





Nordic Council of Ministers' Arctic Co-operation 2003-2005 An evaluation

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Nordic co-operation

Nordic cooperation is one of the world's most extensive forms of regional collaboration, involving Denmark, Finland, Iceland, Norway, Sweden, and three autonomous areas: the Faroe Islands, Greenland, and Åland.

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Results and recommendations

The Nordic Council of Ministers (ncm) Arctic Co-operation Programme 2003-05 is thematically and geographically inclusive. Project allocations specified as Arctic from ncm sources other than the Arctic Co-operation Programme were considerably larger in 2003-05 than those within it, largely due to the Nordic Arctic Research Programme and various mobility programmes. Despite the quest for concentration, 80 percent of the project allocations under the Arctic Co-operation Programme in 2003-05 have been to projects at or below DKK 0.5 million and the share of relatively small projects is even greater for other ncm allocations. Among the three main co-operation areas, projects on sustainable development have received roughly twice as much as have each of those on indigenous issues and welfare. Despite considerable variation across the thematic priorities defined in the programme, all priority areas except Children and Young Adults have been in focus in +three or more relatively large project activities.

The project activities examined more closely in this report have been competently and seriously implemented. Substantial ncm allocations have supported cross-national competence-building and network development that are often difficult to finance from other sources. The complementarity involved here is valuable, especially if measures are

taken within such projects to enhance the likelihood that new insights and networks can serve to generate lasting impacts. There is great variation in the attention paid to disseminating the results, including in formats that are readily accessible to relevant users or a broader audience. The NCM provides enabling resources for such dissemination, not least through its Arctic website and its various publication series.

The procedure for selecting among project proposals under the Arctic Co-operation Programme, based largely on the Nordic Senior Arctic Officials as members of the NCM Arctic Expert Committee (AEC), works particularly well for proposals linked to circumpolar endeavours under the Arctic Council. It is not well adapted to evaluate research proposals unless those proposals attend directly to recognized policy priorities pursued by AEC members. Sectoral expertise is brought into the evaluation process, especially at national levels.

To clarify the division of labour between the Arctic Co-operation Programme and the NCM sectors, the NCM should:

- *Make a decision on* whether it is appropriate to use the Arctic Co-operation Programme to finance also purely intra-Nordic co-operation, as has been done in 2003-05, or whether the programme should be used only for activities that support joint Nordic interests in broader cooperation, including under the Arctic Council or the Barents Region. Should the NCM opt for the latter, the implication would be that applications for purely Nordic project activities should seek funding under NCM sector programmes and working groups.
- *Articulate more clearly* that research projects that do not directly and practically address common Nordic policy priorities that AEC members pursue, including within the Arctic Council, are not to be funded under the Arctic Co-operation Programme unless an additional, Nordic-level structure for scientific peer review is added.
- *Place on the Arctic website* more links to other NCM application opportunities relevant to the substantive priorities defined for the NCM's Arctic work.

To ensure optimal usage of available expertise in evaluation of project proposals, the NCM should:

- *Make sure that the applications reach AEC members in a format that facilitates the process of circulating them to relevant sector expertise and with sufficient lead time to AEC meetings to permit national-level evaluation and aggregation.*
- *Examine the possibilities of obtaining a more formal co-advisory role for the Arctic Expert Committee with respect to applications found to be of high quality and Arctic relevance but channelled to other NCM sector programmes for budgetary reasons.*

To improve intra-NCM co-ordination and facilitate strategic planning, the NCM should:

- *Introduce annual reporting on Arctic activities conducted within the NCM sectors, structured according to the NCM Arctic priorities.*
- *Extend the cycle of the Arctic Co-operation Programme from three to four years, since this will bring the programme in temporal sync from 2008 with several other relevant NCM programmes.*
- *Request a concise results and recommendations report from any NCM-funded Arctic activity upon completion and include them in the annual Action Plan under the Arctic Co-operation Programme, along with progress reports from non-finalized projects and NCM sector reports on Arctic activities. Results and recommendation reports should be written in lay language and include information on the institutions involved and the funds used; the problem pursued; substantive findings; other important results; dissemination activities; follow-up activities and, if appropriate, information about a fuller report with links for downloading. This would enable greater use than has been made thus far of the annual Action Plan under the Arctic Co-operation Programme as a means for strategic planning and dissemination of project results.*
- *Make annual priorities within the Arctic Co-operation Programme based on evaluation of thematic coverage through previous or on-going projects or new and pressing policy challenges.*

To enhance dissemination of results and raise the NCM profile in Arctic affairs, the NCM should:

- *Request in application forms* not only identification of potential users but also specification of how results will be disseminated.
- *Publish the concise results and recommendations reports* that the NCM should request from all finalized projects, on the NCM Arctic web site and circulate them to relevant NCM sectoral committees and working groups.
- *Place on the NCM Arctic web site links* to the most salient reports on Arctic affairs co-funded by the NCM but published externally and downloadable from other web sites, such as the various AMAP assessment reports and the Arctic Human Development Report.
- *Set aside funds to arrange regularly (e.g. annually) practitioner seminars* on Arctic topics to encourage interaction among participants in NCM-funded Arctic project activities and various users.

To permit effective implementation of these various suggestions, the NCM should:

- *Increase the administrative resources* allocated to its Arctic work, from the present 30 percent of an advisor and 30 percent of a coordinator position to full-time positions.



1 Mandate and implementation

The Nordic Council of Ministers (NCM), formed in 1971, is the main forum for Nordic governmental co-operation.¹ Work under the NCM is co-ordinated by a Council that comprises the Nordic Ministers of Co-operation, nominated by their own governments to have overarching responsibility for Nordic co-operation. In addition, there are 10 sectoral Councils of Ministers.² Represented in the NCM are the five Nordic states as well as the three self-governing territories of the Faroe Islands, Greenland and Åland. In the periods between Nordic ministerials, typically held several times a year for each council, co-operation is managed by the Nordic Committee for Co-operation (NSK), supported by the Secretariat, which is located in Copenhagen.³

The first NCM Arctic Co-operation Programme was formulated in 1996; thus, the 2003–05 Programme was the third in a series of three-year programmes and was followed by the ongoing 2006–08 programme. This programme has financed a great many activities in both Nordic and Russian parts of the Arctic, typically concerned with core NCM areas such as the environment, social security and health, trade and industry, and education and research. Organizationally placed under the Nordic Co-operation Ministers, the programme had annual budgets that increased from DKK 3.6 million in 2003 to DKK 7 million

by 2005. On the basis of recommendations prepared by the NCM Secretariat, applications to the Arctic Co-operation Programme are evaluated by the Arctic Expert Committee – the Senior Arctic Officials of the Nordic states and representatives of the Faroe Islands and Greenland.⁴ Significant work on the Arctic is also conducted under other NCM sectors, working groups, institutions and programmes; the Arctic Expert Committee does not oversee those activities.

1.1 Mandate The mandate for this evaluation stipulates that the purpose is to 'reflect how Arctic co-operation was implemented in the period 2003-2005 in terms of the NMR's objectives, and to evaluate the results'.⁵ The work shall:

- 'cover all the NMR's activities in the Arctic, 2003-2005. It will therefore deal with project activities under the Arctic Co-operation Programme as well as with co-funded or parallel activities carried out by the various ministerial councils during the same period.';
- 'lead to a complete overview of the NMR's activities in the Arctic, 2003-2005. The overview will state which ministerial councils were responsible for funding projects and the extent of their financial support (the NMR's share of total project budget), and will rank projects in terms of the primary objectives of the Arctic Co-operation Programme 2003-05.';
- '[provide a] general evaluation of the Arctic results* based on the total project portfolio, as well as an assessment of how they contributed to the achievement of the Arctic Co-operation Programme's objectives and how they helped generate Nordic benefit* with particular emphasis on the how co-operation was implemented, results and subsequent follow-up'.⁶
- 'include recommendations for: ways in which the NMR's Arctic work might be designed to complement other significant national and international input in the Arctic; how status reports and final publications might be improved and made more specific; and how to ensure that the results of activities are incorporated into the political process. The main recommendations should address how the Arctic profile of the NMR might be raised and how Nordic benefit in the Arctic might be consolidated.'

- ‘if possible,* bring forward proposals for the best method of integrating research commitments into the NMR’s overall Arctic involvement.’

1.2 Sources and methods In accordance with the mandate, the NCM Secretariat prepared a list of 66 activities, programmes and institutions partly or wholly funded by the NCM, with detailed information on the NCM funds allocated, their share of total funds, and sectoral responsibility.⁷ Although the evaluation does not aspire to provide in-depth assessment of individual projects, a sub-set of these projects was selected for more detailed scrutiny in the preparation of this report.⁸ Two criteria guided this selection: (1) *Size and NCM financial weight*: most projects in focus in this evaluation are relatively large in financial terms, and NCM contributions weighed heavily in overall project funds; and (2) *Thematic coverage*, seeking to represent all the Arctic thematic priority areas defined by the NCM.

In addition to the material provided by the Secretariat, several categories of information sources have been tapped by the author in the preparation of this evaluation. Interviews have been conducted with project leaders, members of the Nordic Committee for Co-operation and the Arctic Expert Committee as well as NCM staff responsible for Arctic projects.⁹ Those interviews were semi-structured and open, leaving room for other inputs on programme activities and results than those initiated by the author. Beyond this, the evaluation has drawn upon relevant material published on the official web site of the Nordic co-operation, including annual action plans under the Arctic Co-operation Programme and other project information, as well as progress and final reports from selected projects and project publications.¹⁰

1.3 Report outline The next section describes, in capsule form, the geographic and thematic objectives defined for the Arctic co-operation of the NCM in the 2003–05 period. On this basis, section 3 gives tabular and graphical overviews of the full project portfolio with information about scope, financial sources, and relationships to the main objectives and thematic priority areas. Section 4 evaluates project implementation and results within each priority area: welfare; children and young adults; commerce and industry; resource management; environmen-

tal and energy issues; and culture, education and research. Section 5 examines the ncm structures for selecting and evaluating project proposals and disseminating results. Finally, section 6 extracts from that evaluation specific recommendations for further improving the ncm's Arctic co-operation.



2

Nordic Arctic co-operation 2003-05

Objectives and priorities

An overarching principle for all ncm activities is that they are to generate ‘Nordic benefit’. This term refers to the added value and synergistic effects that can be gained by conducting projects and other activities at the Nordic rather than national or bilateral levels, especially with respect to Nordic cohesion, competence and competitiveness.¹¹ The Arctic Co-operation Programme for 2003-05 specified this by highlighting the need to concentrate on more comprehensive and politically relevant projects; to ensure that ncm activities are complementary to efforts by national and other international funding agencies; to anchor projects in user needs; and to improve the visibility and accessibility of information on Arctic activities.

The ncm does not explicitly define the spatial boundaries of ‘the Arctic’ but generally follows the usage of the Arctic Council and the Barents Euro-Arctic Council. The purpose of ncm engagement in Arctic co-operative structures is to promote pan-Nordic interests in the circumpolar area (ncm 2003a:8), and the ncm Adjacent Area Programme focuses on those parts of Northwest Russia that are close to the Nordic borders (ncm 2004b). Taken together, this indicates that the *geographic* areas of priority include all of Greenland, the Faroe Islands, and Iceland; the northernmost counties of Norway (Finnmark, Troms and Nor-

dland), of Sweden (Norrbotten and Västerbotten) and of Finland (Lapland, Oulu and Kainuu); and, in Russia, Murmansk and Arkhangelsk oblast, the Nenets autonomous area, and the Komi and Karelian republics.¹² Needless to say, since circumpolar activities are encouraged, projects may also directly or indirectly finance activities beyond these areas, e.g. in Canada or Alaska, as long as they are seen as contributing to Nordic benefit.

In conjunction with the general requirement for NCM funding that activities should as a rule involve at least three Nordic states or territories, this geographic delineation implies that, technically speaking, all NCM activities in the Arctic are also contributions to 'Arctic co-operation' – whether or not they are linked to broader circumpolar processes or in other ways strengthen co-operation between Norden and other Arctic states. This inclusive understanding of Arctic co-operation is reflected in the mandate for this evaluation, notably in the instruction to 'cover all of the activities of the Nordic Council of Ministers in the Arctic during the period 2003–2005'. Allocations under the Arctic Co-operation Programmes point in the same direction: several projects supported under this mechanism are in fact instances of Nordic co-operation that occurs in the Nordic segment of the Arctic. Opinion differs among those engaged in NCM Arctic co-operation on the weight to be given to linkages to broader Arctic, or at least Euro-Arctic processes. Section 5.4 shows that the NCM's Arctic co-operation programmes are becoming increasingly circumpolar in their orientation.

The first NCM planning document on Arctic co-operation defined a series of substantive objectives, which prior to the period examined here were summarized under three headings: Indigenous peoples, Welfare in the Arctic, and Sustainable development.¹³ Those three categories structure the NCM's own presentation of its Arctic project portfolio in 2003–05 and will serve as reference for the descriptive analysis of the NCM's Arctic activities provided in section 3 of this report. Beyond this, the Arctic Co-operation Programme for 2003–05 specified six thematic priorities which to some extent cut across those objectives and provide natural starting points for evaluation of Arctic activities conducted in section 4:

(1) Welfare, including health and equality especially developing indicators for describing the living conditions of indigenous peoples; improving networking of women's organizations, with focus on women's situation and earning potential; integrating persons of limited working capacity into working life and society; and combating communicable diseases and promoting distance medical treatment.

(2) Children and young adults focusing on their integration into society in geographic areas where special measures are needed with respect to health care, education and training, social welfare, communication of culture, and the voluntary sector.

(3) Development of business and industry with emphasis on promoting economic development in sparsely populated areas; developing infrastructure and communication systems for traditional Arctic industries and favourable framework conditions for new industries; and competence-building in the processing of primary-industry products and removing trade barriers to such products.

(4) Sustainable utilization of resources including an active Nordic role in working groups of the Arctic Council and 'promotion of a regionally sustainable development in the Arctic across national boundaries' (NCM 2003a:10).¹⁴

(5) Environment and energy especially developing efficient local administrations to ensure sustainable development; implementation of international agreements that limit the use and therefore the transportation of persistent organic pollutants and heavy metals or concern access to environmental information and participation in environmental decision-making; and examining alternative forms of energy supply in sparsely populated areas.

(6) Culture, education and training, research and mobility notably co-operation among Arctic academic and research institutions, including virtual modes of teaching with the Arctic University; cultural interaction more broadly; research in and on the Arctic, including that based in the universities of the Arctic area and the Nordic Arctic Research Programme;¹⁵ and various mobility programmes aimed at facili-

tating cultural interaction and participation by students and researchers in Arctic educational and research activities.

Taken together, these objectives and priorities are substantively broad and ambitious. Some tension exists between the decision to concentrate on comprehensive projects and the long list of priorities given above. Moreover, the six thematic priorities have been pinpointed with different degrees of specificity. For example, relatively well-specified and operational objectives are defined for welfare and health and for environment and energy, whereas objectives on children and young adults and on sustainable resource use remain quite open.

Thematic comprehensiveness and open priorities generally imply substantial flexibility for those who implement the programme by selecting among project applications – in this case primarily the NCM Arctic Expert Committee. It is easy to see the advantages of such discretion. The Nordic SAOs have been able to direct funds to activities directly supportive of their Arctic work but not explicitly articulated in the list of NCM Arctic priorities. Important instances in the period examined here are NCM contributions to Arctic Council impact assessments related to climate change and Arctic oil and gas development.¹⁶ Similarly, open programme definitions means that project groups with particularly innovative ideas, strong participation or high policy relevance are not discouraged from engaging the NCM in the realization of projects with high Nordic benefit.

The disadvantages should also be noted, however: comprehensiveness reduces the value of a planning document as an instrument for setting and communicating priorities. Such communication is important, especially since developing a high-quality project with broad Nordic and Arctic co-operation is time-consuming and costly; under the Arctic Co-operation Programme, applications now exceed available funds by a factor of 10.

To summarize, the NCM's Arctic Co-operation Programme 2003-05 is thematically and geographically inclusive, which means that project applications that meet explicitly defined criteria are numerous and heterogeneous. In comparison, the 2006-08 programme (NCM 2006a) has fewer priority items but remains broad.



3 Activity overview

This section briefly outlines the procedural requirements that every **NCM** project activity must meet. It gives an overview of allocations to various categories of Arctic activities in 2003–05, including their distribution over small and large project activities and the main objectives and thematic priorities that the **NCM** has set for its Arctic work. A more detailed qualitative assessment of achievements within the various issue areas is provided in section 4.

- 3.1 Procedural criteria** To permit aggregation over the full range of proposals, a single deadline now applies for all applications to the Arctic Co-operation Programme. Other procedural requirements are:¹⁷ indication of Nordic benefit, including specification of users; participation involving a minimum of three Nordic states or territories, or at least two Nordic participants and a minimum of one from adjacent-area states;¹⁸ and demonstration that the project closely matches the priority themes and strategic goals of the programme, and/or the chairmanship programme in force.¹⁹ In addition, applicants must specify whether and how the project will contribute to profiling the **NCM**, and the Nordic countries more generally, and, as appropriate, make clear its relationship to activities under the Arctic Council or to national efforts. The

NCM welcomes joint-financing proposals, whether including other NCM sectors, or national or international funding sources.

Project leaders are to prepare progress and final reports. Other than the administrative reporting required for triggering NCM project payment, there is considerable diversity in the format of those reports, ranging from thick books to thin leaflets or user-oriented seminars. Reporting in forms that can readily be made available on the web is strongly encouraged.

3.2 Arctic activities funded in 2003-05 In the first two Arctic Co-operation Programme periods, project applications had been relatively few, but the number of high-quality applications rose steeply from 2003. In the latest round, applications exceeded available funds by a factor of 10; the corresponding factor in 2003 was 3. In more recent years, the rise in research-related applications associated with the International Polar Year (IPY) 2007-09 has further accelerated the trend.

The material underlying Table 1 has been prepared by the NCM Secretariat and sums up all NCM allocations to activities characterized by the Secretariat as 'Arctic' in 2003-05. The specificity of the material varies considerably and this is why three categories are distinguished: (1) allocations to Arctic project activities under the Arctic Co-operation Programme; (2) allocations to Arctic project activities from other NCM sources, including under three mobility programmes that have been able to separate out their contributions to Arctic networking; and (3) broader allocations of which a substantial, but unspecified, amount has gone to Arctic project activities.

The third category includes allocations to Nordic institutions located in the Arctic, and to the Saami Council, because the available material fails to specify the shares of those budget items that have been spent on project activities and how much has gone to administrative staff, house rental, heating etc. The category also includes allocations to two mobility programmes and the Environment Development Fund under the Nordic Environment Finance Corporation (NEFCO) since the available material does not specify the share of those activities that concern the Arctic.²⁰ More information on these various allocations, including their sector placement in the NCM, is found in Annexes 3-4.

TABLE 1 NCM allocations (millions DKK) relevant to Arctic project activities, based on material from the NCM Secretariat

Arctic project activities funded under the Arctic Co-operation Programme	15.9
Project activities specified as Arctic and funded from other NCM sources	20.4
<i>Total specified allocations to Arctic project activities</i>	<i>36.3</i>
Allocations with unspecified share to Arctic project activities	303.8

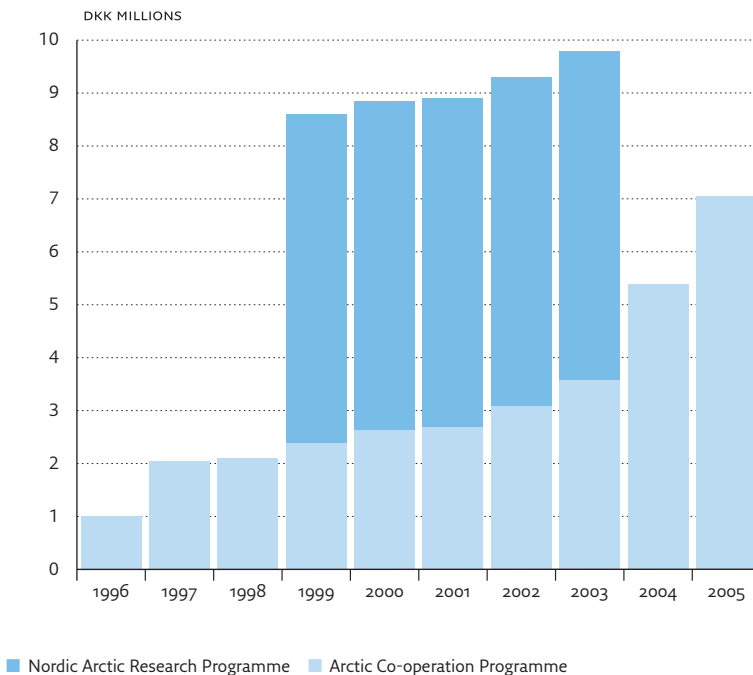
A few comments are in order with respect to this table. First, some readers may be surprised that Nordplus mobility programmes are included in the category of Arctic project activities; to some, those programmes are means for Nordic, rather than Arctic, co-operation. However, this follows from the inclusive definition of 'Arctic co-operation' used by the NCM, not only in the mandate for this evaluation but also in project selection under the Arctic Co-operation Programme and project activities reported as 'Arctic' by the sectors. A number of those projects involve only Nordic states; and as noted, mobility in education and research is among the Arctic priorities set by the NCM. Second, the huge size of the 'unspecified' category in the table (approx. DKK 304 millions) indicates that if systematic reporting by the NCM sectors on Arctic project activities is desired, some decisions must be made on which expenditures to include and which not. Third, even before better data exist on the lump sums aggregated in the third table category, Arctic project allocations from other NCM sources than the Arctic Co-operation Programme are considerably larger in 2003–05 than those within it: DKK 20 millions from a total of DKK 36 millions.

In the following, a series of graphic displays are presented that in various ways relate those 2003–05 project activities to NCM Arctic objectives and priorities. But before this, a timeline is provided on allocations the two NCM programmes that deal specifically with the Arctic.

3.3 NCM programmes specifically

on the Arctic, 1996–2005 The light-toned stacks in Figure 1 display the sums allocated to the NCM Arctic Co-operation Programme since its inception in 1996. The growth is substantial, especially after 2003, and this might be taken as evidence that the enhanced visibil-

FIGURE 1 NCM allocations to its Arctic Co-operation Programme and Nordic Arctic Research Programme, 1996-05 (Total: DKK 50 millions)



Note: Allocations to the Arctic Co-operation Programme from www.norden.org; allocations to NARP from Strand (2006).

ity of Arctic activities inherent in the development of a designated programme, has improved the NCM's willingness to pay for Arctic co-operation.

As shown by the dark stacks placed on top, however, the roughly DKK 6 million allocated annually by the Council of Ministers for Education and Research during the 1999-2003 Nordic Arctic Research Programme (NARP) was not followed up in subsequent years. Some NARP activities flowed into 2004; and in 2005, around DKK 1.5 million of the Arctic Co-operation Programme was earmarked for research, education and information technology and largely expended on activities related to the International Polar Year. In practice, therefore, as pointed out by the Arctic Expert Committee (NCM 2004a:5), the financial growth in Arctic Co-operation Programme allocations has only partly compensated for the discontinuation of that major research endeavour.

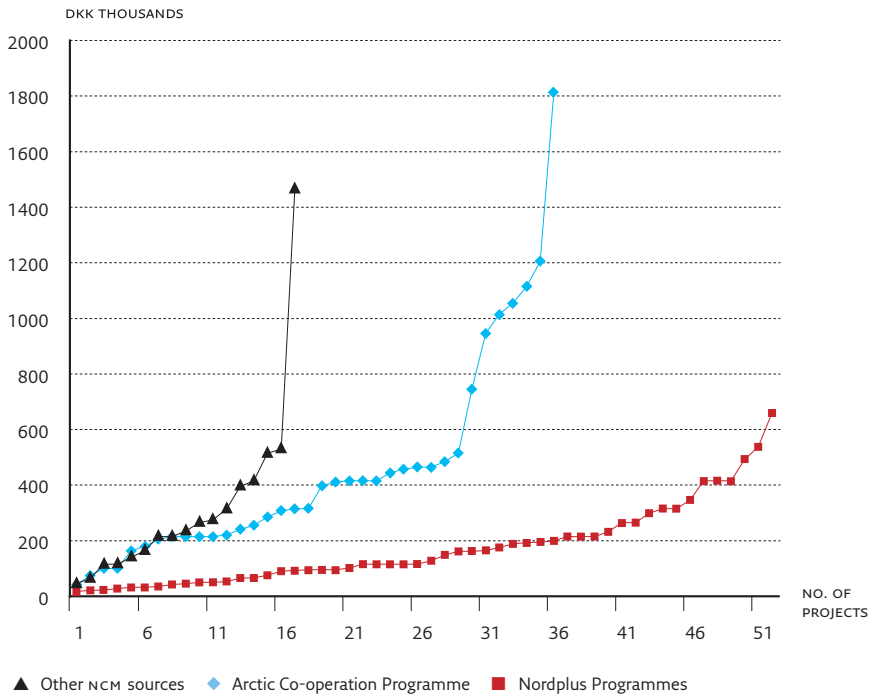
One likely implication is that total NCM allocations to Arctic project activities peaked in 2002/2003 and has only partly recovered from a low point in 2004. Determining this with certainty, however, would require a more thorough analysis of annual Arctic allocations from the various NCM sectors than provided in this report.

3.4 Concentration and policy relevance As noted above, the NCM objective to concentrate its Arctic efforts is modified by very inclusive definitions of geographic and thematic priorities. An alternative interpretation of concentration is that funds should primarily be allocated to large projects, and not be spread out thinly over numerous small activities. One general rationale for such specification of Nordic benefit is that large projects permit mobilization of a critical mass of expertise or technological and economic capacity. Another is that the international process that provides the dominant frame Nordic co-operation in this area, the Arctic Council, lacks the financial muscle to sustain the large-scale and more or less permanent activities it has initiated, especially with respect to environmental monitoring. There is nevertheless some disagreement among members of the Arctic Expert Committee on the balance to be struck between small and big projects and the extent to which *de facto* commitments should be made to multi-year activities. Some express a concern that large and often multi-year activities tie up too much of the limited funds available under the programme.

The diamond line in Figure 2 plots individual allocations to the 36 project activities funded under the Arctic Co-operation Programme, from the smallest to the largest. The square line does the same for the 52 project activities funded under three Nordplus mobility programmes that have specified their Arctic allocations, whereas the triangle line shows 17 specified Arctic project allocations from other NCM sources. NARP projects are not included in Figure 2 because data on individual project allocations in 2003, the last year of this programme, is not available.

As would be expected, mobility-programme allocations – frequently made for travels and other networking activities – are as a rule much smaller than the other two categories. The share of medium-sized or large projects is higher for the Arctic Co-operation Programme than for other Arctic projects, but even for this programme only 20 percent of the projects are above DKK 0.5 million. This is not surprising, given

FIGURE 2 NCM allocations to project activities specified as Arctic, 2003-05, not including NARP allocations (Total: DKK 30 millions)



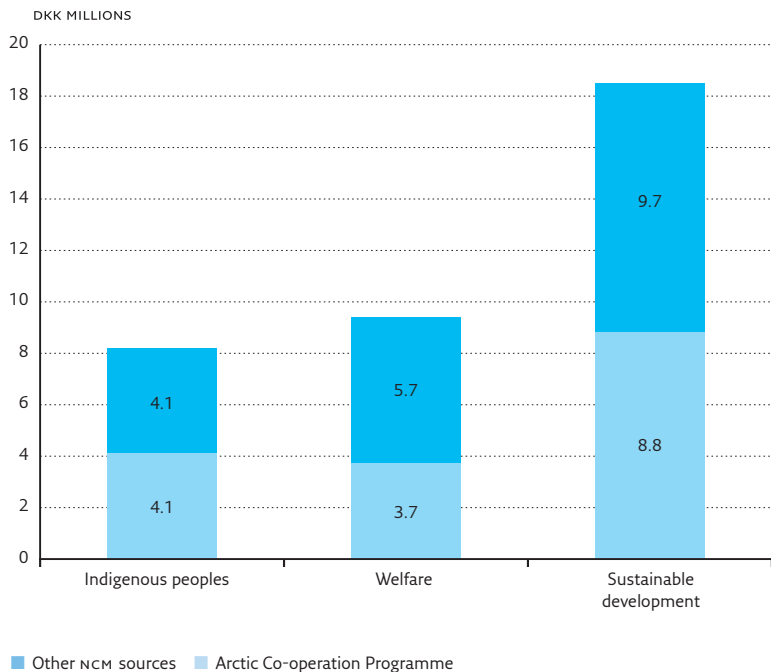
Note: Individual projects are listed in Annexes 3-4.

the substantive scope of NCM priorities in the Arctic. Activities based in Arctic Council working groups are well represented among the relatively big projects, especially those under the Sustainable Development Working Group (SDWG) and the Arctic Monitoring and Assessment Programme (AMAP).²¹ That said, there are also quite a few sizable projects that are not linked to the Arctic Council, including the two biggest NCM projects specified as Arctic in the 2003-05 period, which address workforce skills and renewable energy in the West Nordic Region, and several projects conceived within the Action Plan to Protect the Natural Environment and Cultural Heritage in the Arctic. The limits to such size comparisons should be kept in mind, however. Several project activities extend beyond the 2003-05 period, whereas others are so closely linked that they could easily be seen as a single unit.

3.5 Distribution of Arctic project activities

by primary objective Figure 3 distributes the approx. DKK 36 millions specified as having gone to Arctic project activities in 2003–05 over the three general substantive NCM objectives for its Arctic work, related to Indigenous peoples, Welfare, and Sustainable development. The assignment of project activities to each of these categories is based on project descriptions, reports, or interviews with project leaders or NCM staff. Allocations to any project that clearly addresses more than one main objective have been divided among the relevant categories. It is inevitable that some of those assignments, given in Annex 5, are debatable – but Figure 3 should nevertheless give a roughly valid picture of how funds have been distributed over those three co-operation areas.

FIGURE 3 Distribution of NCM funds allocated to project activities specified as Arctic by primary objective, 2003–05 (Total: DKK 36 millions)



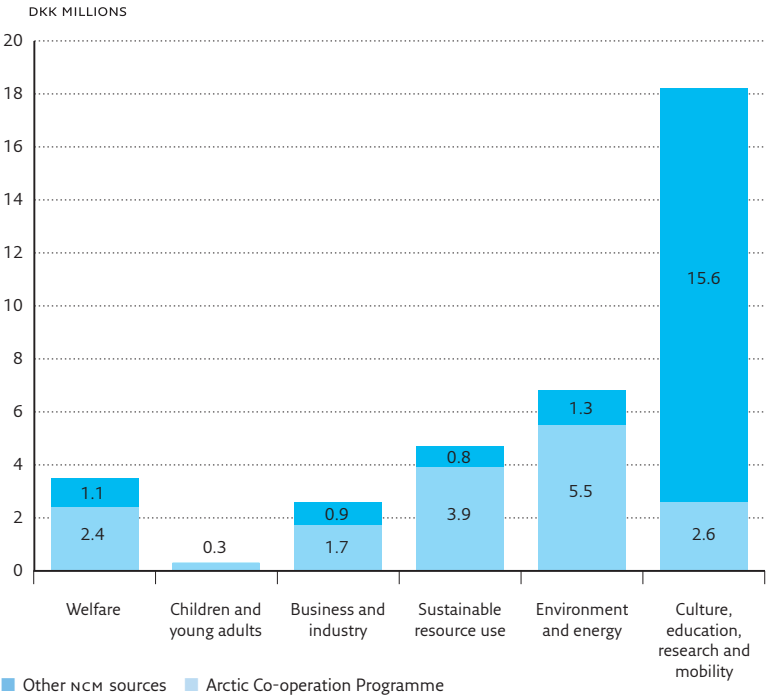
Note: Annex 5 lists the projects and the assignment to primary objectives.

Sustainable development is clearly the largest co-operation area, with allocations twice as high as each of the two others. Welfare appears to weigh more heavily among projects funded outside than within the Arctic Co-operation Project, but other differences are not striking.

Distribution of Arctic project activities

3.6 by priority theme Figure 4 distributes the allocations specified as having gone to Arctic project activities in 2003-05 over the thematic priorities defined for the ncm's Arctic work. Again, some allocations concern project activities that clearly address more than one thematic priority and have been divided among the relevant categories. Consider for instance the allocation to the production of the Arctic Human Development Report, a broad exposé of challenges and opportunities facing Arctic residents and decision-makers within all the priority areas defined by the programme. This case is atypical, however: since each of

FIGURE 4 Distribution of ncm funds allocated to project activities specified as Arctic by thematic priorities, 2003-05 (Total: DKK 36 millions)



Note: Annex 5 lists the individual projects and the assignment to thematic priorities

the thematic areas is further specified by a series of priority questions, projects that fit more than one thematic category are much fewer than with respect to general objectives.

The dominance of the category ‘Culture, education, research and mobility’ is largely due to the financial weight of NARP and the Nordplus mobility programmes; funds under the Arctic Co-operation Programme for those purposes have been moderate. The dominance would have been even greater had information been available on the Arctic component of Nordplus Junior and Nordplus Higher Education. Nor is there any doubt that a number of activities financed under the general allocations to such Nordic institutions as the Norden houses in the Faroe Islands and Iceland, the Norden Institute of Greenland, and the Nordic Saami Institute in Norway, would fall into the Culture and Research category. The same is true for the allocation to Saami co-operation, parts of which are allocated by the Saami Council to Saami artists and cultural organizations.

The second largest category is ‘Environment and energy’, in part due to the string of AMAP projects funded under the Arctic Co-operation Programme on various pollution and climate-change issues. The Environment and energy share of the total would have been much bigger had it been possible to specify the segment of NCM annual allocations (around DKK 10 millions) to the Nordic Environment Finance Corporation (NEFCO) spent in the Arctic.²² Arctic projects on sustainable resource use have also received substantial amounts, largely under the Arctic Co-operation Programme. In contrast, the category ‘Children and young adults’ is almost empty, whereas ‘Welfare, health and equality’ has received intermediate amounts.

3.7 Summary and implications Allocations to the Arctic Co-operation Programme have risen continuously since 1996, but the jump that occurred in 2004 only partly made up for the closure of the Nordic Arctic Research Programme. Arctic project allocations from NCM sources other than the Arctic Co-operation Programme were considerably larger in 2003-05 than those within it, largely due to NARP and the three mobility programmes that have specified their Arctic project allocations. Improved reporting by NCM sectors on their Arctic activities will increase the difference.

Despite the quest for concentration, 80 percent of the project alloca-

tions under the Arctic Co-operation Programme in 2003-05 have been to relatively small projects, at or below DKK 0.5 million. The share of small projects is even greater for other NCM allocations. Among the three main co-operation areas, various projects on sustainable development have received roughly twice as much as have those on indigenous issues and welfare. As regards the priority areas, that on Culture, Education and Research is clearly the largest category, mostly due to other NCM sources than the Arctic Co-operation Programmes, especially various Nordplus mobility programmes and NARP. Environment and Energy is also markedly bigger than the others, even before considering allocations to the Nordic Environment Finance Corporation. Children and Young Adults are clearly at the bottom.



4

NCM-activities and Nordic benefit in the Arctic

While section 3 described Arctic projects largely in quantitative terms – funds allocated to various objectives and thematic areas – this section provides more qualitative evaluation of how those projects contribute to the NCM's Arctic objectives and priorities. This examination of the Nordic benefit of NCM Arctic activities is structured by the thematic priorities reviewed in section 2.

- 4.1 Improvement of welfare, health and equality** Several large projects under the Arctic Council SDWG have focused on welfare, health and equality, including the Arctic Human Development Report already mentioned. Another comprehensive, multi-year project concerns the development and use of new indicators for describing the living conditions of indigenous peoples, co-ordinated by Statistics Greenland. NCM financial support to initial, explorative activities in the late 1990s was important to the conception of this project, which has subsequently received funding from many national and international bodies. In close interaction with respondents among indigenous communities, project participants have developed highly elaborate and detailed questionnaires on a broad range of factors relevant to individual well-being. The main rationale was the perception that indicators commonly

used in European and American surveys of living conditions failed to reflect the perceptions, priorities and special characteristics of many Arctic indigenous residents, including combinations of wage employment and hunting, fishing, herding and traditional food-processing activities. Adapted versions of a 62-page core questionnaire have structured approximately 7,000 interviews with Inuit in Canada, Greenland and Alaska and indigenous peoples in Chukotka. Partly for funding reasons, the number of interviews with Saami in Norway, Sweden and the Kola Peninsula is much lower, and no interviews will be conducted in Finland. Data collection continues and empirical results are now in the process of being tabulated for publication. The project maintains its own website, and the approximately 30 senior scientists involved have presented the research design and other findings at workshops and conferences as well as to relevant decision-makers.

While large amounts of finely grained data have been generated, as yet less attention has been paid to the aspiration to use those data in comparative dynamic social analysis of causal relationships.²³ Certain analytical themes have been identified, with preliminary findings largely descriptive, such as the relative pervasiveness of health problems among indigenous residents in Chukotka as compared to those in Greenland and Alaska. With the Greenlandic data collection now finalized, comparative analysis across Inuit populations will now proceed on a more robust footing. Follow-up activities include an Arctic Council project on Arctic Social Indicators, the development of an IPX-endorsed project to enable web-based accessibility of data on living conditions, and participation in several NCM-funded efforts to learn more about the composition of economic production and trade in the Arctic and the ability of Russia's indigenous peoples to affect environmental decision-making.

Two projects co-ordinated by the Northern Feminist University, a private resource centre in Northern Norway, has directly targeted a second priority: women's role in economic life. Both these projects have been conducted under the Arctic Council. They take as their point of departure the recommendations of that council's 'Taking Wing Conference', echoed in the AHDR (2004) statement that certain characteristics of Arctic rural communities, notably declining populations and the fact that young women are the first to leave, accentuate gender concerns also found in mainstream societies. The one project focuses on the fisheries sector, while the second expands the scope to include other indus-

tries based on Arctic natural resources, including mining, petroleum activities and forestry. Statistical and qualitative data are used to shed light on women's actual participation and positions in production ('individual power') and decision-making ('institutional power') and their saliency and mode of representation in the media and the public debate ('discursive power'). NCM funds have financed travel and workshops needed for co-ordinating nationally funded case studies as well as the production and dissemination of project reports. Although thematically linked, the case studies are not designed to support systematic comparative analysis across countries or sectors.

With respect to integration of individuals with limited working capacity into the labour force and society, an NCM-funded project on labour-market services in the North Atlantic should be noted (NCM 2004c). Distant medical treatment was addressed within a NARF project that aimed to draw lessons from the Greenland experience; whereas none of the NCM-funded Arctic project activities aggregated in Table 1 addresses communicable diseases. The lack of applications on this topic could be due to the large-scale programme activities carried out in this period under the Barents Euro-Arctic Council and the Council of Baltic Sea States, aimed at strengthening measures against tuberculosis and the spread of HIV in Northwest Russia and the Baltic States. Among the largest projects in the thematic area is an effort to improve dissemination of the *International Journal of Circumpolar Health*, notably by making articles in this international peer-reviewed journal available on the web.²⁴

To summarize, several large projects relevant to the Welfare, Health and Equality have been conducted and most of the five priority items have been addressed to some extent. Projects are comparative in orientation and involve development of closer networks among experts and practitioners – evident also in the generation of new projects with partly overlapping participation. Major projects are closely linked to more comprehensive endeavours, especially within the Arctic Council.

4.2 Integration of children and young adults The general aim in this area has been the 'social integration' of children and young adults in 'geographic areas where special measures are needed with respect to health care, education and training, social welfare, communication of culture, and the voluntary sector'. Figure 4 shows that NCM allocations

to specified Arctic project activities on this topic were relatively small in 2003-05. Largely based on NCM funds, the Russian Association of Indigenous Peoples of the North, Siberia and Far East (RAIPON) has established an Information Centre for Indigenous Youth at the Institute for Northern Peoples at Herzen State Pedagogical University. Although located in St. Petersburg, this centre conducts various outreach activities towards indigenous communities in the Russian Arctic, including the publication of a youth magazine and support to indigenous students arriving in St. Petersburg. Another project proposal directly focused on youth on the European margin was recommended for funding under the Arctic Co-operation Programme, but was transferred to another NCM sector for budgetary reasons (NCM 2003a:36).

Children and Youth is a major co-operation area within the NCM; and since 1998, a series of NCM Framework Action Plans on Children and Young Adults in the Nordic Region's Adjacent Areas have been developed and implemented. In the 2003-05 period, however, individual projects have been rather small and the geographical focus of the programme has largely rested on the Baltic states and non-Arctic parts of Western Russia (NCM 2003b). It is quite plausible that specification of Arctic project activities funded under the Nordplus Junior mobility programme would have raised the Children and Young Adults profile of NCM Arctic work.

4.3 Development of business and industry The Arctic Council project on Reindeer Husbandry and Wild Reindeer looms large in the Business and industry category.²⁵ Co-ordinated by the Centre for Saami Studies at the University of Tromsø, Norway, the Reindeer Project speaks directly to two priority items for the NCM's Arctic work: promotion of economic development in sparsely populated areas; and competence-building on the processing of primary-industry products and removal of trade barriers to such products. The project followed up on an earlier Arctic Council project also funded by the NCM. Compared to its precedent, the Reindeer Project broadened the focus to include not only herders but also the role of the entire family in reindeer husbandry, as well as interactions between herded and wild populations of reindeer and caribou.

Circumpolar in scope, the Reindeer Project sought to provide a compact overview presentation of family-based husbandry practices,

the socio-economic situation of those depending on this industry, and current threats such as poor recruitment, conflict with hunters of wild populations, climate change, and constraints on market development due to national and international sanitary regulations that are poorly adapted to small-scale production (Ulvevadet and Klovov eds. 2004). Outreach activities included a well-attended conference in Yakutsk, Russia, which permitted not only presentation of own findings but also provision of inputs from Russian researchers, officials and herders. Due to lack of US and Canadian funding, no American indigenous organization was included in the International Steering Committee. This was the subject of some tension during presentations at Arctic Council meetings and may in part explain why policy recommendations were articulated only in the Scandinavian and the Russian parts of the overview report. Comparison was only implicit – the project was largely designed in the form of similarly structured case-studies. Partly in response to recommendations articulated in this and the previous reindeer project, Norway has established an International Centre for Reindeer Husbandry in Kautokeino, tasked with collecting and disseminating information to support sustainable practices in that sector.

Another major Arctic Council project, Economy of the North, has also sought to shed light on the conditions for economic development in sparsely populated areas, but with a very different focus. Co-ordinated by Statistics Norway, the project took as its point of departure the observation that data on Arctic contributions to national economic production and exports are inadequate, incommensurable and unreliable, largely because collection and publication of data is rarely broken down regionally. Accordingly, the project has aimed to forge closer links among Arctic statistical agencies, compile and compare existing regional-level data, and provide a preliminary assessment of Arctic impacts on global and national economies. On that basis, explorative analysis is offered regarding how those impacts will be affected by the rapid climate change currently affecting the region. An emerging network of Arctic governmental and university-based statisticians is a major result. The project group comprises key participants in other large Arctic Council and NCM activities on socio-economic data collection, notably the Arctic Human Development Report and Living Conditions. Its anchoring in the statistical agencies of Arctic states varies somewhat but governmental statistical agencies in Canada, Greenland, Norway, Russia and

Sweden participate. Similar to the AMAP projects on climate and oil and gas, the Economy of the North Project has encountered difficulties in generating Russian data in formats that permit comparison with those compiled in the Nordic and American countries.²⁶

One project conducted under the NCM's Labour Market sector is also relevant to the development of business and industry in the Arctic – an examination of the match between workforce skills and the competence needs of various industries in the West Nordic Region, especially Greenland.²⁷

In summation, NCM activities on the development of Arctic business and industry involve case studies within a primary industry that is of particular interest to indigenous peoples, examination of the economic structure of the Arctic as whole, as well as labour market analysis in sub-regions. Less attention appears to have been paid to programme aspirations concerning infrastructure and communication systems for traditional Arctic industries and framework conditions for new industries. Individual activities are relatively large, several of them closely linked to the Arctic Council's SDWG. Results from the Reindeer Project have been widely disseminated thanks to NCM financial support. In the longer run, the network of Arctic statisticians generated under the Economy of the North Project may improve the reliability and accessibility of quantitative data on Arctic production and trade.

4.4 Sustainable resource use One important cluster of activities in this thematic area has been conducted under the NCM Action Plan to Protect the Natural Environment and Cultural Heritage in the Arctic (NCM 1999).²⁸ Anchored in an Arctic Steering Group, this action plan was financed partly under the Arctic Co-operation Programme and partly by two working groups under the NCM Environment sector.²⁹ Projects have generally focused on Greenland, Iceland, and Svalbard (Nielsen 2006), in part because the level of experience in the respective administrations with integration of cultural heritage concerns and environmental management differed considerably. Some are primarily research-oriented, building a data base on sea-bird colonies in the Arctic and examining the effects of trawling and seafloor dredging for shrimp and scallops on populations, ecosystems and such cultural heritage as shipwrecks. The former was part of a broader effort by the Arctic Council working group on Conservation of Arctic Flora and Fauna (CAFF) to create a Cir-

cumpolar Biodiversity Monitoring Programme, and has alerted Nordic Ministers for the Environment to the recent tendency toward declining size and breeding success in several colonies. Findings from the trawling and dredging project, based in Iceland, were among the drivers for Iceland's decision in 2006 to conserve five coral reefs with a combined area 80 square kilometres.³⁰

Other projects deal with policy evaluation and have developed criteria for selection of geological and cultural elements for protection and procedures for improving protection and preservation of cultural heritage, monitoring transport attrition, and reducing environmental disturbances in the conduct of Arctic research. A common theme in the recommendations produced is that, wherever possible, local, regional and national authorities should seek to combine the necessary protection of the natural and cultural environment with their active use for educational/scholarly or recreational purposes – and to link such usage with enhanced monitoring. Another project allocated funds under that action plan in 2003–05 proposed the development of a Nordic high-level education programme for nature guides, rangers and outfitters, to complement national training programmes.³¹ No decision to develop such a Nordic-level programme has been made thus far, but the project has encouraged the training of several new nature guides in Greenland.

Dissemination activities have included publication of reports, conference and workshop contributions, and notably the production of a brief, lay-language results and recommendations report, published in Danish, Norwegian and English versions (Nielsen 2006). Such publications may support institutional memory with respect to lessons learnt; since many administrative bodies are marked by frequent changes in personnel, the long-term effects of competence-building and networking among project participants are inherently uncertain. Beyond this, the more general message that cultural heritage concerns should be integrated with protection of the natural environment has been written into the most recent chairmanship programme under the Arctic Council and will be carried further in working group activities.³²

The other major NCM projects on sustainable resource use are nested within broader endeavours under the Barents Regional Council (on co-ordination of environmental monitoring activities of Norway, Finland and Russia) or under the Arctic Council (on assessing the impacts of petroleum activities on the Arctic environment and socio-eco-

nomic developments). Nordic funds have enabled the collection of data on oil contamination in water masses, selected organisms and sediments in the Davis Strait, the North Atlantic, and the Barents, Kara and White Seas as part of the preparation of the AMAP Oil and Gas Assessment (AMAP 2006a). A major problem has been late and inadequate data provision, especially from Russia, causing considerable delays in the assessment report. Rather than being finalized in time for the Arctic Council Ministerial in 2006, submission a lay-language Overview Report and a two-volume Science Report is now expected in the course of 2007. As with many AMAP projects, NCM funds cover only part of the total costs of producing this major assessment. Separate NCM funding was provided for dissemination of preliminary results at a 2005 symposium held in Russia, attended by experts from science, industry and government agencies, as well as Arctic residents and other stakeholders.³³ When finalized, the assessment is expected to raise the saliency of oil and gas issues in societal debates and also generate Arctic Council policy recommendations on hydrocarbon development in the Arctic.

To summarize, NCM project funds allocated to sustainable resource use in the Arctic clearly support Nordic participation in work overseen by the Arctic Council. There are also a number of project activities in this category that are sub-regional in scope, targeting the Barents and West Nordic regions. Project reports have been widely disseminated, including through relatively short lay-language reports, and their anchoring in administrative structures that can support follow-up activities is generally good.

4.5 Environment and energy The NCM priority items in this thematic area have been quite specific, and relatively large projects have focused on most of them. The strengthening of efficient local administrations to ensure sustainable development has been pursued in several smaller projects framed within the concept of Local Agenda 21. A second priority item is implementation of international agreements on the use and transportation of persistent organic pollutants (POPs) and heavy metals.³⁴ A string of NCM projects, most of them co-ordinated by AMAP, have addressed this matter by attempting to clarify the relationship between long-range transported and local POPs and the health situation for Arctic residents and marine mammals that represent an important component of the diet of some indigenous peoples. These

activities typically form part of larger Arctic Council endeavours, such as the 2000–04 Persistent Toxic Substances project. The latter was linked to the United Nations Environment Programme and engaged the Russian ministries for natural resources and health as well as the Russian Federal Service for Hydrometeorology and Environmental Monitoring (Rosgidromet) in assessing the significance of aquatic food chains as pathways of exposure for indigenous peoples, the relative importance of local and distant sources, and the role of atmospheric and riverine transport.³⁵ The project actively involved RAIPON and is seen as having raised levels of awareness and competence among Russian indigenous organizations regarding the severity of local and distant discharges of hazardous compounds.

By far the greatest costs in all AMAP assessments are carried by the governments that finance activities under national research institutions whose contributions are 'in-kind', largely through the allocation of research man-years. Russian in-kind contributions typically require also an external funding component, however, and among the funds made available to AMAP for such purposes, NCM contributions have weighed heavily. In the Persistent Toxics Project, most of the NCM funding has been spent in Russia. Results have been used in scientific assessment work under the Convention on Long-Range Transported Air Pollution (CLRTAP), the OSPAR Convention on Marine Pollution in the North-east Atlantic, the Stockholm POPs Convention, and the World Health Organization, in addition to feeding into the Arctic Council. Several peer-reviewed articles are either published or in press. Follow-up activities have included various internationally funded projects under what is now the Arctic Council's Arctic Contaminants Action Programme (ACAP) aimed at improving the collection, storage and decontamination of various hazardous substances – PCB and obsolete pesticides in particular. Outreach to local authorities and representatives of indigenous organizations has mainly been through workshops held in each of the four geographic areas in focus – inhabited by the Saami (Kola peninsula), Nenets (lower Pechora river basin and parts of Taimyr peninsula), Dolgan (Taimyr) and Chukchi and Yupik peoples in the far east (Chukotka) (AMAP 2004).

Some scientific follow-up has also been generated. The Persistent Toxics Project documented clear relationships between ways of life, including dietary habits, and exposure to toxics that in turn appeared to

affect the sex ratio among newborns: relatively fewer boys are born to women highly exposed to the toxics examined. The number of blood tests analysed was fairly small, however, and the project has been followed up by another NCM-funded project on lifestyle, local pollution and human health. The latter seeks to exploit more of the blood material collected in the earlier project and combine that information with new studies of birth registers in Greenland and Canada.

In addition to enabling participation by Russian researchers, the NCM has been crucial to AMAP assessment reports in another, very practical way. Nordic funds have financed the production of maps, graphical displays and tables for presentation of the various data collected during the assessment, as well as layout, printing and other technical aspects of report production. According to the AMAP General Secretary, assessment reports produced under this working group could not have been prepared without this support.³⁶

Another, related AMAP project concerns the production of the high-profiled Arctic Climate Impact Assessment (ACIA). NCM funds have been used in moderately successful attempts to compile and apply existing Russian data for circumpolar assessment of the extent and consequences of Arctic warming. Some data were acquired but not in formats that permitted usage with corresponding information from the other parts of the Arctic. A more recent activity has examined the combination effects of climate change and Arctic contaminants, studying how the transport and effects of priority contaminants are affected by the significant warming underway in the Arctic. The policy relevance appears to be high: there is a clearly discernible line from the foci and findings of these AMAP projects to the Nordic 2006-08 Strategy for Climate and Toxic Substances (NCM 2006b).

A third priority in the Energy and Environment part of the Arctic Co-operation Programme highlights access to environmental information and participation in decision-making, pursued in several medium-sized capacity-building activities targeting indigenous communities. A RAIPON project aimed at strengthening the role of indigenous communities in environmental decision-making was meant to map traditional knowledge among indigenous communities in Murmansk, Arkhangelsk and Nenets relevant to environmental policy issues in those regions. It was implemented by developing a questionnaire, in part inspired by the Living Conditions Project, and training some individuals in the various

communities to conduct questionnaire-guided interviews. Between two and three hundred interviews were conducted, but funds ran out before the material could be analyzed; the data therefore rest in the RAIPON library, in principle open for interested users. Another activity, co-ordinated by the Indigenous Peoples Secretariat in Copenhagen, aimed to communicate results from the Persistent Toxics Project and discuss policy implications with indigenous communities and Arctic Council policy-makers.

The final priority item concerned examining alternative forms of energy supply in sparsely populated areas. Co-ordinated by Nordic Energy Research, a three-year project on renewable energy systems and hydrogen technology in the West Nordic Region is looking into this matter. The project aims to specify technical concepts for appropriate, environmentally friendly energy solutions in sparsely populated areas.³⁷ This project, motivated by the logistical and environmental challenges associated with traditional diesel-based systems for local electricity generation, has been well anchored politically. The Nordic Energy Ministers had instructed their Committee of Senior Officials and Nordic Energy Research to develop a project, and an *ad hoc* West Nordic working group, including representatives of national energy agencies and local communities, was established for project follow-up (Lemgart and Ulleberg 2005:8). Initially, the geographic foci of this project were towns and villages in the Faroe Islands, Greenland, and Iceland that are not connected to main transmission networks and therefore dependent on local electricity production. Following mapping of existing systems for production and consumption, including load profiles, the project group narrowed in on two specific localities, Nólsoy in the Faroe Islands and Nanortalik in Greenland. Detailed case studies are in the process of being finalized, and the aim is to produce findings with a degree of accuracy and reliability that can permit decision-making on whether to build demonstration facilities. The solutions identified in the project combine windmills, hydrogen technology and proton exchange membrane (PEM) fuel cells, and may complement (but not at this stage replace) fossil-fuel aggregates. Interactions among the project group, local authorities and the West Nordic group have generated and disseminated information on applying these technologies in the West Nordic context. One NCM publication is available on both the NCM and the Nordic Energy Research websites, but awareness of the project beyond those directly

involved appears to be moderate so far; a second report is being finalized. Not surprisingly, a main challenge is that, with current framework conditions, such hybrid facilities will produce electricity that is significantly costlier than that produced by fossil fuels (Lemgart and Ullberg 2005:122-3). Moving beyond analysis to realization of demonstration projects – that is, actually building facilities in the two localities identified as appropriate – will require project funds at considerably higher levels than have so far been invested.

In summary, then, major NCM projects have been launched on each of the items prioritized within the Environment and Energy theme, especially those concerning hazardous substances and renewable energy. There is a clear concentration on relatively large projects with high policy relevance. It is not a straightforward matter to determine the causal direction between NCM Arctic priorities and project activities, however. As in other thematic areas, political commitment to some activities preceded the formulation of the Arctic Co-operation Programme and is likely to have shaped programme specification. There is no doubt that the various AMAP projects, the largest cluster in the Environment and Energy theme, are highly compatible with several NCM Arctic objectives and priorities. They involve networking among Nordic research institutions and feed into larger, multi-year endeavours that include other Arctic states, and generate policy-relevant information in a profiled issue area. They contribute to the implementation of several international agreements that have been accorded high priority by Nordic states, and put a Nordic stamp on salient activities under an Arctic Council working group. According to AMAP (2006c), Nordic researchers and officials have on several occasions been able to act as a bloc on issues where representatives of other states, among them Russia or the USA, have articulated other attitudes or interpretations of existing data. These projects have also triggered scientific follow-up activities and form a basis for the formulation of Nordic political priorities. With respect to the Renewable Energy Project, the main issue is now whether findings will encourage governments, energy companies or international organizations, including the EU, to move forward and support a transition to the demonstration stage.

4.6 **Culture, education and training, research and mobility**

This is a large and heterogeneous category. Many activities under the Nordic institutions in the Faroe Islands, Greenland, and Iceland revolve around cultural co-operation and facilitate networking within the Nordic segment of the Arctic. Recall that those activities are not included in the graphical displays in Section 3 because such allocations are not specified in the available material. Another important means for intra-Nordic cultural co-operation in the Arctic is the Nordplus Language programme. The purpose of this programme is to protect and strengthen the Nordic language community. Among the larger projects financed in the 2003–05 period is work connected with production and updating of intra-Nordic dictionaries and development of a Saami word-processing correction programme.³⁸

The other Nordplus programmes aim to facilitate Nordic mobility and networking in the education and research sectors, including co-operative course development and funding of teacher and student travels. As shown in Figure 2, many of those mobility grants are small, but NCM allocations for those purposes to, e.g., Foreningen Norden in Iceland have been quite substantial in the 2003–05 period.³⁹ Except for Nordplus Neighbour, which is open to applications from adjacent-area countries, the Nordplus programmes are primarily instruments for intra-Nordic mobility. In practice, these funds may also support broader, circumpolar networks since intra-Nordic mobility between institutions in, for instance, the University of the Arctic umbrella, is often financed under Nordplus whereas travels beyond Norden are funded under north2north or Barentsplus.⁴⁰

The last year of the 1999–2003 Nordic Arctic Research Programme (NARP) falls within the period examined here and predominates among NCM project activities in this category. Co-ordinated by the Thule Institute at the University of Oulu, this major multi-disciplinary undertaking funded 63 projects that examined the lead theme, ‘Rapid Changes in the Arctic’, within three broad areas: Natural processes, Biodiversity and environmental threats, and Living conditions for Arctic inhabitants. NARP activities comprised networking, data compilation, modelling work and pursuance of a wide range of research questions. Among the objectives was to recruit young researchers to the Arctic field and a large number of master and doctoral students were involved. One of the

three international symposia and 21 of the 68 NARP workshops were held in 2003. As many as 334 peer-reviewed articles were published within the ambit of this programme (Strand 2006:50).

Drawing in part upon experiences and findings from NARP and ACTA, an analysis is in progress under the NCM Education and Research sector of whether there are gains to be reaped from greater co-ordination of Nordic research on climate and environmental change in the Arctic, and if so, in what research areas.

4.7 Summary and implications Despite considerable variation across the thematic priorities defined in the programme, all areas except Children and Youth have been in focus in three or more relatively large project activities. The project activities examined more closely in this report have been competently and seriously implemented. There is, however, great variation in the attention paid to disseminating the results, including in formats that are readily accessible to relevant users or a broader audience.

Many of the projects have compiled data of particular kinds from several Arctic states. However, there have been few attempts to utilize such data to conduct systematic comparative analysis with a view to extracting and examining lessons from experiences with policies made in different states. More attention to such analysis would contribute to Nordic benefit. With projects that involve data acquisition from Russia, there have been increasing problems of availability, related to the general tightening of control over information in that state. The implication for NCM activities is that particular attention should be paid to identifying well-placed and competent Russian co-operation partners. In fact, this point can be generalized to transnational collaboration with other segments of the Arctic as well.

Substantial allocations under the Arctic Co-operation Programme and other NCM sources have supported cross-national competence-building and network development that are often difficult to finance from other sources. The complementarity involved here is valuable, especially if measures are taken within such projects to enhance the likelihood that new insights and networks can serve to generate lasting impacts. Attention to follow-up activities is especially important in evaluating proposals for, or results from, this category of activities.



5 NCM-instruments for selection, implementation and evaluation

This section focuses on the NCM arrangement for project selection and follow-up of Arctic project activities, including co-ordination with the NCM sectors and dissemination of results.

5.1 Ensuring complementarity

with other Arctic efforts One important means for ensuring complementarity between NCM Arctic activities and those of others is the annual meetings of leading representatives of four major regional bodies for international co-operation in the North: the NCM, the Bar-ents Euro-Arctic Council (BEAC), the Council of the Baltic Sea States, and the Arctic Council. Moreover, the NCM General Secretary attends the biannual Arctic Council ministerial meetings, whereas the NCM Senior Advisor on the Arctic usually attends SAO meetings.⁴¹ During SAO meetings, activities conducted by the Arctic Council's permanent and *ad hoc* working groups are also reported, which permits an open flow of information both to the AEC and to the NCM Secretariat.⁴² It will be recalled that the AEC comprises the Senior Arctic Officials of the Nordic states and corresponding representatives of the Faroe Islands and Greenland. Although not formally an observer with the BEAC, the NCM is regularly invited to meetings of its Committee of Senior Officials

as well; here the *NCM* is represented by the Senior Advisor on Russian affairs.⁴³

Another major instrument for avoiding duplication, and realizing potential synergy, with activities funded by others than the *NCM* is the evaluative role of the Arctic Expert Committee (*AEC*) in selection of projects under the Arctic Co-operation Programme. Funding recommendations by the *AEC* are usually, but not always, followed by the Nordic Committee for Co-operation, which usually has the final say on that segment of *NCM* Arctic activities.⁴⁴ The centrality of the *AEC* members in the work of the Arctic Council makes them well placed to identify possible links between proposed Nordic activities and related projects in other Arctic states.

This use within the *NCM* of an already existing grouping – Nordic *SAOs* who meet regularly also in other fora and for other purposes – is cost-efficient and has some very clear advantages. It ensures that the *NCM* decision-making body is advised by those high-ranking officials who are the most closely engaged with circumpolar issues. Project leaders praise the relatively non-bureaucratic application procedure and the *NCM*'s ability to make decisions on funding rather swiftly. Especially those whose projects are nested in broader Arctic Council projects activities highlight the strength of a project evaluation procedure that ensures due awareness to the policy priorities in that high-level forum.

However, another consequence of relying upon the Nordic *SAOs* in evaluation of proposals should also be noted. The members of the *AEC* are typically foreign ministry officials with extensive knowledge of Arctic affairs and hands-on expertise concerning ongoing international processes. This makes them well placed to evaluate the policy relevance of a project's overarching goals – but not necessarily the quality of project design and participation. It is the responsibility of the individual *AEC* members to involve complementary sector expertise at the national level prior to allocation meetings. In addition, the *NCM* Arctic advisor seeks inputs from *NCM* sector departments, in practice at advisor level, before elaborating a project overview with funding recommendations to the *AEC*.

There is much to suggest that the efficiency of this mode of involving sector expertise varies across project categories. For scientific research proposals whose merit cannot be determined on the basis of practical attendance to policy priorities, such evaluation is a specialized

and time-consuming matter. That is why extensive national bureaucracies are typically maintained to conduct such evaluation, including by accepted procedures for tenders and scientific peer review. The principal view held by the NCM Education and Research department, and shared by several AEC members, is that all NCM research allocations should be subject to the same procedures for scientific evaluation as are national or European allocations.⁴⁵ National research councils are presently involved by the AEC members prior to allocative meetings, but it would be unrealistic to expect such reviews to be very thorough. Indeed, thorough scientific reviews conducted in parallel by research funding agencies from all the seven states and territories represented in the AEC would hardly be an efficient use of resources.

There are several ways to strengthen the involvement of complementary expertise, if this is perceived as useful. All of them are likely to render the process more time-consuming and therefore more costly. One is to add external peer review of project proposals, at least for those that involve allocations above a certain amount or include a substantial scientific research component. In the case of research projects, a cost-efficient mode of project evaluation could be through formal involvement of NordForsk, the NCM body for co-operation among national research councils in Norden. If the NCM considers the Arctic Co-operation Programme as an appropriate instrument for funding research, an initiative in this direction may be considered. Alternatively, if inclusion of this additional layer of expertise is seen as too costly from an administrative point of view, the NCM should clarify that the Arctic Co-operation Programme will not be used to cover scientific research activities unless they directly underpin specific Nordic policy priorities. Such a clarification would not necessarily preclude support activities for basic research, such as networking, reachout and publication.⁴⁶

In other issue areas, a somewhat different approach is conceivable, i.e., enhancing the level of NCM sector involvement in order to exploit the issue expertise associated with sectoral senior officials committees and working groups. Such involvement would not necessarily affect the central position of the AEC. For instance, a brief evaluation statement by the most relevant NCM sectoral committee or working group could be requested for any project application above a certain threshold for consideration by the AEC. The reverse arrangement is already practised to some extent: in recent years, the Nordic SAOs have relayed positive

evaluations of project applications not funded for budgetary reasons, to other NCM funding sources where they might be relevant, often in the Environment sector. In addition to introducing complementary expertise, higher-level NCM sector involvement in Arctic project evaluation could also improve the basis for co-ordinating NCM Arctic activities within and outside the Arctic Co-operation Programme, and might affect subsequent follow-up activities in a positive way. There are important disadvantages as well, however: notably that this would mean involving yet another group of time-pressured senior practitioners in allocating amounts of funds that are, after all, moderate. If seriously implemented, involvement of sectoral bodies outside the Secretariat might also require aggregation of different views on the part of the various national representatives involved.

All considered, the current arrangement – which places the main responsibility for involvement of sector expertise at the national level with the AEC members as hubs – probably remains the most rational solution, at least for applications that do not require careful assessment of scientific merit. This arrangement requires, however, that AEC members are given sufficient time to disseminate applications to relevant national sector expertise. This would require that they receive application material in a format that (1) provides them with a quick overview, for instance a substantive half-pager on each; (2) permits ready distribution of single project files to those in adjacent bureaucracies or other bodies called upon to comment on proposals; and further (3) that they receive this material well in advance of AEC meetings. Those requirements appear to have been only partly met so far, especially with respect to the time allowed for national preparation before the AEC meets to decide upon allocations.

5.2 Making results available to

potential users Responsibility for disseminating substantive project results rests with project leaders, but the NCM supports such activities in several ways. Project activities briefly reviewed above have generated interesting results that are reported through workshops and conferences, feedback given during fieldwork, and most tangibly through reports published within or outside NCM publication series. The NCM is in general progressive in its web policy; practically all publications are

downloadable in accessible formats and free of charge from the Nordic website. Many reports are also available in hardcopy versions.

A general impression is that the NCM exerts relatively little pressure on Arctic project leaders to encourage dissemination. The application form used for the Arctic Co-operation Programme does not request any detailed dissemination plan; and although several project leaders have received gentle reminders, monitoring and review of publication activities do not seem to be regular exercises. The new web-based reporting system could be used actively for such purposes. Several project participants said they would welcome more direct encouragement, or opportunities, to present their results in relevant Nordic fora, for instance through seminars arranged within the NCM framework.

Correspondingly, several senior practitioners involved in NCM Arctic co-operation complain that after they have forwarded their recommendations and funds have been allocated, they hear little about how projects have actually proceeded and what findings have emerged. Such information is clearly available, including on the NCM Arctic website, but usually not in the compact format that would enable those senior officials to keep track of the many projects and their contribution to Nordic benefit, beyond the few activities that for one reason or another hold their particular attention. This suggests that the NCM should require from project leaders, as many other funding agencies do, concise (e.g. 2-page) lay-language results and recommendations reports from any NCM-funded Arctic activity that is finalized. Those reports should be made available not only on the web but also to the AEC and other relevant NCM bodies, including working groups and committees under the sectors.

5.3 Project reporting and strategic planning In the past few years, administrative reporting of Arctic Co-operation Programme projects has been web-based and conducted through a password area known as the NCM Portal, with separate entries for project leaders, evaluators and others. This system has been the source of considerable frustration among many project leaders. Weaknesses have been noted concerning the availability, and download ability, of appropriate forms and guidelines. Many have also had difficulties with uploading progress and final reports, and have received inadequate or unreliable feedback on whether uploading has succeeded. Alleviating the problem, the Sec-

retariat appears to have handled these problems, presumably related to the introduction of a fairly new system, in a positive and flexible way.

An important link exists between this administrative reporting system and the need for more extensive provision of concise reports on substantive results from project activities, including to relevant practitioners within the *ncm* sphere. At present, structures for evaluative activities, including assessment of whether stated objectives under the Arctic Co-operation Programme are being met by *ncm*-funded project activities, are not well elaborated. The annual Action Plan published on the *ncm* website presents the *ncm* objectives and thematic priorities in the Arctic and briefly describes projects funded that year. Although there is some variation, descriptions tend not to include specific information on targeted user groups, nor do they as a rule specify what is to be produced under the project, or timetables for such delivery. The substantive heterogeneity across projects of the information provided under the same headings suggests that those descriptions are automatically generated from the *ncm* project database and then given some light editing. This may be a cost-efficient mode of producing such documents, but it requires clear and specific instructions to those reporting, as to desired length and exactly what kinds of information should be supplied. In addition, as shown in section 3, there is room for improvement with respect to reporting on Arctic activities from the *ncm* sectors.

It is not surprising, therefore, that little attention is given in the annual Action Plans to assessing what has been achieved within the projects that are finalized or underway, including substantive results and how they have been disseminated. If one section of the annual Action Plan would compile progress reports (approx. 1/3 page) from ongoing projects and the 2-page results and recommendation reports that the *ncm* should request from finalized projects, a basis would exist for the *AEC* to articulate priorities for the subsequent year within the broader field defined in the Arctic Co-operation Programme. This would, at relatively low cost, improve conditions for making strategic considerations more of an ongoing activity than it is today.

5.4 Arctic profile of the

Nordic Council of Ministers Enhancing the visibility of its Arctic activities is among the objectives pursued by the *ncm*. An important means for achieving this goal is the *ncm* Arctic web site. This website

is attractive and informative and provide access to a large number of publications and news reports. Interviewees have noted certain points for further improvement: Given the complexity of the NCM structure, including the various sources for financial support, the Arctic website would be a good place to highlight applicable programmes or action plans of particular relevance to the Arctic. Some indicated that the Arctic website is used primarily by those already well versed in the Arctic dimension of Nordic co-operation. Thus, the NCM Arctic webmaster should explore possibilities for establishing links from as many global or regional websites with Arctic relevance as possible, making sure also that those links bring the interested user directly to the Arctic website. Today, those who arrive from the Arctic Council website, for instance, are taken to the NCM general homepage; they may not be aware of the existence of a dedicated Arctic page on the International Co-operation menu. Also, on the Arctic web, links should be placed to the most salient reports on Arctic affairs co-funded by the NCM but published externally and downloadable from other web sites. Prominent examples include the various AMAP assessment reports as well as the Arctic Human Development Report. This would combine dissemination with NCM profiling; the links should be accompanied by brief texts that explain NCM contributions. Although such contributions are invariably noted in acknowledgement sections, it is safe to assume that many readers skip over such portions of the text.

The circumpolar orientation of the NCM appears to be on the rise. We find evidence of this in the specific attention devoted to the Arctic Council, and the Nordic role in this institution, which is even more striking in the 2006–08 Arctic Co-operation Programme (NCM 2006a) than in preceding ones. There is much to suggest that the Nordic SAOs are increasingly emphasizing the opportunities provided by the NCM Arctic Co-operation Programme and other NCM activities, to underpin Nordic initiatives within the Arctic Council with concrete activities. The 2006 Salekhard Declaration from the fifth Arctic Council Ministerial indicates that these efforts also promote the saliency and visibility of the NCM itself. Consider in particular the statements that the Arctic ministers '[w]elcome the joint efforts of the Arctic Council and the Nordic Council of Ministers to establish a dialogue at the appropriate levels of government to further define the scope of co-operation in education and research' and highlight the 'increased co-operation with regional

bodies, such as the Nordic Council of Ministers... and acknowledge their contribution to circumpolar co-operation', and '[a]ppreciate the increased financial contribution of the NCM to the Arctic Council activities and Working Groups' projects'. No earlier ministerial declaration has paid such attention to the NCM.

As the chairmanship of the Arctic Council in the next six years will rest with a Nordic state, the institutional conditions for exerting such influence on developments in this circumpolar forum are especially favourable – of course, within the limits inherent in a high-level forum that also includes two of the world's greatest powers.

5.5 Summary and implications The procedure for selecting among project proposals under the Arctic Co-operation Programme, based largely on the Nordic SAO's, works particularly well for proposals linked to circumpolar endeavours under the Arctic Council. It is not well adapted to evaluate research proposals unless those proposals attend directly to recognized policy priorities pursued by the members of the Arctic Expert Committee. Sectoral expertise is brought into the evaluation process, especially at national levels. In order for this arrangement to work well, considerable time is needed from the reception of application material to its discussion at AEC allocation meetings. Structures that would permit the AEC to evaluate, as a regular activity, progress towards meeting NCM objectives and priorities in the Arctic would be strengthened by more active use in the annual Action Plans of progress and project reports that are already requested from project leaders. Such usage of reports would require clearer instructions on contents and word limits in reporting forms. The additional work would fall primarily upon project leaders and would not be unreasonable. Strategic work would also benefit from annual reporting from the NCM sectors on their Arctic project activities.

The NCM provides enabling resources for the dissemination of project results, not least through its Arctic website and its various publication series. Encouragement and review of publication activities are light. There is no general requirement for compact, lay-language results and recommendation reports.

The circumpolar orientation of the NCM is on the rise and so is the NCM saliency within the foremost high-level forum for circumpolar co-

operation, the Arctic Council. NCM contributions to some of the major successes of the Arctic Council could be highlighted more on the NCM Arctic website.

The suggestions emerging from this discussion of how the NCM may enhance complementarity, project dissemination, administrative and political follow-up, strategic planning, and its own overall visibility in Arctic affairs, all involve additional tasks for the Secretariat. At present, only 30 percent of an advisor position and 30 percent of a secretary position is allocated to the Arctic and this is inadequate already today. In consideration of the additional task recommended in this report and the cross-sectoral nature of the issue area, there is much to suggest that raising those shares to full positions would improve the conditions for realizing Nordic benefit in the Arctic.



6 Recommendations

This section adds to, and elaborates, on the recommendations found in the summarizing section in the beginning of this report.

To clarify the division of labour between the Arctic Co-operation Programme and the NCM sectors, the NCM should:

- *Make a decision on* whether it is appropriate to use the Arctic Co-operation Programme to finance also purely intra-Nordic co-operation, as has been done in 2003–05, or whether the programme should be used only for activities that support joint Nordic interests in broader cooperation, including under the Arctic Council or the Barents Region. Should the NCM opt for the latter, the implication would be that applications for purely Nordic project activities should seek funding under NCM sector programmes and working groups.
- *Articulate more clearly* that research projects that do not directly and practically address common Nordic policy priorities that AEC members pursue, including within the Arctic Council, are not to be funded under the Arctic Co-operation Programme unless an additional, Nordic-level structure for scientific peer review is added.

- *Place on the Arctic website* more links to other NCM application opportunities relevant to the substantive priorities defined for the NCM's Arctic work. In view of the broad set of Arctic priorities and the limited sums available under Arctic Co-operation Programme, it is important to trigger activities under other NCM programmes and instruments, notably with respect to intra-Nordic project activities.

To ensure optimal usage of available expertise in project evaluation, the NCM should:

- *Make sure that the applications reach AEC members* in a format that facilitates the process of circulating them to relevant sector expertise and with sufficient lead time to AEC meetings to permit national-level evaluation and aggregation.
- *Examine the possibilities of obtaining a more formal co-advisory role* for the Arctic Expert Committee with respect to applications found to be of high quality and relevance but channelled to other NCM sector programmes for budgetary reasons. Such formalization could ensure that AEC evaluative statements are taken into consideration by the decision-making committee and would activate the existing obligation held by committees in other NCM sectors to pay attention also to Arctic Co-operation Programme priorities when allocating funds to Northern activities.

To improve intra-NCM co-ordination and facilitate strategic planning, the NCM should:

- *Introduce annual reporting on Arctic activities* conducted within the NCM sectors, structured according to the NCM Arctic priorities. This would increase attention to those priorities in other parts of the NCM and improve possibilities for co-ordination of intra-Nordic and more broadly based Arctic project activities.
- *Extend the cycle of the Arctic Co-operation Programme* from three to four years, since this will bring the programme in temporal sync from 2008 with such other relevant NCM programmes as Sustainable Development and Fisheries, Agriculture, Forestry and Food-stuffs, and thus improve conditions for co-ordination.

- *Provide in project application forms* clearer instruction on contents of the project summary field (e.g. project name, sum applied for, participants, goal, activity, products and timetable), and a sharply enforced (e.g. through field truncation) size limit (e.g. ½ printed page). It should be made clear that the contents of this field will be compiled into an overview package that will be used by the Arctic Expert Committee as part of the evaluation material and by the Secretariat in compilation of an Annual Action plan, should the project be granted funding.
- *Request a concise results and recommendations report* from any NCM-funded Arctic activity upon completion and include them in the annual Action Plan under the Arctic Co-operation Programme, along with progress reports from non-finalized projects and NMR sector reports on Arctic activities. Results and recommendation reports should be short (e.g. 2 pages), written in lay language and include information on the institutions involved and the funds used; the problem pursued; substantive findings; other important results; dissemination activities; follow-up activities and, if appropriate, information about a fuller report with links for downloading. Similarly, the NCM should instruct project leaders to prepare progress reports with a length (e.g. 1/3 printed page) and format that make them suitable for inclusion in the annual Action Plan under the Arctic Co-operation Programme. This would enable greater use than has been made thus far of the annual Action Plan as a means for strategic planning and dissemination of project results.
- *Make annual priorities within the Arctic Co-operation Programme* based on evaluation of thematic coverage through previous or ongoing projects or new and pressing policy challenges. Such annual priorities could be written into the Action Plan and be published on the Arctic website. For potential applicants, this would indicate the topics with highest chances of success. For the NCM, this would improve the precision of the Arctic Co-operation Programme as an instrument for generating Nordic benefit. However, since thematic coverage and policy relevance are only two of several criteria for Nordic benefit, such annual priorities should not preclude allocations to other parts of the Arctic Co-operation Programme.

To improve dissemination of results, the NCM should:

- *Request in application forms* not only identification of potential users (as today), but also specification of how results will be disseminated, so as to direct attention to outreach activities early on in the process of developing proposals.
- *Publish the concise results and recommendations reports* that the NCM should request from all finalized projects, on the NCM Arctic web site and circulate them to relevant NCM sectoral committees and working groups.
- *Place on the NCM Arctic web site links* to the most salient reports on Arctic affairs co-funded by the NCM but published externally and downloadable from other web sites, such as the various AMAP assessment reports, the Arctic Human Development Report, and others. Such links could be accompanied by brief texts that explain the NCM contributions. Although such contributions are invariably noted in acknowledgement sections, these are often not read.
- *Set aside funds to arrange regularly (e.g. annually) practitioner seminars* on Arctic topics to encourage interaction among participants in NCM-funded Arctic project activities and various users. Seminars should be compact enough – thematically and in terms of length – to attract the attention of time-pressured practitioners. Locations could alternate among the Nordic countries and territories. In addition to external profiling of the NCM's Arctic activities, this would also further enhance connections among NCM Arctic project participants and thus contribute to their broader exchanges on developments in the Arctic.

To permit effective implementation of these various suggestions, the NCM should:

- *Increase the administrative resources* allocated to its Arctic work, from the present 30 percent of an advisor and 30 percent of a secretary position to full-time positions.
- *Allocate the resources needed* to ensure that the web-based system for administrative project reporting ('the portal') has a transparent website structure and high technical reliability.

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Annex 1 : Mandate for the evaluation of the NCM's Arctic Co-operation 2003-05

Background

1. The Nordic Council of Ministers' Arctic Co-operation Programme dates back to 1996, and is based on the 1995 Council of Ministers' proposal B 157/m. The Arctic Co-operation Programme was originally integrated into the Council of Ministers' Adjacent Areas Programme but has been treated separately since 2003, in order to raise its profile. The three-year programme that ran from 2003-2005 had an annual budget of DKK 5.6 million in 2003 rising to DKK 7.0 million in 2005.
2. In addition to the Arctic Co-operation Programme, other significant Nordic activities have been implemented in relation to the Arctic, notably in research, education and environmental co-operation.
3. On 5 April 2006, the Nordic Committee for Co-operation (NSK) decided that all the Nordic Council of Ministers' (NMR) Arctic activities would be evaluated. This mandate provides the framework for the evaluation and sets out the issues and conditions that the Nordic Council of Ministers requires to be clarified and evaluated.

Aim of evaluation

4. The aim of the evaluation is to reflect how Arctic co-operation was implemented in the period 2003-2005 in terms of the NMR's objectives, and to evaluate the results. The point of departure for the evaluation is the compilation of Arctic activities that has been produced by the Secretariat of the Nordic Council of Ministers.

Aspects to be examined

5. The evaluation will cover all the NMR's activities in the Arctic, 2003-2005. It will therefore deal with project activities under the Arctic Co-operation Programme as well as with co-funded or parallel activities carried out by the various ministerial councils during the same period.
6. This work is designed to lead to a complete overview of the NMR's activities in the Arctic, 2003-2005. The overview will state which ministerial councils were responsible for funding projects and the extent of their financial support (the NMR's share of total project budget), and will rank projects in terms of the primary objectives of the Arctic Co-operation Programme 2003-05.
7. A general evaluation of the Arctic results is envisaged based on the total project portfolio, as well as an assessment of how they contributed to the achievement of the Arctic Co-operation Programme's objectives and how they helped generate Nordic benefit in the Arctic. The consultant (see item 13 below) will select illustrative examples of projects to support the evaluation, with particular emphasis on the how co-operation was implemented, results and subsequent follow-up.
8. The evaluation will include recommendations for: ways in which the NMR's Arctic work might be designed to complement other significant national and international input in the Arctic; how status reports and final publications might be improved and made more specific; and how to ensure that the results of activities are incorporated into the political process. The main recommendations should address how the Arctic profile of the NMR might be raised and how Nordic benefit in the Arctic might be consolidated.

Overlap with research analysis

9. A considerable proportion of the NMR's involvement in the Arctic concerns research, or is research-related. This is the case both for the Arctic Co-operation Programme and for the activities of

the various specialist ministerial councils. The Nordic Council has recommended that the NMR should increase investment in research into climate and environmental change in the Arctic (Rec. 18/2005).

10. The Nordic Council of Ministers intends to comply with this recommendation by carrying out an analysis, through the Council of Ministers for Education and Research (MR-U), of: the need for expertise and co-ordination; the requirements for continued, long-term Nordic research into climate and environmental change in the Arctic; and the consequences of such changes for the population of the region.
11. The MR-U evaluation of research into climate and environmental change will result in proposals for ensuring the scientific relevance of research projects, including those within the Arctic Co-operation Programme. Funding for this pilot study will be provided by the Arctic Co-operation Programme and MR-U.
12. In evaluating the total Arctic activities of the NMR, the consultant should take the MR-U analysis of Arctic research into account and, if possible, should bring forward proposals for the best method of integrating research commitments into the NMR's overall Arctic involvement.

Implementation and timetable

13. The evaluation will be carried out in accordance with the mandate by a consultant from a recognised sociological research institute or consultancy with experience of evaluations and of Arctic conditions. For the purposes of the evaluation, the consultant may conduct interviews with Arctic experts in the Nordic countries, advisors and heads of department in the NMR Secretariat, managers of completed projects and other relevant stakeholders.
14. The consultant should begin work immediately after the NSK approves this mandate at its meeting on 13 June 2006. The NMR should receive a draft report on this work not later than 10 Sep-

tember 2006, with a view to the draft report being debated at the meeting of the NSK on 4 October 2006.

15. Final approval of this evaluation of the NMR's Arctic Co-operation will be the responsibility of the NSK.

Funding

16. The evaluation will be funded from money not used by the 2005 framework budget and by the Arctic Co-operation Programme's 2006 budget for the 'Neighbourship' policy. Expenses for travel, services, printing etc will be met out of the total project budget, which will not exceed DKK 250,000.

Annex 2 : List of persons interviewed

Nordic government officials

- Baldursson, Ragnar; Ministry of Foreign Affairs, Iceland; member of the Arctic Expert Committee; interviewed 1 November 2006
- Engell, Mikaela; Ministry of Foreign Affairs, Denmark; member of the Arctic Expert Committee; interviewed 19 October 2006
- Ising, Tore; Ministry of the Environment, Norway; head of the Arctic Steering Group for the Action Plan to Protect the Natural Environment and Cultural Heritage in the Arctic (2000-05); interviewed 7 November 2006
- Lindroos, Bo; Ministry of Foreign Affairs, Finland; former Head of the NCM Environmental and Resource Department; interviewed 2 November 2006
- Mortensen, Kaj P.; Department of Foreign Affairs, Faroe Islands; member of the Arctic Expert Committee; interviewed 17 October 2006
- Ödmark, Helena; Foreign Ministry, Sweden; member of the Arctic Expert Committee; interviewed 9 November 2006
- Rosenberg, Stein Paul; Ministry of Foreign Affairs, Norway; deputy member of the Arctic Expert Committee; interviewed 17 October 2006 and 10 November 2006
- Søndergaard, Jørgen; Greenland Home Government in Denmark; member of the Nordic Committee for Co-operation; interviewed 26 October and 14 November 2006
- Ulfstedt, Erik; Ministry of Foreign Affairs, Finland; member of the Arctic Expert Committee; interviewed 31 October 2006

NCM Secretariat and Working Groups

- Ammendrup, Jon; Danish Institute for Fisheries Research; Secretary, NCM Working Group on Environment and Fisheries, email exchange 12 October 2006
- Bock, Nikolaj; Senior Advisor for Arctic Affairs, NCM; interviewed 13 September 2006 and 13 November 2006
- Møller, Hans Skotte; Danish Forest and Nature Agency; Secretary, NCM Working Group on Nature, Open Air and Cultural Environments; interviewed 24 October 2006
- Titlestad, Gard; Head of NCM Department of Education, Research and Information and Communication Technology; interviewed 14 November 2006

Project leaders or co-ordinators

- Alfsen, Knut; Statistics Norway; interviewed 18 October 2006
- Egereva, Daria; Russian Association of Indigenous Peoples of the North, Siberia and Far East; interviewed 27 October 2006
- Forss, Mikael; Nordic Energy Research; interviewed 16 October 2006
- Glomsrød, Solveig; Statistics Norway; email exchange 9–10 November 2006
- Kullerud, Lars; University of the Arctic; interviewed 14 November 2006
- Poppel, Birger; University of Greenland; formerly with Statistics Greenland; interviewed 27 October 2006
- Reiersen, Lars-Otto; Arctic Monitoring and Assessment Programme; interviewed 13 October 2006
- Sloan, Lindis; the Northern Feminist University, Norway; interviewed 6 November 2006
- Ulvevadet, Birgitte; Department of Biology, University of Tromsø, Norway; formerly with Centre for Saami Studies at the same university; interviewed 19 October 2006

Annex 3 : NCM allocations relevant to Arctic project activities, 2003–05

This Annex contains three tables; one for each of the allocation categories given in Table 1 of this report (see Section 3.2). These tables are based on material from the NCM Secretariat.⁴⁷

ANNEX 3, TABLE A Project activities specified as Arctic and funded under the NCM Arctic Co-operation Programme 2003–05, sorted by priority area (Total: DKK 15,9 millions)

ALLOCATIONS SPECIFIED AS ALLOCATED TO ARCTIC PROJECT ACTIVITIES				
Activity	NCM ⁴⁸ allocation (1000 DKK)	Total ⁴⁹ budget (1000 DKK)	Responsible management body (2003–05)	NCM sector
Welfare, including health and equality				
Arctic Human Development Report	1.190	4.547	Stefansson Arctic Institute (Iceland)	MR-SAM ⁵⁰
Comparative Arctic living conditions	1.040	3.741	Statistics Greenland	MR-SAM
Women's participation in decision-making process in Arctic fisheries management	200	3.281	Northern Feminist University (Norway)	MR-SAM
Women and resource management in the rural North	270	3.504	Northern Feminist University (Norway)	MR-SAM
Developing Journal of Circumpolar Health	1.100	3.400	Center for Arctic Medicine (Finland)	MR-SAM
Children and Youth				
Capacity building of Russian indigenous people for building a sustainable future	190	279	RAIPON, ⁵¹ Russia	MR-SAM
Development of business and industry				
Reindeer husbandry and wild reindeer	1.000		Centre for Saami Studies, Univ. of Tromsø, Norway	MR-SAM MR-FJSL ⁵²
The Economy of the North	730	4.060	Statistics Norway	MR-SAM

ANNEX 3, TABLE A

ALLOCATIONS SPECIFIED AS ALLOCATED TO ARCTIC PROJECT ACTIVITIES				
Activity	NCM allocation (1000 DKK)	Total budget (1000 DKK)	Responsible management body (2003-05)	NCM sector
Sustainable resource use				
Database on seabird colonies	100	105	NFK ⁵³ , NMD ⁵⁴	MR-M ⁵⁵
Protection criteria for geological formations and cultural heritage sites	560	560	NFK	MR-SAM MR-M
Representative selection of Arctic cultural environments	300	300	NFK	MR-SAM MR-M
Monitoring transport attrition of our natural and cultural heritage in the Arctic	166	166	NFK, NMD	MR-SAM MR-M
Integration of environmental concerns in research and education	600	600	NFK	MR-SAM MR-M
Nature guides in the Arctic	600	600	NFK	MR-SAM MR-SAM
The Pasvik programme – Environmental monitoring in border area of Finland, Norway and the Russian Federation	396	11.961	Finnmark County Governor, Norway	MR-SAM
Oil pollution in northern marine areas and organisms	930	3.160	Arctic Monitoring and Assessment Programme (AMAP)	MR-SAM
International Arctic oil and gas symposium 2005	200		AMAP	MR-SAM
Environment and energy				
Strengthening the role of indigenous communities in environmental protection	400		RAIPON, Russia	MR-SAM
Relationship between pollution and health conditions for Arctic populations	400	2.300	AMAP	MR-SAM
Lifestyle, local pollution, human health of Arctic indigenous peoples	500	700	AMAP	MR-SAM
Persistent Organic Pollutants (POPs) in ringed seals in Northwestern Russia	300	590	AMAP	MR-SAM
Ringed seals exposure to POPs	206		MIFI ⁵⁶	MR-SAM
Assessment of effects attributable to climate change and uv radiation in northern areas	400	1.295	AMAP	MR-SAM

ANNEX 3, TABLE A

ALLOCATIONS SPECIFIED AS ALLOCATED TO ARCTIC PROJECT ACTIVITIES				
Activity	NCM allocation (1000 DKK)	Total budget (1000 DKK)	Responsible management body (2003-05)	NCM sector
ACIA International scientific symposium on climate change in the Arctic	200	1.600	AMAP	MR-SAM
Effects of climate change on transport of contaminants to the northern areas	450	555	AMAP	MR-SAM
Circumpolar contaminants, communicating results	430	480	Indigenous Peoples' Secretariat	MR-SAM
Renewable energy systems in the West Nordic Region	1.795	3.165	Nordic Energy Research	MR-SAM MR-ENERGY ⁵⁷
Culture, education and training; research and mobility				
Teach the teachers, Barents Virtual University	28	102	Pomor State University, Russia	MR-SAM
Co-ordination of Observation and Monitoring of the Arctic for Assessment and Research (COMAAR)	240			MR-SAM
Change and variability	293			MR-SAM
Northern Research Forum – workshops	226	487	University of Akureyri, Iceland	MR-SAM
Nordic research co-operation, International Polar Year (IPY) 2007-08	442	496	University of Greenland	MR-SAM
Nordic Arctic Research Planning Workshop	300		RAIPON, Russia	MR-SAM
Workshop on Arctic Council Information and Communication Technology Network	85		Kemi-Tornio Polytechnic (Finland)	MR-SAM
Second International Conference on Arctic Research Planning	85			MR-SAM

ANNEX 3, TABLE B Project activities specified as Arctic and funded from other NCM sources, 2003-05, sorted by priority area (Total: DKK 20,4 millions). This table does not list projects that are co-financed by the Arctic Co-operation Programme and already specified in Table A.

ALLOCATIONS SPECIFIED AS ALLOCATED TO ARCTIC PROJECT ACTIVITIES				
Activity	NCM allocation (1000 DKK)	Total budget (1000 DKK)	Responsible management body (2003-05)	NCM sector
Welfare, including health and equality				
Expert meeting regarding function/ structure of labour-market services in the North Atlantic	200			MR-A ⁵⁸
Red House Greenland	250		Ostgrönland-Hilfe e.V.	MR-S ⁵⁹
Children and Youth				
Development of business and industry				
Skills in the workforce of West Nordic Region – workforce supply and demand in Greenland	1.447			MR-A
Development of the Northern Network – Circumpolar Agricultural Association	50			MR-FJSL
Sustainable resource use				
Effects of trawling and seafloor dredging	515	515	NFK	MR-M
Brochure on over-grazing and erosion	150	150	NFK	MR-M
Indirect interests in fishery management	125			MR-M
Environment and energy				
Nordic Arctic Working Group ⁶⁰	500	500	NMR	MR-U ⁶¹
Local Agenda 21 idea workshops	400			MR-M
Idea booklet and Idea website for municipalities about Local Agenda 21	260			MR-M
Best Available Technologies in small-boat harbours (Clean boat life)	300			MR-M
Mini-power plants in sparsely populated areas	380			MR-SAM MR- ENERGI
Culture, education and training; research and mobility				
Travel scholarship to Siberia, 2005	30	50	Nordic Institute of Greenland/ NAPA	MR-K ⁶²

ANNEX 3, TABLE B

ALLOCATIONS SPECIFIED AS ALLOCATED TO ARCTIC PROJECT ACTIVITIES				
Multi-cultural Nordic Festival, 2003	100	2.177	Nordic Institute of Greenland/ NAPA	MR-K
Crossroads, Nordic tour, 2004 ⁶³	220	2.534	Nordic Institute of Greenland/ NAPA	MR-K
University of the Arctic, vcs Core Web	200			MR-U
Pilot Course I and II Nordic Network for adult education - Greenland contact/ co-ordinator	100			MR-U
Nordic Arctic Research Programme ⁶⁴	6.132	6.132 ⁶⁵	Thule Institute, Finland	MR-U
Nordplus Language	4.999	24.339 ⁶⁶	International Office, Iceland	MR-U
Nordplus Adult	2.581	26.728 ⁶⁷	Cirius, Danmark	MR-U
Nordplus Neighbour	NOK 750	NOK 1.690 ⁶⁸	Research Council of Norway	

ANNEX 3, TABLE C NCM allocations with unspecified share to Arctic project activities (Total 303,8 DKK millions)

Nordic institutions	Arctic project activities (1000 DKK)	Total funding (1000 DKK)	Responsible management body (2003-05)	NCM fag-område
Environment Development Fund, Nordic Environment Finance Corporation (NEFCO)	Unspecified	36.395		MR-M
Nordic Vulcanological Institute	Unspecified	23.423		MR-U
Nordic Saami Institute	Unspecified	19.278		MR-U
Nordic Institute of Greenland	Unspecified	13.827		MR-K
Norden House in the Faroe Islands	Unspecified	31.039		MR-K
The Norden House in Iceland	225 ⁶⁹	20.612		MR-K
Nordic co-operation areas				
Saami co-operation, including Saami Council	Unspecified	12.231		MR-K
Mobility programmes with unspecified Arctic expenditure				
Nordplus (Higher Education)	Unspecified	96.577	Centre for international mobility	MR-U
Nordplus Junior	Unspecified	50.440	International office, Sweden	MR-U

Annex 4 : NCM allocations to Arctic activities under three Nordplus mobility programmes, the Nordic Arctic Research Programme and the Nordic Environment Finance Corporation

NCM Arctic allocations (in parentheses, given in 1000 DKK) under Nordplus Adult:

- Klubburinn Geysir (30);
- Verkmenntaskolen Akureyri (51);
- Islands Ungdomsforeninger/Ungmennafélag Íslands - UMFI (147);
- Foreningen Norden i Island (331);
- Icelandic Fire Service Technical College (80);
- Nordisk Samorganisation for Ungdomsarbejde - NSU (113);
- Islands Ungdomsforeninger/ Ungmennafélag Íslands - UMFI (3);
- Foreningen Norden i Island (147);
- Fræðslumidstöð Vestfjarða (18);
- Islands Ungdomsforeninger/Ungmennafélag Íslands - UMFI (284);
- Foreningen Norden i Island (477);
- Foreningen Norden i Island (173);
- Menntasvið Reykjavíkurborgar (6);
- Icelandic Fire Service Technical College (133);
- Ásgardur Handverkstæði (184);
- Øytun Folkehøgskole (27);
- Fylkesmannen i Finnmark (38);
- Sjøsamisk Studieforbund (178);
- OPUS Hadsel, Melbu videregående skole (161).

NCM Arctic allocations (in parentheses, given in 1000 DKK) under Nordplus Neighbour:

- Writing and publication of book series on Problem Solving - Olympiad Mathematics (Talnakönnun) (100);

- Arctic network of family medicine (250);
- Boundary layer phenomena over partially ice-covered Arctic seas: Impact on weather, climate, ecology (200);
- Joint university Masters Programme in Climate Research (JUMPR) (200).

NCM Arctic allocations (in parentheses, given in 1000 DKK) under Nordplus Language:

- Nordterm: Styringsgruppens møter 2004 og 2005 (17);
- Nordterm: Styringsgruppens møter 2005 (20);
- Workshop on Small States (panel om sprog i et multikulturelt samfund (35);
- Den vestnordiske fortælling i skolen (78);
- Sprogkonsulenttjenesten i Island (643);
- Kurs i Isländiska för Nordkalottingar (13);
- Islandsk-dansk ordbog (100);
- Utvidningen av den finsk-skoltsamiska ordboken (75);
- Islandsk-skandinaviske ordbogsværk (300);
- Samisk og finsk terminologi: Ordbok for samfunn og helse (922);
- Islandsk-dansk ordbog (250);
- Finsk-islandsk ordbog (100);
- Utvikling av samiske korrekturprogram for elektronisk tekstbehandling (700);
- Flerordsforbindelser på islandsk og dansk (217);
- Språk og kultur i Vest-Norden (7);
- Icelandic Online (87);
- Språk og kulturidentitet hos kvaenene (35);
- Nordterm 05: Ord vs. termer (80);
- Sommerkursus i Grønland – Nordboerne, inuit og det moderne Grønland (250);
- Skandinavisk språktrening for lederstapet i BSRB (80);
- 'Kan man lære dansk' (60);
- ISLEX – Islandsk-skandinavisk web-ordbog (400);
- Icelandic Online II: Et IT kursus i islandsk som andet sprog på mellemvineau (180);
- Sprogkonsulenttjenesten i Island (200);
- Finsk, meänkieli og kvensk som minoritetsspråk i Norge og Sverige – en del av vår felles kulturarv i Norden (100);

- Språkundervisning på arbeidsplassen: informationsportal på nettet (50).

Projects with NCM allocations under the Nordic Arctic Research Programme (NARP) in 2003: total NCM allocation in this period approx. DKK 6,2 millions:

- Pollution and rapid climatic changes in the Arctic as recorded by lake sedimentary archives (POLARCLIM);
- Regional Earth System Modelling Network for the Arctic (RESMONA);
- Long-term variations in atmospheric circulation and climate in the Arctic;
- Sensitive records of climate change at the Arctic fringe;
- Linking land and sea around Faroe Islands and Svalbard (NORDLINK);
- Investigating rapid climate change using Svalbard ice cores;
- Simulation of decadal-scale variability in the North Atlantic and Arctic oceans;
- Dispersal of radioactive ^{129}I to and within the Arctic: atmosphere-land-sea interactions on regional and global scales;
- Interannual-to-decadal climate changes in the Atlantic Arctic (ATLANTARC);
- Impact of snow and ice on rapid changes in the Arctic;
- Detecting rapid environmental changes through studies of annually laminated lake sediments in northern Scandinavia: linkages to the North Atlantic Ocean circulation;
- Sources of airborne aerosol particles over the remote Arctic Ocean and their climatic impact;
- Biological source identification of cloud condensation nuclei across the Arctic Ocean;
- Climatic change, carbon flux and living resources in the Nordic seas;
- Carbon stocks and turnover rates in the Nordic Arctic regions (C-Nordic);
- Animal biodiversity in the Arctic and sub-Arctic: conservation genetics of large carnivores;
- Bioproduction and energy transfer in the Nordic seas, the role of key zooplankters in a system with rapid climate change;

- Beneficial soil organisms in northern regions of the Nordic countries;
- Effects of climate change on soil animals in the Arctic: ecological, ecophysiological and ecotoxicological approaches;
- Cross-system analysis of variation in biological structure and dynamics of North Atlantic lakes related to variations and changes in climate and land use (NORLAKE);
- Reforestation of northern barren lands: combating stress impacts;
- Human impact and sustainable utilization of sub-Arctic birch forests in a changing environment;
- Abrupt climate change and impact on cod (ACCIC);
- Rapid transport of pollutants in drift ice to melt-down regions near Atlantic inflows;
- Global climate change effects on Arctic terrestrial vertebrates: a long-term, pan-Arctic shorebird monitoring programme;
- Capability of Arctic plant species to respond to rapid environmental changes;
- Ecophysiological responses to oceanic temperature changes in boreo-Arctic marine fishes;
- Macroparasites in semi-domesticated reindeer of Fennoscandia – parasite population dynamics, control options and environmental impact implications;
- Atmospheric transport pathways, vulnerability and possible accidental consequences from nuclear risk sites in the European Arctic;
- Work forum: Life Cycle Assessment (LCA);
- Network creation and workshop arrangement regarding the Malla research project;
- Network group for sustainable harvest of large ungulates in Greenland;
- Oppbygging av kunnskap om drivsnø i Norden;
- Network for crisis centres in the Barents Region – a case for researching women's transregional mobilization and agenda-setting;
- Telemedicine in Greenland – Analysis of the period of implementation and the first years of operation;
- Social exclusion among men and women born in northern Finland, and the Nordic dimension.

Projects that have received NCM funding under the Nordic Environment Finance Corporation (NEFCO); total allocations in 2003-05 approx. DKK 36 million:

- Apatity Hospital;
- Petrozavodsk, Energy monitoring;
- School no 3 Petrozavodsk;
- Pioneer Centre Arkhangelsk;
- School no 5 Kirovsk;
- Polyclinic no 1 Kirovsk;
- Novodovinsk Street illum.;
- Kirovsk Laundry;
- 10 constructions, Kirovsk;
- Novodovinsk Freq. Contr
- Apatity School 5;
- Kirovsk Energy monitoring;
- Kirovsk School no 7;
- Solnetschnij District, Kirovs;
- Polar Zori Kinderg. 7;
- Polar Zori Gymnasium 1;
- Derzhavin Lyceum, petroz.;
- e) Segezha Energy monitoring;
- Petrozavodsk School no 4;
- Novodovinsk School 4;
- Novodovinsk School 1;
- The vessel 'Lepse', Murmansk;
- Treatment of waste, Murmansk;
- Sr 90, Murmansk.

Annex 5 : Assignment of NCM Arctic project activities to objectives and priorities

ANNEX 5, TABLE A Figures in the columns under the two categories (Objective and Priority theme) refer to the shares of the project allocation (given in column 3) assigned to the various sub-categories; for each category those shares add up to 1.

ACRONYMS:

DKK = Danish kroner	CY = Children and young adults
IP = Indigenous peoples	BI = Business and industry
WF = Welfare	SU = Sustainable resource use
SD = Sustainable development	EE = Environment and energy
WHE = Welfare, incl. health and equality	CRM = Culture, research and mobility

Name	Objective				Priority theme					
	DKK	IP	WF	SD	WHE	CY	BI	SU	EE	CRM
Arctic Human Development Report	1.190	0,33	0,33	0,33	0,17	0,17	0,17	0,17	0,17	0,17
Comparative Arctic living conditions	1.040	1			1					
Women's participation in decision-making process in Arctic fisheries management	200			1	1					
Women and resource management in the rural north	270			1	1					
Developing Journal of Circumpolar Health	1.100		1		0,5					0,5
Capacity building of Russian indigenous people in building sustainable future	190		1		0,5	0,5				
Reindeer husbandry and wild reindeer	1.000	1					0,5	0,5		
The economy of the north	730	0,33	0,33	0,33			1			
Database on seabird colonies	200			1				1		
Protection criteria for geological formations and cultural heritage sites	560			1					0,5	0,5

ANNEX 5, TABLE A

Name	DKK	Objective			Priority theme					
		IP	WF	SD	WHE	CY	BI	SU	EE	CRM
Representative selection of Arctic cultural environments	300	0,33	0,33	0,33				0,5	0,5	
Monitoring transport attrition of our natural and cultural heritage in the Arctic	166			1				1		
Integration of environmental concerns in research and education	600			1				1		
Nature guides in the Arctic	600			1			0,5	0,5		
The Pasvik programmes - Environmental monitoring in border area of Finland, Norway and the Russian Federation	396			1				1		
Oil Pollution in northern marine areas and organisms	930			1				1		
International Arctic oil and gas symposium 2005	200			1				1		
Strengthening the role of indigenous communities in environmental protection	400	1						0,5	0,5	
Relationship between pollution and health conditions for Arctic populations	400		1						1	
Lifestyle, local pollution, human health of Arctic Indigenous peoples	500		1						1	
Persistent Organic Pollutants in ringed seals in North-western Russia	300		1						1	
Ringed seals exposure to POPs	206			1					1	
Assessment of effects attributable to climate change and uv in northern areas	400	0,33	0,33	0,33					1	
ACIA International scientific symposium on climate change in the Arctic	200	0,33	0,33	0,33					1	
Effects of climate change on transport of contaminant to the Northern areas	450			1					1	
Circumpolar contaminants, communicating results	430	0,5		0,5					1	

ANNEX 5, TABLE A

Name		Objective			Priority theme					
	DKK	IP	WF	SD	WHE	CY	BI	SU	EE	CRM
Renewable energy systems in the West Nordic Region	1.795			1					1	
Training indigenous peoples	150	1								1
Teach the teachers, Barents Virtual University	28									
Co-ordination of Observation and Monitoring of the Arctic for Assessment and Research (COMAAR)	240	0,17	0,17	0,67						1
Change and variability	293	0,17	0,17	0,67						1
Northern Research Forum - workshops	226	0,17	0,17	0,67						1
Nordic research co-operation, International Polar Year (IPY) 2007-08	442	0,17	0,17	0,67						1
Nordic Arctic Research Planning Workshop	300	0,17	0,17	0,67						1
Workshop on Arctic Council Information and Communication Technology Network	85	0,17	0,17	0,67						1
Second International Conference on Arctic Research Planning	85	0,17	0,17	0,67						1
Expert meeting regarding function/ structure of labour-market services in the North Atlantic	200		1		0,5		0,5			
Red House Greenland	250	1			1					
Skills in the workforce of West-Nordic Region – workforce supply and demand in Greenland	1.447		1		0,5		0,5			
Development of the Northern Network – Circumpolar Agricultural Association	50			1			1			
Effects of trawling and seafloor dredging	515			1				1		
Brochure on over-grazing and erosion	150			1				1		
Indirect interests in fishery management	125			1				1		
Nordic Arctic Working Group	500			1						1

ANNEX 5, TABLE A

Name		Objective			Priority theme					
	DKK	IP	WF	SD	WHE	CY	BI	SU	EE	CRM
Local Agenda 21 idea workshops	400			1					1	
Idea booklet and Idea website for municipalities about Local Agenda 21	260			1					1	
Best Available Technologies in small-boat harbours (Clean boat life)	300			1					1	
Mini power plants in sparsely populated areas	380			1						
Travel scholarship to Siberia, 2005	30	0,33	0,33	0,33						1
Multi-cultural Nordic Festival, 2003	100	0,33	0,33	0,33						1
Crossroads, Nordic tour, 2004	220	0,33	0,33	0,33						1
University of the Arctic	200	0,33	0,33	0,33						1
Nordic Network for adult education – Greenland contact/co-ordinator	100		1							1
Nordic Arctic Research Program	6.132	0,17	0,17	0,67						1
Nordplus Language	4.999	0,33	0,33	0,33						1
Nordplus Adult	2.581	0,33	0,33	0,33						1
Nordplus Neighbour	750	0,33	0,33	0,33						1

Notes

- 1** The NCM complements the Nordic Council, which was established in 1952 to foster closer co-operation among Nordic parliamentarians.
- 2** Until 2006, there were 18 councils. Ministers of foreign affairs and defence hold meetings outside the formal framework of the Nordic Council of Ministers.
- 3** The Nordic Committee for Co-operation is made up of senior officials on Nordic co-operation of the Nordic states and self-governing territories.
- 4** The term 'Senior Arctic Officials' (SAOs) refers to the high-ranking officials who co-ordinate activities under the Arctic Council in-between biannual ministerial meetings.
- 5** Mandate for the evaluation of Nordic Council of Ministers Arctic Co-operation, accepted 16 August 2006, item 4; see annex 1.
- 6** On the concept of 'Nordic benefit', see section 2.
- 7** The mandate (item 4) had provided that 'The point of departure for the evaluation is the compilation of Arctic activities that has been produced by the Secretariat of the Nordic Council of Ministers'.
- 8** According to the mandate, '[t]he consultant... will select illustrative examples of projects to support the evaluation'.
- 9** A list of interviewees is found in annex 2.
- 10** The NCM Arctic website is (www.norden.org/arktis); the general Nordic website is (www.norden.org).
- 11** Cohesion refers to integrative processes in the cultural, political and economic spheres.
- 12** See the Arctic Human Development Report (AHDR 2004: 17–18), published under the auspices of the Arctic Council and financially supported by the NCM; the listed counties are represented in the Regional Council of the Barents Euro-Arctic Region. Beyond Norden and Northwest Russia, the Arctic comprises all of Alaska; Canada north of 60° as well as northern Quebec and Labrador; and in Russia the Yamal-Nenets, Taimyr and Chukotka autonomous areas, Krasnoyarsky Kray, and the Sakha Republic (AHDR 2004: 17–18).
- 13** The 1996 articulation of specifically Arctic objectives highlighted four categories: improving the quality of life for the population, with special emphasis on indigenous populations; ensuring sustainable resource use and maintenance of the character of wilderness, natural qualities and biological diversity of Arctic; reducing and removing causes of pollution; and developing rational modes and bodies of co-operation among Arctic states (NCM 2003a: 7).
- 14** The Nordic strategy 'Sustainable Development: New Bearings for the Nordic Countries' was launched in 2001 and revised in 2005.
- 15** On this programme, see sections 3.3 and 4.6.
- 16** See Annex 3, Table A and section 4 below.
- 17** The following information is taken from project application guidelines available at www.norden.org.
- 18** Adjacent-area states: Northwest Russia, Estonia, Latvia or Lithuania. More than three participants from Nordic or adjacent countries are encouraged; deviation from the requirement of 'three Nordic participants' may be considered under special circumstances.
- 19** NCM chairmanship rotates annually among the Nordic states; annual programmes are available at www.norden.org/web/2-2-ord_p/sk/index.asp.
- 20** The two mobility programmes with unspecified Arctic allocations are also

by far the biggest mobility programmes: Nordplus Junior and Nordplus Higher Education; see Annex 3.

21 There are four permanent working groups additional to SDWG and AMAP: Conservation of Arctic Flora and Fauna (CAFF), Emergency Prevention, Preparedness and Response (EPPR), Protection of the Marine Environment (PAME); and the Arctic Contaminants Action Program (ACAP). The latter, previously known as the Action Plan to Eliminate Pollution of the Arctic, was upgraded to a working group in the 2006 Salekhard Ministerial Declaration.

22 NEFCO projects in Northwest Russia are specified in annex 4; there is a focus on activities that will reduce or eliminate discharges of hazardous substances, including radioactive material.

23 On project goals, analytical themes, preliminary findings and publication activities, see www.arcticlivingconditions.org.

24 All articles from the first 2002 issue are now downloadable free of charge from the web; for older issues only tables of contents are available. *The International Journal of Circumpolar Health* is a continuation of *Arctic Medical Research* (1984–96) and *Nordic Council for Arctic Medical Research Report* (1972–1983); tables of contents for those earlier publications are also available at <http://ijch.oulu.fi/>.

25 In Figure 4, allocations to this project have been divided between this category and Sustainable Resource Use; see annexes 3 and 5.

26 See the comments below on AMAP projects on Arctic oil and gas and the Arctic Climate Impact Assessment.

27 The West Nordic Region comprises the Faroe Islands, Greenland and Iceland.

28 The action plan addressed one of the thematic foci of the ncm Strategy for a Sustainable Norden.

29 The ncm Working Group on Nature, Open Air and Cultural Environments and the ncm Environment Monitoring and Data Group. The Arctic Steering Group, dissolved in December 2005, had joint

secretariat with the former. Eight projects are either finalized or under finalization; the ninth, on integration of environmental concerns in Arctic tourism, has so far failed to produce a publishable report.

30 In 1999, Norway was the first European state to preserve coral reefs from bottom trawling and dredging; at present, 1900 square kilometres of protection area have been designated (Nielsen 2006:44).

31 Three other projects under the Action Plan to Protect the Natural Environment and Cultural Heritage in the Arctic were funded before 2003: Integration of Tourism; Local Agenda 21 in the Arctic; and Environmental Education in the Arctic.

32 Text of the Norwegian chairmanship programme is available at www.arctic-council.org.

33 In 2006, i.e., after the programme period examined here, the ncm has supported also the technical production of the assessment report and purchase of professional journalist services for the Overview Report; for details, see AMAP 2006b.

34 The POPs in focus include organo-chlorine pesticides used in agriculture, industrial chemicals such as polychlorinated biphenyls (PCB), and various combustion products generated regionally or further south. Some heavy metals such as mercury are found in high concentrations in the Arctic but originate largely from waste incineration and coal-burning power plants and residential heaters as far away as Asia (AMAP 2002).

35 On this and other Arctic Council activities, see www.arctic-council.org/en/main/infopage/5#a4.

36 Lars-Otto Reiersen, personal communication.

37 Originally conceived as a two-year project, follow-up funding was achieved for 2006 to finalize technical and economic assessment.

38 Nordplus Language Arctic projects are listed in Annex 4.

39 See Annex 4.

40 The University of the Arctic, which

operates north2north, is a network that includes practically all post-secondary educational institutions in the Arctic region. Barentsplus is the Barents-regional counterpart to Nordplus Higher Education.

41 The ncm obtained *ad hoc* observer status in 1999 and permanent status in 2000; see ncm (2003a: 8).

42 On the Arctic Council working groups, see section 3. The most salient recent programme is the Arctic Climate Impact Assessment (ACIA). The ncm is also invited to meetings at the working-group level.

43 On the structure of the Barents Euro-Arctic Region, with its ministerial-level Barents Euro-Arctic Council, see www.beac.st

44 Allocations higher than DKK 0.5 million are formally decided by the relevant Council of Ministers.

45 Gard Titlestad, personal communication.

46 On the priority given to Arctic research in the 2003–05 programme, see Section 2. In the most recent Arctic Co-operation Programme (2006–08), improving conditions for Nordic research, especially with regard to the International Polar Year, is one out of three main co-operation areas, and research is also emphasized under the priority item on climate change (ncm 2006a).

47 Translation, formatting, explanatory footnotes and assignment to thematic priority areas by the author.

48 The entire allocation from ncm to the project is given here. If the project has received funds after 2005, only the amounts used in the period 2003–2005 are given.

49 The entire project budget for the 2003–05 period is given here. If the project has received funds after 2005, only the amounts used in the period 2003–2005 are given.

50 Nordic Council of Ministers for Co-operation.

51 Russian Association of Indigenous Peoples of the North, Siberia and Far East.

52 Nordic Council of Ministers for Fisheries and Aquaculture, Foodstuffs and Forestry.

53 ncm Working Group on Nature, Open Air and Cultural Environments.

54 ncm Environment Monitoring and Data Group.

55 Nordic Council of Ministers for the Environment.

56 ncm Working Group on Environment and Fisheries.

57 Nordic Council of Ministers for Energy; as of 2006, this council is merged with the councils for Regional Policy and Industry/Trade.

58 Nordic Council of Ministers for Labour and the Work Environment.

59 Nordic Council of Ministers for Social Security and Health Care.

60 This cross-sectoral ncm working group was established in 2005 to develop a Nordic strategy on climate change and contaminants in the Arctic for 2006–08; the strategy is described in ncm (2006b).

61 Nordic Council of Ministers for Education and Research.

62 Nordic Council of Ministers for Culture.

63 Costs were in part allocated to ensure participation by two performers from Alaska.

64 Costs were in part allocated to ensure participation by three performers from Alaska.

65 Allocations are specified in annex 4.

66 Refers to total ncm programme allocations (i.e. including non-Arctic activities); Arctic allocations are specified in annex 4.

67 Refers to total ncm programme allocations (i.e. including non-Arctic activities); Arctic allocations are specified in annex 4.

68 Refers to total ncm programme allocations (i.e. including non-Arctic activities); Arctic allocations are specified in annex 4.

69 Unlike the other Nordic institutions, the Norden House in Iceland has specified its Arctic project activities; this allocation

could therefore have been placed in Table 1. Its inclusion here has the advantage of gathering all Nordic institutions located or engaged in the Arctic within the same table. The following Arctic project activities have been conducted by the Norden House in Iceland in the period: Samisk Fokus. Vinterfestivalen; Gi Lyd!; Tasiilaq; Transform; Siberian Beauty; Skuolfi; Duo Artica; Kvinnen fra havet; Konsert Mari Boine; and 'Áillohas'.

