

Oceans and the Coastal Area

2006 - 2015

Action Plan 2008

Contents

Foreword	3
Summary	4
Objectives of the Programme	4
The primary objectives of the HAVKYST programme are:.....	5
The secondary objectives of the programme are the following:	5
Budget	6
Structure of the Programme and prioritisation of research tasks.....	8
I. Sub-programme: Marine ecosystems	8
II. Sub-programme: Effects on ecosystems	9
III. Sub-programme: Long-term effects of emissions to the sea from petroleum-related activities (PROOF)	10
IV. Sub-programme: Management and conflict resolution.....	11
V. Sub-programme: The basis of value creation	13
VI. Cross-disciplinary activity: Methods, models and.....	14
technology	14
VII. Cross-disciplinary activity: Research cooperation.....	15
International cooperation and internationalisation	17

Foreword

The “Oceans and the Coastal Area” Programme is a continuation of the following programmes: “Marine resources, environment and conservation”, “Long-term-effects of discharges to the sea from offshore activities (PROOF)”, parts of “Fishery Technology”, the marine part of the “ProFo” pollution programme, in addition to input from the planning note for coastal zone research. The Action Plan for 2006 was the first action plan for the new programme.

The Action Plan is based on the Programme Plan. The Programme Board has prioritised certain areas on the basis of the state of our knowledge and other guidelines.

The Action Plan forms the background for the call for proposals for research funding for 2008, for which the following plan has been drawn up:

- Call for proposals, with a deadline of 6 pm. on June 6, 2007 for:
Researcher projects, knowledge-building projects with user involvement, personal overseas research grants, personal visiting researcher grants and support for events

Summary

“Oceans and the Coastal Area” is a new, coordinating marine research programme. It is management-oriented, in that it is intended to generate basic knowledge for a future ecosystem-oriented, precautionary management system for marine ecosystems, while being designed to contribute to the increased creation of value from ocean and coastal resources. The primary objective of the Programme is to encourage creative research of high international quality on the marine environment. A broad understanding of our marine environment is of great value in its own right for a knowledge-intensive nation such as Norway, at the same time as it will provide us with the foundations of long-term management of our marine ecosystems and their resources as a basis for wealth creation at national and international level. The Programme will lead to the development of basic competence both via studies of specific conditions in Norwegian waters and by reinforcing a holistic understanding of the structure, functions and species diversity of the ecosystem.

This Action Plan takes the Programme Plan as its point of departure. It is intended to provide signals to the research community regarding current priorities for the Programme for the period of the plan, and will provide the basis on which proposals for research funding are invited for this period.

The Action Plan is revised on an annual basis.

Objectives of the Programme

The overall objective of the HAVKYST programme is to encourage creative marine environmental research of high international quality. A broad understanding of our marine environment will be of great value to a knowledge-intensive nation such as Norway in its own right, at the same time as it will form a basis for long-term management of marine ecosystems and their resources as a basis for value creation at both national and international level. The Programme will bring about basic competence development through studies related to specific conditions in Norwegian waters and as a means of

strengthening the integrated understanding of the structure, function and species diversity of marine ecosystems.

The primary objectives of the HAVKYST programme are:

- to reinforce Norway's position as a leading nation in marine ecosystem-related research.
- to be a central contributor to the process of generating more knowledge of the marine environment.
- to provide a research-based foundation for long-term integrated management and a basis for the creation of value based on marine resources.

The secondary objectives of the programme are the following:

- To generate new basic knowledge of the structure, functions, driving forces, sub-processes, species diversity and types of nature found in marine ecosystems.
- To generate new knowledge of human impacts on marine ecosystems via the addition and effects of pollution, and to contribute knowledge capable of acting as a basis for measures to clear up pollution from dumping sites and sediments. It will also be necessary to focus on the effects of introduced species on the flora and fauna of the coastal zone.
- To increase our knowledge of the long-term effects of petroleum industry discharges to the sea.
- To acquire knowledge and tools capable of contributing to integrated ecosystem-based management of the ocean and the coast, and to resolving conflicts between various societal interests and between nations.
- To obtain knowledge that will contribute to the foundations of greater value creation from marine resources.
- To sharpen the focus on methods, models and technology for generating new ecosystem knowledge and to develop a methodology for the adoption of knowledge based on experience.
- To stimulate international research cooperation and exchanges of knowledge.

Budget

The zero-growth Programme budget for 2008 is NOK 81.25 million. In its budget proposal for 2008, the Research Council of Norway has budgeted for an increase of NOK 23 million, meaning that the budget for the Programme for 2008 is NOK 104.25 million, of which NOK 42.27 million is for new applications. In the increased budget of NOK 23 million, NOK 20 million is earmarked research under the Focus on the Northern Areas initiative.

The following table shows the distribution of available/free funding at zero rates of growth, with an increase in the 2007 budget from the Research Fund and with an increase as described in the Research Council of Norway's budget for 2007.

Sub-programme	Budget 2008 (zero growth)	Budget 2008 (growth)	Budget 2008 – earmarked research in the Northern Areas
I: Marine ecosystems	5,250,000	7,250,000	1,000,000
II: Impact on ecosystems	2,250,000	6,250,000	5,000,000
III: PROOF	5,000,000	15,000,000*	10,000,000
IV: Management and conflict resolution	3,000,000	5,000,000	2,000,000
V: Basis for value creation	2,250,000	4,250,000	2,000,000
Methods, models and technology	1,000,000	2,000,000	
Research cooperation	1,000,000	3,000,000**	
Total	19,750,000	42,750,000	20,000,000

* NOK 1 million reserved for joint call in AMPERA

** NOK 2 million reserved for joint call in MariFish and MarinERA.

The Programme Board has set out its priorities within the individual sub-programmes/cross-disciplinary activities, as described below.

In response to increasing pressure to exploit the resources in the Northern Areas, the Norwegian Government and the Storting (national assembly) have introduced a more cohesive strategy relating to these areas, in which research constitutes a major component. The HAVKYST programme's proposed budget for 2008 includes a budget increase of NOK 20 million that is earmarked for the Focus on the Northern Areas initiative and will be distributed among all the sub-programmes.

In its High North Strategy the Government has set out an objective for Norway to be the best steward of the environment and resources in the north. The Research Council is playing an important role in achieving this objective (for further information please refer to the document Focus on the Northern Areas, *forskning.nord*.) To adequately safeguard its interests and responsibilities, Norway must manage its resources in a manner that inspires worldwide respect. This requires knowledge and expertise about the natural environment, technology, society and culture and a broad understanding ranging from basic relationships to application and innovation. The Research Council has defined five priority areas of research to meet societal challenges relating to the Northern Areas. The Havkyst programme will place particular focus on projects within two of these areas: petroleum activity in the north; and the environment and marine resources.

The prospects for large-scale petroleum activities in the Northern Areas have given rise to greater political focus on the region. The petroleum industry is facing sizeable challenges regarding resource mapping and technology. Special focus and targeted research activities on the interaction between the environment and renewable marine resources are required (cf. Integrated Management of the Marine Environment of the Barents Sea and the Sea Areas off the Lofoten Islands). The introduction of petroleum activities will have a major impact on development of communities in the north and on the rights and opportunities of indigenous peoples. It is also essential to be able to understand the foreign and energy policy context within which petroleum developments in the north will be taking place. NOK 10 million will be earmarked for research on the interplay between petroleum activities, the environment and marine resources (see sub-programme III).

There are a number of pressing environmental research tasks in the north; it is particularly important to learn more about ecosystem processes, long-range transboundary pollution and other types of pollution. A deeper understanding of ecosystems in a large-scale perspective is vital for improving fisheries management. NOK 10 million of the proposed growth budget is earmarked for research on topics defined in sub-programmes I, II, IV and V.

Internationalisation is a research policy priority, and the HAVKYST programme will provide support to cooperative projects within the EU framework provided these are successful in the competition for research funding under the programme. The HAVKYST programme takes part in three ERA-NETs, all of which are expected to issue funding announcements during 2007/2008. These will be issued as separate calls for proposals.

For a more detailed description of the programme, please refer to the Programme Plan.

Structure of the Programme and prioritisation of research tasks

I. Sub-programme: Marine ecosystems

NOK 7,250,000 is available for the start of new projects in 2008, which means that 4 - 6 new projects may be funded.

The following topics are given priority:

From organisms to ecosystems - driving forces and sub-processes focusing on the structures and functions of, and anthropogenic effects on, ecosystems in our marine regions and on acquiring basic knowledge of the physical, chemical and biological driving forces and sub-processes that influence marine ecosystems. A better understanding and management of the living marine resources in our ecosystem will require more knowledge of how physical, chemical and biological factors affect these ecosystems. For example, it will be necessary to acquire knowledge of how ocean climate provides a framework for the production of phyto- and zooplankton, which in turn are controlling factors in the migration, growth and recruitment of fish stocks. Another example is better knowledge of how marine mammals and fish stocks mutually influence one another. Similarly, there is a need for more knowledge of the benthic components of marine ecosystems as well as of interactions between benthic and pelagic organisms.

Biological diversity

focusing on acquiring knowledge about the extent, condition and development of biological diversity as a basis for ecosystem-based management.

Natural variations in biological diversity should be described and projects should help to develop higher levels of competence in taxonomy. More knowledge is needed to enable us to understand how climatic change and the effects of various kinds of human activity affect biological diversity. It is essential to know how viruses, bacteria and disease bring about changes in biological diversity. It is also important to generate knowledge of how foreign species are spreading and affecting our marine ecosystems.

II. Sub-programme: Effects on ecosystems

NOK 6,250,000 is available for the start of new projects in 2008, which means that 3 – 5 new projects may be funded. Of this NOK 5,000,000 is earmarked research in the Northern Areas.

Introduced species and diseases

focusing on mapping the distribution of introduced species and studies of how these affect the flora and fauna of our coastal zone.

Apart from habitat destruction, the introduction of organisms foreign to local environments is regarded as the most important cause of the sharp reduction in global species diversity. The transfer of species from one area to another is taking place on a particularly large scale due to vessels taking ballast water on board in one port and discharging it in another. A number of major algal blooms, which among other effects have caused serious losses to the aquaculture industry, are believed to be due to introduced algae transported in ballast water. Fouling on ships' hulls and fishing gear is another introduction vector, in addition to the introduction of new aquaculture species and other species that accompany these species. What most of the species that are introduced to new areas have in common is their potential ability to displace naturally occurring species, thus altering the ecosystem. The most important goal is to prevent new species from becoming established, while it is also important to map the distribution of introduced species and to study how these are affecting the flora and fauna of the coastal zone.

Environmental toxins from contaminants, dumping sites and sediments, cleaning-up operations and measures

focusing on the dispersal, enrichment and effects of concentrations of environmental toxins in our harbour areas and coastal zones.

Diffuse additions of environmental toxins from contaminated sediments make it necessary to offer advice regarding limiting the dietary consumption of seafood from several Norwegian fjords and harbour areas. In order to provide a solid scientific basis for such dietary advice and other measures, more work in this area of research is needed.

A national effort has been launched to clean up harbours and land-fill sites, and this involves major investments. (Stortingsmelding 14 (2006-2007)

<http://www.regjeringen.no/nb/dep/md/dok/regpubl/stmeld/2006-2007/Stmeld-nr-14-2006-2007-.html?id=441267>)

This effort demands greater insight into plans for measures, alternative solutions and the environmental and societal consequences of such measures, in order to ensure that the most appropriate measures are put into effect. The ecological foundations of alternative sets of measures should be emphasised.

Noise

focusing on the question of whether noise produced by seismic surveys and other sources of sound can affect the behaviour and distribution of fish and marine mammals.

There have been a number of conflicts between traditional fisheries and the offshore industry, and the authorities still lack sufficient knowledge to enable them to put appropriate measures into effect to limit the possible negative effects of such sources of noise. Modern military sonar may have indirect lethal effects on marine mammals. It may be necessary to place restrictions on the use of such instruments. The Programme should produce more knowledge about these problems.

III. Sub-programme: Long-term effects of emissions to the sea from petroleum-related activities (PROOF)

NOK 14 million in funding is available for new projects in 2008, of which NOK 10 million is earmarked for projects under the Focus on the Northern Areas initiative. Grants will be allocated to 10-15 new projects. In addition, NOK 1 million is earmarked for research projects under the ERA-NET scheme; a separate call for proposals will be issued for this.

The objective of this sub-programme is to increase knowledge about the long-term effects of discharges to the sea from petroleum-related activities. From 2008 the sub-programme will also encompass the acute effects of large-scale accidental discharges.

This sub-programme comprises five priority research areas:

- Effects in the water column
- Special research tasks in the Arctic and the Northern Areas
- Links between research and monitoring activities
- Effects of acute discharges
- Ongoing discharges of drill-cuttings

All five of these research areas are open to funding. The following topics are of particular interest:

- Particular effects related to toxicity and metabolic/microbial metabolism of oil components and chemicals under Arctic conditions, for example in relation to short food chains and annual circulation.
- Effects of discharges of drill-cuttings and water-based drilling fluids (including mineral-based weight materials), both on filter-feeding organisms in the water column and on fragile bottom-dwelling communities (coral reefs, sponges and scallops).

- Development of criteria/models for fragility/resilience of marine ecosystems, with an eye to comparison between and impacts on various regional areas.
- Development of impact models (as distinct from known risk models) for acute oil discharges, emphasising mortality of fish larvae, with the aim of generating a scientific impact map with appurtenant uncertainty analysis.
- Long-term effects (on populations of birds and bottom fauna, for example) of acute discharges in especially valuable and fragile areas such as shallow Arctic marine areas, preferably based on relevant distribution modelling and pertinent oil types.
- Toxicity of oil drops and oil fractions, particularly with regard to effects on fish eggs/larvae.

Projects on joint interactions at the ecosystem level are also needed. Little research has been done on the joint effects of various activities. Discharges produced by the offshore sector may be responsible for only a small proportion of the total effects, but it may be enlightening to examine such discharges in the context of other impacts such as climatic effects and long-range transboundary pollution. This is particularly relevant for the Northern Areas. In this connection studies on discharges from offshore activities, such as a large-scale acute discharge, would be useful.

IV. Sub-programme: Management and conflict resolution

NOK 5,000,000 is available for the start of new projects in 2007 of which NOK 3,000,000 is earmarked research in the Northern Areas. 3 – 5 new projects may be funded.

The objective of this sub-programme is to generate knowledge that will be directly relevant for decision-makers, so that decisions can be made on the basis of robust data.

In order to make a contribution to the knowledge base needed for the sustainable development of the resources in our marine and coastal areas, a research effort is needed in all the topics listed in this sub-programme, which have been described in detail in the Programme Plan. Within the individual fields, the programme board particularly invites proposals that concentrate on the following topics:

Responsible fish capture

In order to achieve ecosystem-based management of fish resources it will be necessary to develop fishing gear that optimises harvesting patterns, reduce undesirable bycatch and avoid damage to the benthic habitat.

Conflicts of interest

The utilisation of marine resources is often marked by conflicts of interest, for example in the question of allocation of fishing rights in traditional fisheries, where rights have to be shared among nations or among the participants in Norwegian fisheries. Conflicts may also arise in the coastal zone, where area is a scarce resources. There may also be conflicts of interest implicit in the choice of management models that will have different consequences in terms of economic efficiency and allocation of resources.

The Programme Board is interested in projects that analyse such conflicts of interest and that put forward proposals for how such conflicts can be resolved or managed as well as possible.

Measures of environmental quality

There is a need for a basic knowledge for the development of ecosystem indicators and measures of environmental quality capable of being used in ecosystem-based management in the long run.

Framework Water Directive

The EU's Framework Water Directive creates a superstructure that overlies existing regulations and provides guidelines regarding integrated water management. The Directive covers the coast out to a mile from the datum line. There is a need for knowledge of the consequences of the Directive for the aquaculture industry and in other intensively exploited coastal waters.

V. *Sub-programme: The basis of value creation*

NOK 4,250,000 is available for the start of new projects in 2008, of which NOK 2,000,000 is earmarked research in the Northern Areas. 2 – 4 new projects may be funded.

Sustainable management is a necessary but not sufficient condition for marine value creation. The potential for increased value creation lies in part in more socially rational harvesting of marine resources and partly in making the catch and processing phases of the fishing industry more efficient, as well as generating new products based on marine resources. This sub-programme will include the conditions and perspectives of the Sami people.

A coastal society that creates value

and focuses on understanding how local and regional production systems, coastal cultures, knowledge systems and entrepreneurship create the premises for development and the creation of value.

More research is needed in order to give us greater insight into interactions between natural and culturally based industrial activity and social and economic organisation at local and regional level. We also need studies of the coastal infrastructure, including sustainable transport and logistics systems. Another central aspect is interactions between cultural environments and local and regional identity and organisation, and the creation of value based on these.

Bio-habitats and habitat restoration

focusing on producing an overview and knowledge of marine habitats. Knowledge of this sort is a prerequisite for sustainable management of the coastal zone, not least where the prospects of combining nature conservation and resource utilisation, with emphasis on the precautionary principle, are concerned.

There are knowledge challenges related to the development of management models that will contribute to the protection of the subsea landscape, with its diversity of habitats, while permitting the sustainable utilisation of living resources by methods that do not harm the seascape. It will also be necessary to acquire management knowledge that will contribute to ensuring species diversity by conserving habitats or biotopes.

VI. *Cross-disciplinary activity: Methods, models and technology*

NOK 2,000,000 is available for the start of new projects in 2008, which means that 1 – 2 new projects may be funded.

Fisheries technology

with a focus on the fact that greater investments in fisheries technology are capable of making a significant contribution to the development of responsible fisheries management at the same time as it produces benefits in value creation for the fishing industry. New frame conditions for responsible, sustainable fisheries are essential.

In the future, Norwegian fisheries will need to be able to document that they are respecting the overarching goals for responsible fishing, and we must therefore make yet greater efforts to reduce by and unintended mortality in our fisheries, at the same time as we minimise the negative ecosystem effects of fishing operations. Ethical aspects of harvesting natural raw materials in parallel with a sharper focus on quality and stable supplies of fish raw materials will require the development of new, less harsh fish capture methods and new sales methods for the coastal fleet.

VII. Cross-disciplinary activity: Research cooperation

NOK 1,000,000 is available for the start of new projects in 2008. Overseas fellowships, fellowships for visiting researchers and support for meetings are given priority. In addition NOK 2,000,000 is reserved for joint calls within MariFish and MarinERA.

There is a trend in science in the direction of an ever higher degree of specialisation, in which no individual researcher or national centre of expertise any longer has a complete overview of all the scientific aspects of marine science. The scientific challenges facing us thus demand cooperation between institutes and with the university sector, as well as a large degree of international cooperation. This will also make a contribution to better, more efficient utilisation of competence, equipment and research facilities. There is also a need to develop cross- and multidisciplinary research projects in which specialist groups collaborate. The philosophy of the Programme offers major challenges in the fields of developing efficient methodologies, cooperation and coordination at national and international level. It is also important that the Programme should result in an improvement in recruitment to this field of research and to the development of at least one Centre of Excellence in Research. On this basis of this background, the Programme Board invites proposals for projects that will generate national and/or international research cooperation.

National collaboration

One of the strategic guidelines of the Programme is to encourage a greater degree of scientific cooperation among Norwegian research groups. The definition of scientific problems and questions of project funding can be coordinated between several programmes. Research centres will also be encouraged to consider such cooperation and sharing of responsibility.

Generally speaking, the Programme's projects ought to receive funding from other sources than Oceans and the Coastal Area, and efforts should be made to increase funding and to find other financial partners.

International collaboration

International collaboration is essential if we are going to be able to deal with many of the knowledge challenges faced by marine science. The Programme wishes to build on the good traditions of international collaboration that exist in marine research, and to further develop these via collaboration on projects.

The international aspects are therefore well developed in marine management and research, being incorporated in international agreements and conventions, and in the context of research cooperation and networks for exchanges of knowledge at institutional and individual level. Both the international perspective and an awareness of tendencies and research results in other countries are of decisive importance for the development of knowledge in this field. European

cooperation benefits us all, given our many cultural and historical similarities and shared climatic features. However, knowledge development must also be viewed in relationship to research groups in other countries.

A number of Norwegian marine science research groups are already of international standard, and this is a natural consequence of Norway's position as a marine science nation. One of the Programme's objectives is to further reinforce this position.

Research cooperation with research centres in developing countries

Marine products have gradually become highly international commercial products. While global marine production doubled from 1961 to 1999, international trade in fish products increased more in the same period, not least because these are the principal export products of a number of developing countries. Due to weak institutional infrastructures and management bodies in such countries, these important fisheries are vulnerable to over-exploitation and environmental threats. In June 2006 the Government launched the Norwegian Action Plan for Environment in Development Cooperation which states: "Sustainable management, use and conservation of natural resources and biological diversity...will be given highest priority within Norway's environmental development cooperation", and which covers a wide range of resources, notably marine environments and fisheries. Norwegian research can contribute to the development of local knowledge and a better understanding of the effects of the activity of the Norwegian fisheries sector in other countries.

Marine products are also the most important source of animal protein, particularly for the poorest parts of the population in many developing countries. Norway has committed itself at the UN to participate in the international fight against poverty. One of the areas in which we are best able to contribute, thanks to our scientific competence, is precisely in the fisheries sector, for example by transfers of knowledge and technology. However, this will require the development of research-based knowledge of natural and social conditions in individual countries and of international regimes and agreements. In this connection, it is important to collaborate with local research groups. The research that is carried out must take into account, and develop, methods and technologies that can be applied under local conditions, such as stock estimations that are relevant to small-scale fisheries, local management regimes and coastal zone planning.

Better knowledge of conditions in the southern hemisphere is also needed from the point of view of Norway's own interests. In the course of the past 20 years the consumption of fish products in developing countries has increased seven times as much as in the industrialised world, a trend which is expected to continue. This represents an important market potential for the Norwegian fishing industry, not only in the shape of new markets for fish products but also for fisheries-oriented technology and knowledge.

Strategy for awarding research funding

In order to ensure that research supported by the Programme is of high quality, projects will be funded on a competitive basis. High scientific quality is a prerequisite for all programme activities, and when research funds are being allocated, applications of high scientific quality will be prioritised. Applications will be forwarded to external experts for assessment of scientific quality and will be evaluated in accordance with the criteria announced for each type of application (www.forskningsradet.no) >Funding>Evaluation criteria). The aims of the Programme include multi- and cross-disciplinarity and national and international project cooperation. Where these aspects are likely to raise the scientific quality, relevance and usefulness of projects, they will be also prioritised when funding is being allocated. Large projects that are relevant to several sub-programmes may be jointly financed by these programmes.

International cooperation and internationalisation

One of the cross-disciplinary activities of the Programme is to encourage national and international cooperation.

There are opportunities for interesting international cooperation in ecosystem-based research and management. The Programme will encourage optimal use of international measures via projects and other activities. International cooperation should be regarded in connection with the need for higher levels of competence in areas of national and international interest. Exchanges of both graduate students and research scientists with international research groups will be encouraged.

The Programme supports EuroDEEP and is relevant to three ERA-networks: MarinERA, AMPERA and MariFISH. All three ERA-Nets will have joint calls during 2007/2008.

The EU's Seventh Framework Programme

There are significant similarities between the thematic priorities defined in the EU's Seventh Framework Programme and those defined in Report No. 20 (2004-2005) to the Storting, *Commitment to Research*. Research on the marine environment is a common area of focus, and one in which the Oceans and the Coastal Area Programme plays a key role. The Programme will provide support to cooperative projects within the EU framework provided these are successful in the competition for research funding under the programme.

Milestones/timetable

Target groups

The target groups of the Programme are universities, institutes and colleges. Because of their responsibility for managing our marine resources and for contributing to the development of this sector of industry, the authorities are also an important component of the Programme's target groups for the knowledge it generates.

Types of support

The Programme will help to generate the basic knowledge required for the future ecosystem-oriented and precautionary-based management of our marine ecosystems, and will also be designed to contribute to increased value creation based on oceanic and coastal resources. In order to meet these goals, the Programme has several means at its disposal, and this call is open to applications for the following types of support:

- Researcher projects
- Knowledge-building projects with user involvement
- Personal overseas research grants
- Personal visiting researcher grants
- Support for events

Researcher projects are aimed at R & D institutions, and are intended to help to give research groups the competence demanded by industry and the public sector in a longer-term perspective. In some cases, it will be desirable to build up high-quality scientific centres of gravity, for example based on multi-disciplinary, cross-institutional projects. Strategic basic research and strategic efforts aimed at value creation will be the important areas here.

Knowledge-building projects with user involvement are aimed at R&D institutions to contribute to long-term industry-oriented researcher training and competence building in research communities, within topics that are crucial to the development of business and industry in Norway. A minimum of 20 per cent of the project costs must be funded by monetary contributions from industry or other users. Cooperation between the research group and participating users is rooted within a sound framework, and organised in a manner that ensures the commercial relevance of the project and the R&D results.

Recruitment via doctoral and post-doctoral research fellowships will be important tasks of the Programme. This type of support should be applied for in connection with researcher projects. International mobility will be important, and this concept covers both periods of research for Norwegian scientists and research fellows at overseas R & D institutions and stays in Norway for foreign scientists. Research students and research fellows are encouraged to spend a period of time at another institution than their own, quite possibly abroad.

The Programme aims to support the organisation of conferences, symposia and workshops, particularly those of a multi- and interdisciplinary character. Conferences will be organised under the Programme, at least every second year, for presentation and discussion of research problems and/or results. The

Programme will organise annual seminars for all research students that it finances, as well as a researcher conference in January 2008, which will focus on projects that have already reached their final phase.