description of the scheme and illustrates it with information based on a particular CoE and its host university, and hence describes the perceptions and experiences of one host university, host department and centre. These are illustrative examples; other CoEs and hosts may have different experiences and perceptions. The presentation is based on the survey data collected for the OECD-RIHR study, previous evaluations and studies of the scheme (Langfeldt et al., 2010; Aksnes et al., 2012; Borlaug, forthcoming), and interviews at the selected CoE, its host university and host department.

A small country with centralised research funding

In order to contextualise the CoE scheme, a brief overview of the Norwegian research system is necessary. There are four major types of public research organisations: universities, university hospitals, university colleges and research institutes. Generally speaking, there is a division of work between the universities and the research institutes. The latter are the primary providers of applied and contract research, and the former primarily conduct basic research. In terms of finance, Norwegian universities still enjoy considerable block funding compared to other European universities, which are often more dependent upon project-based grants.¹ Moreover, Norway has only one research council, the Research Council of Norway (RCN), which administers all grant schemes, including the REIs. The centralisation of competitive funding schemes for research, combined with the division of tasks among the different kinds of research-performing organisations, means that CoEs can potentially have a substantial impact on the national research landscape.

Norwegian excellence policy

The emergence of explicit policies for excellence in research is relatively recent in Norway. Policies for generous, selective funding of the very best researchers and research groups began to appear during the later years of the 1980s and the first half of the 1990s, albeit with very limited effect on overall research policy (Aksnes et al., 2012). This may be typical of the experience of small countries; several evaluations of Norwegian research at the time emphasised the relatively flat research landscape, with the distribution of resources based on the principle of equality and few research groups of high international quality (Walløe, 2008). The idea of a scheme to promote excellence in research was launched in the 1999 White Paper on research (KUF, 1999). While there were already a few single-standing schemes to promote excellence in research by forming centres and/or for long-term funding for the very best, the White Paper introduced what was to be called the CoE scheme as the first general scheme for excellence in research (Aksnes et al., 2012). The scheme was first announced in 2002, through an open call for applications (Box 8.1).

Box 8.1. The Norwegian CoE scheme

Governed by the Research Council of Norway (RCN)

Established/first call: 2002

Main selection criteria: Scientific quality, high international standard

Number of centres: 13 centres in 2003 (ended in 2012); 8 centres in 2007; 13 centres in 2012

Yearly funding: EUR 1-1.8 million from RCN, substantial co-funding/in-kind funding from host institution

Duration: 5 + 5 years, mid-term evaluation after 3.5 years

Organisational model: aims at co-localised research groups

Host institutions: universities, university hospitals and research institutes

General characteristics of the CoEs

The aim of the scheme is to “establish time-limited centres characterised by focused, long-term research efforts of a high international calibre, and where research training is an important aspect” (RCN, 2005). It is the prime national research policy instrument for:

- promoting high scientific quality in national research
- promoting cutting-edge basic research through long-term, generous funding
- strengthening the internationalisation of Norwegian research
- creating added value by establishing centres in host institutions
- building strong research groups
- promoting researcher recruitment.

The RCN has recently announced the third generation of these centres. During the scheme’s lifetime some changes and adjustments have been made. In the first call, one of the selection criteria was the social relevance of the research field. Fields differ considerably in how much relevance is an inherent part of their typical research or is readily identifiable. With the introduction of a new scheme for centres for research-based innovation in 2005, this criterion was removed from the CoE scheme as it was considered covered by the new scheme. In addition, the RCN encouraged host institutions to limit the number of applications. As such, the CoE scheme can be seen as an instrument for prioritising strong research environments in host institutions.

Illustrative case

The illustration of the CoE scheme in this chapter is based on the experience of the University of Oslo, which has hosted 12 CoEs (three from the first CoE call, five from the second, and four from the latest). The illustrative examples concern the university, one CoE at the university, and the host department and faculty of the CoE. The selected CoE, here called CoRG,² employs 40 persons who represent 24 full-time equivalents (figures for 2012). The main purpose for establishing CoRG was to strengthen research capacities and enhance the research field. The centre performs basic research and its scientists teach at the bachelor’s and master’s levels to some extent. It is a temporary unit and is highly dependent upon funding from the CoE scheme.

Funding and internal governance of the Norwegian CoEs

The RCN provides each centre with between NOK 8 million and NOK 20 million a year; the average is NOK 12.8 million. The RCN requires co-funding from the host institution, which defines the characteristics of these funds. Co-funding may include infrastructure investments, funds from its own budget or external grants. Hosts are required to cover infrastructure and overhead costs for the CoEs. However, the practices of hosts vary. While some interpret co-funding literally and provide funding from their own budgets, others define infrastructure as their co-funding. The first strategy has resulted in organisational tensions. Some CoEs appear to have been formed at the expense of other research groups in the same department, and some CoEs have become large and unmanageable. Based on experience so far, it seems that host institutions now have two strategies: i) rewarding CoEs through additional funding; and ii) using infrastructure for co-funding in order to avoid organisational tensions. These two strategies apply primarily to the universities. Research institutes face other types of challenges, especially if they are a partner in a CoE rather than the host. A host institution can define infrastructure as co-funding, but partners have to provide funds. This is a challenge owing to the relatively low basic funding of research institutes.

In some fields, the CoE grant is a small percentage of the CoE's overall budget; on average, it is 20%. There are large differences between the public research organisations (PROs) and between research fields. CoE funding represents most of the budget for CoEs in the humanities and the social sciences, and for CoEs hosted by research institutes. In the life sciences, the CoE grant is important, but represents a relatively small share of the total budget. These centres tend to be large; one has more than 200 researchers. Table 8.1 shows the total yearly funding from the scheme per research area and the average funding for each centre. The large number of centres in the geosciences reflects the Norwegian context.

Table 8.1. Yearly total and average funding of Norwegian CoEs, by fields

Field	Number of CoEs	Annual NOK (million) from the CoE scheme	
		Total funding	Average funding per CoE
Geosciences	6	79.3	13.2
Engineering	5	64.7	12.9
Life sciences	12	169.5	14.1
Hum & social sciences	7	77.9	11.1
Natural sciences	4	54.6	13.6

Notes: Field categorisation by NIFU. Includes the three first CoE generations, budget years 2009 and 2013; see notes to Table 8.2.

Source: RCN web pages, www.forskningradet.no/en/Home_page/1177315753906.

The scheme's success has led to an increase in the CoE budget, with a substantial increase in funds from the first to the third generation (Table 8.2).

Table 8.2. Yearly total and average funding of Norwegian CoEs

CoE generation	Number of CoEs	NOK (million) from the CoE scheme	
		Total funding	Average funding per CoE
2003	13	151.2	11.6
2007	8	87.8	11.0
2013	13	207.0	16.0

Notes: Current prices. Figures for the 2003 and 2007 generations are for budget year 2009. (Langfeldt et al. 2010). Numbers for the 2013 generation are for budget year 2013

Source: RCN web pages, www.forskningsradet.no/en/Home_page/1177315753906.

The selected centres are expected to generate enough additional funding to be self-sufficient after the termination of the CoE grant. However, access to alternative grants varies among fields. While a life sciences centre might have a number of funding opportunities, these seem to be rather limited in fields such as the humanities, which is composed of many rather specialised subjects. Hence, some centres will tend to continue at the same level of activity after the grant period, while others will have to scale down their activities considerably.

Funding and governance at the University of Oslo

The University of Oslo has faced a steep learning curve in terms of providing for the CoEs. Concerning financing, the university first decided to award each centre an annual lump sum of NOK 2 million. This strategy changed in 2012 when the first centres were in their final phase. In order to sustain some of their activity and to ensure the centres' smooth transition into their departments, this lump sum allowance is now allocated to the faculty. The grant is permanent, i.e. it marks a general increase in the faculty budget. The faculty now has the authority to decide on the continuance of the centres. Making the faculty responsible for the grant is a new budget model; the practice is also being applied to the new generation of centres; they will not receive a direct grant, which will be allocated via the faculty.

Behind this new funding strategy was the concern that the centres tended to grow quite large. Strained faculty finances do not allow for a great deal of specialisation in selected research topics or a concentration of resources in a particular field. As the faculties and faculty administrations have different perceptions of the CoEs – some are enthusiasts, others are sceptical – they may choose practices for administering the grants different from those preferred by the university.

The University of Oslo's annual reporting to the RCN has illuminated challenges for co-ordinating their reporting systems in order to provide assistance for the reporting expected of the centres. In particular, different authorities seem to use different definitions of key terms; this complicates the reporting process. For example, the Ministry of Education, the RCN and the university all have different definitions of "a stay abroad"; reporting a researcher as having had a stay abroad involves reporting on the basis of three different definitions, which obviously generates an extra workload.

The CoRG is administered as part of a department and, like other parts of the department, relies on the department's and the faculty's administrative resources. The CoE grant constitutes 38% of its total funding (Table 8.3). External funding is moderate

but higher than the average in its field of research. CoRG's leader credits the CoE scheme for its increased success in Norwegian open-mode funding, which is very competitive. Applying for a CoE is thought to have professionalised application writing in the group. Together with the prestige associated with CoEs, this is seen as having led to their improved success rate regarding RCN project grants.

Table 8.3. CoRG's income sources

CoRG's sources of income	%
Grant from the REI directly	38
Funds from the host institution	36
Other public grants (mainly RCN)	26
Total	100

Centres use the CoE grant for various purposes, such as improving infrastructure, attracting guest researchers, conference travel and buying out of teaching duties. For CoRG, much of the grant has been used to hire senior international scholars and post-docs and buy out teaching duties. This last has had consequences for CoRG's field of research. Buying centre staff out of teaching duties means that the department has to find replacements. This can be challenging, and the easiest option is often to rely on people already working in the department. Most departments have tight budgets. Thus, the buy-out money offers the host department some flexibility and autonomy and they prefer not to spend it on temporary teachers. The buy-out strategy also affects education, since CoRG's research speciality is not covered well at the bachelor's and master's levels. To the authors' knowledge, problems relating to buy-out of teaching duties concern only a minority of the CoEs.

Responsibilities and division of labour

The Norwegian CoE scheme presupposes certain organisational structures. Most centres have a board, but it has no formal authority, which remains with the department, the faculty or the central university management. The board functions as a reporting body and approves the allocation of resources within the CoE. Some CoEs do not have a separate board and instead report directly to their host department's board. All centres have a centre leader and an administrative leader, and are organised into research groups with certain scientific goals. Important decisions are made by the research groups.

In general, the host unit is represented on the CoE board. It is unusual for the centre leader to be part of the management group of the department, even though he/she is responsible for many of the temporary employees in the department. Boards of centres composed of local representatives seem to have less impact than centres with a combination of local and external board members (Langfeldt et al., 2010).

The division of responsibilities between the host department and the CoE presents some distinct organisational challenges. An evaluation of the CoE scheme found great variety in the extent to which CoEs are embedded in the host institution (Langfeldt et al., 2010). In most centres, the centre leader works full-time at the centre, as do its PhDs and post-docs. The remaining staff are affiliated on the basis of a certain percentage and have their main positions and teaching obligations in their home departments. The RCN generally prefers affiliated researchers to be physically located (co-location) in the centre.

In 2010, 14 out of 21 centres were co-located, one was partly co-located and six were virtual. Generally, the virtual centres are large and in fields such as the life sciences and the natural sciences. Co-location requires significant resources from the host institutions and has generated a variety of solutions, from centres as independent units under the university dean to centres as a research group in a department. A university may adopt both types of solutions. The host departments encounter the greatest challenges for integrating the centres and they cater for and engage the centres in various ways. In general, it seems that centres with a good relationship with their host report more positive results (Langfeldt et al., 2010).

Overall, universities and departments have a positive view of the CoEs. When they are sceptical, this mainly relates to problems for handling the administrative aspects of CoEs: responsibility for CoE personnel, organisation of co-payments, distribution of publication credits, physical location of the CoE, and appointment of board representatives. Individual departments have their own ways of handling these issues, as the RCN has no overall expectations or guidelines on these matters. Obviously, the more complex the centre in terms of crossing the organisational borders of departments and even faculties, the more challenges arise concerning the division of responsibility between the host and the centre.

As noted above, responsibility for personnel is one challenge. In general, the CoE leader enjoys great autonomy in matters such as recruitment. Given the limited duration of the centre, this may have a significant impact on the host department. Providing permanent positions for eminent post-docs is one such challenge. The host's flexibility as regards hiring is restricted by increased concerns about "the four years rule"; in short and strictly interpreted, it means that after four years on temporary contracts researchers may have the right to a permanent position. Given the shortage of new permanent positions, hosts seek to avoid situations in which the rule can be enforced, as it will reduce their autonomy.

Moreover, the CoE leader often manages a large number of employees, without having formal responsibility for them, since this lies with the host department. For some host departments, the size of some CoEs means that they can become relatively autonomous and challenge the host's authority. Obviously the ability to handle the CoEs varies and largely depends on the relation between the department leader and the CoE leader. In an evaluation of the CoE scheme, Langfeldt et al. (2010) observed cases in which conflicts and tensions were relieved by a shift of department leader and/or faculty dean.

One strategy for more thoroughly integrating CoEs and hosts has been to involve the CoE leader in the department's leadership. However, some departments and faculties see CoEs simply as a large project and treat them as such, with no particular influence on the host. The CoEs are now generally being organised closer to the department level and included in departments' and faculties' strategic plans and priorities than was the case in the first generation of CoEs. Because research institutes are project-based organisations, the CoEs do not represent important challenges in terms of integration, internal collaboration and impact on host institution.

In general, host institutions have become more familiar with the centre schemes and seem to handle and integrate the centres in a more considered way.

Responsibilities and division of labour at the University of Oslo

Considering the egalitarian structure of the Norwegian research system, the CoE scheme represents a chance for the university and its research groups to strengthen their research capacities. Informants claim that the CoEs have increased the visibility of the University of Oslo and thus the number and quality of applicants, among both students and employees.

The CoE scheme focuses on forefront research and the main output variable is international scientific publications. CoEs at the University of Oslo all conduct basic research, but several also carry out applied research and experimental development, depending upon the characteristics of the academic field. CoRG is administered by one department and handled like any other research unit. In terms of research, it is relatively specialised and the affiliated researchers devote all of their research time to the centre. They are not involved in consultancy or technology transfer. There are few points of interaction between the centre and other researchers in the department. Most seminars are open but there is a clear demarcation between those in the centre and those outside the centre, which is primarily maintained by the latter. The department and the centre have taken measures to diminish the conflicts between the centre and the other researchers, but so far these have had little effect. The low degree of synergy is particularly detrimental for the outsiders, who could have profited in terms of research quality and networks by interacting with the centre. A contributing factor is the fact that the centre is not physically co-located with the department. This decreases interaction, but helps to develop the centre's identity and visibility. All informants agree that the centre has increased the visibility of the academic field internationally, as demonstrated by the increased number and quality of applicants for positions in the department, among other things.

CoRG collaborates with internationally renowned researchers and groups. The sudden increase in funding has, according to some informants, led to a situation in which the CoE demands little from their collaborating partners. For instance, partners are not required to contribute to teaching, which is a loss for the department. Still, few problems are reported. As the centre's partners are mainly non-Norwegian, this entails additional challenges; local researchers undertake all administrative tasks, while their international partners can concentrate fully on their research.

At the organisational level, experience with the CoE scheme has contributed to the professionalisation of the faculty and the university, particularly for handling large temporary research units. There has been a remarkable change from the first to the third generation of CoEs. It is now generally considered that the best organisational form is for the centres to be well integrated in the host department.

Establishing a new organisational structure is resource-intensive, especially because the CoEs are time-limited units. In some cases, they may engage in “symbolic compliance” by establishing temporary structures more to satisfy the formal terms of the CoE scheme than to contribute to better research performance.

Staff and recruitment

The impact of the CoE scheme on staff and recruitment varies. In the geosciences, life sciences and mathematics, CoEs account for a large share of personnel resources (excluding recruitment positions). In 2009, the centres averaged 68 researchers, for 44 full-time equivalents. The centres have higher shares of PhD positions, part-time affiliations and guest researchers than other research groups, and they are popular among

PhD students. This represents a challenge for the host institution since the high quality of the centres and the need for co-payments often mean that internal recruitment positions are allocated to the CoEs, leaving less for those outside.

Although the grants represent opportunities to attract international scholars, this is a problem in some fields, especially in those such as economics where “star” academics expect high salaries. Moreover, as industry typically provides far better conditions than universities, this makes it difficult to recruit promising young scholars. In addition, international scholars find Norway a less attractive location. However, the grant has led to more successful recruitment of both young and senior researchers. It has made it possible to invite more guest researchers and hire adjunct professors, and has facilitated more travel and tighter links with other international research groups.

Typically, the universities’ administrative procedures for hiring researchers are bureaucratic and time-consuming. Given their limited time frame, the CoEs require fast and flexible recruitment processes, especially for hiring a star academic. In general, the CoEs seem to have had sufficient flexibility in this respect.

CoE funding often offers young researchers leadership opportunities. Several CoEs have a strategy of appointing young scholars to project leader positions; this is especially evident in the geosciences and life sciences. Research in the CoEs is generally driven by PhD students and post-docs, who often embody the new research direction of the centre. Moreover, CoEs often have more seminars and workshops than other research units and emphasise interaction between senior and junior researchers.

CoE staff and recruitment at the University of Oslo

The CoRG has sought out well-known and highly recognised researchers with impressive activities and publication records. It also gives high priority to post-docs. Internationally, young researchers seeking an academic career in CoRG’s field of research have few possibilities, making the CoRG post-doc positions especially attractive. In fact the applicants are from the highest ranked and best-known universities; CoRG can pick from the best talent in the field. In contrast, PhD candidates still seem to prefer universities such as Harvard and Oxford, so that the quality is less impressive than for post-docs. Moreover, the quality of local PhD candidates has decreased in the CoE period.

As mentioned above, senior researchers have used part of their funding to buy out their teaching obligations for bachelor’s and master’s courses. A combination of circumstances has meant that the department has not replaced the senior researchers in the centre with staff with similar research competence. The centre’s post-docs teach but only on a temporary basis, and they do not take part in setting the content of the teaching programmes.

Overall, the CoE seems to provide an environment for good interaction between seniors and juniors. So far, the latter have not had any difficulty pursuing a career and appear to be attractive candidates.

Because CoEs cannot apply for a second CoE grant, they have to be integrated into the organisational structure of the university once the grant period ends. However, most CoEs are quite specialised and often require technical support personnel with specific competencies, which makes it difficult to integrate them. The University of Oslo is therefore considering instructions for recruitment to ensure a smoother wind-up of the centres, which would entail shifting some authority from the centre leader to the department and the university. This may not be well received by CoE leaders who may already struggle to find their place within a long-established and rigid organisational structure.

At the end of the CoE funding period, the contract of about half of the academic staff of the CoRG will be terminated. Recently, the CoRG has been allocated four out of five new positions in the department, which will secure some continuity in the research area. However, there is a danger of skewing the balance between the different subfields of the discipline, which are small. If too many resources go to one of these, the others might suffer. All parties are conscious of this issue.

General assessment and experiences

The CoE scheme is open to all disciplines and research groups, has no strategic priorities and relies on a single model. For example, there are no general differences in the funding of centres in different fields of research. Norwegian scientists find these terms very attractive and the CoE scheme has a lot of prestige.

The application process is quite lengthy. In the 2010 evaluation of the scheme, several informants mentioned the professionalisation of the application-writing process. This meant that, after making a CoE application, it is easier to write applications for other large grants, such as EU grants.

In the 2002 call the RCN received 129 applications, in the 2007 call, 98, and in the 2011 call, 139. In the third call the distribution of applicants by fields of research was relatively balanced (Table 8.4). The success rate varies somewhat between fields.

Table 8.4. Number of applications and selected centres in 2012 (third generation) by field of research

	Natural science, engineering	Life sciences	Humanities and social sciences
Applicants	56	46	37
Centres	5	6	2

Source: RCN web pages, www.forskningradet.no/en/Home_page/1177315753906.

As with most prestigious schemes, the application and selection process is widely discussed and criticised. Neither geographical distribution nor distribution of research areas is among the selection criteria. Still, critics claim that such concerns affect the selection process. In particular, some critics felt that geographical considerations played a part in the selection of the first generation of CoEs. Critics also claim that the selection process lacks transparency, and that the review panels do not always make clear why some centres are selected and others are not. Even though the selected CoEs, and the CoE scheme itself, have high standing, researchers ask for more transparency and better justification by the RCN.

The general perception of the mid-term evaluations of the CoEs (performed 3.5 years after the centres are established) was that they had positive effects. The CoEs seem generally to see the evaluation as a way to gain recognition of the centre's research and often as a way to gain valuable input from evaluators (Langfeldt et al., 2010). Moreover, and perhaps more importantly, tensions and challenges between the centres and hosts are brought out and sometimes solutions are found. On the negative side, the mid-term evaluation is yet another time-consuming demand for reporting on the CoEs' activities and results. As the terms and definitions for reports to the RCN are open to interpretation, centres' reporting procedures differ. Some tend to report all publications of all affiliates,

making it difficult to define the list of publications produced by the CoE grant. Other centres have sharper boundaries, which often result in more modest reporting.

The added value of the scheme differs somewhat between fields of research and the size of the centres. Large centres, for which the CoE grant makes up 10% of the total budget, are less dependent on the CoE grant than smaller centres such as the CoRG, for which the CoE grant accounts for 38% of the budget. Yet, most CoEs report that the grant provides far more flexibility than other grants, which often have a shorter time span and are for specific projects.

Given the large number of applications, the RCN encourages the universities and institutions that apply to limit the number of applications. While some do so, the University of Oslo views the CoE selection process as a chance to identify excellent research groups which might not be recognised in the university's strategy and priority processes. Therefore, they allow all groups to apply. Moreover, university sources emphasise that, as the selection of CoEs is rather unpredictable, the university has no reliable criteria for selecting the groups most likely to win the competition.

The CoE scheme requires hosts to provide co-funding. Hence, the scheme ties up much of the limited financial resources of the host university and department, and affects the balance between those with a centre and the rest. Yet, the investments pay off; the centres attract a great deal of external funding. The CoRG is reported to have increased the income of its host department. Compared to other departments at the same faculty, the host department is now relatively well off. As a result, researchers outside the CoRG have more resources, for example for participating in international conferences, than prior to the CoRG's establishment. In this case, the risk of impoverished environments around a CoE seems exaggerated. Nonetheless, the research done by the CoRG attracts more attention than the research performed elsewhere.

Concluding remarks

The national research landscape

Considering the egalitarian norms and structures of Norwegian research, the CoE scheme represents something new. Its long-term, lump-sum funding model enables the building of strong research communities and creates opportunities to attract highly qualified scholars. The internationalisation of research is strengthened by sponsoring international projects, senior researchers in part-time positions, inviting guest researchers and providing funds for travelling to international conferences. Moreover the scheme has enhanced national and interdisciplinary collaboration both across fields and between subfields.

Another significant impact of the scheme is the increased national competition it has encouraged. The CoE scheme heightens ambitions and raises the bar in Norwegian research. In an otherwise egalitarian research landscape, it has legitimised the concentration of research resources for selected research groups and strengthened adherence to the academic norms of excellence.

This study has concentrated on an analysis of the experience of universities. There are, however, considerable differences in the CoE scheme's impact on universities and research institutes. The evaluation of the CoE scheme (Langfeldt et al., 2010) revealed that the impact on organisational structures was relatively small in research institutes, which already had structures for organising temporary research efforts. However, it has

had important impacts on the relationships between universities and institutes. It has given research institutes the opportunity to employ more PhD candidates. As these have to be enrolled in a university PhD programme, the CoE scheme has increased the interaction between the institutes and the universities involved. Moreover, the long-term, lump-sum funding model enables research institutes to match funding requirements in Framework Programme applications. This leads to more opportunities for international collaboration at research institutes with low block-grant funding.

The organisational aspect of the CoE-scheme

In addition to enhancing research excellence, the CoE scheme has an important organisational aspect. A temporary unit with specific organisational structures presents challenges for host universities and departments in terms of handling and institutionalising a relatively powerful research unit, positioned somewhat outside of traditional structures. At the same time, these traditional structures present challenges for centres, which have to find their place and create a new organisation in an environment that to some extent opposes initiatives like CoEs. After ten years of experience, it is possible to conclude that the centres have unravelled some of the tenacious structures of the university by showing the need for better administrative procedures and strategies to cater for and integrate the centres.

Notes

1. About 60% of total R&D expenditures at Norwegian universities are based on general university grants (figures for 2011, sources: Det norske forsknings- og innovasjonssystemet, www.forskningsradet.no/prognett-indikatorrapporten/Forside/1224698172624, Table A.7.2).
2. CoRG is an alias to protect the anonymity of respondents.

References

- Aksnes, D., M. Benner, S-B. Borlaug, H. F. Hansen, E. Kallerud, E. Kristiansen, L. Langfeldt, A. Pelkonen and G. Sivertsen (2012), “Centres of Excellence in the Nordic countries. A comparative study of research excellence policy and excellence centre schemes in Denmark, Finland, Norway and Sweden”, NIFU Working Paper 4/2012, Oslo.
- Borlaug, S.B. (forthcoming), “Excellence and innovation in policy and science – external steering and internal responses”, PhD thesis, TIK centre, University of Oslo.
- KUF (1999), *Forskning ved et tidsskille*. St. meld. nr 39 (1998-1999). (Report to the Storting, Oslo)
- Langfeldt, L., S-B. Borlaug, M. Gulbrandsen (2010), “The Norwegian Centre of Excellence Scheme. Evaluation of Added Value and Financial Aspects”, NIFU STEP Report 29/2010, Oslo.
- RCN (2005), *The Norwegian Centres of Excellence Requirements and Guidelines*, The Research Council of Norway, 31 May, Oslo.
- Walløe, L. (2008), *Evne til forskning*. Norsk forskning sett innenfra, Det Norske Vitenskaps Akademi, www.dnva.no/nyheter/vis.html?tid=39981, accessed 10 September 2012.



From:
Promoting Research Excellence
New Approaches to Funding

Access the complete publication at:
<https://doi.org/10.1787/9789264207462-en>

Please cite this chapter as:

OECD (2014), "Chapter 8. Norwegian centres of excellence", in *Promoting Research Excellence: New Approaches to Funding*, OECD Publishing, Paris.

DOI: <https://doi.org/10.1787/9789264207462-11-en>

This work is published under the responsibility of the Secretary-General of the OECD. The opinions expressed and arguments employed herein do not necessarily reflect the official views of OECD member countries.

This document and any map included herein are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

You can copy, download or print OECD content for your own use, and you can include excerpts from OECD publications, databases and multimedia products in your own documents, presentations, blogs, websites and teaching materials, provided that suitable acknowledgment of OECD as source and copyright owner is given. All requests for public or commercial use and translation rights should be submitted to rights@oecd.org. Requests for permission to photocopy portions of this material for public or commercial use shall be addressed directly to the Copyright Clearance Center (CCC) at info@copyright.com or the Centre français d'exploitation du droit de copie (CFC) at contact@cfcopies.com.