



Networks of Centres
of Excellence Réseaux des centres
d'excellence

Canada

NCE Program Guide

Updated January 2002



Government of Canada
Natural Sciences and Engineering Research Council of Canada
Canadian Institutes of Health Research
Social Sciences And Humanities Research Council of Canada

© Minister of Public Works and Government Services Canada 2002
ISBN — NS3 — 16/2002
Cta. No. 0-662-66285-7

Networks of Centres of Excellence
350 Albert Street
Ottawa, Ontario K1A 1H5
Telephone : (613) 995-6010
Facsimile : (613) 992-7356
Web address : <http://www.nce.gc.ca>

Table of Contents

Networks of Centres of Excellence	1
Goal.....	1
Objectives.....	1
Selection and Evaluation Criteria	2
Development of Highly Qualified Personnel.....	2
Networking and Partnerships.....	2
Knowledge Exchange and Technology Exploitation.....	3
Management of the Network.....	3
Application and Review	4
Competition Cycles.....	4
Target Areas.....	4
Eligibility.....	4
Application Procedures.....	5
Review Procedures.....	5
Mid-term Review.....	6
Administration	7
Environmental Review Policy for Networks Receiving NCE Funds.....	7
Funding Agreement.....	8
Network Agreement.....	8
Release of Grant Instalments.....	8
Audit.....	8
Reporting Requirements.....	8
Management	9
Board of Directors.....	9
Scientific Director.....	9
Network Manager.....	9
Research Management of the Network.....	9
Communications.....	10
Host Institution.....	10
Intellectual Property.....	10
Benefit to Canada.....	11
Use of NCE Funds	12
Salaries and Stipends.....	13
Contracts with Government Laboratories and Facilities.....	14
Parental Leave Supplements.....	14
Monitoring and Guidance	14
Program Evaluation.....	15
Major Changes.....	15
The Access to Information Act and the Privacy Act.....	15

Appendix A: Conflict of Interest Policy Framework	16
1.0 Definitions	17
2.0 Disclosure	18
3.0 Management of Conflict of Interest	18
4.0 Review Process	19
Examples of Conflict of Interest	20
Appendix B : Benefits to Canada	21
Working Guidelines	21
Mechanism for Reporting Due Diligence.....	21
Appendix C : The Access to Information Act and the Privacy Act (ATIP)	22
The Access to Information Act	22
The Privacy Act.....	22
Use and Disclosure of Personal Information provided to the NCE Program	23
Appendix D: Example of Environmental Review Process for Networks	25

Networks of Centres of Excellence

The Networks of Centres of Excellence (NCE) program is a federal program administered jointly by the Natural Sciences and Engineering Research Council, the Canadian Institutes of Health Research, and the Social Sciences and Humanities Research Council in partnership with Industry Canada. The program is managed by a Steering Committee made up of the Presidents of the three granting agencies and the Deputy Minister of Industry Canada. Day-to-day administration is provided by the NCE Directorate made up of staff from the three granting agencies.

Goal

The goal of the federal NCE program is to mobilize Canada's research talent in the academic, private and public sectors and apply it to the task of developing the economy and improving the quality of life of Canadians. This goal is consistent with, and reinforces, the three pillars of the federal Science and Technology strategy: sustainable job creation and economic growth, improved quality of life, and advancement of knowledge.

Objectives

This NCE program goal is accomplished by investing in national research networks that meet the following objectives:

- Stimulate internationally competitive, leading-edge fundamental and applied research in areas critical to Canadian economic and social development;
- Develop and retain world-class researchers in areas essential to Canada's productivity and economic growth;
- Create nation-wide multidisciplinary and multisectorial research partnerships that integrate the research and development priorities of all participants;
- Accelerate the exchange of research results within the network and the use of this knowledge within Canada by organizations that can harness it for Canadian economic and social development.

Selection and Evaluation Criteria

To ensure that the program objectives are met, proposals are assessed against the five criteria outlined below. Networks are also evaluated on an ongoing basis during tenure of a grant against these same criteria. A threshold of excellence must be exceeded for each criterion. The quality of research is considered first and, unless it is deemed excellent, the network is denied NCE funding. In other words, research excellence is a necessary condition for the initial or continued funding of an NCE. It is not the sufficient condition, because the goals of the program are also reflected in the four additional criteria.

The descriptors of the five criteria given below are not all-inclusive.

Excellence of the Research Program

- The excellence, focus and coherence of the research program;
- The achievements of the researchers and their ability to contribute to the research program;
- The value added by the network approach, in terms of the quality of the research and achievement of the goals that can be pursued;
- The extent to which the program will contribute to Canada's ability to lead in areas of research with high economic and social impact;
- The extent to which new and emerging social and ethical issues, where relevant, will be addressed in the research program;
- The relationship of the research program to similar work conducted in Canada and abroad.

Development of Highly Qualified Personnel

- The ability to train and retain outstanding researchers in research areas and technologies critical to Canadian productivity, economic growth, public policy and quality of life;
- Training strategies that promote multidisciplinary and multisectorial research approaches and encourage trainees to consider the economic, social and ethical implications of their work.

Networking and Partnerships

- Effective research and technology development links between academic institutions, federal and provincial agencies and private sector participants;
- Multidisciplinary, multisectorial approaches in the research program;
- Evidence that an effort has been made to include all suitably qualified groups;
- Optimization of resources through the sharing of equipment and research facilities, databases and personnel;
- Presence, nature and extent of contributions from the private sector and federal and provincial agencies, and prospects for increasing commitments as the work progresses.

Knowledge Exchange and Technology Exploitation

- Likelihood that new products, processes or services can be commercialized by firms operating in Canada and that these will strengthen the Canadian industrial base, enhance productivity, and contribute to long-term economic growth and social benefits;
- Prospect for social innovation and the implementation of effective public policy through collaboration with the public sector;
- Effective collaboration with the private and public sectors in technology, market development, and public policy development;
- The impact, or potential impact, on the partners' science and technology capabilities;
- Effective management and protection of intellectual property resulting from network-funded research.

Management of the Network

Each network must possess an organizational structure appropriate for the management of the research and business functions of a complex multidisciplinary, multi-institutional program. These elements must include:

- A board and committee structure to ensure that appropriate policy and financial decisions are made and implemented;
- The presence of effective leadership and expertise in the research and the business management functions;
- Effective research planning and budgeting mechanisms;
- Effective internal and external communications strategies.

Application and Review

Competition Cycles

Networks compete for seven years of NCE funding. There is a maximum of two seven-year funding cycles available to a network. At the end of the first seven-year funding cycle, existing networks compete with applications for new networks. Subject to the quality of submissions, approximately twenty-five percent of the competition budget will be made available to fund new networks. All funding decisions are based on an arm's-length assessment of applications by Expert Panels and recommendations of Selection Committees. Competition for a possible second cycle of funding occurs during year seven. In the second cycle, greater emphasis is placed on the network's knowledge and technology transfer activities, as well as on the development of integrated research training strategies that meet both partner and longer-term university needs for increasing relevance.

Networks successfully completing the end of an NCE funding cycle may opt to compete for Research Management funding to continue their networking activities. Research Management funds are restricted to covering some network administration and networking costs and may not be used for the support of research itself. Research support must be provided through other sources of funding such as granting agency programs and partner organizations and is a required element. Research Management support is awarded to only a limited number of highly productive networks that can demonstrate that, beyond the first or second cycle of NCE funding, their research, development and commercialization activities continue to be of critical importance to Canada's economic and social development and that the funding requested is essential to realizing the full benefits of the NCE funding previously

received. High standards of excellence are a trademark of the NCE program and a network that receives Research Management funds must therefore continue to meet the NCE program criteria and standards.

Target Areas

The NCE Steering Committee will decide on the need to target areas for new networks prior to each competition taking into consideration:

- the amount of funding available;
- the broad areas already represented in the ongoing networks;
- the need to promote or develop specific areas in accordance with national needs.

If the competition is to involve target areas, the NCE Steering Committee will recommend suggested target areas to the Ministers of Industry and Health, who will propose target areas to the government for decision. Target areas will be announced six months prior to the application deadline for letters of intent.

Eligibility

Researchers and organizations that receive NCE funds must meet the general eligibility requirements of one of the three granting agencies. Partners from the private and public sectors, while not eligible to receive NCE funds, are encouraged to have an active role in the network.

Organizations eligible to receive funds are universities, affiliated hospitals and research institutes, and post-secondary institutions having a research mandate. An industry consortium may receive funds to administer a network.

Application Procedures

Applicants proposing new networks must first submit a Letter of Intent. Applicants whose Letter of Intent passes the initial screening process may request up to \$25,000 to assist them in preparing a Full Application. These funds, tenable for six months, can be used for application-related expenses such as travel, communications and workshops, as well as for secretarial, clerical and co-ordination services.

Applicants who are receiving NCE funds and who are submitting an application for a final cycle of funding will normally apply early in year seven of the first funding cycle. A Letter of Intent is not required.

Networks that do not apply for funding after the first cycle or that are ending their second cycle may apply for Research Management funds as described above. These funds are limited in duration and cover only network administration and networking costs, e.g., the costs associated with the protection of intellectual property, annual general meetings, Board of Directors and Research Management Committee meetings, the salaries of essential network staff, and network communications activities. Where feasible, networks are encouraged to share administrative costs and resources.

Review Procedures

Selection Committee and Expert Panels' Recommendations

For each competition, the NCE Steering Committee will appoint a Selection Committee composed of international-calibre experts with broad expertise representing the domains of the three granting agencies.

The Selection Committee will review the Letters of Intent based on the selection criteria, the

application's relevance to the NCE program goals as well as, if applicable, the proposed network's relevance to the target area. The Selection Committee will make recommendations on which applicants should be invited to submit Full Applications to the NCE Steering Committee for decision.

The NCE Directorate will appoint an interdisciplinary Expert Panel to evaluate each Full Application. The review will be based on the NCE selection criteria. An Expert Panel will meet with representatives of each group of applicants and their partners.

The Expert Panel will provide a detailed evaluation of the strengths and weaknesses for each selection criterion and will make recommendations on the appropriateness of the requested budget. The review reports, which will be provided to the respective applicant groups after the competition, will be transmitted to the NCE Selection Committee. The Chair or a designated member of each Expert Panel will be available to respond to questions and provide additional information during deliberations of the Selection Committee.

NCE Steering Committee Decision

Taking into account the reports of the Expert Panels, the Selection Committee will review and rate the applications based on the selection criteria. The Selection Committee will transmit a priority-ranked list of networks recommended for funding along with a list of recommended awards to the NCE Steering Committee for decision. The decisions reached by the NCE Steering Committee are final. There is no appeal process.

Announcement of Competition Results

A confidential evaluation report for each Full Application will be made available to each group of applicants. A public report from the Selection Committee will provide an overview of the competition along with a summary

analysis of each application recommended for funding.

Mid-term Review

The progress of each funded network is monitored on an on-going basis with an in-depth peer review at the mid-point of the seven-year cycle, i.e., during year four. Each network prepares a detailed report on the first three years of activity and a strategic plan for the next three years. An in-depth evaluation of the network's performance is conducted by an Expert Panel that makes recommendations to the NCE Steering Committee.

At the mid-term of cycle two funding, the network is also required to report on the three previous years of support. In addition, the network must also detail, in its strategic plan, measures to accelerate its knowledge and technology transfer activities for the final years of funding.

The mid-term review could result in continued funding, continued funding on a conditional basis, or the phasing out of a network before the end of the current award.

Administration

NCE grants are administered through the NCE Directorate. In general, the rules and policies of the granting agency into whose domain the network's research falls will apply to that network. Networks whose research falls under the mandate of more than one granting agency must choose and adhere to the rules and policies of a single granting agency. In addition, networks must adhere to the regulations and administrative policies specific to the NCE program.

Networks must obtain appropriate certification for each research project involving animals, human subjects, biohazards, or radioactive materials. Network research must adhere to the Tri-Council Policy Statement *Ethical Conduct for Research Involving Humans* located at: www.nserc.ca/programs/ethics/english/policy.htm

Networks should also consult the Researcher's Guide of the granting agency under whose mandate the network research falls for further details.

Environmental Review Policy for Networks Receiving NCE Funds

All Networks of Centres of Excellence must pay careful attention to environmental considerations in their decision to fund Network Projects proposals. Their Boards of Directors shall establish a process for environmental review, which is comparable to the process established by NSERC in fulfillment of its obligations, pursuant to the *Canadian Environmental Assessment Act (CEAA)*. All project proposals within the Network shall be reviewed for potential environmental effects.

Environmental Review Requirements for Networks Receiving NCE Funds

- An environmental review shall be carried out on all projects selected for funding by the Network, and on funded projects when methodology changes significantly during the course of the funding period.
- Boards may choose to carry out the environmental review themselves or to delegate this task, for example, by appointing a sub-committee or hiring consultants.
- Network funds shall only be released to Network investigators after their projects have undergone an environmental review and the Network has determined that no significant adverse effects on the environment are expected. The Network should make awards conditional on a favourable environmental review.
- If the Board or its delegate determines that the environmental effects of a Project are significant, the Project will not be funded by the Network and will not be part of the Network's research program. In such cases, the result of the environmental review and the Board's decision shall be communicated to the Researcher(s) involved, to the NCE Directorate and to the relevant Participating Institution(s).
- Networks must report annually to the NCE Directorate to summarize their environmental review process and the results of the reviews done.

Networks should refer to Appendix D of this guide for an example of the environmental review process.

Funding Agreement

Following the announcement of the funding decision and prior to the release of the first instalment of the award, a Funding Agreement (FA) is signed by representatives of one or more of the granting agencies and the designated representative of the host institution and the Scientific Director of the network. The FA outlines the terms and conditions for funding under the NCE program.

Network Agreement

Release of the first instalment of the award is also conditional on the signing of a Network Agreement (NA) by participating institutions that receive NCE funds. This agreement, which must be approved by the signatories to the FA, sets out the operating rules of the network and outlines the rights and obligations of its investigators and participating institutions.

All researchers participating in the network must sign an acknowledgement stating that they will abide by the terms of the NA. The NA must be updated prior to changes in a network's operation. No changes can be made to the body of a network's NA without the prior approval of the signatories of both agreements (NA and FA).

Release of Grant Instalments

Payment of grants is authorized by the NCE Steering Committee through one or more of the granting agencies. Subsequent instalments are approved annually, subject to the availability of funds, satisfactory progress, and the network's continuing compliance with the program's policies, terms and conditions.

For networks administered through a university, funds are released to the designated financial administrative unit of the host university, following normal payment schedules for the

granting agencies. The network advises the host university on the amounts to be disbursed to participating institutions.

For networks not administered through a university, funds are released monthly in arrears to the financial administration unit of the network that is responsible for the distribution of funds to participating institutions.

Audit

Each Network of Centres of Excellence will provide annual audited financial statements of its administrative centre as well as an annual audit report of compliance with the administrative and financial policies of the NCE Program. This audit shall focus on the financial practices of the network's administrative centre.

The NCE Directorate also reserves the right to request an audit of the research accounts for any centre of the network if it considers it necessary.

These audits will be carried out by an independent accounting firm.

Reporting Requirements

Bilingual corporate reports, statistical tables, financial reports, and administrative reports such as financial and compliance audits, conflict of interest and environmental review reports are required annually as stipulated by the NCE Directorate. Detailed progress reports and strategic plans are required in year four of each funding cycle.

Management

Each network must have an administrative structure capable of managing a complex multidisciplinary and multi-institutional program. The particular structure varies according to the needs and size of the individual network, but must be detailed by the proponents in the Network Agreement and approved by the NCE Steering Committee.

Board of Directors

Each network must appoint a Board of Directors that has the overall responsibility for the management, direction and financial accountability of the network. The Board of Directors of a network is accountable to the NCE Steering Committee. The names and affiliations of the members of the Boards of Directors are considered public information.

The membership of the Board must reflect the interests and concerns of the public, private and academic sectors involved in the network. The network must obtain the approval of the NCE Steering Committee for the initial composition of the Board. The network must advise the NCE Directorate of any changes in membership of the Board during the course of funding. The NCE Steering Committee retains the right to name one voting member (not a staff member of a granting agency) to the Board. An NCE staff member has observer status on the Board of Directors of the network and also attends meetings of the network's committees.

To ensure objectivity, and the perception of objectivity, in the management of the network, the Chair of the Board must not be from any of the participating institutions that receive network funds. Moreover, it is advisable to have some members on the Board of Directors who are not directly affiliated with the network. To ensure the stakeholders have input into the direction of the network, at least half of the membership of the Board of Directors should be from outside

the university community, and the majority of those from industry. The perspective of network researchers who are not directly involved in the management of the research is also important. Therefore, the Board must have as a voting member one researcher from the network who is not the Scientific Director or a member of any other network committee.

Scientific Director

Each network has a Scientific Director who reports to the Board of Directors. The Scientific Director is responsible for providing scientific leadership and direction to the network. Other duties may include: chairing the research management committee; providing progress and financial reports as approved by the Board of Directors to the NCE Directorate; recruiting the Network Manager; promoting research collaboration among individuals; acting on behalf of the network with the NCE Directorate; and promoting the network to the scientific community, to the private and public sectors, and to the general public.

Network Manager

Each network must have a senior manager with the appropriate background and expertise to direct the business and management of the network. This Network Manager provides the leadership and direction for all of the network operations and ensures control and accountability on a day-to-day basis.

Research Management of the Network

The management of the research program requires ongoing assessment of all projects in order to provide recommendations to the Board of Directors regarding research priorities and budget allocations. This function should be carried out by a committee, which is usually chaired by the Scientific Director and is made up

of researchers from the network as well as the user sectors, namely industry and government. The membership of this committee should reflect the multisectorial and multidisciplinary nature of the network research program.

Communications

The competent management of communications is critical to the success of individual networks and the program as a whole. Effective internal network communications are vital to the network mode of conducting research. Network activities, results and accomplishments should also be conveyed to external audiences, including potential participants from all sectors, public policy makers, the media and the general public. Consistency in the message is essential, and therefore one appropriately qualified individual in each network should be responsible for coordinating all network communications efforts. Each network must develop a communications plan with a set of comprehensive objectives and activities designed to enhance interest in the network and its research activities and to promote the network and the NCE program to the broad spectrum of sectors that may benefit. Networks are encouraged to produce their public communiqués and publications in both official languages when possible.

The network's communications activities and messages must be consistent with and complementary to the NCE program communications plan. They must acknowledge the contribution of the federal government, and the fact that the three granting agencies are partners in the NCE program, providing the base of funding that complements NCE research activities.

Networks are expected to collaborate closely with the NCE Directorate Communications Officer for their communications activities directed to an external audience. Network

university partners are also expected to cooperate with the networks and the NCE Directorate Communications Officer in communicating the successes arising from network-funded research.

Host Institution

The Host Institution is responsible for providing suitable space to house the Administrative Centre of the network; receiving and distributing funds to participating institutions as approved by the Board of Directors; providing accounting and financial reporting for NCE funds and contributions to the network from other sources as required by the NCE Directorate; and providing suitable support to assist the Scientific Director in his or her network responsibilities. The Host Institution may also act as the legal entity to sign agreements and contracts on behalf of the network.

Intellectual Property

Guidelines

The ownership and disposition of intellectual property arising from network-funded research must be governed by the arrangements described in the Network Agreement.

Intellectual property resulting from network-funded research must be promptly and concurrently disclosed by researchers to the network and the industry liaison office of the employing or contracting institution.

Networks are encouraged to maximize the use of resources such as the universities' industrial liaison offices, the Canadian Technology Network (CTN), and the Industrial Research Assistance Program (IRAP) to expedite the exploitation of intellectual property.

Dissemination

Normally, the results of research funded through public sources must be published or otherwise disseminated to the community in a timely manner. Since the NCE program encourages the transfer of knowledge and technology to the user sector, it may be necessary to obtain protection for intellectual property resulting from network-funded research prior to disclosure in a public forum. Provision for reasonable publication delays (usually not exceeding six months), or other arrangements, may be made to avoid jeopardizing the commercial potential by premature disclosure.

Sharing of Benefits and Costs

Agreements made regarding the ownership of the intellectual property resulting from network-funded research must take into account the NCE objective of creating partnerships. This implies a sharing of eventual benefits between the partners commensurate with their respective contributions, as well as the sharing of costs to protect the intellectual property.

Commercialization

The industrial partners' contributions to the network must be recognized by allowing them access to the commercial exploitation of the intellectual property under terms commensurate with the nature and level of their contributions. The arrangements with each corporate partner must be addressed in a Network Affiliate Agreement.

Benefit to Canada

A key NCE program objective is to advance Canadian economic and social development. Accordingly, every effort must be made to have the results of network-funded research exploited in Canada, for the benefit of Canadians. Benefit to Canada is defined as incremental Canadian economic activity and improved quality of life in Canada. Maximum benefits would be derived from the creation of high-quality jobs in Canada, which should be an important goal of any commercialization activity.

The owners of intellectual property resulting from network-funded research, or the agent acting on their behalf, will consult with relevant stakeholders (Network administrators, universities, and researchers) on issues of commercialization. When selecting a receptor company for the exclusive license of the commercial rights of intellectual property resulting from network-funded research, the agent or owners of intellectual property resulting from network-funded research will use reasonable and thorough efforts to maximize benefits to Canada in a national and international context, including the possible development of new Canadian receptor companies. Due diligence in efforts to maximize benefits to Canada depends in part on the nature of the research results that are being exploited, and on the window of opportunity. If there is evidence of negligence on the part of the Network in performing the due diligence, the NCE Steering Committee reserves the right to impose sanctions as it deems appropriate. (See Appendix B for Working Guidelines.)

Use of NCE funds

In general, the regulations of the granting agencies regarding allowable expenses also apply to NCE awards. There are however some exceptions. The following table is a non-comprehensive list of eligible and ineligible expenses under NCE funding. For clarification, contact the NCE Directorate.

Eligible Expenses	Ineligible Expenses
Direct costs of research as normally allowed by the granting agencies.	Cost of research done by a university researcher under a spin-off or "virtual" company.
Salaries and benefits of full-time university-based researchers working full-time on network-funded research (see Salaries and Stipends).	Part-time salary support for university-based researchers.
Scientific Director salary: Subject to the approval of the Network Board of Directors and the employer of the NCE Scientific Directors and on the condition that contributions towards his or her salary from all federal sources do not exceed \$150K (including benefits).	Support services provided by the host institution such as: <ul style="list-style-type: none"> • construction and maintenance of buildings • administrative support • personnel support • financial services • telephone lines and equipment • library and building services • insurance other than liability insurance
Subject to the approval of the Network Board of Directors and the employer of the NCE Scientific Directors, partial teaching release / clinical release for the Scientific Director only, up to \$25K per year.	Release time from teaching (except for partial release for the Scientific Director).
Salaries and benefits for network staff.	Discretionary severance and separation packages.
Costs related to networking: travel accommodation for network personnel, researchers, and members of network boards and committees.	Furniture
Equipment	
Materials and supplies related to the direct costs of research.	
Communications activities	
Costs to obtain liability insurance for members of the Board of Directors and network administrators.	
Legal fees and other related incorporation costs.	
Intellectual property: on an annual basis up to 50% of the total cost of protection for intellectual property resulting from network-funded research.	
Contracting of services only where necessary. To provide services and expertise not available within the network.	

Eligible Expenses	Ineligible Expenses
Market studies: subject to approval by the Board of Directors, market studies to determine the market potential for an NCE-generated development or to determine the appropriate market(s) for a development.	
Prototype development: subject to approval by the Board of Directors, provided that due diligence has been used to find a partner to share in the costs of development, normally on a matching basis.	

Salaries and Stipends

The payment of stipends to students and postdoctoral fellows follows the regulations of the granting agency under whose mandate the network research falls.

The salaries and benefits for participants employed full-time on network research may be paid from NCE grant funds; however, their total research commitment must be dedicated to the work of the network. Such researchers may supervise graduate students working on the network research. Participants who receive salary support from the NCE program are not eligible to hold grants from the granting agencies. Granting agency practices would generally apply concerning salary levels and limitations on non-research activities.

Part-time salary support for participants can be paid only with funds contributed to the network from other sources.

Increased participation in the NCE program by researchers from government laboratories is desirable. In accordance with the *Financial Administration Act* and Treasury Board guidelines, however, government researchers will not be eligible to receive network research funds directly.

Scientific Director salary policy

Subject to the approval of the network Board of Directors and the employer of the NCE Scientific Directors, NCE funds may be allocated to cover the salary of an NCE Scientific Director on the condition that contributions towards his or her salary from all federal sources do not exceed \$150K (including benefits). The salary support provided to the NCE Scientific Directors must enable them to dedicate corresponding time to network-related activities. NCE Scientific Directors who receive NCE salary support may hold grants from the federal granting agencies provided they meet the eligibility requirements of the respective agencies.

Contracts with Government Laboratories and Facilities

Networks may use contracts in order to access specialized facilities and services provided by government laboratories. Memoranda of Understanding that set up the terms for Specified Purpose Accounts may be used to support joint projects. Money deposited into these Specified Purpose Accounts by networks can come only from non-federal funds raised by the networks and not from the federal funds for the NCE program.

Parental Leave Supplements

On request, and if the university grants parental leave, networks will provide parental leave supplement to graduate students and postdoctoral fellows supported from NCE awards, including from a partner's contribution to an NCE project. Graduate students and postdoctoral fellows will receive an NCE Parental Leave Supplement from their network if they meet the eligibility requirements outlined

below. Supplements are to be in the amount needed to cover the approved parental leave period, up to six months and up to the current level of support.

- The NCE parental leave supplement policy applies to graduate students and postdoctoral fellows who are expectant mothers and/or the primary caregiver for a child within six months of the child's birth or adoption and have taken leave from their home institution
- The parental leave must be taken in Canada.
- Students or postdoctoral fellows who are eligible for parental benefits from other sources (e.g., employment insurance or other plans) must first apply to those alternate sources for parental leave support. Where parental leave support can be obtained from another source, additional NCE parental leave supplement funds may be provided to bring the total parental leave support to the maximum allowable under the NCE policy.

Monitoring and Guidance

A network's activities are subject to general overview and monitoring by the NCE Steering Committee through the NCE Directorate. NCE staff may participate in the resolution of technical, financial or administrative difficulties and may also provide advice and guidance related to the interpretation of the NCE program's objectives, rules and guidelines. Assistance may also be provided in the co-ordination of the network's activities with those of other networks or of other government-sponsored initiatives including the diffusion of network achievements.

Program Evaluation

The NCE Steering Committee is responsible for evaluating the effectiveness of the NCE program and reporting the results to the Minister of Industry. Program evaluation activities, carried out by an independent firm, may involve surveys and interviews of individuals and staff. Current and former networks are required to take part in the evaluation of the NCE program and make information and records available to the program evaluation team on request.

Major Changes

Upon endorsement by the Board of Directors of a network, any major change that would affect the general mission, research program or other operations of the network must be submitted to the NCE Steering Committee for approval prior to implementation.

The Access to Information Act and the Privacy Act

The NCE program is subject to the federal *Access to Information Act* and the *Privacy Act*. (See Appendix C for more details.)

Appendix A: Conflict of Interest Policy Framework

Interactions between university researchers and the private sector are an essential feature of the NCE program. For the objectives of the NCE program to be achieved, many kinds of interactions among individuals participating in the network must occur. These interactions may lead to gains and benefits to the individuals participating in the network and are desirable and natural outcomes of being involved in the network. Such interactions, however, may place individuals participating in the network in a position of potential, apparent or actual conflict of interest.

The NCE Steering Committee is the body ultimately responsible to the government, and therefore to taxpayers, for the integrity of all the networks and their operations. The responsibility for implementing and managing the Conflict of Interest Policy Framework, to ensure that network operations and decisions are not biased by conflict of interest, is delegated to each Network Board of Directors, which represents the highest authority in the management structure of the network. The Network Boards of Directors are accountable to the NCE Steering Committee for the effective implementation and management of the Conflict of Interest Policy Framework.

Individuals participating in the network such as members of the Boards of Directors and advisory committees who do not receive NCE funds are recognized as playing a unique role in the networks. They bring an important perspective as a result of their particular knowledge, often as representatives of organizations in the field of interest of the network. Nevertheless, they are still required to disclose any financial interest or position of influence, as described in Section 2.0, in any business in the same area of interest as the network, other than that of their main employer.

The Conflict of Interest Policy is intended to enable Network Boards of Directors and individuals to recognize and disclose situations that may be open to question and to ensure that such situations are appropriately resolved. The policy builds upon and is complementary to those of the organizations that make up the Network Boards of Directors, the network investigators and of the administrators.

1.0 Definitions

"Avoidance" means refraining from, or withdrawing from, participation in activities or situations that place an individual participating in the network in a potential, apparent or actual conflict of interest relative to his or her network duties and responsibilities.

"Conflict of interest" means a situation where, to the detriment or potential detriment of the network, an individual is, or may be, in a position to use research knowledge, authority or influence for personal or family gain (financial or other) or to benefit others.

"Disclosure" means the act of notifying in writing the Board of Directors, through the Network Manager, of any direct or indirect financial interests and positions of influence held by an individual participating in the network which could lead to a potential, apparent or actual conflict of interest.

"Divestment" means the sale at arm's length, or the placement in trust, of assets, where continued ownership by an individual participating in the network would constitute a potential, apparent or actual conflict of interest with the participant's network duties and responsibilities.

"Financial interest" means an interest in a business in the same area as the network as described in Section 2.1 of this document.

"NCE" means the federal Networks of Centres of Excellence program.

"NCE Steering Committee" means the committee comprised of the three granting agencies' Presidents and the Deputy Minister, Industry Canada, which has overall responsibility for the NCE program.

"Network" means a group funded under the federal Networks of Centres of Excellence program.

"Network Board of Directors" means the Board that is responsible for the overall management of the network and is accountable to the NCE Steering Committee.

"Network Manager" means the senior managerial employee of the network who reports to the Board of Directors.

"Position of influence" includes any position that entails responsibility for a material segment of the operation and/or management of a business.

2.0 Disclosure

Upon joining the network, each individual is obliged to disclose in writing to the Board of Directors, through the Network Manager, any direct or indirect financial interests and positions of influence that could lead to a potential, apparent or actual conflict of interest (examples provided in Attachment). In addition, these submissions must be updated whenever the individual's circumstances change in a way that would necessitate a further disclosure. The individual also has the obligation to disclose any potential, apparent or actual conflict of interest when it arises during network committee or Board meetings so that the committee or Board is aware of the situation and can take appropriate action.

2.1 Financial Interest

It consists of:

- Any material stock option (e.g., 1%) or similar ownership interest in such a business, but excluding any interest arising solely by reason of investment in such business by a mutual, pension, or other institutional investment fund over which the person does not exercise control; or
- receipt of, or the right and potential to receive, any income from such a business, whether in the form of a fee (e.g., consulting), salary, allowance, interest in real or personal property, dividend, royalty derived from licensing of technology, rent, capital gain, real or personal property, or any other form of compensation or contractual relationship, or any combination thereof.

3.0 Management of Conflict of Interest

The Network Board of Directors or its conflict of interest sub-committee is charged with the responsibility of managing conflict of interest, and determining and implementing the appropriate course of action. This management system is based on disclosure, as described in Section 2. All disclosures constitute confidential information that will be available to the Network Board, or a sub-committee thereof, for the evaluation and resolution of any conflict of interest or allegations of conflict of interest brought before the Board or its conflict of interest sub-committee.

While it is recognized that it may be difficult to completely avoid situations of potential, apparent or actual conflict of interest, complete avoidance or divestment may be required in certain cases. Such divestment should not consist of a sale or transfer of assets to family members or other persons for the purpose of circumventing the conflict of interest compliance measures as directed by the Board.

3.1 Principles

An individual participating in the network who is involved with, or has an interest in, or deals in any manner with a third party which might cause a conflict of interest, will not be present and participate in any network decisions, including committee decisions, if the declared potential conflict of interest could influence the decision or actions of the network. It is the obligation of the individual to declare such potential, apparent or actual conflict of interest before discussions take place so that the committee or Network Board of Directors is aware of the situation in order to ensure that the individual is out of the room when the discussion and decision process on the item in question are taking place. This course of action should be recorded in the minutes of the meeting.

Any question raised by an individual or company regarding the potential conflict of interest of an individual will be raised at the Network Board of Directors level and must be documented in writing. The Network Board of Directors will determine the extent to which the question should be pursued and in such cases will consult the individual in question. If necessary, the individual will be asked to respond in writing.

3.2 Non-compliance

If an individual is discovered to be in conflict of interest where disclosure and prior approval have not been sought or granted, the Network Board of Directors will require the individual to:

- account to the network for any gain or benefit made directly or indirectly, arising from an involvement with, or an interest in, or from dealing in any manner with a third party that gives rise to a conflict of interest; **and**
- withdraw from the involvement; **or**
- withdraw from the Network. **or**
- take appropriate action as determined by the Board of Directors.

4.0 Review Process

An individual may request in writing, within 30 days, a review of a Network Board of Directors' decision on conflict of interest. In certain circumstances, the Network Board of Directors may arrange for an independent third party appointed by mutual agreement of the network and the Board of Directors, and failing such mutual agreement appointed by the NCE Steering Committee, to act as an intermediary to scrutinize scientific reports and budgetary information of research project(s) in which the individual participating in the network is involved. The intermediary would provide an opinion on the overall merit of the review,

without divulging specifics of a proprietary nature to other members of the network. The ultimate decision on the resolution of the review rests with the Network Board of Directors.

In cases where there is a concern with respect to decisions or actions of the Network Board of Directors itself, this concern should be submitted in writing to the NCE Steering Committee. The NCE Steering Committee may request the Chair of the Network Board of Directors to respond in writing to the Steering Committee. Following submission of the Chair's response, the NCE Steering Committee will decide on follow-up action.

Examples of Conflict of Interest

The following examples, although not comprehensive, illustrate situations that may lead to an indirect or direct conflict of interest:

- employment in any capacity by another employer outside the participant's, administrator's or director's university, institution or company signing the Network Agreement, including self-employment;
- holding an office that puts the individual in a position to affect decisions, such as manager with executive powers, within a company, or member of a board of directors;
- participating in a research contract or consultancy relationship with a company, or serving on the board of a company;
- entering into a research contract with a company in which the participant, or a member of his or her immediate family, has a financial or other interest;
- carrying out supplementary professional scientific activities in accordance with the disclosure requirements of the participant's or director's employing organization;
- ownership of equity or other financial participation in a corporation (including stock options and shares). Participants, administrators and directors should abstain from activity in which they would have inside advantage (e.g., purchase of shares) based on the information they are privy to through membership in the Network.
- accepting gifts (other than some minor hospitality) or special favours for him or herself or a member of his or her family from private organizations with which the Network does business;
- influencing the purchase of equipment or materials for the Network from a company in which the participant, the administrator or the director has a financial or other interest.

Appendix B: Benefit to Canada

Working Guidelines

A key NCE program objective is to advance Canadian economic and social development. Accordingly, every effort must be made to have the results of network-funded research exploited in Canada, for the benefit of Canadians. Benefit to Canada is defined as incremental Canadian economic activity and improved quality of life in Canada. Maximum benefits would be derived from the creation of high-quality jobs in Canada and this should be an important goal of any commercialization activity.

The owners of intellectual property resulting from network-funded research, or the agent acting on their behalf, will consult with relevant stakeholders (Network administrators, universities, and researchers) on issues of commercialization. When selecting a receptor company for the exclusive licence of the commercial rights of intellectual property resulting from network-funded research, the agent/owners of intellectual property resulting from network-funded research will use reasonable and thorough efforts to maximize benefits to Canada in a national and international context. Due diligence in efforts to maximize benefits to Canada depends in part on the nature of the research results that are being exploited, and on the window of opportunity. The agent/owners of intellectual property resulting from network-funded research should take the following non-comprehensive list of possible benefits to Canada factors into consideration in exercising that due diligence:

- existing company in Canada with receptor capacity;
- expansion of an existing company in Canada;
- formation of a new company in Canada;
- joint ventures or strategic alliances with a company in Canada;
- co-manufacturing involving a company in Canada;
- cross-licensing or co-development with a company in Canada;
- establishment of a new subsidiary in Canada (R&D, manufacturing, sales, marketing, distribution);
- development and/or production in Canada by a foreign company (world product mandate).

Mechanism for Reporting Due Diligence

Within 30 days of a decision to pursue exploitation by a foreign company, and in advance of finalizing this decision, the agent/owner is required to report the decision to the Network Board of Directors, and through the Network Board of Directors, to provide the NCE Steering Committee the rationale and circumstances that led to the decision. The NCE Steering Committee reserves the right to impose sanctions as it deems appropriate, if there is failure to comply with these reporting requirements or negligence in performing the due diligence, on the part of the Network.

Appendix C: The Access to Information Act and the Privacy Act (ATIP)

The *Access to Information Act* (ATI) gives Canadian citizens and people present in Canada a limited right of access to information in federal government records. The *Privacy Act* gives these same individuals a limited right of access to personal information about themselves held in government records and sets out rules and fair practices for the management of personal information by federal institutions. All information collected and generated in the context of the Networks of Centres of Excellence (NCE) program that comes under the control of the NCE Directorate and the granting agencies is subject to these laws.

The Access to Information Act

A requester seeking access to NCE records under ATI must write to the ATIP Co-ordinator at the relevant granting agency providing a precise description of the records sought and enclosing an application fee (\$5.00 at the time of this writing). Submitting a request does not guarantee that a requester will gain complete access to the requested records. The Act sets out specific exceptions that apply when disclosure of information could be expected to injure private or public interests. In responding to such requests, for example, the agencies would not disclose personal information about identifiable individuals or proprietary technical information submitted in confidence by researchers or companies. Moreover, if a request required a lengthy search or involved a large number of records, a requester could be asked to pay additional fees to help cover the processing costs.

More information about the Act can be obtained from the agencies' respective Access to Information and Privacy Co-ordinators or from

INFO SOURCE, a published register of federal information holdings available in most large

libraries. It is important to remember that the ATI is intended to complement, not replace, established channels of communication. The federal granting agencies have always promoted open informal communication with their research communities and with the public. Contact them informally before using the Act.

The Privacy Act

The *Privacy Act* gives people in Canada certain rights with respect to personal information about them held by federal institutions. For example, institutions must inform people from (or about) whom they collect personal information, how it will be used and to whom it will be disclosed. Personal information may be used only for the purposes for which it was originally collected or for uses consistent with that purpose. The Act also contains a procedure for requesting correction of inaccuracies in personal information.

Making a request under the *Privacy Act* is similar to making one under ATI except that there are no fees associated with requests to see personal information. The *Privacy Act* sets out limits to the right of access similar to those contained in ATI. For example, unless otherwise set out in advance, a person requesting access to personal information about themselves would not be given access to personal information about another.

Use and Disclosure of Personal Information Provided to the NCE Program

The decision-making processes related to NCE applications are subject to more publicity than traditional grant or scholarship applications made to individuals.

NCE co-applicants and other participants, including members of Network Boards of Directors, managers and other key players, should be aware that their names and affiliations will be accessible to the public.

More detailed personal information about applicants and prospective administrators collected by the NCE program is used to review applications, to administer and monitor awards, and to promote and support research. Consistent with these purposes, applicants should also expect that personal information collected by the program might come to be used and disclosed in the following ways:

As part of the review process, applications are disclosed to selection committees composed of experts recruited from the academic, private and public sectors. Applications may also be transmitted to external referees, to members of ad hoc review committees or to site visit committees for review. Individuals recruited by the NCE program to participate in these peer review activities are instructed to protect and to treat as confidential all information entrusted to them.

The substance of expert reviews and the comments of selection committees about a proposal are accessible to all co-applicants even though reviews may occasionally include comments about a particular co-applicant. Normally, NCE program staff provide these assessments as feedback to the principal applicant only; it is expected, however, that he/she will share it with co-applicants.

Because the agencies typically have "corporate" databases, the NCE program staff associated with a given agency are usually aware of other applications submitted by the same applicants or groups to other programs within that agency. For the purposes of adjudication and award administration, selection committees may be provided with multi-year summaries of co-applicants' proposals and awards in all programs. In cases when, for example, there is a question of possible overlap in the support of the same research activity by two or more programs, an application submitted to one program may be used during the review of an application submitted to another program. NCE staff may also disclose the contents of applications to program staff in their respective agency for the purposes of determining the most appropriate source of funding, jurisdiction, or to monitor overlap in federal support.

The three agencies use personal information about applicants in their files and databases to identify prospective committee members and reviewers for specific grant scholarship or fellowship applications. This applies to NCE applicants.

The NCE program routinely publishes and disseminates certain details about successful applications. These include names and affiliations of co-applicants, the amount of the total award and any conditions attached to it, summaries prepared by the applicant or by the program for public reference. The final reports of the NCE selection committees for Full Applications providing an overview of a competition along with a summary of each application recommended for funding are also publicly disseminated.

Files and databases containing personal information may also be used by the Agencies for program planning, evaluation and review and in audits and for generating statistics for these activities.

Participants in the NCE program are subject to the Tri-Council Policy Statement *Ethical Conduct for Research Involving Humans* located at www.nserc.ca/programs/ethics/english/policy.htm and their personal information may be used and disclosed consistent with that policy.

NCE data on the gender of applicants is collected on a voluntary basis only. While gender data on specific individuals is not used in the adjudication process, it may be used by the agencies to promote the increased participation of women in council programs and on committees.

The agencies also use the information in their files and databases to generate mailing lists in order to disseminate publications and other information to the research community.

To file a formal request, or for more information on the Acts, contact:

*ATIP Coordinator
Natural Sciences and Engineering Research
Council of Canada
350 Albert Street
Ottawa, Ontario K1A 1H5
Telephone: (613) 995-6214
Fax: (613) 992-5337*

Appendix D: Example of Environmental Review Process for Networks

Important note: What follows is an example of an environmental review process. While the steps may be adapted or modified according to its own situation, each Network must set up its own process.

In most cases, the review will be straightforward and should be based on applicants carrying out a self-assessment of the project, comparable to NSERC's Form 101 Appendices A and B. The level of review will depend on the applicant's response and the complexity of the project. In principle, most laboratory projects conducted indoors may be excluded from such assessment, provided that appropriate environmental protection procedures are in place, e.g., provisions for the treatment of effluent or disposal of hazardous waste.

1. For projects conducted exclusively indoors, researchers must attest to that fact in their proposal. (For example, see page 1 of NSERC's Form 101 at http://www.nserc.ca/forms/formtable_e.htm).
2. For projects in which at least one activity takes place outdoors, Network Investigators must complete the equivalent of NSERC's Environmental Impact Statement and the *Canadian Environmental Assessment Act* Pre-screening Checklist (Form 101, Appendices A and B, which can be found at www.nserc.ca/forms/formtable_e.htm).

3. Environmental Impact Statements should be sent to and reviewed by the Network Board of Directors (or its delegate) for an assessment of potential environmental effects. If there are no significant environmental concerns, the proposal can be approved and funded by the Network.

If there are significant environmental concerns, a more thorough examination should be carried out by the researcher, preferably equivalent to a screening under Section 16(1)(a) to (d) of the *Canadian Environmental Assessment Act*. This more detailed report is submitted to the Network's Board. The Board, or its delegate, must review the detailed report and conclude whether or not the environmental effects are significant, even after proposed mitigation measures are put in place.

NOTE: Network Investigators will sign the Environmental Assessment forms for projects under their responsibility.