CENTRE FOR ADVANCED STUDY

ANNUAL REPORT 2000

1. Administrative matters

The Centre for Advanced Study, CAS, is a foundation, and it was established by the Norwegian Academy of Science and Letters (NASL). The resolution to establish the Centre was passed in 1989, and its activities commenced in full from 1992. Its purpose is to promote basic research and interdisciplinary theoretical work on the highest academic level.

The governing bodies of the Centre are the Council and the Board.

The Operating Fund at the CAS was established in 1993. Its purpose is to contribute to the running of the Centre. This fund is administered by the Board of the Centre.

1.1 The Council

In the year 2000 the Council was composed of the following members:

Rector Kirsti Koch Christensen, University of Bergen (chair)

Rector Kaare R. Norum, University of Oslo

Rector Tove Bull, University of Tromsø

Rector Emil Spjøtvoll, Norwegian University of Science and Technology, Trondheim Professor Lars Walløe, President of the Norwegian Academy of Science and Letters, Oslo Arne Bjørlykke, President of the Norwegian Academy of Technology and Science, Trondheim Ranveig Frøiland, Member of the Storting and leader of its Standing Committee on the Church, Education and Research

Director Sven Erik Skønberg, NHO [Confederation of Norwegian Employers] (until 1 May, successor not yet nominated)

Per Gunnar Olsen, Secretary of LO [Norwegian Federation of Trade Unions] (for the period of Berith Bergersen's leave of absence from 1.8.99. Berith Bergersen is at present a junior minister in the Ministry of the Church, Education and Research)

Professor Arild Underdal, Vice-chairman of the Executive Board of the Norwegian Research Council

The Council had one meeting in 2000 (13 June).

1.2 The Board

The composition of the Board is regulated by Article 4 of the Memorandum of Association, in which the relevant provisions subsequent to the amendment of 1998 read as follows:

"The Board of the Norwegian Academy of Science and Letters, and the Norwegian Universities Council each appoint two members with alternates to the Board of the Centre. In agreement with the Universities Council the Academy appoints one additional member who shall be the chairman of the Board, and it appoints the latter member's alternate. ... The State nominates the sixth member of the Board. In agreement with the Universities Council the Academy appoints one of the other members to be vice-chairman of the Board. ... The Board of the Norwegian Academy of Science and Letters has the right to appoint one of its members to serve as an observer on the Board of the Centre for Advanced Study."

In the year 2000 the Board was composed of the following members:

Professor Aanund Hylland, University of Oslo (chairman) – NASL

Professor Jan Fridthjof Bernt, University of Bergen (vice-chairman) – NASL

Professor Bjørn Tysdahl, University of Oslo – NASL

Professor Tore O. Vorren, University of Tromsø – Universities Council

Professor Kathrine Skretting, Norwegian University of Science and Technology – Universities Council

County Governor Ann-Kristin Olsen, County of Vest-Agder - The State/Research Council

The Academy's observer: Professor Hans M. Barstad, Secretary General

Alternates:

Professor Ragni Piene, University of Oslo – NASL (for Hylland)

Professor Erling Eide, University of Oslo – NASL (for Bernt)

Professor Sølvi Sogner, University of Oslo – NASL (for Tysdahl)

Professor Hanna Mustaparta, Norwegian University of Science and Technology – Universities Council (for Vorren)

Professor Erik H. Egeberg, University of Tromsø – Universities Council (for Skretting)

County Governor Leif Arne Heløe, County of Troms – The State/Research Council (for Olsen)

The Board had 6 meetings in 2000.

1.3 <u>Scientific director</u>

The newly created post of scientific director was advertised for the second time and the closing date for applications was 1 February 2000. There were 20 applicants. To assess the applicants a selection board was appointed consisting of the Chairman of the Board, Professor Aanund Hylland, the Vice-chairman Professor Jan Fridthjof Bernt and Professor Ragni Piene. Professor Ole-Jørgen Skog of the University of Oslo was offered the post, which he accepted, and at the meeting of the Board on 4 April he was appointed for a term of three years to commence on 1 August 2000.

1.4 <u>Location, management and administration</u>

The Centre has offices in the premises of the Norwegian Academy of Science and Letters at 78 Drammensveien.

Professor Aanund Hylland, who has been Chairman of the Board since 1 January 2000, also functioned as scientific director until 1 August, when Ole-Jørgen Skog took up his appointment. The administration otherwise consisted of Office Manager Unn Haaheim Hagen and Secretary Marit Finnemyhr Strøm. With effect from 1 September the latter's post was converted to that of an executive officer. In addition a firm of consultants was employed to run the computer system and to provide computer support for the researchers. Ellen Stokland was the editor of the two Newsletters published during the year. Additional help was provided during certain periods by engaging a person on an hourly basis.

1.5 Other matters

The working environment at the CAS is considered to be good, and absence from work on account of illness is low among the staff. In 2000 nobody had one single day of sick-leave. The Centre's activity does not cause any pollution of the external environment.

The Board resolved that from 1 November 2000 the CAS was to become a member of the early retirement pension scheme (AFP) provided by the Norwegian Public Service Pension Fund.

2. The objectives of the Centre and the work of the Board

Also in the year 2000 the Board saw it as its most important task to work to realise the ambitious objectives that were formulated in 1994:

- 1. The academic activity at the CAS shall be known to satisfy the highest international standards and thereby contribute to raising the level of basic research in Norway.
- 2. The academic work of the CAS is long-term in nature. It shall be permanent and academically independent in relation to political and economic influences including research policy.

The Board worked to realise the first objective with the aim of making the CAS into a spearhead, which through its quality and scientific results shall serve as an example to others and thereby contribute to raising the level of Norwegian basic research.

The most important element in this work is the recruitment of collaborators who can show evidence of international academic results on the highest level. At the same time the Board wishes to encourage the broadest possible co-operation within the framework of the system of research groups. This form of teamwork appears to be functioning extremely well with the size, the academic weight and the youthful constituents (at post-doctoral level) that each group has. The interdisciplinary atmosphere created between the three subject groups strengthens both the academic and the social environment at the CAS.

The research groups, as they function at the CAS, are unique in an international context, and many of the leading researchers who have stayed here, have had extremely positive things to say about this arrangement.

In its work towards achieving the second objective the Board was well assisted by the recommendations of the Evaluation Committee (the Bjørgo Committee). Bringing together the Centre's grant into one item on the budget of the Ministry of the Church, Education and Research is in conformity with the Committee's recommendation and the Board's wishes. The Ministry's requirements that research must satisfy apply exclusively to its quality and are not linked to specific purposes.

The increase in the budget from which the Centre benefited at the end of the 1990s made possible the establishment of a new full post of scientific director. The Board also strengthened the administration by increasing the operating budget to improve the computer services and to be able to provide more help with simple office services. In addition to this the basic grant to each of the research groups was strengthened in real terms.

Nevertheless the Board must admit that there is still a long way to go before the CAS reaches the financial level recommended by the Bjørgo Committee. The budget for the year 2000 provided no increase in real terms in the Centre's grant, and the same applies to 2001. There is thus a difference of some 5 or 6 million kroner between ideals (as represented by the Bjørgo Committee's realistic proposals) and realities. On the one hand there is a great need for further strengthening of the administration at the CAS. With today's level of staffing, the organisation is vulnerable. What is needed is the appointment of one more person to the administrative staff, which has hitherto been impossible on account of the resource situation. Secondly there is a need for the research groups to receive considerably more resources. In the year 2000 the three groups had to manage within an annual budget of approx. 1.6 million kroner each. That this is possible at all is related to the fact that visiting researchers from Norwegian universities receive their salaries from their respective

universities. The funds that the CAS makes available are mainly spent on project costs and guests from abroad, including their accommodation and travelling expenses. The available resources are however much too tight for it to be possible to bring to Norway a sufficiently large number of really leading international researchers. This is to be regretted, since the significance of this for Norwegian research cannot be overestimated.

The Board refers otherwise to its Reports for earlier years. In our Report for 1997 we included central sections of the Evaluation Committee's positive comments on the academic qualities of the CAS and on the considerable amount of work that had already been done to achieve the Board's objectives. In our Report for 1998 we described the development of the constructive co-operation the CAS now has with the Norwegian universities. In the autumn of 2000 the Board commenced the work of renewing these agreements, which expire at the end of 2001.

3. Research groups and academic activity

The Board continued its work on quality assurance. High quality and broad composition characterised the research groups that worked here in 2000 and the results were good (see item 4).

The three groups that started working in the autumn of 1999 continued their projects in the spring of 2000, on the following topics:

- Mesoscopic Physics of Normal Conductors and Superconductors headed by Professor Youri Galperin, University of Oslo
- Classical Chinese Philology
 headed by Professor Christopher Harbsmeier, University of Oslo
- Explaining Regime Effectiveness
 Professor Arild Underdal, University of Oslo

The autumn of the year 2000 saw the start of the activity to be carried out in the research groups that are to function in the period 2000/2001, on the following topics:

- Dynamics of Fluid Rock Systems
 headed by Professor Bjørn Jamtveit, University of Oslo
- Editing Medieval Manuscripts
 headed by Professor Odd Einar Haugen, University of Bergen
- Decision Making under Uncertainty
 headed by Professor Stein W. Wallace, Norwegian University of Science and Technology,
 Trondheim

Newsletters Nos. 1 and 2 2000 give an account of the groups' activities, see attachments 3 and 4. Both these Newsletters are also available in an English edition and are furthermore to be found on the Centre's web pages.

In June 2000 the Board completed its business relating to the nomination of the researchers who are to head each group in 2002/2003. The selection procedure for new research groups is of a high international standard.

After a preceding two-stage perusal of a total of 22 proposals put forward by the universities in the previous autumn, 10 short-listed candidates were the object of an international peer review in the spring of the year 2000. The administration procured a total of 33 evaluation reports from outstanding, independent international researchers, i.e. an average of 3.3 reports per candidate, and this material constituted the basis of the Board's final decision at its meeting in June.

In the autumn of the year 2000 the selection process was begun for 2003/04. By 23 November, which was the closing date for applications, a total of 21 proposals had come in, and these were roughly

evenly distributed over the three main areas. As the first stage of the selection process the Board decided at its meeting on 5 December to go further with 16 candidates, 6 from social science, 5 from the humanities and 5 from natural science.

4. Objectives and results

The Board can show evidence of very good academic results during the first eight years of operation at the CAS, especially since 1995, when the relationship with the Ministry of the Church, Education and Research (KUF) was better clarified and the first university agreements were put in place.

The Board also feels that activities are being conducted with full recognition by both KUF and the Norwegian universities. The good results, according to the CAS researchers themselves, are to a great extent due to the infrastructure, which is appropriately maintained by a very small but extremely efficient administration. Nevertheless the workload falling upon the administration is at times very heavy, and there is therefore, as mentioned earlier, a need to strengthen the administrative staff by the establishment of one additional post. The Board has already passed a resolution in principle to this effect, but the resource situation has hitherto not made it possible to put this resolution into practice.

In the spring of the year 2000 thirty-two researchers were working at the Centre. Six of our most outstanding Norwegian senior researchers within 3 main academic areas were working together with 15 international authorities from 7 countries in 3 continents. In addition the CAS was the workplace for 11 younger researchers (doctoral degree students and post-doctoral research fellows). In the autumn of the year 2000 twenty-two researchers were working at the CAS - of whom 7 were leading Norwegian senior researchers, 9 were outstanding researchers from abroad and 7 were younger researchers. A number of outstanding researchers from abroad are also guests at the Centre for short periods, i.e. a month or less.

Major seminars with broad national/international participation have now become a natural part of the academic activity in all the groups. In addition a number of internal seminars have been arranged.

The interaction at the CAS between the researchers from abroad and those from Norway, and the many lectures they have given at universities and in other academic fora, represent an important contribution to the internationalisation of Norwegian research and are a significant result in themselves.

As a result of the Centre's activities, the Board is expecting a number of publications in the form of data bases, books and articles in international journals. On account of the long delay before material is printed, it is naturally impossible at the present time to have any real overview of these results in relation to the work carried out in the year 2000. Some works have already been published, but most of them are either being evaluated or further revised, or they are available in manuscript form. A complete survey of the results of the work performed in the year 2000 will not be available for some years. The Board will in the time ahead be working to establish a better documentation system for this purpose, but this is inter alia dependent on administrative resources. Otherwise reference is made to reports from the research groups for 1999/2000 (attachments 5, 6 and 7).

In addition the following objectives were achieved in the year 2000:

- The academic activity was performed in conformity with the planned result targets.
- The selection procedure for new research groups is now of a high international level.
- The Newsletter has now achieved a good form and is of a high quality. It appears twice a year
 in Norwegian and English editions, and it is sent to all those who are working with basic
 research in Norway. Web pages have also been established for the Centre.
- Contact with good Norwegian researchers outside Oslo was improved and there has been a significant increase in the number of group leaders from other universities.

- Improvement of the contact with the subject communities in the universities was brought about through the fact that contact persons have been nominated in all the universities. This arrangement is functioning well.
- In the course of the year a more permanent solution was found for our computer services, in that the Centre for Information Technology at the University of Oslo took over the running of our computer system from New Year.
- A scientific director was appointed to a full post.
- The excellent, constructive and mutually obligating co-operation with the universities in Norway and the Norwegian Academy of Science and Letters was carried further.

Nevertheless the establishment of more formal contacts with international sister organisations was delayed on account of capacity problems and the financial limitations. Furthermore the system of popular-scientific lectures was discontinued for an indefinite period on account of gradually declining interest on the part of the general public.

The increase in the budget from 1999 to 2000 was modest. The Board was therefore not successful in its work to achieve a further improvement in the Centre's financial situation. Nor was the budget proposal for 2001 followed up by KUF in spite of the efforts made by the Board. The increase was only 3%, to NOK 8,367,000. If the minimum recommended by the Evaluation Committee had been followed, the grant would have been between 14 and 15 million kroner.

In 1998 for the first time the Board received a donation from a donor abroad, the Andrew W. Mellon Foundation in the United States. The sum donated applies for three years. In the autumn of 1998 and the spring of 1999 two Hungarian post-doctoral research fellows were guests at the CAS. In the spring of the year 2000 a Czech researcher was a member of the "Classical Chinese Philology" group.

5. Finance

5.1 The Centre

From and including the budget year 1999 the former grant from the Norwegian Research Council has been included in the grant from KUF. The total grant in the year 2000 was NOK 8,123,000. Beyond this the individual research groups received a direct contribution amounting to a total of 237,937 kroner. The sources were the Research Council and the Mellon Foundation. In addition the agreement with the universities indirectly brought in considerable resources in the form of approx. 6 research man-years.

The Norwegian Academy of Science and Letters also contributes to relieving the Centre's financial burden in the form of a favourable lease. Furthermore the Academy has put its meeting premises at the disposal of the research groups.

The Centre's Statement of Accounts for the year 2000 show a final balance of NOK 1,410,385. The main reason for this surplus was that the groups altogether spent a good deal less than the funds they had at their disposal in the autumn semester (total under-consumption approx. 940,000 kroner). This was related to the fact that the expenses are greater in the spring semester, and the funds allocated would therefore be applied in the spring semester. The true surplus was therefore of the order of 450,000 kroner, and this was connected with the fact that the Centre's scientific director did not take up his appointment until 1 August 2000.

From earlier years the Centre has an accumulated surplus deposited in a high-interest deposit account. This has to do with the circumstances prevailing during the Centre's first years of operation. In the future the Centre's operating budget will not provide corresponding surpluses – on the contrary, there is as mentioned a need for further strengthening of the budget. Thus the operating budget for 2001

shows a small deficit, and this was covered through the surplus on the operating budget for the year 2000.

The Accounts for 2000 were produced on the assumption that operations would continue.

5.2 The Operating Fund at the CAS

The Operating Fund at the Centre for Advanced Study was given a grant of NOK 27,000 from KUF in 2000, so that the basic capital, which is untouchable, amounted to NOK 1,156,810 at the end of the year 2000. Disposable funds (which are the Centre's buffer) represented NOK 301,897. The Operating Fund is administered by the Board of the CAS.

The Accounts for 2000 were produced on the assumption that operations would continue.

Since the Centre has at any time long-term financial obligations, it is desirable and expedient to have a buffer, in addition to the untouchable share of the Operating Fund (the basic capital). Of the accumulated surplus in the Centre's high interest account the sum of NOK 4,000,000 will therefore be transferred to the disposable share of the Operating Fund in 2001, as security against any unforeseen future financial needs.

CAS 8 February 2001.

Attachments:

- 1. Annual Accounts 2000 Centre for Advanced Study
- 2. Annual Accounts 2000 Operating Fund at the Centre for Advanced Study
- 3. Newsletter 1 2000
- 4. Newsletter 2 2000
- 5. Report from the "Mesoscopic Physics" Group
- 6. Report from the "Explaining Regime Effectiveness" Group
- 7. Report from the "Classical Chinese Philology" Group