

DND Identification Number: 2002082518

MEMORANDUM OF UNDERSTANDING**BETWEEN****THE DEPARTMENT OF NATIONAL DEFENCE****AND**

Agriculture and Agri-Food Canada; Canadian Food Inspection Agency; Canadian Nuclear Safety Commission; Canadian Security Intelligence Service; Defence R&D Canada; Department of Fisheries & Oceans; Environment Canada; Health Canada; National Research Council Canada; Natural Resources Canada; Office of Critical Infrastructure Protection & Emergency Preparedness; Privy Council Office; Royal Canadian Mounted Police; Solicitor General Canada; Treasury Board Secretariat;

CONCERNING

**THE CHEMICAL, BIOLOGICAL, RADIOLOGICAL AND NUCLEAR
RESEARCH AND TECHNOLOGY INITIATIVE (CRTI)**

1. INTRODUCTION

- 1.1 The Chemical, Biological, Radiological and Nuclear (CBRN) Research and Technology Initiative (CRTI) is an initiative to enhance Canadian ability to respond to chemical, biological, radiological and nuclear terrorist incidents. It includes strengthening coordination and collaboration of capacity, capabilities, research and technology plans and strategies. The Canadian Federal Budget 2001 provided an ongoing fund with an initial 5-year mandate of \$1.70M through FY 06/07 to address the recommendations regarding CBRN Science and Technology (S&T) capability and capacity. The Minister of National Defence (MND) will be accountable for the CRTI fund.
- 1.2 This Memorandum of Understanding between the Department of National Defence (DND) and Agriculture and Agri-Food Canada; Canadian Food Inspection Agency; Canadian Nuclear Safety Commission; Canadian Security Intelligence Service; Defence R&D Canada; Department of Fisheries & Oceans; Environment Canada; Health Canada; National Research Council Canada; Natural Resources Canada; Office of Critical Infrastructure Protection & Emergency Preparedness; Privy Council Office; Royal Canadian Mounted Police; Solicitor General Canada; Treasury Board Secretariat, hereinafter referred to as the "Participants", describes an arrangement being entered into by the Participants to facilitate the implementation and conduct of CRTI projects.

2. DEFINITIONS and ABBREVIATIONS

ADM (S&T)	Department of National Defence, Assistant Deputy Minister, Science and Technology
ATP	Acquisition Technology Project
BIP	Background Intellectual Property
CBRN	Chemical, biological, radiological or nuclear
Contributing Participant	A Participant that contributes resources to a specific CRTI Project Arrangement
CRTI	Chemical, Biological, Radiological and Nuclear Research and Technology Initiative
DRDC	Defence Research and Development (R&D) Canada of the Department of National Defence
FIP	Foreground Intellectual Property
First Responder	An authority accredited to attend and exert control and jurisdiction over the site of a CBRN event
IS	Interdepartmental Settlement
Lab Cluster	A group of federal and/or other government laboratories comprising

scientific and technical experts and supporting equipment and facilities, whose S&T capabilities and capacity are prepared and able to contribute synergistically, effectively and efficiently to the preparedness for, prevention of and response to a terrorist attack in Canada that has employed CBRN hazards

MOU	Memorandum (Memoranda) of Understanding
OGD	Other Government Departments
Participant	A signatory to this MOU
Project	Specific collaborative activity described in a Project Arrangement under this MOU.
Project Arrangement (PA)	An implementing arrangement, entered into after this MOU has become effective, which specifically details the terms of collaboration on a Project between two or more Participants. For the purposes of this MOU, the Project Charters, as Annexes to this MOU, will constitute the PA.
PWGSC RTDP	Public Works and Government Services Canada Research and Technology Development Project
S&T	Science and Technology
SC	Interdepartmental CRTI Steering Committee
Secretariat	CRTI Secretariat
TAP	Technology Acceleration Project
TBS	Treasury Board Secretariat

3. OBJECTIVES AND SCOPE

- 3.1 The CRTI is mandated to implement the CBRN S&T recommendations funded by Budget Plan 2001, according to Treasury Board Secretariat (TBS) direction, specifically to:
- 3.1.1 Create clusters of federal and other government laboratories;
 - 3.1.2 Create a fund to build S&T capability in critical CBRN areas;
 - 3.1.3 Accelerate the provision of technology to the First Responders' community and other operational authorities; and
 - 3.1.4 Provide funds to those areas where national S&T capacity is deficient owing to obsolete equipment, dated facilities and/or inadequate scientific teams.

- 4.2 Management responsibility for CRTI is vested in a SC. The SC is chaired by ADM (S&T) with representation from participating departments and agencies at the ADM level, or equivalent. The SC is responsible for CRTI strategic policy and direction, approvals of Projects and financial oversight and Project implementation activities.
- 4.3 SC membership will include:
- 4.3.1 Chair - ADM (S&T).
 - 4.3.2 Vice Chair - SC member chosen by the membership.
 - 4.3.3 Secretary - Secretariat Director.
 - 4.3.4 Participants to this MOU.
- 4.4 The Secretariat discharges the following mandate:
- 4.4.1 Develops, recommends and manages CRTI administrative and program policies and procedures according to the annual business cycle, including: Project selection; financial management; intellectual property (IP) management; communications; program performance evaluation; access to information program (ATIP).
 - 4.4.2 Co-ordinates the quality and relevance reviews of the Project selection process.
 - 4.4.3 Prepares the annual report to Government and CRTI stakeholders.
 - 4.4.4 Provides liaison with federal departments, central agencies, other stakeholders and partners.
 - 4.4.5 Co-ordinates international agreements.
 - 4.4.6 Liaises and interfaces with Project Managers.
 - 4.4.7 Liaises with Lab Cluster teams and Lab Cluster team leaders.
 - 4.4.8 Provides support to the SC.
 - 4.4.9 Identifies opportunities and issues for referral to the SC, and provides research, analysis, and other advice as requested by the SC.
 - 4.4.10 Co-ordinates communications and consultation events and is responsible for communications and publications.
 - 4.4.11 Co-ordinates and manages the CRTI Knowledge Management/Information Management program.
 - 4.4.12 Manages disputes at the program level, and brings unresolved issues for resolution.
- 4.5 To carry out its mandate, the Secretariat is staffed by:

- 4.5.1 Director.
 - 4.5.2 Three x CRTI Portfolio Managers.
 - 4.5.3 Knowledge Manager.
 - 4.5.4 Financial Officer.
 - 4.5.5 Senior Administrator.
 - 4.5.6 Administrator.
- 4.6 **Project Champion (PC):** The PC is responsible to the SC for ensuring a PA meets its objectives within schedule and budget. PCs will be appointed by the lead Participant. The PC will typically be a science manager at the DG level.
- 4.7 **Project Review Committee (PRC):** The PRC is chaired by the PC and contains management representatives, typically at the Director General or equivalent level, from the other Participants. The PRC provides oversight of the PA, including approval of changes to PA objectives, schedule and cash profile, recommends changes in the PA's CRTI allocation of funds to the SC for approval, and addresses other exceptional circumstances that cannot be resolved by the Project Team. The PRC meets at least once annually.
- 4.8 **Project Manager (PM):** The PM is appointed by the PA's lead Participant. The PM is responsible to the PC for day-to-day management of the PA, consistent with its objectives, schedule and budget.
- 4.9 **Portfolio Manager:** One of the three Portfolio Managers within the Secretariat, as assigned by the Secretariat Director. Works with the PM to ensure that the Project is advancing according to plan. Represents the CRTI on the PRC and co-ordinates changes to the Project plan with the PRC.
- 4.10 **Project Team:** Is led by the PM. Includes the assigned Portfolio Manager and representatives from each Contributing Participant. Supports the PM in the accomplishment of the PA objectives.

5. PROJECT CATEGORIES

5.1 ATP

Those Projects that establish or enhance the infrastructure and equipment of the Lab Clusters that support the CBRN response. They typically are: of 0 - 1 year duration, "off-the-shelf" purchase of existing technology, and have priority afforded to the most critical gaps in capacity, consistent with Lab Cluster roles and responsibilities. Acquisition technology Project proposals are evaluated, prioritized and recommended to the SC by the Lab Cluster teams based on their relevance to, and impact on, the respective Lab Cluster implementation plans.

5.2 TAP

Those Projects that accelerate the commercialization and transition to use by First Responders and other operational authorities of technologies that address key capacity gaps. They typically are: 0.5 - 2 years in duration, typically \$1-\$10M in total resources, comprise technology that is "in-the-pipeline", and in which an industrial partner is required.

5.3 RTDP

Those Projects that close the gaps in knowledge and capabilities of the S & T and operational communities so as to enable effective response to future CBRN threats. They are consistent with the Federal Innovation Networks of Excellence (FINE) concept, of 3 - 4 years duration, typically \$3-\$10M in total resources, typically encourage partnering and leveraging, and can include technology demonstrations.

6. PROJECT INITIATION

- 6.1 Within no later than three months of Project approval by the SC, the PM identified in the Project proposal, will develop a Project implementation plan and PA. The PA will be based on the Project proposal submitted and approved by the SC.
- 6.2 The Project implementation plan and Project Charter will be developed in consultation with the Portfolio Manager.
- 6.3 The PRC will review and recommend Project initiation sign-off through the Secretariat and ADM (S&T) on behalf of the SC for approval.

7. FINANCIAL ARRANGEMENTS

- 7.1 ADM (S&T) is accountable to the DND Deputy Minister for the financial performance of the CRTI, consistent with Treasury Board (TB) guidelines, budget allocation and the government's financial rules, regulations and procedures. ADM (S&T) has delegated authority for day-to-day oversight to Director General R&D Programs, who in turn has delegated day-to-day management to the Director of the Secretariat.
- 7.2 Approved Project funds will be transferred via the IS mechanism by the Secretariat from DND to the Participants to set up OGD Suspense Accounts, in accordance with the respective Project plans, and in consultation with PMs.
- 7.3 Participants will assume responsibility for received funds in accordance with approved Project plans, and will follow their Departmental expenditure authority.
- 7.4 The Participants will be responsible for procurement services and for cash managing in-year funds. Unexpended funds will be returned to DRDC to apply against other CRTI Projects. Where this is not possible, CRTI funds will be managed within DND cash management authorities.
- 7.5 DND cash management authority will be utilized to allow for adjustment of the funds' 5-year cash profile, including both carry-forward of unspent in-year funds and advance of future-year

- funds. The adjustment in any year of the CRTI is not expected to exceed \$2-3M, though the risk of greater carry-forward will be higher in the first year.
- 7.6 DND will provide for in-year transfers of funds between votes when required. These transfers, in any year of the CRTI, are not expected to exceed \$2-4 M.
- 7.7 The Secretariat Director will maintain oversight of program finances. The Participants will be responsive to the Secretariat Director, via the respective PMs, for provision of periodic expenditure and cash flow information.
- 7.8 CRTI funds transferred to Participants can be applied against departmental incremental costs in support of the Project, and/or used to contract with the private sector and/or academia, as established in the Project plan.
- 7.9 Eligible departmental incremental costs include, for Technology Acceleration and/or Research and Technology Development Projects: capital costs; salaries and benefits for Public Service employees including overheads, Project management, operations and maintenance costs in direct support of the Project execution.
- 7.10 Cash requirements for each year of the multi-year contract will be identified in the PA and will form part of the respective departmental transfer
- 7.11 Participants will be able to retain capital items procured using CRTI funds subject to an asset transfer from DND in the year procured.
- 7.12 Participants may hire new employees to conduct CRTI Projects. Departments will assume employment continuity responsibility beyond Project completion. Where new positions are created, employee benefits and accommodation costs, where appropriate, will be extracted from the Project funds.
- 7.13 DRDC will be responsible for establishing the appropriate methods to control CRTI expenditures on a quarterly basis. The lead Participant will report expenditures consistent with the CRTI expenditure control mechanism.
- 7.14 Financial accountability will be in accordance with the Financial Administration Act as administered by each Participant.

Matching Funds

- 7.15 Participants to each Project will be expected to provide in-kind effort or direct financial support to the Project. Matching funds used to support CRTI projects will be included as part of the regular financial information reports to be filed pursuant to the CRTI reporting process outlined in the individual PAs and are subject to audit. The CRTI share will not exceed 67% of the total Project costs, with the matching funds making up the balance of the total Project costs.
- 7.16 Participants' matching funds may include in-kind effort comprising salaries and related overheads, and/or operating costs for major facilities.

- 7.17 Participants may include as their matching funds contributions from Project team members identified in the PA. These can include University overheads in accordance with the current agreement with the Association of Universities and Colleges of Canada (AUCC). Overhead rates for other Project Participants will be considered in accordance with Public Works Government Services Canada (PWGSC) overhead rates for contracted research services.
- 7.18 Reductions in overhead charges will be considered as an in-kind matching fund.
- 7.19 Contributions in the form of foregone or reduced profit calculated in accordance with the PWGSC Profit Policy will be considered as matching funds.
- 7.20 Project Participants' matching funds may comprise direct financial support to a CRTI Project. Management of such support within the Project will be determined by the PM.
- 7.21 Participants may solicit financial support from other federal programs as a contribution to the Project. These contributions will respect any stacking provisions (extent of financial leverage conditions) associated with these federal programs.
- 7.22 Members of a Lab Cluster may consider their in-kind effort provided to the management and operations of the cluster as matching funds for ATP directed to the Lab Cluster members. The in-kind effort may be spread over a determined number of years.
- 7.23 Leveraging of international programs will be considered to be matching funds by the Project Participants, provided that this leveraging is quantified in a MOU or equivalent document.

Distribution of Funds

- 7.24 Funds for each Project will be distributed according to the following mechanisms:
- 7.24.1 This MOU, which establishes the financial and Project responsibilities to be undertaken in the execution of CRTI Projects, via the transferred funds.
- 7.24.2 Approved Project funds will be transferred via the IS mechanism by the Secretariat from DND to the respective Participant(s) to set up OGD Suspense Accounts, in accordance with the approved PA and plan, and in consultation with the PM.
- 7.24.3 Participants will assume responsibility for received funds in accordance with the PA and will respect their expenditure authority.
- 7.24.4 Any funds further distributed by a participant are subject to the terms and conditions of this MOU.
- 7.25 CRTI monies allocated to lead Participants which are thereafter paid out to third parties in satisfaction of the contractual commitments of the lead Participant, are not to be treated as grants or contributions, but rather, as payments under a contract and, as such, are subject to all applicable TB policies and procedures.

Financial and Program Reporting Requirements

- 7.26 Participants will provide an annual report to the SC (via the Secretariat) and to the Minister of National Defence on major achievements and successes in CRTI Projects.
- 7.27 The Secretariat will be responsible for the reporting of CRTI activities and anticipated benefits within all central agency planning documents; e.g., the Business Plan of National Defence, and the Annual Performance Report.
- 7.28 Participants will provide the Secretariat, within thirty (30) days of the end of each quarter of each fiscal year, a revised estimate by major category, of expenditure, in eligible areas as outlined in the CRTI Treasury Board submission, of resources spent to date, un-liquidated commitments, and the forecast of expenditures for the balance of that fiscal year. Where the forecast of expenditures provided at the end of the third quarter projects a potential, significant surplus (i.e. under spent by 10% or more) of funds at year-end, the surplus funds will be transferred back to the Secretariat upon receipt of the report on the forecast of expenditures.
- 7.29 Participants will also refund at year-end any unspent advances in accordance with the Receiver General for Canada directives respecting OGD advances. The Secretariat, will attempt to arrange for the full carry-over of these unspent resources for reallocation the following fiscal year.
- 7.30 Within fifteen (15) days following the reconciliation of the advance, the Participants will provide the Secretariat an accounting of CRTI expenditures incurred by standard object level (by standard full cost (i.e. direct and indirect costs)).
- 7.31 Participants will also provide to the Secretariat within sixty (60) days following the end of each fiscal year, the necessary CRTI Project status and completion reports.
- 7.32 The Secretariat will maintain an ongoing database of current and forecasted CRTI expenditures and detailed information on the performance and successes of the major CRTI activities.
- 7.33 Participants will be required to report current and forecasted expenditures in a manner consistent with the CRTI Secretariat's reporting obligations.

8. CONTRACTUAL ARRANGEMENTS

- 8.1 PWGSC will provide contracting services for the procurement of goods and services for CRTI Projects, unless the procuring Participant has exceptional contracting authority or is procuring goods and services whose value is within its procurement authority.
- 8.2 Multi-year contracts employing CRTI funds are expected. Cash requirements for each year of the multi-year contract will be determined by the Secretariat in consultation with the PM, and will form part of the respective departmental transfer.
- 8.3 The maximum size of any contract for a CRTI Project will be dictated by the approved Project envelope and TB directives concerning national contracting practices.

- 8.4 Universities participating in CRTI Projects will receive funds via contract, as opposed to grants and contributions. Reductions in university overheads will be considered in-kind matching funds to the CRTI Project.

9. PROJECT TERMINATION

- 9.1 The Secretariat Director, in consultation with the PC and the contracting authority where necessary because of project contracts, will make recommendations regarding the termination of a Project to the SC, whose decision will be final.
- 9.2 Conditions that may lead to termination could include:
- 9.2.1 Deliverables/Milestones not met.
 - 9.2.2 Forecast inability to deliver (e.g. key personnel have left the department or Project).
 - 9.2.3 Failure of a contractor to meet contractual obligations and/or CRTI MOU reporting requirements.
 - 9.2.4 Change in CRTI investment priorities.
- 9.3 Procedures for Project termination will be included in the PA. Project termination conditions must also be as outlined in the General Conditions included in any Contract funded under the PA.

10. PUBLICITY AND PUBLICATIONS

- 10.1 Participants will provide copies of any reports, articles or publications to the Secretariat for its review of possible security considerations 30 days prior to any release, distribution or planned publication.
- 10.2 Releases by Participants to the public or for internal use on the success or accomplishments of Projects carried out with CRTI funding, will recognize the support provided by CRTI, and, where appropriate, will be issued jointly.
- 10.3 All reports, articles and publications originating from Projects supported by CRTI will acknowledge CRTI support

11. INTELLECTUAL PROPERTY (Applicable only to TAP and RTDP)

- 11.1 Each Project shall contain mutually agreed language with respect to the management of intellectual property (IP). Each Project will manage IP according to the following principles and in accordance with PWGSC policies and guidelines:
- 11.1.1 Identification of, and any restrictions on, the "right of use" applicable to BIP will be established at Project initiation. Contributing Participants will normally make their BIP available to the extent appropriate for the successful execution of the Project.

- 11.1.2 Contributing Participants will respect the rights and interests of collaborators with respect to divulgence or use of third-party information, or any previous commitments or licensing of BIP to third parties. The use of BIP owned by a third party will be the subject of a license agreement. Non-disclosure agreements will be employed when requested by Contributing Participants.
- 11.1.3 Parameters for the ownership, management, administration and exploitation of FIP will be established at Project initiation. These parameters will favour the transfer and commercialization of Intellectual Property so as to maximize its access by First Responders and operational communities.
- 11.1.4 Every reasonable effort will be made to support private sector participants in the commercialization of FIP generated in the course of a Project or PA. This will typically result in either the granting of licenses or the vesting of title to the FIP to the private sector Participants through a contract. The selected approach will be negotiated at the outset of the Project so as to best support the interests of all Contributing Participants.
- 11.1.5 The TB Policy on Title to Intellectual Property Arising Under Crown Procurement Contracts will be applied to work carried out under a PA, except where exceptions to the Policy have been identified by the Contributing Participants.

12. SECURITY PROVISIONS

- 12.1 Participants in CRTI Projects may be required to possess valid security clearances, depending on the nature of the Project, in order to have access to information necessary for its execution. The PA and plan should identify where security clearances are required.

13. POINTS OF CONTACT

- 13.1 Points of contact (position title and phone number) for this MOU are to be identified by lead Federal Departments or Agencies and faxed to CRTI at (613) 995-0002.

14. SETTLEMENT OF DISPUTES

- 14.1 Disputes regarding the interpretation or implementation of this MOU will be resolved only by consultation between/among the Participants and will not be referred to a national tribunal or any other third party for settlement.

15. AMENDMENT

- 15.1 This MOU may be amended only by mutual written consent of the Participants.
- 15.2 A PA under this MOU may be amended based on the recommendation of the PRC with approval of the SC.

16. DURATION, WITHDRAWAL AND TERMINATION

- 16.1 Subject to sub-paragraphs 16.2 and 16.3, this MOU will remain in effect until the mandate of the CRTI or any resulting project has been completed, whichever is the latest.

- 16.2 A Participant may withdraw from this MOU on presentation of 30 days written notice to the other Participant(s)
- 16.3 This MOU may be terminated with the mutual written consent of all the Participants.
- 16.4 Any CRTI Projects in effect at the date of termination of this MOU will terminate at the same time as termination of this MOU.

17. EFFECTIVE DATE AND SIGNATURE

17.1 This MOU will enter into effect on the date of the last signature.

18. **SIGNATORIES**

18.1 This MOU will be signed by representatives from the following departments: National Defence, Agriculture and Agri-Food Canada; Canadian Food Inspection Agency; Canadian Nuclear Safety Commission; Canadian Security Intelligence Service; Defence R&D Canada; Department of Fisheries & Oceans; Environment Canada; Health Canada; National Research Council Canada; Natural Resources Canada; Office of Critical Infrastructure Protection & Emergency Preparedness; Privy Council Office; Royal Canadian Mounted Police; Solicitor General Canada; Treasury Board Secretariat. This MOU may be signed by other departments as required.

Date _____
For the Department of National Defence

Date 02/10/29
Agriculture and Agri-Food Canada
gs? D. G. Senell

Date _____
Canadian Food Inspection Agency

Date _____
Canadian Nuclear Safety Commission

Date _____
Canadian Security Intelligence Service

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Date 1 Nov 02
For the Department of National Defence

Date _____
Agriculture and Agri-Food Canada

Date Nov 1 / 02
Canadian Food Inspection Agency

Date November 1, 2002
Canadian Nuclear Safety Commission

Date 12/02
Canadian Security Intelligence Service

Date 21 Nov 2002

Defence R&D Canada

Date _____

Department of Fisheries & Oceans

Date 02 / 11 / 01

Environment Canada

Date _____

Health Canada

Date _____

National Research Council Canada

Date 1 Nov 02

Natural Resources Canada

Date 1 Nov 02

Office of Critical Infrastructure Protection & Emergency Preparedness

Date _____

Royal Canadian Mounted Police

Date _____

Solicitor General Canada

Date _____
Royal Canadian Mounted Police

Date December 7, 02
Solicitor General Canada

Date _____
Treasury Board Secretariat

For Department of National Defence:

Date: _____

For Department of Natural Resources Canada:

Dr. Irwin Itzkovitch
Assistant Deputy Minister
Earth Sciences Sector

Date: October 28, 2002