2012 NETWORKS CENTRES OF EXCELLENCE

PROGRAM GUIDE

Canada

Table of Contents

The Networks of Centres of Excellence

The Networks of Centres of Excellence (NCE) programs are administered jointly by the Natural Sciences and Engineering Research Council (NSERC), the Canadian Institutes of Health Research (CIHR), and the Social Sciences and Humanities Research Council (SSHRC).

Launched in 1989, the NCE Secretariat today delivers nationally four programs and one initiative:

- Networks of Centres of Excellence (NCE) Program;
- NCE Knowledge Mobilization Initiative;
- Centres of Excellence for Commercialization and Research (CECR) Program;
- Business-Led NCEs (BL-NCE) Program; and
- Industrial Research and Development Internships (IRDI) Program.

At the inception, in 1989, the NCE program networks received funding for up to two seven-year cycles. Following a 2007 evaluation, it was determined that new networks (NCE-Networks) would be funded for a five-year cycle, with the possibility of renewing for up to two further cycles of five years.

The NCE Knowledge Mobilization (NCE-KM) initiative was introduced in early 2010 following an evaluation of the 2005 pilot initiative entitled the NCE New Initiative (NCE-NI). Similarly, the NCE-KM funding is designed to support the networking and knowledge mobilization of a network. NCE-KM Networks are funded for one four-year cycle with the possibility of renewing for an additional three-year cycle.

The NCE programs/initiatives are overseen by the tri-agency NCE Steering Committee comprising the Presidents of the NSERC, CIHR and SSHRC as well as the Deputy Ministers of Industry Canada and Health Canada, and the President and CEO of the Canada Foundation for Innovation (as an observer).

Day-to-day administration of the NCE is provided by the NCE Secretariat, housed at NSERC. The Secretariat runs periodic national competitions through which the NCE Steering Committee selects successful networks and centres on the advice of international calibre expert reviewers.

The NCE Program

The goal of the NCE Program is to mobilize Canada's research talent in the academic, private, public, and not-for-profit sectors and apply it to the task of developing the economy and improving the quality of life of Canadians. This goal aligns with the guiding framework for Canada's science and technology policy, *Mobilizing Science and Technology to Canada's Advantage.*

Expected outcomes of the NCE Program are listed below and vary according to the grant type.

Immediate outcomes of the NCE Program:

- increase networking and collaboration among researchers from Canada and abroad;
- develop leading-edge research findings that are relevant to the needs of the user sector (e.g. private and public sectors, non-governmental organizations, and others) and Canada's socio-economic development;
- create nation-wide, multidisciplinary and multisectoral research partnerships between universities and the user sector (e.g. private and public sectors, non-governmental organizations, and others); and
- establish training that promotes multidisciplinary and multisectoral research approaches and encourages trainees to consider the economic, social, environmental, and ethical implications of their work.

Intermediate/long-term outcomes of the NCE Program:

- 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;
- attract and retain world-class researchers and highly qualified personnel (HQP) in areas essential to Canadian economic and social development;
- create functional multi-regional, interdisciplinary research teams;
- develop a pool of HQP in areas essential to Canadian economic and social development; and
- increase Canada's international visibility and reputation.

Goals of the NCE-Networks

The NCE Program goal is accomplished by investing in Networks that meet the following objectives:

- stimulate internationally competitive, leading-edge, multidisciplinary research in areas critical to Canadian economic and social development;
- develop and retain world-class research and research mobilization capabilities in areas essential to Canada's productivity and economic growth;
- create nation-wide and international partnerships that bring together the key individuals and organizations needed to generate and implement multifaceted solutions to complex Canadian challenges;
- accelerate the exchange of research results within the Network and the use of this knowledge by organizations within Canada to produce economic and social benefits; and

- increase Canada's international visibility and reputation as a leader by attracting world-class collaborations, and developing partnerships with international organization counterparts, when applicable.

NCE-KM Goal and Objectives

The goal of the NCE-KM initiative is to further the application and mobilization of world-class research to benefit end users by supporting networking and collaboration between well-established research teams and knowledge users.

The objectives of the NCE-KM initiative are:

- to support networks between knowledge producers and knowledge users from various disciplines, sectors and institutions, including industry, government and not-for-profit organizations, for the social, economic, technological, and/or wellness benefit of Canadians;
- to ensure the greatest impact of the application and mobilization of knowledge through strengthening collaborations with knowledge users and end users; and
- to enable collaboration between researchers from different disciplines to develop approaches and strategies to maximize the impact of knowledge mobilization efforts.

NCE Program Competitions

Overview

There are four types of NCE Program competitions. These are:

- NCE-Network;
- NCE-Network Renewal;
- NCE-Network Management Funds (NCE-Network MF); and
- NCE-Knowledge Mobilization Network (NCE-KM Network).

The NCE Program uses a comprehensive review process, in which proposals are assessed by impartial international experts in specific fields, as well as representatives from the relevant sectors.

Depending on the competition, applications are reviewed by the NCE Standing Selection Committee, an expert panel, or both. Final decisions are made by the NCE Steering Committee based on the recommendations of the review committees.

The NCE Standing Selection Committee is composed of international calibre experts with broad, multidisciplinary and multisectoral expertise, representing the domains of the three federal granting agencies, as well as the diversity of current government priority sectors. NCE Standing Selection Committee members are appointed by, and make recommendations to, the NCE Steering Committee.

The NCE Steering Committee makes the funding decisions based on the above recommendations. Decisions of the Steering Committee are final and there is no appeal process.

At the conclusion of a competition, Applicants receive a confidential evaluation report specific to their application. The NCE Steering Committee prepares a public competition report providing an overview of the competitions together with a summary analysis of each application recommended

for funding. The report is posted on the NCE website (http://www.nce-rce.gc.ca)

As competitions are announced, application instructions are published on the NCE website.

General Eligibility to NCE Program Competitions

Applications must be submitted by an academic researcher or researchers on behalf of the proposed network members with the support of the proposed network host.

The lead applicant and academic researchers involved must be eligible to apply for funding under the policies and guidelines of at least one of the three federal granting agencies partnering in the program.

The network host must:

i) meet the general eligibility requirements of one or more of the three federal granting agencies partnering in the program;

ii) administer and house the network administrative centre;

iii) show evidence of an effective financial and accounting framework; and

iv) be a signatory or adopt the *Memorandum of Understanding (MOU) on the Roles and Responsibilities in the Management of Federal Grants and Awards,* with the granting agencies.

Examples of Network Hosts may include Canadian universities and post-secondary institutions with a mandate for research and their affiliated institutions (including hospitals, research institutes and other not-for-profit organizations), or a private sector consortium.

Application Process

Applicants to the NCE-Network must submit a Letter of Intent (LOI) which outlines the proposed Network's vision, socioeconomic context, and key participants. It also summarizes how the Network will address the criteria and further the objectives of the NCE program. For the NCE-KM initiative, applicants are encouraged to first submit a Notification of Intent (NOI), which enables NCE staff to verify eligibility of candidates and to confirm suitability of the applications to the scope of the program.

The LOI stage follows the NOI stage.

- Successful LOIs go forward to the full application stage, for which further detail, such as CVs of key participants and a strategic plan, are required.

For the NCE-Network (Renewal) and NCE-Network MF competitions, there is no LOI stage. Applicants to these competitions only submit a Full Application.

Full Application Preparation Funding

Applicants invited to submit a full application may request Full Application Preparation (FAP) funding to assist them in preparing a full application. The value of the FAP funding varies for each competition and is subject to approval by the NCE Secretariat. To access the FAP funding the applicant must provide an outline of the expenses requiring FAP funds.

Review Process

The NCE Standing Selection Committee reviews the LOIs and provides recommendations to the NCE Steering Committee regarding the LOIs recommended to advance to the full application stage of the competition.

At the full application stage, an Expert Panel may be used to review the full applications, meet with the applicants, and provide a written review report.

The NCE Standing Selection Committee reviews the full applications, and considers any additional review reports. The Committee provides funding recommendations to the NCE Steering Committee. The NCE Steering Committee makes the final funding decision.

Competition Specific Criteria

NCE-Networks:

Review Criteria: In addition to any requirements outlined for a specific competition, proposals are assessed against the following five NCE program criteria (detailed criteria can be found in Appendix F):

1. Excellence of the research program
2. Development of highly qualified personnel
3. Networking and partnerships
4. Knowledge and technology exchange and exploitation
5. Management of the Network

NCE-Networks Renewal (applicable to five-year NCE-Networks only):

Additional Eligibility criteria: Networks applying for renewal must be an existing recipient of the NCE-Networks grant at the time of application. Networks may apply for up to two additional funding cycles through the NCE-Networks (Renewal) competition. If a third (and final funding cycle) is

requested, it will only be granted when a Network has developed and built on its partnerships to progressively transform itself into a network driven by the needs of its partners.

A Network applying to the NCE-Network Renewal competition may apply for reduced, equal, or additional funds based on the activities proposed.

Review Criteria: Renewal applications for a subsequent funding cycle will be assessed according to the Review Criteria for a new application. In addition, the renewal application will include a progress report to assess the progress of the Network in achieving its goals and objectives. Progress for the Network as a whole must be detailed in terms of accomplishments that are measured against the five NCE selection criteria and against the performance targets and metrics submitted in the original application.

NCE-Networks Management Funds (applicable to seven-year NCE-Networks only):

Additional Eligibility criteria: To be eligible to apply for NCE-MF funds applicants must be currently funded NCE-Networks that have reached the end of all available funding cycles or do not intend to apply for a further funding cycle.

Up to $500,000 are available to NCE-Networks for a period of up to two years.

Review Criteria: NCE-MF proposals are assessed against the following four review criteria:

1. Track record of the Network during the last funding cycle
2. Value-added of the proposed activities
3. Partnerships and contributions
4. Need for funds

NCE-Knowledge Mobilization Networks:

Successful NCE-KM Networks are funded up to $400,000 per year for four years, with a possible three-year extension (based on a successful renewal application).

Knowledge Mobilization proposals are assessed against the following five review criteria (detailed criteria can be found in Appendix G):

1. Expected impacts and added value
2. Plan for Knowledge Mobilization
3. Composition of the proposed Network team
4. Stakeholder engagement in the proposed Network
5. Management and governance

NCE-KM Networks have the possibility of applying for renewal of their funding for a further three-year cycle if there is evidence that they have developed and built on their partnerships to progressively transform themselves into networks that are centred on their receptors (knowledge users).

Grant Recipients

Grant Payments

NCE grants are made to the lead applicant through the network host. NCE-Networks must incorporate as a federal not-for-profit to be eligible to receive grant funds. Depending on the governance model put forward by an NCE-KM Network may or may not require incorporation as a not-for-profit organization.

The NCE Steering Committee expects grant holders to use their grants for the purpose for which the funds were awarded, and in accordance with the policies and guidelines of the program and their institution.

The NCE Secretariat reserves the right to terminate or suspend a grant if the recipient ceases to meet the eligibility criteria. Amounts paid after the expiry of eligibility or

on the basis of fraudulent or inaccurate application, or in error, are subject to recovery action. The NCE Secretariat may withhold an appropriate amount of the total grant payable to the recipient until it is satisfied that the recipient meets the eligibility criteria and requirements of the program.

Fraudulent use of NCE funds is referred to the appropriate legal authorities.

Funding Agreements

Recipients of NCE grants must sign a standardized Funding Agreement that sets out the terms and conditions of the grant. The signatories are authorized representatives of the Network, host, and granting agencies.

Network Agreements

Networks must sign a Network Agreement with any eligible organization (Network Member) receiving grant funds. Funds may only flow from the network host to the network members once a standard Network Agreement has been signed.

Network Members include Canadian universities or postsecondary institutions with a mandate for research, as well as their affiliated institutions, including hospitals, research institutes and/or other not-for-profit organizations, or other organizations eligible to receive research funds from any of the three federal granting agencies, and that employ or otherwise give academic status to one or more network investigators.

The Network Agreement sets out the expectations of all parties in the Network and provides for such matters as reporting requirements, use of research funds, and ownership and exploitation of intellectual property. It must be signed by each network investigator and network member in accordance with the program guidelines maintained by the NCE Secretariat.

Basis and Timing of Payments

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 NCE-Networks and NCE-KM 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 of the amounts to be disbursed to participating institutions.

For NCE-Networks and NCE-KM Networks not administered through a university host, 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.

Stacking Provisions

The maximum level (stacking limit) of total government assistance (federal, provincial and municipal assistance for the same eligible expenditures) for this program will not exceed 100 per cent of eligible expenditures. In the event total government assistance to a recipient exceeds the stacking limit, it will be necessary for the Granting Agencies to adjust the level of assistance so that the stacking limit is not exceeded.

When an investigator or Network is successful in attracting other funding, from either governmental or non-governmental sources, the additional funds do not displace the grant provided by the NCE Program. NCE-Networks are encouraged to use the additional funds to extend or accelerate the achievement of their overall objectives by expanding their research programs, increasing their HQP

development activities, enhancing knowledge mobilization activities and/or technology exchange and exploitation or other activities to support the mobilization of research excellence for the benefit of Canadians. NCE-KM Networks are encouraged to use the additional funds to extend or accelerate the achievement of their overall objectives by expanding their knowledge mobilization activities.

The current principles and practices related to stacking of assistance are as follows:

- Access to NCE funds should be fair for all applicants, regardless of their other sources of funding;
- Applications are evaluated according to the selection criteria for the funding; and
- Applicants must provide a statement of other sources of funding with their application, and on a subsequent annual basis, demonstrating that there is no duplication of funding for the same research. However, when research programs are supported by multiple sources, the additional benefits of NCE support must be well explained and justified.

The onus is on the applicant to provide sufficient information to enable review committees to evaluate the relationship with other sources of support (held or applied for), and to recommend the appropriate NCE funding level. The consequence of not providing adequate information to enable the Standing Selection Committee to assess the relationship to other research support is that the committee can recommend reduced or no funding.

Contracts

Networks may use contracts in order to access specialized facilities and services provided by government laboratories. MOUs 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.

Use of NCE Program Funds

In general, the rules and policies of the granting agency into whose domain the majority of the Network's activities fall will apply to that Network, as mutually agreed by the Network and the NCE Secretariat.

In addition to the rules and policies outlined in the Tri-Agency Financial Administration Guide, (http://www.nserc-crsng.gc.ca/Professors-Professeurs/FinancialAdminGuide-GuideAdminFinancier/index_eng.asp), all Networks must adhere to the regulations and administrative policies specific to the NCE program.

The table below contains a non-comprehensive list of eligible and ineligible expenses for the NCE Program.

Specific expenditures related to NCE-Networks, NCE-KM Networks and NCE-Networks MF can be found at the end of the table.

General Eligible Expenditures (Applicable to all Networks)

Administrative costs	
Eligible Expenses	**Ineligible Expenses**
1. Operating Costs for the Network's Administrative Centre	
The administrative expenses of the NCE-Network or NCE-KM Network are the sum of the expenses that are not eligible to the Indirect Cost and Canada Research Chairs programs. Salaries and Benefits for Network staff members (e.g. network directors, network manager, business development/industrial liaison officer, communications officer, secretarial support staff) Contributions from the NCE funds towards the total annual remuneration (fixed or variable) of each network staff member must not exceed $120,000 full-time equivalent (excluding benefits). This maximum applies to all positions (including employment contracts) and shall be pro-rated on the basis of the proportion of time worked relative to the full-time equivalent. Employment contracts as opposed to professional services contracts are salaried contributions and are for technical or professional services only where this expertise is not available within the Network. Non-discretionary benefits include workplace safety insurance coverage costs for Network staff, pension benefits, medical, vision and dental care benefits and parental leave; the costs of the benefits package should be in the average market range. Other administrative expenses:	Honoraria for external reviewers. Remuneration for Governing Board members Discretionary severance and separation packages. Routine courses (Excel, time management, language training, etc.). Support services provided by the host institution, such as: a) construction and maintenance of buildings; b) administrative support; c) personnel support; d) financial services; e) telephone lines and equipment; f) library and building services; g) insurance other than liability insurance; h) furniture; i) office space; and j) web connection at administrative centre.

Office supplies and equipment (e.g. stationery for the administrative center, fax, computers, printers). Two communication devices for NCE purposes only. Long distance charges (telephone and fax). Internet access (web connection) fees while traveling on business for up to 125 days per year, but not if on sabbatical or other types of leave; (These claims could also be included in the per diem, if the host institution allows it). Costs to obtain liability insurance for members of the Governing Board, and Network administrators. Travel and accommodation for Network personnel, and members of Network boards and committees. Legal fees, audit costs, and other related incorporation costs for the Network.	
2. Costs Related to Networking	
Hospitality costs (non-alcoholic refreshments and/or meals) for networking purposes (e.g. Board meetings and strategic planning meetings with stakeholders).	Hospitality costs for meetings attended only by Network staff are not eligible.
3. Costs Related to Communication Activities	
Newsletters/brochures, annual reports, printing and mailing costs, public relations associated expenses (e.g. display booths, press conferences). Promotional material for conferences, the	Gifts

total cost for one year not exceeding $5,000. Financial contributions to special events in Canada, subject to consultation with the NCE Secretariat. Financial contributions to international events limited to communications activities and/or costs related to networking (e.g. travel, registration fees, exhibit space rental). Other communications activities as long as the activity is approved by the Network's Governing Board and is part of the Network communication strategy.	
4. Costs Related to Knowledge Mobilization and/or Technology Exchange and Exploitation	
Prototype development, subject to approval by the Governing Board provided that due diligence has been used to find a partner to share the costs for development, normally on a matching basis. Market studies to determine the market potential for an NCE-generated development or to determine the appropriate market(s) for a development, subject to the approval by the Governing Board. Intellectual property: on an annual basis, up to 50 per cent of the total costs of protection for intellectual property resulting from Network research.	

Specific Eligible Expenditures
NCE-Networks

Eligible Expenses	Ineligible Expenses
1. Direct Costs of Research and Facility Access	
Direct costs of research and facility access, equipment, materials and supplies related to the direct costs of research, as normally allowed by the granting agencies and detailed in the Tri-Agency Financial Administration Guide and subject to the approval by the Governing Board of the NCE-Network. Salaries, stipends and institutional non-discretionary benefits for Network-related research performed by students and postdoctoral fellows; please refer to the Tri-Agency Financial Administration Guide for specific funding agencies guidelines.	Cost of research done by a university researcher under a spin-off or "virtual" company.
2. Administrative Operating Costs	
The NCE Program funds will support the administrative costs of the NCE-Network to a maximum of 15 per cent of the total grant awarded. Travel and accommodation for researchers. Scientific director salary ("A") and partial teaching/clinical release ("B"); subject to approval by the Governing Board and the employer of the NCE scientific director: a) Contributions from all federal sources towards "A" must not exceed $150K (including benefits); b) Contribution to "B" may be up to $25K per year from NCE funds; and c) Total support ("A" + "B") must not exceed $150K per year. The salary support provided to the NCE scientific directors must enable them to dedicate corresponding time to Network-	Part-time salary support for university-based researchers. Release time for teaching (except for partial release for the scientific director (NCE-Networks) Honoraria for International Scientific Review Board members.

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.	
3. Costs Related to Networking	
Hospitality costs (non-alcoholic refreshments and/or meals) for research related activities	
4. Other Costs Related to Student and Postdoctoral Fellows	
Parental Leave Supplements (up to 6 months at the current level of support) for graduate students and postdoctoral fellows who meet the following eligibility requirements: a) 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. b) 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 NCE policy. c) The parental leave must be taken in Canada. 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.	

NCE-KM Networks & NCE-Networks MF	
Eligible Expenses	**Ineligible Expenses**
1. Direct Costs of Research and Facility Access	
Direct costs of equipment and supplies related to knowledge mobilization and/or technological exchange and exploitation as normally allowed by the granting agencies and detailed in the <u>Tri-Agency Financial Administration Guide</u> and subject to the approval by the Governing Board of the NCE-KM or MF-Network.	Research-related activities. Salaries, stipends and institutional benefits for students and postdoctoral fellows performing Network-related research.

Annual Reporting

Seven year NCE-Networks are monitored on an ongoing basis, with an in-depth review taking place at the mid-point of the funding cycle.

Progress of the five year NCE-Networks and the NCE-KM Networks will be assessed annually by a sub-group of the NCE Standing Selection Committee (the NCE Monitoring Committee). The progress report will indicate major achievements over the last year, strategies used to achieve goals, and any course corrections or deviations from the original objectives.

Network Management and Governance

Each NCE-Network, NCE-KM Network and network receiving MF funds must have an organizational structure appropriate for the management of the Network activities and business functions of a complex multidisciplinary, multi-institutional program. Refer to Appendix E for additional information on the best practices of the positions, committees and boards listed below.

Network Management

Scientific Director or Network Director

NCE-Network and NCE-KM Networks must have a Scientific Director or Network

Director respectively, who is responsible for providing leadership and direction, reporting to the governance body for the Network and liaising with the NCE Secretariat.

Network Manager

Each NCE-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.

Network Governance

Governing Board

Each NCE-Network must appoint a Governing Board that has the overall responsibility for the governance and management of the Network, and shall act in accordance with the NCE program

guidelines and the Funding Agreement. The Governing Board of a Network is accountable to the NCE Steering Committee.

The membership of the Board must reflect the interests and concerns of the various stakeholders involved in the Network. The Network must obtain the approval of the NCE Steering Committee for the initial composition of the Board and must advise the NCE Secretariat of any changes in membership of the Board during the course of funding.

An NCE staff member has observer status on the Governing Board of the Network and also attends meetings of the Network's committees.

Upon endorsement by the Governing Board 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.

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 Governing Board; providing accounting and financial reporting for NCE funds and contributions to the Network from other sources as required by the NCE Secretariat during and after the closure of the network; and providing suitable support to assist the Scientific Director or Network Director in their Network responsibilities. The host institution may also act as the legal entity to sign agreements and contracts on behalf of the Network.

A strong and positive relationship between the Network and its host is essential to success. In addition to the funding and network agreements, a separate host agreement is key to outlining obligations between the parties (this template is not provided by the NCE Secretariat). When negotiating with the host institution, the needs and expectations of the Network must be detailed.

NCE Policies

Conflict of Interest Policy

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 NCE-Network's Governing Board, which represents the highest authority in the management` structure of the Network. The Conflict of Interest Policy is intended to enable Network Governing Boards and individuals to recognize and disclose situations that may be open to question, and to ensure that such situations are appropriately resolved. For further information regarding the Conflict of Interest Policy Framework, see Appendix A below.

Research-Related Policies (NCE-Networks only)

NCE-Networks should also consult the researcher's guide of the granting agency under whose mandate the Network research falls for further information on policies and guidelines.

When applicable, the Network will ensure that network investigators obtain appropriate certification and/or approval regarding use of human subjects, human pluripotent stem cells, animals, biohazards, radioactive materials, licenses for research in the Canadian territories, and controlled information in the conduct of Network research. Network research must adhere to the Tri-Council policy statement *Requirements for Certain Types of Research.*

Intellectual Property

The NCE Secretariat and the granting agencies make no claim to ownership of intellectual property from the research they fund.

Ownership of Network-Supported Intellectual Property (NSIP) shall be determined by applicable Canadian law and the policies of the relevant participating institution(s).

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 university industry liaison offices, the Canadian Technology Network (CTN), and the Industrial Research Assistance Program (IRAP), to expedite the exploitation of intellectual property.

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 exchange of knowledge and technology between sectors, 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.

Open Access to Research Outputs

Researchers should note that recipients of CIHR grants must make every effort to ensure that their peer-reviewed research

articles are freely available as soon as possible after publication. Guidelines can be found at *CIHR Policy on Access to Research Outputs*.

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.

Other Policies

Recipient organizations that employ or retain the services of individuals who are current or former (in the last twelve months) public office holders or public servants are asked to certify compliance with the *Conflict of Interest and Post-Employment Code for Public Office Holder*s, and disclosure of the involvement of former public servants who are subject to the *Value and Ethics Code for the Public Service*.

Applicants shall provide assurance that, where lobbyists are used, they are registered in accordance with the *Lobbying Act* and that neither actual or potential conflict of interest nor any contingency fee arrangement exists.

Please also see the requirements that must be followed regarding Benefit to Canada (Appendix B), the Access to Information and Privacy Acts (Appendix C), and Environmental Review Policy Appendix D).

Contact Us

If you have any question or require additional information, you can reach us at:

Networks of Centres of Excellence
350 Albert Street, 16th floor mailroom
Ottawa, Ontario
Canada
K1A 1H5

Phone: 613-995-6010
Fax: 613-992-7356
E-mail: info@nce-rce.gc.ca

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 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 Governing Board, which represents the highest authority in the management structure of the Network. The Network Governing Board is 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 Governing Board 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 Governing Board 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 Governing Board, Network Investigators and the administrators.

1.0 Definitions

"Administrative Centre" means the central administrative offices of the organization managing the Network.

"**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.

"Board" means the Governing Board of a NCE-Network that is responsible for the overall management of the administrative centre and is accountable to the NCE Steering Committee.

"**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 to the Governing Board, 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 Appendix.

"**NCE Secretariat**" means the secretariat through which the federal Networks of Centres of Excellence program and three other programs are delivered.

"**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 Governing Board**" 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 Governing Board.

"**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 Governing Board, through the Network Manager, any direct or indirect financial interests and/or positions of influence that could lead to a potential, apparent or actual conflict of interest (examples provided in Section 5.0 of this Appendix). 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

Financial Interest 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 Governing Board or an appointed 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 2.0 of this Appendix. 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 or participate in any decisions pertaining to the Network, 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 Governing Board 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 Governing Board level and must be documented in writing. The Governing Board 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 Governing Board 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 Governing Board.

4.0 Review Process

An individual may request in writing, within 30 days, a review of a decision on conflict of interest. In certain circumstances, the Network Governing Board may arrange for an independent third party appointed by mutual agreement of the Network and the Governing Board, 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 Governing Board.

In cases where there is a concern with respect to decisions or actions of the Governing Board itself, this concern should be submitted in writing to the NCE Steering Committee. The NCE Steering Committee may request the Chair of the Governing Board 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.

5.0 Examples of Conflict of Interest

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

- being employed 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 Governing Board
- 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
- owning 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 research funded by NCE-Networks, or the agent acting on the owners' 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 NCE-funded research should take into consideration the following non-comprehensive list of possible benefits to Canada factors 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 NCE-Network Governing Board and through the Network Governing Board, 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 by 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) programs that comes under the control of the NCE Secretariat and the granting agencies is subject to these laws.

It is important to remember that the ATIP is intended to complement, not replace, established channels of communication. The NCE Secretariat promotes open, informal communication with the research community and with the public. Contact the NCE Secretariat before using the Acts.

The Access to Information Act

A requester seeking access to NCE Secretariat records under the Access to Information Act (ATIA) must write to the ATIP Co-ordinator at Natural Sciences and Engineering Research Council (NSERC) 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 and exemptions that apply in responding to such requests. For example, personal information about identifiable individuals or proprietary technical information submitted in confidence by researchers or companies would not be disclosed. Moreover, if a request requires a lengthy search or involves 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 NSERC Access to Information and Privacy Co-ordinator (see below), the ATIP web page (http://www.tbs-sct.gc.ca/atip-aiprp/index-eng.asp) or from Info Source, a published register of federal information holdings available in most large libraries or at www.infosource.gc.ca.

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 access personal information. The *Privacy Act* sets out limits to the right of access similar to those contained in the ATIA. 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 Secretariat

The decision-making processes related to applications received by the NCE Secretariat are subject to more publicity than traditional grant or scholarship applications made to individuals. Applicants, co-applicants and other participants, including members of Boards of Directors, managers and other key players, should be aware that their names and affiliations will be accessible to the public. The NCE Secretariat routinely publishes and disseminates certain details about successful applications. These include: names and affiliations of applicants and co-applicants, the amount of the total award and any conditions attached to that amount, and summaries prepared by the applicant or by the Secretariat for public reference. The final reports of the NCE Secretariat selection committees or the Private Sector Advisory Board, providing an overview of a competition along with a summary of each application recommended for funding, are also publicly disseminated.

More detailed personal information about applicants and prospective administrators collected by the NCE Secretariat programs 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 be used and disclosed in the following ways:

i) 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 Secretariat programs to participate in these review activities are instructed to protect and to treat as confidential all information entrusted to them.

ii) 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 Secretariat staff provides these assessments as feedback to the principal applicant only; it is expected, however, that he/she will share it with co-applicants.

iii) The NCE maintains a separate database, for the information collected through the annual reporting mechanisms of the different NCE Secretariat programs. Information collected is available to members of the NCE Management and Steering Committees or their delegates who are affiliated with a granting agency or other partners of the NCE Secretariat including Industry Canada, Health Canada, the Canadian Foundation for Innovation, the Canadian Institute for Health Research (CIHR), the Social Sciences and Humanities Research Council (SSHRC) and NSERC.

iv) Because of the relationship between the NCE Secretariat and its partners, staff of the NCE Secretariat is usually aware of other applications submitted by the same applicants or groups to other programs within the partners. For the purposes of adjudication and award

administration, selection committees may be provided with information 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 Secretariat staff may also disclose the contents of applications to program staff in the agencies for the purposes of determining the most appropriate source of funding, jurisdiction, or to monitor overlap in federal support.

v) The NCE Secretariat and its partners may use personal information about applicants in their files and databases to identify prospective committee members and reviewers for specific grant applications, planning and evaluation purposes, audits, and to generate statistics for these activities. The agencies may also use the information in their files and databases to generate distribution lists in order to disseminate publications and other information to the research community.

vi) Data on the gender of applicants is collected by the NCE Secretariat on a voluntary basis only. While gender data on specific individuals is not used in the adjudication process, it may be used by the NCE Secretariat or its partners to promote the increased participation of a specific group in programs and on committees.

Applicants and participants in the NCE Secretariat programs are subject to the Tri-Council Policy Statement: Integrity in Research and Scholarship http://www.nserc-crsng.gc.ca/NSERC-CRSNG/Policies-Politiques/tpsintegrity-picintegritie_eng.asp and their personal information may be used and disclosed consistent with this policy.

Information Provided to the NCE Secretariat

Information provided to the NCE Secretariat is subject to the *Access to Information Act* and the *Privacy Act*. Grant applicants and recipients are encouraged to separate information not related to the grant from meetings and documentation available to the NCE Secretariat and its representatives. Furthermore, applicants and recipients should adopt the practice of labelling information as confidential when the information contains:

(a) trade secrets;
(b) financial, commercial, scientific or technical information considered confidential;
(c) information that could result in a material financial loss or gain or impact a competitive position; and
(d) information that could affect contractual or other negotiations.

Annual Reporting Information

Throughout the grant period, recipients of grants are required to provide information to the NCE Secretariat. The information collected is consolidated across the relevant NCE program(s) to generate statistical information, update operational requirements and identify best practices that may be used by staff and committees. Information used in public reports and publications is discussed with grant recipients in advance.

Non-disclosure and confidentiality agreements

Representatives of the NCE Secretariat will not enter into separate non-disclosure and/or confidentiality agreements.

For further information on the above Acts, please contact:

ATIP Coordinator
Natural Sciences and Engineering Research Council of Canada
350 Albert Street
Ottawa, Ontario K1A 1H5

Phone: 613-995-6214
Fax: 613-992-5337

Appendix D: Environmental Review Requirements

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 Secretariat, and to the relevant participating institution(s).

Networks must report annually to the NCE Secretariat to summarize their environmental review process and the results of the reviews done.

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 [PDF Forms and Instructions.](#)

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 [PDF Forms and Instructions.](#)

3. Environmental Impact Statements should be sent to and reviewed by the Network Governing Board (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.

Appendix E: NCE Best Practices and Operations

Communications

The competent management of communications is critical to the success of individual Networks and to the program as a whole. Effective internal Network communications are vital to the way in which Network Members conduct and share 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 messaging 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 possible beneficiaries. 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 partnership of the three federal granting agencies to the NCE program, which provides the base of funding that complements NCE research activities. Networks are expected to collaborate closely with NCE Secretariat communications staff for their communications activities directed to an external audience. Network university partners are also expected to co-operate

with the Networks and the NCE Secretariat communications staff to convey the successes arising from Network-funded research.

Governance

The Governing Board for a not-for-profit organization is the highest corporate decision-making body. It should not be the responsibility of the Board to manage the Network's activities but rather to provide a framework in which the Network will operate. Management and governance should co-operate as a true partnership, but should not be confused as each plays a separate but equally important role in the organization. Management is defined as the "organization of tasks, people, relationships, resources and technology to achieve the organizational purpose."[1] Good governance on the other hand, can be categorized as the following: vision; goal-setting; securing the necessary resources; monitoring; and accountability.[2]

Governing Board

The Governing Board is responsible for the governance of the Network and acts in accordance with the corporate bylaws, funding agreement, and program guides. It should be an active, working body prepared to lead the Network, rather than appear just to advise from a distance. Directors with experience and expertise in different areas are an asset as each will provide a unique

---

[1] Gill, Mel D., Governing For Results, Trafford Publishing, Victoria, BC., 2005.
[2] Gill, Mel, Governance DO'S & DON'TS: Lessons from Case Studies On Twenty Canadian Non-profits, Final Report, Institute on Governance. Ottawa Apr. 23, 2001.

perspective on the activities and strategic direction of the Network.

Membership of the Governing Board must reflect the interests and concerns of the public, private and academic sectors involved in the Network, and selection of the right people is key to an effective governing body. It is advisable to have some members who are not directly affiliated with the Network, and also to have representatives from both academia and 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. Maintaining the commitment of board members requires that Board of Director activities be kept at an intellectually stimulating level with engagement on significant administrative issues (i.e. budget, legal, knowledge and technology transfer, staffing, policies and guidelines, etc.) and not be overburdened by administrative details. This is usually best achieved by soliciting their involvement in:

a) updating both the strategic vision and plan of the Network;
b) participating in problem-solving activities; and
c) making decisions.

When recruiting board members, if they were not identified during the application process, they should be identified to the NCE Secretariat immediately thereafter. Any relevant program specific guidelines contained in the funding agreement and program guide, as well as any comments received during the review of the Network application from expert panels and the NCE Selection Committee should all be taken into account when recruiting new members.

In order for a Governing Board to have adequate representation from all necessary stakeholders it should consist of no fewer than twelve members, a third of whom being independent members as described below. Generally, the Governing Board should be composed of:

a) a majority of members from the private or industrial sector and the Network's user community;
b) the Network Host (if applicable);
c) the NCE Secretariat representative (as an observer); and
d) members experienced in identifying and resolving situations of conflict of interest.

A representative from the Network Host as a member of the Board helps strengthen and maintain the relationship between the Network and the Host. In a similar spirit, the NCE Secretariat representative participating as an observer will strengthen the relationship between the granting agencies and the Network. The NCE Secretariat representative provides the Board with direct access to relevant information related to the programs of the NCE and the granting agencies; experience in the resolutions of technical, financial or administrative difficulties; and can provide insights and clarifications of program objectives, rules and policies.

A good practice with regards to new board members is to provide them with an orientation package, which may include the following:

a) the mission and objectives of the Network (parts of the original application, annual reports, etc);
b) the board membership and an organizational chart;
c) a description of the board's responsibilities, and the time and location of future board meetings;
d) copies of the funding and network agreements;

e) a list of the administrative centre staff with their roles and contact information;
f) a description of the currently funded projects and a list of the network investigators and network members;
g) an explanation of how the original application, research and business plans were developed;
h) reports from the expert panel and advisory boards on the evaluation of the original application; and
i) financial statements, the approved financial plan and current commitments of the Network.

Typical responsibilities for a Governing Board

The Governing Board is responsible for the governance and management of the Network and shall act in accordance with the NCE Program Guidelines and the Funding Agreement. Typical responsibilities include:

a) appointment of a the Chair;
b) oversee an annual performance review of the Network Lead;
c) approve and update the Network Strategic Plan;
d) approve new signatories to the Network Agreement;
e) approve applications for new Network Investigators;
f) approve annual budgets of the Network;
g) monitor annual performance of the network and approve for submission to the NCE Secretariat the financial and other reports in accordance with the requirements of this agreement;
h) develop and approve Network policies and procedures consistent with the Network's objectives, including the policies and procedures of sub-committees;
i) determine the mandate, membership, authority and termination of any Network committee; and

j) establish a process for environmental assessment which is comparable to the process established by NSERC in fulfilment of its obligations pursuant to the *Canadian Environmental Assessment Act.*

Independent Member of the Governing Board

Independent members are individuals who have no material relationship with the Network that could, either directly or indirectly, in practice or appearance, impair their ability to think and act in an independent manner that is in the best interests of the Network. It is at the discretion of the Governing Board to determine which individuals may be deemed independent members. The following situations are considered material relationships, which preclude an individual from being deemed an independent member:

a) currently being an executive, officer or employee of the Network or occupying such a position within the last three years;
b) receiving or having received, at any time, payments from the Network or one of its affiliates for services;
c) being a partner, executive, employee, officer or director of an entity doing business with the Network;
d) being, or having been, a partner, executive, officer or employee of a firm or affiliated company that has performed audit services for the Network in the last three years; or
e) being an immediate family member (e.g. father, mother, stepfather, stepmother, foster parent, brother, sister, spouse, common-law partner, child of a common-law partner, grandparent, grandchild, stepchild, father-in-law, mother-in-law) of a person in any of the above situations.

Appointments, Terms and Meetings

Board members should be appointed for a renewable term of no less than one year. Allowances should be made for membership rotation. Staggered appointments of one to four years are recommended. Many members (often 25 per cent) may leave after one year irrespective of any planned rotation.

There are a number of important considerations for conducting successful board meetings and managing effective board business:

a) the Board should follow standard guidelines for its legal functioning;
b) the Board should meet at least three times a year (more at the start if needed);
c) the board agenda should be prepared by the Network Manager and/or Scientific Director, with input from the board Chair and the Executive Committee (if applicable);
d) teleconferencing and Internet meetings are suitable avenues for board activities but at least two face-to-face meetings per year are recommended;
e) the agenda, minutes of the previous meeting and other reading materials should be sent to members at least one week prior to the meeting to promote or improve the participation and contribution of members in discussions; and
f) if possible, organizing a networking activity with local network partners, or offering a brief tour of the facility, a short visit to labs funded by the Network and/or lunch presentations with Network investigators for meetings held on a university campus or at a partner facility.

Committees of the Governing Board

The use of board committees can be a great asset to a Network, as committees may directly assist in the decision-making process of the Board. From the experience of previous and ongoing Networks, there are a number of key committees that have greatly assisted the Governing Board. Such committees included:

a) Executive Committee;
b) Audit and Finance Committees;
c) Compensation and Human Resources Committee;
d) Nominating Committee;
e) Environmental Review Committee; and
f) Research Management or Knowledge Mobilization Committee.

Specifically, the Executive, the Audit, the Finance, the Nominating, and the Research Management Committees have proven invaluable to the governance for the majority of Networks. Each of these committees is briefly described below. For further details you could refer to the *Primer for Directors of Not-for-Profit Corporations,* published by Industry Canada.

Executive Committee

The role of the Executive Committee is to generally oversee the not-for-profit organization and to provide direction to staff between board meetings. The committee cannot dissolve or merge the corporation or make other decisions affecting the fundamental mandate or structure of the corporation. In most cases, this committee has the capacity to bind the organization and therefore its authority must be constituted through the bylaws. All board members should be notified at their next meeting of decisions or actions taken by the

Executive Committee.[3] Typically, this committee consists of between three to five directors including the Chair, and may meet occasionally at the request of the Chair or two of its members. The committee may also be tasked with reviewing nominations for the Board, and setting the agenda for upcoming board meetings.

Audit and Finance Committees

The same board members may sit on both committees, however, the Audit Committee should be distinct from the Finance Committee, as each contributes differently to the oversight of the not-for-profit organization. The Audit Committee is typically concerned with the integrity of the corporation's financials, legal compliance, and supervision of accounting practices. The Finance Committee, on the other hand, is more concerned with the mechanics of the corporate financial operations. The Finance Committee deals with budget and financial reporting to the Board, procurement, cost controls, and assessment management.

Nominating Committee

The Nominating Committee oversees board recruitment, removal and replacement of directors and may be tasked with finding candidates for the Board, determining appropriate nominees and/or dealing with remiss directors. The Nominating Committee should be primarily concerned with the long-term interests of the corporation, and balance those interests and the composition accordingly. In order to maintain the best interests of the not-for-profit organization, members of the Nominating Committee must not have close ties to staff or to particular factions of the Board.

---

[3] Broder, Peter, Primer For Directors of Not-For-Profit Corporations, Industry Canada, 2002.

Research Management or Knowledge Mobilization Committee

The management of the NCE-Network's research or knowledge mobilization projects requires ongoing assessment of all activities and provide recommendations to the governing body of the Network on priorities and budget allocations. This function should be carried out by a committee usually chaired by the Network Lead and is composed of experts from the Network as well as the user sectors, namely industry, government and any other groups deemed necessary by the Governing Board. The membership of this committee should reflect the multisectoral and multidisciplinary nature of the Network.

The committee reviews proposals, monitors the progress of the Network funded projects, and makes recommendations to the Board on the activities, budget allocations, and the addition of activities or personnel involved in the Network. This committee typically meets face-to-face two to three times annually and when more groundwork on policies and procedures is needed. Consideration should be given to length of term for each member in order to ensure a balanced succession of membership (i.e. two to four years). Similar to the provisions offered to Governing Board members, an orientation package should be provided to members of this committee to facilitate the management of multiple projects.

Scientific Director (for NCE Networks)

The typical roles and responsibilities of a scientific director may include:

a) developing and leading the Network in its overall strategy and plan to fulfill the approved vision and mission;
b) developing scientific plans to implement the strategic or corporate plan;

c) developing and managing the scientific activities, while acting as the scientific lead across the Network;
d) acting as the authoritative figure, reviewing all deliverables and ensuring accuracy prior to client or journal submission;
e) reporting to the Governing Board and being accountable for the financial and scientific activity reports for the Network;
f) chairing a research management committee;
g) providing progress and financial reports as approved by the Governing Board to the NCE Secretariat;
h) recruiting the Network Manager;
i) promoting research collaboration among individuals;
j) acting on behalf of the Network with the NCE Secretariat; and
k) promoting the Network to the scientific community, to the private and public sectors, and to the general public.

Network Director (for NCE-KM Networks)

The typical roles and responsibilities of a network director may include:

a) developing and leading the Network in its overall strategy and plan to fulfill the approved vision and mission;
b) developing knowledge mobilization plans to implement the strategic or corporate plan;
c) developing and managing the knowledge mobilization activities, while acting as the leader across the Network;
d) acting as the authoritative figure, reviewing all deliverables and ensuring ongoing progress.
e) reporting to the governing body and being accountable for the financial and knowledge mobilization activity reports for the Network;
f) chairing a knowledge mobilization committee;

g) providing progress and financial reports as approved by the Governing Board to the NCE Secretariat;
h) promoting collaboration among individuals;
i) acting on behalf of the Network with the NCE Secretariat; and
j) promoting the Network to the greater knowledge community, to the private and public sectors, and to the general public.

Administrative Centre

The administrative centre comprises the administrative offices, and includes the staff and equipment of a Network. The administrative centre acts under the direction of the Network management. The duties of the administrative centre include:

a) implementing communications, networking, partnerships, technology transfer, training, and other Network strategies as approved by the Governing Board;
b) drafting budgets and program guidelines;
c) arranging for the disbursement of Network funds;
d) preparing financial and other annual reports as required by the NCE programs;
e) providing administrative support to the Governing Board, its committees and the management of the Network;
f) facilitating the transfer of Network- -supported intellectual property;
g) assisting in the preparation of publications, meetings and events; and
h) maintaining books, files, and accounts.

Providing an information package regarding the roles and responsibilities of the administrative centre is useful for staff and researchers who are likely to interact with the Network. The information package may consist of:

a) background information on the program;
b) an overview of the Network operations;
c) financial and other reporting requirements;
d) roles and responsibilities of researchers and/or research personnel; and
e) the proposal review process and Network decision-making guidelines and evaluation criteria.

Financial Systems

The financial system used by the administrative centre should be closely related to the system used by the host institution, in order to ensure the smooth processing of the award installments to eligible expenses.

Administrative Staff

Network Manager

The typical roles and responsibilities of a Network Manager may include:

a) managing human resources in the Network's administrative centre;
b) overseeing the management of finances and IT for the Network, and recommending annual operating budget to the Board;
c) overseeing and preparing annual reports and meetings in accordance with the guidelines of the NCE Secretariat;
d) acting as the Network's public spokesperson and liaising with the granting agencies, government, industry, and other non-governmental organizations; and
e) overseeing the preparation of supporting documents, meeting agendas and minutes of all meetings for the Research Management Committee and the Governing Board.

Business Development and Partnership Manager

The typical roles and responsibilities of a business development and partnership manager may include:

a) designing and implementing the marketing strategy of the Network to maximize the organization's short-, medium- and long-term profitability, and to promote programs;
b) developing, reviewing and reporting on the business development strategy, ensuring its strategic objectives are well understood and executed by the business development team;
c) leading the business development team in sourcing, managing and implementing new business opportunities; and
d) building relationships with external partners in the private sector.

Communications Manager

The typical roles and responsibilities of a communications manager may include:

a) developing the communications strategy to ensure that the appropriate message and medium are used to represent the Network;
b) generating and evaluating new ideas for articles, press releases, events, and ensuring coordination and consistency with organizational image, mandate and objectives;
c) managing relationships and liaising with partner, national and local media, public relations agencies, news agencies, and event organizers to ensure project goals are met and timetable/budget parameters are kept;
d) organizing interviews and managing the communication of official data;
e) writing/editing significant internal and external communications pieces

including speeches and parts of annual reports; and

f) safeguarding the organizations image and interests, while managing relationships with government authorities.

Appendix F: NCE Program Review Criteria

To ensure that the NCE Program goals and objectives are met, proposals are assessed against the five NCE Program Criteria, relevance to the NCE Program goals and objectives and relevance to the target research areas. Networks are evaluated on an ongoing basis during tenure of a grant against these same criteria. Research excellence is a necessary condition for the initial and the continued funding of a network; however, it is not the sole condition, because the goal of the Program is also reflected in the four additional criteria.

1. Excellence of the Research Program

The Network's research program must be driven to address Canadian needs and problems, and is therefore expected to be multidisciplinary and multisectoral.

Elements being considered are:

- the excellence, focus and coherence of the research program;
- the balance between research into new discoveries and the application of research breakthroughs to address practical problems facing Canadians;
- the achievements of the researchers in the continuum of research and their ability to contribute to the realization of the Network's objectives;
- the value added by the Network's multifaceted approach, in terms of having all the critical linkages in place to generate world-class research breakthroughs, to apply that knowledge to practical solutions, and to commercialize innovations that produce social and economic benefits;

- the extent to which the program will contribute to Canada's abilities and reputation for international leadership in areas of high economic and social importance to Canada;
- the extent to which new and emerging social and ethical challenges are an integral part of the research program; and
- the relationship of the proposed research program to similar work conducted in Canada and abroad.

2. Development of Highly Qualified Personnel (HQP)

The training and retention of HQP is imperative to maximize the effectiveness of the Networks' contribution to the wealth, wellness and well-being of Canadians. The Training Program proposed by the Network is expected to add value to the formal training initiatives already available through the academic community and should aim at helping HQP find employment in the Canadian economy (i.e., private sector partners, government, etc.). The multidisciplinary and multisectoral nature of a network should be utilized to provide unique mentorship and training opportunities to maximize HQP retention and integration in all facets of the workforce.

Elements being considered are:

- the ability to attract, develop and retain outstanding researchers in research areas and technologies critical to Canadian productivity, economic growth, public policy and quality of life; and
- training strategies that expose HQP to the full range of economic, social, and ethical implications of the Network's research by involving

them in activities from the initial research discovery to its application through to practical social and economic benefits.

3. Networking and Partnerships

The Network must demonstrate that it has brought together the key individuals and organizations needed to generate and implement multifaceted solutions to the complex Canadian challenges it is designed to address.

Elements being considered are:

- effective research and technology development links between national and international academic institutions, federal and provincial agencies, non-governmental organizations and private sector participants;
- multidisciplinary, multisectoral approaches in the research program;
- demonstration that the right partners/individuals are at the table to address the proposed issue, including international partners when applicable;
- optimization of resources through the sharing of equipment and research facilities, databases and personnel; and
- presence, nature and extent of contributions from the private, public and not-for-profit sectors, and from international partners, as well as the prospect for increasing commitments as the work progresses.

4. Knowledge and Technology Exchange and Exploitation

NCE Networks are expected to generate social and economic benefits by ensuring the rapid flow of ideas and innovations from researchers to Canadian receptors.

Applicants are expected to demonstrate that the appropriate activities will be undertaken and the appropriate resources allocated to maximize those benefits.

Elements being considered are:

- the new products, processes or services to be commercialized by firms operating in Canada as a result of the Network's activities and the extent to which these will strengthen the Canadian economic base, enhance productivity, and contribute to long-term economic growth and social benefits;
- the social innovations to be implemented as a result of the Network and the extent to which these will contribute to more effective public policy in Canada;
- effective collaboration with the private, public and not-for-profit sectors in technology, market development, and public policy development;
- the extent to which the Network will help the partners develop strong receptor capacity to exploit current and future research breakthroughs;
- effective management and protection of Canadian intellectual property resulting from Network-funded research; and
- the extent to which additional/complementary knowledge, and/or technology a foreign counterpart is contributing to Canada by an international partner, when international partnerships are relevant.

5. Management of the Network

Each network must have an organizational structure appropriate for the management of the research and business functions of a

complex multidisciplinary, multi-institutional program.
Elements being considered are:

- 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;
- a defined strategic and operational plan highlighting the proposed networks objectives and milestones;
- a defined governance process;
- effective research planning and budgeting mechanisms; and
- effective internal and external communications strategies.

Appendix G: NCE-Knowledge Mobilization Initiative Review Criteria

To ensure that the NCE Knowledge Mobilization Initiative goals and objectives are met, proposals are assessed against the NCE-KM initiative eligibility and evaluation criteria. Networks are evaluated on an ongoing basis during tenure of a grant.

Applications for KM-NCE funding must address critical issues of scientific, intellectual, social, economic and/or cultural significance in areas of strategic importance for Canada. The proposed network's activities must be multi-disciplinary and fall within the domains of at least two of the three federal granting agencies

1) Expected Impacts and Added Value
NCE-KM networks must be driven to address key problems, challenges, and opportunities of high strategic importance to the end user community and Canadians in general. Elements considered are:
- the expected impacts (social, economic, technological, and/or wellness-related) of the proposed NCE-KM in relation to
  a) one or more end user communities, who are expected to use and benefit from the knowledge to be mobilized; and
  b) Canadians in general and the international community, where appropriate;
- the strategic importance of the expected impacts, both during and beyond the life of the proposed NCE-KM network;
- the relationship/complementarity of the proposed NCE-KM's activities in relation to those of similar entities within the NCE program or to similar activities being carried out by other groups in Canada and abroad.

2) Plan for Knowledge Mobilization
Networks are expected to be multidisciplinary, multisectoral, and significantly involve KM in areas that fall under the domains of two or more of the federal granting agencies. Additionally, they are expected to involve knowledge users and end user communities over the term of the grant. A well-defined plan is critical, and should include approaches to:

- identifying the knowledge needs of the end user community(ies);
- identifying and synthesizing the relevant existing knowledge to address those needs;
- developing processes to assist the end user community(ies) to access, adapt and apply existing knowledge;
- developing clear strategies to ensure uptake in the end user community(ies), including strategies for influencing behavioral or institutional/organizational changes;
- develop strategies and metrics to assess the degree to which there has been uptake and application of knowledge by end users.
- identifying gaps in knowledge requiring further research (including a plan for informing research funders and others of those knowledge gaps);
- planning for the engagement and capacity-building of future end user communities; and
- planning for adaptation and innovation over the life of the network to address situations such as the release of new research or the results of earlier KM activities.

3) Composition of the Proposed Network Team

A network must demonstrate that it has the key individuals required to mobilize knowledge effectively, including both knowledge producers and knowledge users. It is expected that the end user communities will also be represented. The assessment of the proposed team will include consideration of:

- appropriate expertise and experience, as evidenced by track record.. Appropriateness will include multi-disciplinary and multi-sectoral aspects as well as the capacity to achieve the stated objectives and impacts of the NCE-KM network.
- appropriateness of the team leadership of the project, including management, co-ordination and integration of activities; contribution and time commitment of participants; clarity of roles and responsibilities; and
- the value added by the network approach, in terms of having the critical linkages in place for effective knowledge mobilization that results in social, economic, technological or wellness-related benefits.

4) Stakeholder Engagement in the Proposed Network

The engagement of stakeholders in the network is crucial for its success. Stakeholders are all individuals or groups who have an interest in the outcomes of the NCE-KM network. (Please see Definitions, above) Elements considered are:

- the involvement of stakeholders (beyond those directly involved in the network team) in the design and implementation of knowledge mobilization activities;
- the nature and extent of the confirmed financial and in-kind commitments to the proposed network by stakeholders; and

- the planning for future financial and in-kind commitments to ensure longevity of the network.

5) Management and Governance

Networks must be governed by workable management and governance structures. The following elements are considered:

- effective accountability mechanisms, whether through incorporation as a not-for-profit organization or some other means
- a proven track record in leadership, management and/or governance of the individuals proposed for those roles;
- effective budgeting mechanisms together with a detailed budget and timeline;
- an appropriate communications plan;
- the integration of representatives from end user communities into management and governance; and
- the flexibility to allow for involvement of new/additional end user communities who seek to engage with the network.