Final Report

Evaluation of the Industrial and Regional Benefits Policy

Volume II: Appendices

Prepared for:

Industry Canada

Prepared by:

Hickling Corporation

January 19, 1999
HAL Ref : 6721

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APPENDIX B

EVALUATION ISSUES

Rationale

Issue 1: Public Interest

Does the IRB Policy serve a public interest?

Has the situation or the public interest changed since the IRB Policy was defined?

Issues 2: Legal Mandate

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Is the IRB Policy necessary to fulfil the legal mandate of the Regional Agencies?

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Issue 9: Competing Interests

How are competing interests taken into account? (e.g., operational requirements, industrial and regional benefits, schedule, risk, etc.).

Issue 10: Industry Participants

Do IRB industry participants have an appreciation for the IRB Policy and how have they been affected by the Policy?

Program Delivery and Alternatives

Issue 11: How does IRB Work?

How does the IRB Policy work in theory and in practice?

What are the stages of work involved in the IRB process?

What role should Industry Canada play in each stage of the process?

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Is monitoring and verification of IRB commitments essential?

Can monitoring and verification be achieved more cost-effectively?

Issue 13: Mechanisms Regarding Incremental;ity

What mechanisms are best suited for ensuring that IRB contractual commitments are incremental?

Issue 14: Accountability

Who is accountable for the IRB Program?

Is there confusion between the role of Industry Canada and the regional agencies by industry participants? If yes, does this confusion inhibit the delivery of the program and the achievement of its objectives?

Issue 15: Early Involvement

Could IRBs have been better negotiated if Industry Canada was involved earlier?

APPENDIX C

POLICY DESCRIPTION

Final Report

Description of the Industrial and Regional Benefits (IRB) Policy

Prepared for:

Audit and Evaluation Branch
Industry Canada

Prepared by:

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1. The IRB Policy

1.1 *Rationale*

Introduction

The Government of Canada seeks to promote Canada s international competitiveness through a strong continuing integration of scientific, technological, industrial and regional strategies and activities in all parts of Canada. Crown procurement is one instrument used to help improve industrial competitiveness, gain market access, and increase exports in high technology sectors. Federal government procurement is big business in Canada, estimated at $9.5 billion in 1992[1]. While many purchases are routine, certain transactions offer the scope for generating significant industrial benefits (IBs)[2]. In 1992 approximately 25% of total federal spending ($2.5 billion) was available for leveraging industrial and regional development objectives.

The Industrial and Regional Benefits (IRB) Policy seeks to achieve the above objectives through major capital procurements in the defence, space, marine and aeronautic sectors. The primary goal of the policy is to ensure fair access to major federal procurement opportunities for all Canadian companies by bringing Canadian company capabilities to the attention of Canadian and foreign prime contractors. Industry Canada, in conjunction with the Regional Agencies (Western Economic Diversification Canada (WD), Atlantic Canada Opportunities Agency (ACOA), Federal Office of Regional Development (Quebec) (FORD-Q), Federal Office of Regional Development (Northern Ontario) (FEDNOR), is responsible for the implementation of the IRB policy and for developing an IRB strategy for each relevant procurement.

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1 The 1992 data were reported in GCI s Procurement Review (1992), and referenced in the Industry Canada report entitled IRB and Procurement Policy Application for the 1990s , Aerospace and Defence Branch, Industry Canada, January 10, 1997. For a complete list of references, please refer to Annex A.

2 IBs can be roughly defined as any positive economic benefit arising to Canada as a consequence of a federal purchase. IBs range from increased orders for existing products, through orders for build-to-print products, to new investments, projects requiring technology development and technology transfer. They may be in the form of either direct Canadian participation in production of the products, or other business activities unrelated to the product being procured.

Application of the IRB Policy has evolved in response to trade liberalization efforts, both national and international, and the strategic need to meet industrial development objectives in high technology sectors. The IRB Policy has been used in conjunction with other key policy instruments, such as Technology Partnerships Canada and the Defence Development and Defence Production Sharing Arrangements (DDSA/DPSA) with the U.S., to develop a national industrial base. These activities counter the array of policy instruments used by other nations with whom Canada competes in the international market, such as state ownership, state funded R&D, export financing and preferential procurement practices. (See Section 4.)

Historical perspective

Federal government efforts to develop Canadian industry through Canadian procurement policy date back to the Second World War. In 1959, with the cancellation of the CF-105 Arrow Program, it was decided to rely on the DDSA/DPSA to maintain a defence industry capability in Canada. The Defence Industry Productivity Program (DIPP) was also introduced to provide support for the development and production of new products aimed at defence export markets.

Despite these initiatives, it was felt that Canada could gain more from its defence spending and defence industries and initial attempts to leverage procurement activity to achieve IB objectives began in 1974 with the purchase of the Aurora Patrol Aircraft. In part to assure balance in its defence trade with the U.S., Canada began to require, as part of contracts or major acquisitions, that specific IB provisions be met including offsets, technology transfer and investment. Bidding firms were advised that their proposals would be evaluated on the basis of economic benefit to Canada (along with price and technical compliance) and reliance was placed on the competitive nature of the process to induce bidders to offer attractive benefits packages.

This initial approach was developed as a means to derive greater domestic industrial benefit from off-the-shelf purchases of defence equipment from the U.S. The intent was that offsets would reduce the economic drain on Canada of major foreign purchases by providing balancing purchases of other goods and services. This would also improve the government's ability to convince the Canadian business community and the general public of the overall desirability of pursuing financially and technically attractive offshore procurements. IB objectives were established on a case-by-case basis.

These early efforts resulted in contracts with offset benefits to Canada but limited direct Canadian industrial participation. In addition, some political involvement in the procurement process (e.g. CF-18 and CPF contracts) resulted in directed regional distribution of contract work. As a consequence, industry began to question the associated costs and long-term benefits of the IB process at that time.

1.2 The 1986 IRB Policy

Formative Reviews

In 1985, two reviews of Canada's approach to IRB's were undertaken: one by an Interdepartmental Task Force on Industrial Benefits Policy and Implementation and a second by the Nielsen Task Force on Program Review. At this time, it was recognized that there was no clear policy in place to provide direction for the industrial benefits[3] the government was trying to achieve. The major conclusions of the reviews were that:

- While past industrial benefits activity had enjoyed some significant successes, expectations for the economic development potential of the instrument appeared to be optimistic and the administrative approach was developing into a trade irritant. Abandonment of offset[4] maximization objectives was recommended as a way of reducing the adverse international reaction to Canadian IB initiatives.

- IB programming attempted to address too many objectives within each procurement and this lack of focus resulted in confusion and introduced inefficiencies. To be effective, a single overriding objective for IB activity was deemed necessary, and the goal of long-term industrial/regional development was recommended by the Nielsen Task Force.

- Expectations with respect to procurement leverage were overly high. With respect to purchasing, leverage had been largely limited to ensuring fair and full access for competitive Canadian suppliers.

- An "even "distribution of IBs across the country was beyond the scope of a procurement tool. Federal expenditures, while large, were rarely of sufficient magnitude to sustain an industry and it was difficult to match procurement activities to the economies of particular regions.

- The potential existed to significantly improve the long-term industrial and regional benefits through advanced procurement planning.

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3 Industrial benefits is the standard, generic term used to define the high quality, longer term and strategic nature of activities that are negotiated as a part of the IRB Policy.

4 Between 1976 and 1986, it became commonplace to seek offsets in major defence procurements from foreign manufacturers. An offset involved the purchase of Canadian manufactured goods and services, an investment or a technology transfer that was unrelated to the actual product being purchased. Indirect benefits include offsets and other longer term, secondary and tertiary industrial benefits.

The reports concluded that an opportunity existed to improve the effectiveness of the IB programming through more selective application of the tool and the introduction of measures designed to maximize procurement leverage. These measures included long-term planning, establishment of an approach more sympathetic to private sector objectives, and improved coordination with other federal industrial development programs.

A major reorientation of IB programming appeared to offer the best prospect of improving the effectiveness of procurement as a means of promoting long-run industrial/regional development. Operationally, this was to be achieved by negotiating industrial commitments with potential contractors within the framework of their long-term business plans, and emphasizing projects characterized by investment, world product mandates or strong export potential, import substitution, technology transfer or development, and long-run supplier relationships. In this vein, volume guidelines would be abandoned and offset purchase would be de-emphasized.

Since 1986, a number of reviews of the revised (1986) policy and IRB practices have been conducted. Annex A provides a listing of these reviews.

New Policy Statement

The IRB Policy, as approved by Cabinet in May, 1986, provided the framework for using federal procurement as a lever to promote industrial and regional development objectives. This policy statement established long-term industrial and regional development as a primary objective for major procurements. The new policy approach provided that:

- Long-term industrial and regional development be adopted as the primary IB objective to be achieved through public procurement programming on the understanding that special provision may be necessary for developing regional economies and the defence industrial base;

- Future IB programming focus on achieving benefits of lasting value, and de-emphasize short-term job creation;

- Offset maximization objectives generally be abandoned and offset activity be limited to those cases which have the potential of offering significant economic benefit;

- Where difficult economic circumstances exist in a particular region, every effort be made to maximize benefits flowing to that area from large procurements;

- Where required, the effectiveness of industrial benefits programming be enhanced through the use of complementary expenditure[5] programming to realize procurement-related investment opportunities (where such expenditures are consistent with our GATT (WTO) commitments);

- Emphasis be placed on developing Canadian sources through research and development support to assist Canadian firms in "prepositioning" themselves to bid on major federal projects;

- Domestic sourcing requirements considered essential to national security by the Minister of National Defence (e.g. repair and overhaul requirements) be included directly in the statement of requirement of key defence purchases; and,

- All future industrial benefits assessments include a detailed analysis of any broader implications of competing industrial benefits proposals (e.g. their conformity with Canada's international trade obligations and trade development objectives, international relations, national security, etc.).

These policy directions have driven the IRB process since that time. The Policy also provided scope for additional activities which have never become an integral part of the IRB process. Specifically, the 1986 Policy statement approved that (in italics):

- *An Annual Strategic Acquisition Plan become the principal mechanism for bringing procurement related economic development opportunities to the early attention of Ministers and private industry.* [Although no formal review was undertaken, it appears that the Canadian Annual Procurement Strategy (CAPS) failed to provide a reliable, strategic overview of the government's long-term procurement profile due to unpredictable changes on the international scene and forced fiscal constraints that severely impacted Canada's defence budget. The first CAPS was announced in 1988; the last CAPS document was submitted in 1989.]

- *Targets may be established for a minimum share of industrial benefits for regions and the Annual Strategic Acquisition Plan be used to identify upcoming projects amenable to acceleration and direction.* [With the exception of the overall regional targets set for all Canadian Space Agency programming, no targets have been associated with the IRB Policy.]

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5 While identified in the IRB Policy framework of 1986, complementary expenditures from program mechanisms such as the Defence Industry Productivity Program (DIPP) were never used to support the development of IRB related activities or strategies.

- *Industrial benefit funding premiums come from the budgets of both the sponsoring department and the Department of Regional Industrial Expansion (Industry Canada).* [There has never been any explicit recognition or study of funding premiums which may be associated with the Policy.]

Benefits

The 1986 Policy put an emphasis on long-term, high-quality industrial and regional development and de-emphasized the maximization of offsets. The broad intent was to make the public generally aware that the focus of future IB programming would be long-term and the emphasis would be on the quality and not quantity of IBs. It was expected that prime contractors would react positively to the more business oriented approach of the Policy and the international profile of Canadian IB programming would be lowered.

As defined in the IRB Manual (January 1995), the specific benefits of the Policy are to include but not be limited to:

- Technology transfers;
- Joint ventures and strategic alliances;
- Product mandates, licences, marketing agreements;
- Regional and small business development;
- Licencing arrangements; and
- Access to new international markets.

Additionally, it was expected that Canadian industrial capabilities would be brought to the attention of prime contractors, whether Canadian or foreign, for the purpose of the procurement and to encourage the development of ongoing business relationships and new business ventures in Canada.

1.3 Procurement Principles

The Nielsen Task Force reported that the potential existed to significantly improve the long term industrial and regional benefits through advanced procurement planning. The Annual Strategic Acquisition Plan noted in the 1986 Policy was implemented in 1988 as the Canadian Annual Procurement Strategy (CAPS). CAPS was put in place to address some of the shortcomings noted in the Nielsen Report:

- Procurement issues tended to be handled on an ad-hoc basis, frequently resulting in adverse public perceptions and the lack of an integrated approach to industrial benefits;
- Ministers lacked strategic control of procurement planning and needed an instrument from which to view the overall portfolio of industrial and regional benefits activity;
- Industry was not being consulted early enough in the planning cycle; and,
- There was a perceived lack of follow-up and implementation on procurement decisions.

As approved by Cabinet in the 1988 CAPS and reconfirmed in the 1989 CAPS, the IRB Policy is implemented within a framework of government priorities in relation to federal procurement. These procurement objectives, in descending order of priority, are:

- Operational requirements, competition, fairness and accessibility;
- Long-term industrial and regional development, and aboriginal economic development[6]; and
- Other national objectives.

6 Aboriginal economic development was recently elevated by the government in the heirarchy of procurement principles.

2. The IRB Process

2.1 *Application of the IRB Policy*

The Industrial and Regional Benefits (IRB) Policy can be applied to procurement opportunities valued at greater than $2 million which are not subject to NAFTA or GATT (WTO). In general, procurement valued at below $2 million does not offer significant leverage for implementation of the IRB Policy.

Procurements above $2 million are of two kinds, Major Crown Projects and Procurement Review Cases as described below, and the way in which the IRBs are identified and processed depends the procurement category of the project.

2.1.1 *Major Crown Projects (MCPs)*

For procurements defined as Major Crown Project (MCPs), usually over $100 million or sometimes higher if the related project risk is considered by Treasury Board to be relatively low, formal interdepartmental project management offices (PMOs) and Senior Project Advisory Committees (SPACs) are established in accordance with Treasury Board s policy and management guidelines for MCPs. The SPACs are responsible for developing the project s management guidelines for MCPs. The SPACs are also responsible for developing the project s procurement strategy to ensure that all the involved department s mandates are optimized.

The operating department sponsoring the procurement project (usually DND) is the lead department with responsibility for overall project management and for seeking the required project approvals and reporting on progress to Treasury Board. Public Works and Government Services Canada (PWGSC) is the project contracting authority. Industry Canada (IRB authority), WD, ACOA, FORD-Q and FEDNOR each have representation on the SPAC, and are collectively responsible for IRBs.

2.1.2 *Procurement Review Cases (PRCs)*

Procurement outside the MCP regime and over $2 million, usually referred to as Procurement Review Cases (PRCs), are reviewed by the Procurement Strategy Committee (PSC) which screens all procurement opportunities as submitted by operating departments in their Short-Range Acquisition Plans (SRAPs). These have a one to two year horizon. The

PSC, chaired by PWGSC, is composed of operating departments such as DND and Transport Canada and industry and policy departments such as Industry Canada, ACOA, WD and FORD-Q, Indian and Northern Affairs Canada, Environment Canada, Human Resources Development Canada, National Research Council of Canada, Finance Canada, and Treasury Board Secretariat.

2.2 Outline of IRB Process

2.2.1 Development of the IRB Strategy

The initial step in the IRB process is the identification of a procurement opportunity with significant size and lead time that provides a lever for industrial and regional development. This may be done in the context of the review of Long-Term Capital Acquisition Plans. Once the operational and technical requirements, and the proposed procurement strategy are developed, then an IRB strategy is prepared.

Industry Canada in cooperation with the regional agencies, develops an IRB strategy to reflect the opportunity to promote both strategic sectoral and regional development objectives. One or more Cabinet Committees may be required to approve the project at both the project approval-in-principle and the project implementation stage depending on the nature and/or size of the MCP. It is usually at the project approval-in-principle phase that Cabinet may direct that a particular objective is to be incorporated as one of the IRB and/or procurement strategy objectives.

PRCs of strategic value to Canadian industry, exempt from the GATT (WTO) and NAFTA, are identified and targeted for application of the IRB policy or other national objectives. Procurement strategies for PRCs are jointly developed by PWGSC and the operating departments. These PRC procurement strategies are then reviewed by the PSC. After reviewing these PRCs, the PSC may recommend changes to the procurement strategy. Often changes to the procurement strategy entail limiting the procurement to Canadian suppliers or directing the procurement to a specific Canadian supplier. For exceptional PRCs of strategic value or size, formal IRB programs are requested in the procurement strategy.

2.2.2 Evaluation of IRB Proposals

Under the competitive process, bids are evaluated on a best overall "value for money "basis which includes consideration of the technical merit, risk, cost and schedule. The IRB package is evaluated separately on a qualitative basis, e.g., Excellent, Acceptable, Unacceptable. The winning bidder does not necessarily have to present the best IRB package. Once the bid evaluation is complete and the IRB results incorporated, the

evaluation team first briefs the SPAC on the results of the bid evaluation, and then Cabinet committees as appropriate. Ultimately, based on the evaluation of the results and the project team's recommendations, Ministers make the final decision and announce the winning bidder. Approval to proceed into contract for MCPs is sought from the Treasury Board.

PWGSC publishes all PRCs, with the exception of of repair and overhaul, shipbuilding and select military and national security procurements, on the Open Bidding System (OBS), including those PRCs which may not be subject to the provisions of the WTO and NAFTA. For PRCs, approval of the IRB bid packages is obtained from the PSC. Treasury Board will often have to approve as well depending on the sponsoring department's contracting authorities.

2.2.3 Monitoring and Enforcement of the IRB Implementation Process

The winning bidder's IRB proposal forms the contractual basis for the IRBs. Once agreed to, IRB commitments are embodied within the procurement contract and become legally enforceable obligations of the prime contractor, usually stipulated by means of a "withholding of payment" clause or payment of "liquidated damages" based on non-achievement of IRB commitments. Generally, the prime contractor flows-down the IRB commitments to its major sub-contractors. An IRB package can include one or more of the following elements:

- Company Business Plan (including marketing activities);
- IRB Management Plan;
- Regional Development Plan;
- Small Business Supplier Development Plan;
- Product Plans;
- Export Plans; and/or
- Detailed Transaction Sheets (goods and services, investments and technology transfer related to the acquisition).

Industry Canada, ACOA, WD, FEDNOR, FORD-Q and PWGSC are collectively responsible for monitoring the contract to ensure that the prime contractor, and in some cases the major subcontractors, are delivering their IRB package. Industry Canada has the operational

responsibility for the audit and verification process. Monitoring and enforcement only applies to formal MCPs, that is those for which IRBs were specified in the original RFPs.

2.3 The Departmental Players

IRB projects address a variety of objectives and involve many departments and agencies in order to ensure that each objective is met. Each IRB project includes as a minimum:

- Lead Authority, or Operating Department;
- Service Agents, or Contracting Departments; and
- Industry and Policy Departments.

An overview of the roles and responsibilities of each of these players follows.

The lead authority, or operating department, is responsible for defining requirements in terms of performance, cost and time, encumbering funds and securing program end results. It also has responsibility for overall project management, for seeking the required project approvals and reporting on progress to Treasury Board, ensuring the early and effective involvement of service agents (PWGSC) and the IRB lead authority (Industry Canada).

The service agent, or contracting department (PWGSC), is responsible for providing effective advice, technical assistance and specialized services, such as contracting.

The industry and policy departments are responsible for ensuring that the IRB Policy is implemented within a framework of government priorities and procurement objectives, ensuring that other national and departmental objectives are clearly defined and effectively considered at the earliest possible stages, and providing timely assistance to the lead authority, as follows:

- Industry Canada is the lead authority for IRBs. The Department is responsible and accountable for the identification, negotiation and monitoring of IRBs, in consultation with ACOA, FORD-Q, FEDNOR and WD who have a responsiblity for guiding, promoting and coordinating industrial benefits in relation to the regional development and diversification of the Canadian economy.
- Other policy departments, such as Indian and Northern Affairs Canada and Environment Canada, are responsible for ensuring that other national objectives are clearly defined and effectively considered at the earliest possible stages, and providing timely assistance to the lead authority.

3. Trade Environment

3.1 *Domestic Context*

The purpose of the Agreement on Internal Trade (AIT) is to eliminate or reduce barriers to the free movement of persons, goods, services and investment within Canada. The Agreement was signed by First Ministers on July 18, 1994 and entered into force on July 1, 1995. Under Article 508 (4) of the AIT, Parties to the Agreement may continue to apply the non-conforming procurement measures listed in Annex 508.3. The IRB Policy is such a measure. Specifically,

> The federal government may seek national industrial and regional benefits in procurement exceeding $2 million provided that the evaluation of regional benefits is carried out in a non-discriminatory manner with respect to regions for which the federal government has a general framework of regional development.
>
> Column II of Annex 508.3

The AIT also states that the federal government can continue the non-conforming IRB Policy provided that the Policy is reported on annually and reviewed before January 1, 1998 to ensure that the Policy is meeting its regional and economic objectives. These objectives are included in the mandates of the Regional Agencies (WD, FORD-Q, FEDNOR and ACOA) which call for the Agencies to guide, promote and coordinate the IRB Policy for the benefit of the regions.

3.2 *International Context*

Internationally, the most significant procurement agreement linked to coverage of the defence sector is the Canada/U.S. DPSA (see Section 1.1). These arrangements allow for the application of established procurement preferences subject to established domestic laws, policies and regulations. The interpretation of reciprocal obligations under this agreement, notably in the area of repair and overhaul, however, have been under discussion recently. Should the traditional interpretation of the scope for domestic programming under this Agreement be modified, areas of established application of the IRB Policy could be impacted.

Outside of the defence sector, the two international agreements that most significantly impact on government procurement are the North American Free Trade Agreement (NAFTA) and the WTO Agreement on Government Procurement (AGP). Although both these agreements substantially increase the markets available to Canadian industry, there has been only moderate trade liberalization in the high technology sectors (mainly defence and transportation) in which the IRB Policy primarily operates. The defence market, in particular, remains a highly protected and managed market segment in most countries.

Traditionally, negotiations in the context of the WTO and NAFTA have been limited to non-defence sectors. Defence contracting for goods and services of an essential security nature is, therefore, exempt from Canada's NAFTA and WTO obligations. Assessed by dollar value and industrial availability, this sector continues to offer by far the greatest potential for application of the IRB Policy.

In recent years, driven in part by the limitations in resources within departments as well as changes in procurement patterns and organizational structure, there are very few instances of the application of IRBs to non-defence contracts (with the exception of the IT sector in the case of PRCs). The most important non-defence sectors, not subject to international trade obligations, include the following:

- Ship building and repair;
- Telecommunications, air navigation, radar and radio equipment;
- Construction contracts tendered by, or on behalf of, Transport Canada;
- Canadian Space Agency procurement; and
- Certain designated services, notably those relating to transportation, basic telecommunications, finance, health and cultural industries.

NAFTA Chapter 10 obligations built upon the earlier 1987 Canada/US Free Trade Agreement (FTA). A general clause in the FTA allowing for the application of offsets in limited circumstances was dropped. However, the NAFTA and the WTO/AGP have not significantly restricted the scope for application of IRBs as specific carve-outs from coverage have been delineated for those areas to which IRBs have commonly been applied.

A review of the AGP has recently been launched with a view to reviewing both the procedural elements of the Agreement as well as elements of coverage including the elimination of discriminatory measures and practices. Given a reluctance, particularly on the part of the U.S. to substantively address coverage issues, it is unclear to what extent, and in what time frame, current exceptions to the Agreement will be addressed.

In addition, Canada is currently participating in, or assessing the scope for, negotiations inclusive of government procurement in a range of bilateral and regional fora (eg. FTAA, APEC, Korea, Mercusor). Should the U.S. remain intransigent on modifications to its domestic procurement programs, the viability of bilateral/regional initiatives with our non-U.S. trading partners may be reassessed.

Certain provinces have on occasion expressed concern that Canada's international commitments under the WTO not unduly restrict the federal government's scope for the application of the IRB Policy. However, given the limited extent to which IRBs are currently applied to non-defence procurement, the potential crossover is quite small.

In the event that coverage issues are substantively addressed in the WTO, Canada's current exceptions in the information technology sector, as well as certain of our exceptions in the services area, are among the most likely to come under pressure from our trading partners. Given the limited remaining negotiating coinage available to lever market access improvements in government procurement on the part of our trading partners, modifications to the coverage of domestic preferences in advance of the conclusion of these negotiations would not be advantageous from a trade policy perspective.

4. Procurement Preference Policies in Other Countries

4.1 *Summary*

The procurement preference policies of a number of other countries are summarized in Annex B. The summary compares Canada, Australia, Belgium, Denmark, Great Britain, Netherlands, Norway, Spain, and Sweden. As noted in Annex B, compared to other countries Canada does more monitoring, there are more agencies involved, the industrial development package is part of the same contract, Canada does not allow benefits to be banked whereas most other countries do, and Canada includes civilian and defence procurements whereas many other countries include only defence.

Additional information on the procurement preference policies of the United States, the United Kingdom, and Australia follows.

4.2 *United States*

The two major policy instruments used by the United States to fulfill certain industrial development and socio-economic goals are the Buy American Act (BAA) and the Small Business Act. The USA also has a Minority-Owned Business Set Aside Policy, a Women-Owned Business Set Aside Policy, and a Labour Surplus Set Aside Policy, which it can apply to its procurements. These Acts and Policies are applied to both civilian and defence procurements.

Defence procurements are estimated at just over $200 billion per annum. In addition to the above Acts and Policies, defence procurements in shipbuilding, clothing, textile products, food and water must be sourced from American suppliers. Furthermore, if the buy is highly sensitive, it falls under the National Security Program which means zero foreign content.

Additional information on the two major Acts affecting Canadian companies is provided below.

4.2.1 *Buy American Act*

The United States fulfills certain industrial development objectives through its government procurement under the Buy American Act (BAA). BAA applies to both civilian and defence

procurements and it is not covered by the North American Free Trade Agreement (NAFTA). In principle, Canadian companies are allowed to compete on federal government contracts when:

- the U.S. federal government is the direct client; and
- the prime contract is estimated to be worth more than US $6.5 million.

However, a significant proportion of US procurement consists of transfer payments to state and local governments who have Buy America, and/or Buy Local, provisions. State and local governments are not covered by the procurement chapter of the North American Free Trade Agreement (NAFTA); nor are Canadian provinces and local governments. For example, the Federal Aviation Authority (FAA) welcomes Canadian bids on direct purchases of most goods and services above $6.5 million, however, most airports are not owned or run by the FAA but by state or local governments or by private sector corporations that receive funds from the Department of Transport which fall under the BAA.

Federal Acquisition Regulation (FAR) policies can expand the scope of the BAA in some instances, such as FAR 25.202 and FAR 25.203, which require that only domestic construction materials be used in construction in the US except if the procuring agency can demonstrate that a particular domestic construction material would unreasonably increase the cost or would be impracticable, or the procuring agency waives the BAA.

4.2.2 Small Business Set Asides

The US fulfills certain socio-economic goals through its government procurement under the Small Business Act of 1953, which attempts to ensure that American small businesses win at least 20% of all US federal acquisitions spending whether through set-asides or other forms of source selection. This typically happens in one of two ways:

- Most importantly, US federal procurement officials may set aside, in whole or in part, a procurement of any size if they feel that there are two or more US small businesses capable of responding to the solicitation. In other words, even if the prime contract is worth more than US $6.5 million (see 4.2.1), the entire procurement can be set aside for small US businesses.

- Within that broad mandate, US government law and regulations implemented in 1994-95 (the Federal Acquisition Streamlining Act and the Federal Acquisition Reform Act) strongly encourage contracting officers to reserve contracts estimated to be worth over US $2,500 but less than US $100,000 for US small business if the contracting officer expects to receive two or more responsive bids from responsible small businesses. However, US federal procurement statistics show that over 50% of the time, "small"

contracts are ultimately awarded to large business, as there are not enough qualified small business bids.

Although the possibility of foreign competition is not supposed to be a factor in determining whether a procurement is set aside, the Canadian Embassy in Washington, DC has witnessed how American firms have used the Small Business Act to limit foreign competition. Most often this seems to happen when a US competitor, which is a qualified small business and knows how to work the system, points out to the procurement authority (or a member of Congress) that there are two or more small businesses who could bid.

The US federal procurement system has been known to respond to this kind of pressure, effectively shutting out foreign bidders, particularly as government acquisition has become the focus of much attention in the press and in Congress in recent years.

4.3 United Kingdom

The main instrument that the United Kingdom uses with respect to offsets is their "industrial participation" (IP) policy. The main organization responsible for the administration of the IP policy is the Defence Export Services Organization (DESO) within the Ministry of Defence (MoD).

4.3.1 Background: Value for Money

The UK government decided in the early 1990's to pursue a "value for money" approach to its military procurement requirements. This led to an emphasis on purchasing "commercial, off-the-shelf" where feasible, and opened up new possibilities for foreign suppliers which could provide systems matching the basic requirements at a better price. Over the last few years, foreign suppliers have increased their share of MoD procurement to about 10 percent. This has created a fair bit of debate with a call for the government to take a more interventionist role in the industrial sector in order to protect and develop UK capabilities in key technologies.

While "value for money" is the determinant approach to all defence procurements, at any level, it is not the only factor. DESO must also consider technological factors, future UK industry potential (including exports) and so forth.

4.3.2 Industrial Participation Policy

The UK's Industrial Participation (IP) Policy applies only to foreign bidders where an acquisition is worth over £10 million (roughly C$20 million). According to the High Commission in London, the UK's IP Policy is akin to Canada's IRB Policy. The IP evaluation

is carried out by DESO and it analyses the impact of a foreign bid on UK industry, both in terms of the domestic market and export potential, and for encouraging offers of 'industrial participation "with UK industry by foreign suppliers. DESO aims for benefits worth 100% of the contract value but the actual level is determined by the undertaking made by the bidder as one part of its overall bid.

The question of the 'nationality "of the firm is determined on the basis of where the work is actually done, rather than where the profits end up. As such, to the extent that foreign companies set up operation in the UK, they are no longer consider 'foreign "and are thus not subject to IP evaluation.

In practice, a company's undertaking with respect to IP takes the form of a 'Letter of Agreement "(LOA) with DESO. This is not a legally-enforceable document, but nonetheless imposes upon a supplier a moral commitment before any contract with the MoD is actually signed to engage in certain activities in the UK. Should a company fail to live up to its LOA, its chances for future contracts would be greatly reduced. If the prime contractor for a project is foreign, then it normally submits the LOA, although second-tier suppliers may be approached on occasion. If the prime is a UK entity, then DESO looks for LOAs from each of the major foreign subcontractors, with the prime expected to play a central role in making sure the IP is significant enough.

Even if a foreign supplier is not specifically required to make an LOA, it may still wish to approach DESO so that its activities in the UK are taken into account and banked for potential future contracts. In general, DESO will normally backdate for a reasonable period prior to the submission of a LOA, thereby providing some recognition of IP which a company may already have undertaken. Another area of interest is the evaluation of technology transfer and intellectual property rights, where DESO will typically give credit only with respect to future deals which arise from this transfer.

4.4 Australia

Australian procurement rests on the following principles:

- **Value for money.** Procurement practices and procedures are directed to achieving the best available value for money in the acquisition of goods and services for government programs. The test of the best available value for money is a comparison of relevant benefits and costs on a whole of life basis.

- **Promoting national competitiveness and developing industry.** To promote national competitiveness and develop Australian and New Zealand (ANZ) industry, full and fair

opportunities must be provided by government agencies for ANZ industry, especially small to medium enterprises, to compete for government business.

- **Supporting other Government policies.** In addition to industry development, government procurement seeks to:
  - ensure the preservation of the environment and the national estate;
  - advance the interests of Aboriginal and Torres Strait Islander people;
  - promote affirmative action;
  - promote trade and foreign policy; and
  - improve Federal-State coordination and cooperation.

- **Open and effective competition.**

- **Ethics and fair dealing.**

- **Accountability and reporting.** A range of reporting requirements supports this accountability.

4.4.1 Civilian Purchases

Purchasing Australia, which is part of the Department of Administrative Services (DAS), administers the broad policies and guidelines within which all departments and agencies make their purchasing decisions. Purchasing Australia tries to ensure that government procurement achieves its objectives through the following policies and programs:

- Use of industry development criteria in supplier assessment for complex and high-cost procurement. Government agencies are not only encouraged to use Australian and New Zealand (ANZ) industries but they also investigate ANZ capabilities, education and inform industry, and promote ANZ industries.

- Industry Impact Statements (IIS) and Two Envelope Tendering for projects valued at A$10 million or more. The IIS utilizes a range of criteria, noted above, that can be aplied to determine the value-added activities, including opportunities for small business, that will subsequently be included as part of the tender documentation. The Department of Industry, Science and Tourism (DIST) and DAS administer the Government's industry policy objectives.

- The Endorsed Supplier Arrangement for Information Technologies (IT) and major office machines recognizes suppliers who can demonstrate a commitment to world best practices in terms of quality, standards and service, and long-term value added activities in Australia and New Zealand. Foreign companies which have signed on to

Partnerships for Development or Fixed Term Arrangements are considered to have the industry development criteria of endorsed suppliers.

4.4.2 Defence Purchases

The Department of Defence is one of the Commonwealth's largest buyers of goods and services. Each year, Defence procures goods and services worth some A$5 billion, most of which is spent in Australia and has a high ANZ content.

Defence policy for industry is consistent with broader government industry policy noted above, and is underpinned by the objective of defence self-reliance. Defence administers several complementary industry programs which encourage the participation of Australian industry in defence business, promote research and development, facilitate technology and skills transfer from overseas, and facilitate defence exports where this is consistent with Australia's strategic interests.

Defence relies on three major programs as follows:

- **Defence Buying Australian:** Government guidance requires that all purchasing activities above A$10 million maximize opportunities for Australian and New Zealand industry development. Defence's Buying Australian plan goes beyond this, and formalizes the requirement for consideration of local content and industry development priorities for all purchases valued at A$5 million or more.

- **Australian Industry Involvement Program:** Militarily significant capital and logistic acquisitions have additional industry requirements which are achieved through the Australian Industry Involvement (AII) Program. The AII Program seeks to maximize the cost effective level of Australian industry participation in all facets of the acquisition and support processes.

- **Defence Industry Development Program:** The Defence Industry Development (DID) Program aims to develop Australian industry capabilities which are important for defence self-reliance and long-term defence requirements, and which would not otherwise have been developed through commercial activity or Defence procurement.

5. Evolution of the IRB Policy

5.1 *Application of the IRB Policy*

The IRB Policy has generated a high level of benefits since its initiation in 1986. As shown in Table 5-1, the total value of industrial and regional benefits from the 18 MCPs in the administrative phase (post 1986) is estimated to be $5.1 billion. This figure includes direct and indirect Canadian content values (CCVs)[7]. The estimated contract values for the 18 MCPs and for a select number of PRCs with IRB packages are given in Annex C.

In recent years, driven in part by the limitations in resources within federal departments and agencies as well as changes in procurement patterns and organizational structure, as noted below, there have been very few instances of the application of IRBs to non-defence contracts.

5.2 *Changing Environment*

(i) Resource Constraints

Budgetary reductions within the federal government have meant that fewer human and budgetary resources are available to Industry Canada and the Regional Agencies in fulfilling their roles within the IRB process. Industry Canada is reviewing the IRB inputs to project RFPs, evaluation procedures and contract clauses with the aim of further standardizing the IRB process and reducing resource demands. Means of streamlining IRB management and reporting requirements are also needed as well as less stringent audit and verification procedures that will still permit the monitoring of IRBs against contractual commitments.

Resource constraints are making it more difficult for Regional Agencies to carry out their IRB functions in terms of briefing contractors on regional capabilities, identifying potential suppliers, participating in IRB evaluations and monitoring and enforcing IRB commitments. The effect of this reduced participation could limit the ability of the IRB process to optimize

7 Direct Canadian content refers to benefits that involve services, goods or equipment that are entered into for the production of the deliverable end items under the contract. Indirect Canadian content are benefits from activities not directly related to the product procured.

Canadian industry involvement and to achieve IRB regional and industrial development objectives[8]. On the other hand, another impact of resource constraints has been the reduction in the number of capital projects sponsored by the government and, therefore, a reduction in the need for resources to manage the IRB process.

Table 5-1: Benefits of MCPs in Administration Phase (Post 1986)

Project	*Long Title*	*Client*	*Total Estimated Benefits ($000)*
MCDV	Maritime Coastal Defence Vessel	National Defence	448,000
MIL-LAV	Militia Light Armoured Vehicle	National Defence	99,720
LAV-RECCE	Lynx Replacement	National Defence	584,430
SRAAW(H)	Short Range Anti-Armour Weapon (Heavy) Eryx Missile Project	National Defence	66,300
LSVW	Light Service Vehicle Wheeled	National Defence	188,811
HLVW	Heavy Logistic Vehicle Wheeled	National Defence	279,000
CANTASS	Canadian Towed Array Sonar System	National Defence	80,120
CC130AU	CC130 Hercules Avionics Update	National Defence	62,766
CFSSU	Canadian Forces Supply System Upgrade	National Defence	240,408
CAATS	Canadian Automated Air Traffic System	Transport Canada	570,000
TCCCS	Tactical Command and Control Systems	National Defence	1,223,140
CC150MOD	Airbus Cargo Conversion	National Defence	44,613
ISPR	Income Security Plan Redesign	Human Resources Development Canada	251,585
MAATS	Military Automated Air Traffic System	National Defence	49,500
TTT	Tactical Transport Tanker	National Defence	190,430
AMSA	Artic Maritime Surveillance Aircraft	National Defence	145,905
EST	Electronic Support and Training System	National Defence	107,100

8 ACOA, in fact, is allocating more resources to supporting IRBs because they consider the IRB Policy to be a priority.

UTTH	Utility Tactical Transport Helicopter	National Defence	506,800
Total			5,138,586

(ii) Alternative Delivery Mechanisms

The transfer of government services to the private sector is having an impact on the coverage of the IRB Policy. The downsizing and restructuring of government will likely accelerate this trend. The recent movement of the Air Navigation Services in Transport Canada to NavCanada is a notable example.

In addition to procurement by federal departments, procurement by certain crown corporations such as Via Rail, the Royal Canadian Mint and the St. Lawrence Seaway Authority is subject to NAFTA rules. Canadian crown corporations are not currently covered under WTO/AGP. Subject to review by Parties, privatization of entities removes them from coverage under NAFTA and WTO/AGP. Privatized Canadian entities are no longer subject to the application of the IRB Policy.

(iii) Procurement Changes

Budget pressures and advances in civilian technology will increasingly be influencing departments, particularly DND, to purchase off-the-shelf equipment which will not require expensive and lengthy developmental work and normally offer price savings because the product is in production. Under these circumstances, the IRB benefits will depend on negotiating other business activities in Canada not directly associated with the contracted goods and services. The assessment and negotiation of IRBs could be more difficult under these circumstances.

Other changes in approaches to procurement which will make the IRB Policy more complicated to implement include more joint procurement with the provinces and other countries eg the US and multi-phase contracts.

(iv) Industrial Development

Sector strategies for a number of industry sectors have been developed by Industry Canada and have facilitated the identification of weaknesses in industry ś capabilities which can be filled by IRBs. The observations of the Auditor General and the continuing government emphasis on jobs and economic growth will place demands on the IRB process to manage a better relationship between operational requirements and industrial development objectives. Coordination of existing industrial development initiatives including sector

strategies, technology road maps, investment promotion and the Technology Partnerships Canada program, together with IRBs, could assist in improving this relationship.

The Sector Competitiveness Framework (SCF) exercise in Industry Canada is intended to develop a consensus understanding between industry and government of the competitive position and outlook of specific industrial sectors. When complete, the SCFs will be an essential element in shaping the industrial benefits approach to be used in procurements. The SCFs and follow-on analysis will lead to the formulation of IRB objectives and the identification of sub-sector elements (companies, technologies, markets etc.) which are of strategic importance to the long-term growth and international competitiveness of the sector.

(v) Trade Environment

The AIT will have an increasing influence on federal procurement. The federal government wants to demonstrate exemplary behaviour towards AIT procurement procedures which could affect its ability to continue sole sourcing practices, for example. It is recognized that these are still early days with the AIT. There remains some ambiguity on the interpretation of the Agreement's application but the AIT is not expected to change the procurement environment in a way that would impact the IRB Policy.

At this time, Canada is participating in procurement-related discussions in the WTO as well as, currently or prospectively, in a range of other bilateral and regional fora. These discussions could potentially impact on certain niche areas of federal procurement within the scope of IRB Policy. The outlook for early movement of these negotiations is, however, uncertain.

Decisions of the Canadian International Trade Tribunal (CITT) which handles all procurement-related complaints regarding federal contracts under the AIT, NAFTA and WTO could, however, have implications for the Policy in aspects such as the application of limited tendering procedures to restrict competition.

APPENDIX D

PHASE I: OBJECTIVES ACHIEVEMENT

Working Document

Evaluation of the Industrial and Regional Benefits Policy

Phase I: Objectives Achievement

Prepared for:
Industry Canada

Prepared by:
Hickling Corporation

January 30, 1998

HICKLING Ref: 6672

Executive Summary

1. Background

The Industrial and Regional Benefits (IRB) Policy, as approved by Cabinet in May, 1986, provided the framework for using federal procurement as a lever to promote industrial and regional development objectives. The Policy established long-term, high quality industrial and regional development as a primary objective for major procurements.

The IRB Policy is applied to procurement opportunities valued at greater than $2 million which are not subject to NAFTA or GATT (WTO). The procurements with IRBs are of two kinds, Major Crown Projects (MCPs) and Procurement Review Cases (PRCs), and the way in which the IRBs are identified and processed depends on the procurement category of the project.

Major Crown Projects: For procurements defined as MCPs, usually over $100 million or sometimes less if the related project risk is considered by Treasury Board to be relatively high, formal interdepartmental project management offices (PMOs) and Senior Project Advisory Committees (SPACs) are established in accordance with Treasury Board s policy and management guidelines for MCPs.

Procurement Review Cases: Procurement outside the MCP regime and over $2 million, usually referred to as PRCs, is reviewed by the Procurement Strategy Committee (PSC) which screens all procurement opportunities as submitted by operating departments in their Short-Range Acquisition Plans (SRAPs).

The Policy puts an emphasis on specific IRB benefits from procurements such as Canadian content, technology transfer, strategic alliances, small business development and access to international markets. In implementing the Policy, Canadian industrial capabilities in all regions are to be brought to the attention of bidders, whether Canadian or foreign, for the purpose of the procurement and to encourage the development of ongoing business relationships and new business ventures in Canada.

An Evaluation Framework for the IRB Policy was completed by Hickling Corporation in March, 1995 with a view to initiating an evaluation in 1997. The evaluation issues identified in the Framework were reviewed in early 1997 to include a fuller examination of the

continuing relevance of the IRB Policy and the linkage of the evaluation to the Agreement on Internal Trade (AIT).

The IRB Steering Committee, at its meeting on June 27, 1997 considered terms of reference for the evaluation and approved a two phased approach to the evaluation with the Phase I report to constitute the federal government's response to the reporting requirements under the Agreement on Internal Trade (AIT)[1]. It was agreed that Phase I concentrate on the evaluation issues of policy rationale, objectives, objectives achievement and impacts, and Phase II focus on the remaining issues of process efficiency and effectiveness.

2. Evaluation Approach

The approach in Phase I has been to conduct a broad investigation of the benefits of the IRB Policy across the population of Major Crown Projects (MCPs) and Procurement Review Cases (PRCs) by conducting mini case studies of each of them, including those which will be chosen for full case studies in Phase II. The full evaluation including Phases I and II is based on options 4B and 5B of the Evaluation Framework.

The study has reviewed the 18 MCPs currently under contract, post 1986, and 81 PRCs which have been identified as having an IRB requirement. Most of these procurements are with DND. The total estimated contract values of the selected MCPs and PRCs amount to $5.5 billion and $2.3 billion respectively.

Documentation review, file review, and interviews were the three main elements of study methodology. The Statistics Canada's input/output economic computer model was also used to help assess the economic impact of the Policy. MCP files were obtained from Industry Canada for review and, of particular interest, were the IRB strategy, the portions of the RFP and contracts dealing with IRBs, and the IRB status reports.

The identification and review of the PRC files was considerably more involved and required time consuming review of PWGSC project files. We benefited greatly from the assistance of ACOA in accessing their PRC database, consisting of 1,946 PRCs going back to 1985. Each of the records was examined for recommendations concerning:

- Canadian Content;
- Industrial Benefits;

1 The AIT requires the federal government to "conduct a review....no later than January 1, 1998 to ensure that (the IRB Policy) meets (its) regional and economic objectives."

- Regional Benefits; and/or
- Small Business Benefits.

Interviews were conducted with 20 government representatives from Industry Canada, ACOA, FORD-Q, WD, PWGSC, and DND familiar with each of the MCP and PRC projects specifying IRB objectives. Discussions were undertaken with officials of Industry Canada with expertise on the AIT on how the Phase I study could best contribute to the AIT reporting requirements.

Approximately 50 industry representatives, selected with advice from the Industrial Benefits Association of Canada and familiar with each of the IRB projects, were also consulted. A reasonable balance in the regional and size distribution of the companies contacted was achieved. The consultations in both cases concentrated on the incrementality of the national and regional impacts of the IRB policy, and additionally, for government representatives, on issues of policy rationale.

The impacts that this evaluation is concerned with are those that are directly due to the IRB Policy, that is the incremental impacts. The difficulty is in estimating how the companies would have reacted in a world different from that which prevailed. As an approximation of the incremental benefits of the IRB Policy, we have estimated the incremental Canadian content for the MCP and PRC cases achieved as a result of the Policy.

3. Findings and Analysis

Major Crown Projects

Eighteen ongoing and recently completed MCPs were reviewed with a total contract value of $5.7 billion. The companies awarded the MCPs have committed to achieving $4.4 billion in Canadian content over a period of 19 years, from 1988 to 2006. Reported achievements by these companies over a ten-year period, 1988 to 1997, amount to $3.5 billion.

The 18 MCPs have achieved $1.9 billion in total incremental direct and indirect Industrial Benefits (IBs) compared to an incremental commitment of $2.3 billion; or an average annual incremental achievement of $212 million compared to an average annual incremental commitment of $122 million (longer time frame than achievements). This consists of:

- $113 million achieved in incremental direct IBs per annum compared to an annual incremental commitment in direct IBs of $82 million; and

- $100 million achieved in incremental indirect IBs per annum compared to an annual incremental commitment in indirect IBs of $40 million.

The analysis of the incremental achievements and commitments, by region, indicates that incremental achievements have exceeded incremental commitments except in the West. It was noted that $35 million achieved in direct and indirect incremental regional benefits per annum were not specified to a region in Canada.

The overall impact of the IRB Policy on MCPs is generally positive. Fourteen of the 18 MCPs have positive impacts compared to four MCPs which have negligible impacts. Long-term benefits tend to be in the form of supplier relationships and skills development.

Procurement Review Cases

1,946 PRCs were reviewed, of which 81 were found to have been recommended for some form of IRB provision: Canadian content, industrial benefits, regional benefits, and/or small business benefits. Project files could be located for 51 of the PRCs with recommended IRBs. For half of these 51 PRCs, no evidence could be found that the recommendation for IRBs had been translated into contractual requirements.

While the total number and value of PRCs has been increasing over time, the number and value of PRCs with recommended IRBs peaked between 1988 and 1991 at about 14 per year, and has fallen dramatically since to about four per year.

The total value of the 1,946 PRCs reviewed was $34.78 billion, averaging $3.44 billion per year from 1988 onward. The 81 PRCs recommended for IRBs were valued at $2.3 billion, averaging $28.4 million each.

The only client departments for PRCs with IRBs were DND, Transport Canada, the RCMP, and CIDA. The RCMP and CIDA were responsible for one each. Transport Canada was responsible for 15%, and DND was responsible for the remaining 83%. The distribution based on value is similar.

The value of Canadian content in the PRC contracts averages about 47% of the total value of the contracts. Of this, about 63%, or $618 million over ten years, has been judged to be incremental as a result of the existence of the IRB Policy.

The bulk of the benefits go to Ontario, followed by Quebec, the West, and the East. However, the location of the benefits is often unspecified or unknown. Ontario is strong in electronic systems work. Software work is relatively evenly distributed among the West,

Ontario, and Quebec. Manufacturing is important in all of the regions. In general, the work provides very high quality jobs.

Support for the Policy is clearly highest in the eastern and western regions. A clear majority of interview respondents felt that the Policy had influenced which companies participated on contracts. This was especially true for companies in the eastern and western regions.

IRB contractual obligations are almost always met, and usually exceeded. Sustainable impacts are typically in the form of market access and skills development. There was little evidence of firms leveraging IRB opportunities into new business development. Firms in the eastern and western regions were most likely to achieve subsequent sales as a result of participation in a PRC with IRBs.

There was an almost unanimous opinion that the costs associated with the IRB provisions are minimal and mostly administrative in nature.

4. Conclusions

The tangible, short-term impacts of the IRB Policy on the Canadian economy have been positive. These impacts are most pronounced in the Eastern and Western regions. The most significant impact has been to increase the Canadian content of defence procurement in general, which has resulted in the creation of high-quality jobs. The Policy has also been successful in ensuring that regional and small business have the opportunity to participate in these contracts. While the absolute value of the work flowing to the regions has not been disproportionately high, the benefits to regional companies have been very important. The tangible costs of the Policy are considered to be very low.

Although the Policy has had positive short-term benefits, the achievement of the Policy objective to create long-term, sustainable impacts is not evident. While there have been some success stories, in general companies have been unsuccessful at leveraging contracts into opportunities for product and market development. This is not surprising given that the Policy is applied predominately to defence procurement. Defence markets have been static, the defence industry is very competitive, foreign defence markets are often protected, and the translation of defence products and skills into commercial markets is difficult.

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Appendices

1. IRB Evaluation Overview

1.1 *Background*

An Evaluation Framework for the Industrial and Regional Benefits (IRB) Policy was completed by Hickling Corporation in March, 1995. The evaluation issues identified in the Framework were reviewed in early 1997 by an informal working group from Industry Canada and the Regional Agencies. Following this review, the issues and the selected evaluation options were revised by HICKLING to include a fuller examination of the continuing relevance of the IRB Policy and the linkage of the evaluation to the Agreement on Internal Trade (AIT). HICKLING also prepared criteria for the selection of case studies to be part of the IRB Policy evaluation.

In mid 1997, a comprehensive description of the IRB Policy, its implementation, the domestic and global trade environment and the procurement preference policies in selected countries was developed by HICKLING in consultation with the IRB Advisory Committee (representation on the IRB Advisory and Steering Committees is given in Appendix A). The Policy description was presented to the IRB Steering Committee at its meeting on June 27, 1997.

The Committee also considered terms of reference for the evaluation and asked that the evaluation contract provide for the reporting requirements under the AIT[2] as an integral part of the evaluation. A two phased approach to the evaluation was agreed upon with Phase I concentrating on policy rationale, objectives, objectives achievement and impacts and Phase II focusing on the remaining evaluation issues of process efficiency and effectiveness.

1.2 *IRB Policy Statement*

The IRB Policy, as approved by Cabinet in May, 1986, provided the framework for using federal procurement as a lever to promote industrial and regional development objectives.

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2 The AIT requires the federal government to conduct a review....no later than January 1, 1998 to ensure that (the IRB Policy) meets (its) regional and economic objectives.

This policy statement established long-term industrial and regional development as a primary objective for major procurements. The new policy approach provided that:

- Long-term industrial and regional development be adopted as the primary industrial benefits (IB) objective to be achieved through public procurement programming on the understanding that special provision may be necessary for developing regional economies and the defence industrial base;

- Future IB programming focus on achieving benefits of lasting value, and de-emphasize short-term job creation;

- Offset maximization objectives generally be abandoned and offset activity be limited to those cases which have the potential of offering significant economic benefit;

- Where difficult economic circumstances exist in a particular region, every effort be made to maximize benefits flowing to that area from large procurements;

- Where required, the effectiveness of IB programming be enhanced through the use of complementary expenditure[3] programming to realize procurement-related investment opportunities (where such expenditures are consistent with our GATT (WTO) commitments);

- Emphasis be placed on developing Canadian sources through research and development support to assist Canadian firms in "prepositioning "themselves to bid on major federal projects;

- Domestic sourcing requirements considered essential to national security by the Minister of National Defence (e.g. repair and overhaul requirements) be included directly in the statement of requirement of key defence purchases; and

- All future IB assessments include a detailed analysis of any broader implications of competing industrial benefits proposals (e.g. their conformity with Canada's international trade obligations and trade development objectives, international relations, national security, etc.).

These policy directions have driven the IRB process since that time.

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3 While identified in the IRB Policy framework of 1986, complementary expenditures from program mechanisms such as the Defence Industry Productivity Program (DIPP) were never used to support the development of IRB related activities or strategies.

1.3 Expected Benefits of IRB Policy

The 1986 Policy put an emphasis on long-term, high-quality industrial and regional development and de-emphasized the maximization of offsets. The broad intent was to make the public generally aware that the focus of future IB programming would be long-term and the emphasis would be on the quality and not quantity of IBs. It was expected that prime contractors would react positively to the more business oriented approach of the Policy and the international profile of Canadian IB programming would be lowered.

As defined in the IRB Manual (January 1995), the specific benefits of the Policy are to include but not be limited to:

- Technology transfers;
- Joint ventures and strategic alliances;
- Product mandates, licences, marketing agreements;
- Regional and small business development;
- Licencing arrangements; and
- Access to new international markets.

Additionally, it was expected that Canadian industrial capabilities would be brought to the attention of prime contractors, whether Canadian or foreign, for the purpose of the procurement and to encourage the development of ongoing business relationships and new business ventures in Canada.

1.4 IRB Evaluation Approach

As noted, the IRB evaluation is being conducted in two phases. Phase I, which is the subject of this report, has reviewed the rationale, objectives, and objectives achievement of the IRB Policy. The approach in this phase has been to conduct a broad investigation of the benefits of the IRB Policy across the population of Major Crown Projects (MCPs) and Procurement Review Cases (PRCs) by conducting mini-studies of each of them, including those which will be chosen for full case studies in Phase II. The Phase I report is a stand-alone report suitable for use by Industry Canada staff to prepare a review of the IRB Policy in compliance with the AIT.

Phase II will focus on the remaining evaluation issues of process efficiency and effectiveness. The approach in this second phase will be to conduct case studies of a number of MCPs and PRCs. Phase II will complete the evaluation study and fulfil the requirements of the Terms of Reference remaining after Phase I.

The full evaluation including Phases I and II is based on options 4B and 5B of the Evaluation Framework, as revised (the evaluation issues are set out in Appendix B). The following list indicates how the evaluation issues have been divided between the two phases (the numbers refer to those in Appendix B). The division is one of emphasis only and the issues of Phase II have been kept in mind during the data collection tasks of Phase I.

Phase I (Objectives Achievement)

Program Rationale

1. Public Interest
2. Legal Mandate
3. Appropriate Role

Program Objectives

4. Strategic Goals
5 Barriers

Program Impacts and Effects

6. Actual Impacts and Effects
7. Incremental Benefits and Costs
8. Longer-Term Benefits and Costs

Phase II (Process)

Program Impacts and Effects (process components)

9. Competing Interests
10. Industry Participants
11. How does IRB Work
12. Monitoring and Verification
13. Mechanisms Regarding Incrementality
14. Accountability
15. Early Involvement

1.5 Definitions of Procurements with IRBs

The IRB Policy is applied to procurement opportunities valued at greater than $2 million which are not subject to NAFTA or GATT (WTO). The procurements with IRBs are of two kinds, Major Crown Projects (MCPs) and Procurement Review Cases (PRCs), and the way

in which the IRBs are identified and processed depends on the procurement category of the project.

1.5.1 Major Crown Projects

For procurements defined as Major Crown Project (MCPs), usually over $100 million or sometimes less if the related project 'risk "is considered by Treasury Board to be relatively high, formal interdepartmental project management offices (PMOs) and Senior Project Advisory Committees (SPACs) are established in accordance with Treasury Board ś policy and management guidelines for MCPs. The SPACs are responsible for developing the project ś management guidelines for MCPs. The SPACs are also responsible for developing the project ś procurement strategy to ensure that all the involved departments 'mandates are optimized.

The operating department sponsoring the procurement project (usually DND) is the lead department with responsibility for overall project management and for seeking the required project approvals and reporting on progress to Treasury Board. Public Works and Government Services Canada (PWGSC) is the project contracting authority. Industry Canada (IRB authority), WD, ACOA, FORD-Q and FEDNOR each have representation on the SPAC, and are collectively responsible for IRBs.

1.5.2 Procurement Review Cases

Procurement outside the MCP regime and over $2 million, usually referred to as Procurement Review Cases (PRCs), is reviewed by the Procurement Strategy Committee (PSC) which screens all procurement opportunities as submitted by operating departments in their Short-Range Acquisition Plans (SRAPs). These have a one to two year horizon. The PSC, chaired by PWGSC, is composed of operating departments such as DND and Transport Canada and industry and policy departments such as Industry Canada, ACOA, WD and FORD-Q, Indian and Northern Affairs Canada, Environment Canada, Human Resources Development Canada, National Research Council of Canada, Finance Canada, and Treasury Board Secretariat.

Our study has reviewed the 18 MCPs currently under contract, post 1986, and 81 PRCs which have been identified as having an IRB requirement. Most of these procurements are with DND. The selected MCPs and PRCs with IRB packages and their estimated contract values are tabulated in Appendix E.

1.6 Evaluation Methodology

Documentation review, file review, and interviews were the three main elements of study methodology. Statistics Canada's input/output economic computer model was also used to help assess the economic impact of the Policy.

1.6.1 Documentation Review

Relevant documentation was obtained from Industry Canada, PWGSC, ACOA, WD, FORD-Q, DND, Transport Canada, Treasury Board, the Office of the Auditor General and Statistics Canada. The regional agency headquarters in Ottawa (ACOA and WD) were visited to access their document collections on IRBs. The documentation collection covered both Phase I and Phase II issues but concentrated on the needs of Phase I. Of particular interest were the "IRB Strategy and Project Objectives" documents which were prepared at the outset of each major procurement which had IRB objectives. A list of references is recorded in Appendix C.

1.6.2 File Review

Major Crown Projects: MCP files were obtained from Industry Canada for review. Of particular interest were the IRB strategy, the portions of the RFP and contracts dealing with IRBs, and the IRB status reports.

Procurement Review Cases: The identification and review of the PRC files was considerably more involved. The following steps were followed:

16. Identification of PRCs with recommended IRB provisions.

PRCs with IRB provisions were identified using the Procurement Review Committee's "Record of Review". The ACOA files contained the most complete collection of these records, consisting of 1,946 going back to 1985. Each of the records was examined for recommendations concerning:

- Canadian Content;
- Industrial Benefits;
- Regional Benefits; and/or
- Small Business Benefits.

Ultimately, 81 cases were identified as having one or more of these attributes. A list of these cases is contained in Appendix E. ACOA also maintains an electronic database containing

information on the PRC title, client organization, amount, and PWGSC contact. This database was made available to us[4].

17. *Correlation of PRC numbers with PWGSC file numbers.*

The PRC Record of Review 'is a recommendation of what should 'happen in a contract. To assess what actually did ' happen requires a review of the PWGSC contract file. Unfortunately, there is no easy way to correlate the PRC number with the contract file number. Extensive detective work proved necessary to identify the PWGSC project officer and locate the officer in the hopes that the officer would recognize the project from the PRC Record of Review 'description and remember the PWGSC file number[5]. In many cases, the project officer was no longer with PWGSC. In the end, of the 81 cases identified from the PRC Record of Review ', information on 64 files was obtained.

18. *Review of PWGSC files.*

The objective in reviewing the PRC project files was to follow the IRB recommendations through the RFP, contract, and realized benefits stages to see how well achievement matched intention. Where possible, the following information was extracted from the files:

- The prime contractor name and contact;
- Sub-contractor names and contacts;
- The client department name and contact;
- The portion of the RFP addressing IRBs;
- The portion of the contract addressing IRBs; and
- IRB status reports.

1.6.3 Interviews

Interviews were conducted with 20 government representatives from Industry Canada, ACOA, FORD-Q, WD, PWGSC, and DND familiar with each of the MCP and PRC projects specifying IRB objectives. Discussions were undertaken with officials of Industry Canada with expertise on the AIT on how the Phase I study could best contribute to the AIT reporting requirements.

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4 We would like to thank Paul Knarr, Craig Rowsell, and Rachelle Roy of ACOA for assisting us in accessing their files and database.

5 We would like to thank Anabel Sequeira of SIPS, Brenda Stahls of IPC, and Ann Pengelly of AMES for their efforts in obtaining the PWGSC files. Ann Pengelly, in particular, made an extraordinary effort to track down errant files.

Approximately 50 industry representatives and industry associations (eg. Industrial Benefits Association of Canada) familiar with each of the IRB projects were also consulted. The consultations in both cases concentrated on the incrementality of the national and regional impacts of the IRB policy and additionally for government representatives on issues of policy rationale. Appendix D lists those interviewed.

Companies were identified and interviewed in the following manner:

1. *Company Identification*

Prime contractors and subcontractors were identified, where possible, from the PWGSC and Industry Canada project files.

The Industrial Benefits Association of Canada provided names of companies from across Canada that their local representatives felt would have opinions on the IRB Policy. These companies may or may not have been involved in a PRC contract. There was no evidence that the list of companies was biased in their views about the IRB Policy in any systematic way.

Efforts were made to have representation from companies of different sizes (small - under 100 employees or $10 million in sales; medium - between 100 and 1000 employees or between $10 million and $100 million in sales; and large - over 1000 employees or $100 million in sales) in each of the regions (West, Ontario, Quebec, and East).

2. *Company Contact*

The companies identified in the first step were contacted and the participation of a senior member of the company was solicited. The appropriate person would be familiar with the firm's PRC contracts, and would be in a position to understand how those contracts influenced the long-term business prospects of the company.

A letter was faxed to the participants that outlined the purpose of the study and provided questions that would be used to guide the interview. An introductory letter from Industry Canada was also sent. A copy of each letter is contained in Appendix F. The question were:

General Questions

- What has been you experience with the IRB Policy?
- Are you better off as a result of the IRB Policy than you would be otherwise?
- Are there other people we should speak with?

Contract Specific Questions

- How would the contract have been different in the absence of the IRB Policy?
- To what extent have the IRB obligations been achieved?
- What have been the incremental benefits of the IRB provisions?
- What have been the incremental costs of the IRB provisions?
- What unintended impacts have resulted from the IRB provisions?
- What sustainable impacts have resulted from the IRB provisions (alliances,
- Market access, exports, skills development, technology development, technology transfer, regional investment, etc.)?
- What subsequent sales can be attributed to the IRB provisions?

Quantitative Data

- Contract direct spending by region.
- Contract indirect spending by region.
- Contract specific jobs created.
- Sustainable jobs created.

A mutually convenient time was arranged to hold the interview.

3. *Interviews*

Most of the interviews with MCP companies were conducted by telephone. Where individuals were available in Ottawa, interviews were usually in-person. The PRC company interviews were conducted over the telephone. Each interview lasted at least 30 minutes. The questions were used to guide the interview, but discussions were open-ended and interviewees were free to bring up points of special relevance to them.

In total, 24 PRC and 20 MCP company interviews were completed. The distribution by region and size of the companies (headquarters location) whose representatives we interviewed is shown in Table 1-1.

Table 1-1: Company Interviews

	Small	Medium	Large
West	2	1	6
Ontario	2	4	11
Quebec	2	1	4
East	7	2	0
Other (US)			1

1.6.4 Incrementality

The impacts that this evaluation are concerned with are those that are directly due to the IRB Policy. These impacts are called **incremental**, which is defined as the difference between what **did happen** with the IRB Policy in place and what **would have happened** if the Policy had not been in place. As difficult as it might be to identify and measure the actual and relevant impacts that did happen, it is much more difficult to estimate what impacts would have happened without the Policy. This difficulty involves estimating how the companies would have reacted in a world different from that which prevailed.

All of the MCPs and PRC cases with IRB components result in a reported achievement of Canadian content (direct and indirect) against contractual commitments. As an approximation of the incremental benefits of the IRB Policy, we have estimated the incremental Canadian content for the MCP and PRC cases achieved as a result of the Policy.

However, these IRB achievements are not all attributable to the use of the IRB Policy. Other considerations would result in the achievement of Canadian content in the absence of the IRB Policy. These considerations include the Shipbuilding Policy, sourcing strategy for reasons of industry sectoral health, defence industrial base and the selection (competitive or sole-source) of a Canadian company because it is a competitive source of excellence on the world market.

Based on a combination of information gathered from document and file reviews, interviews and background knowledge, we have made estimates of how much the implementation of the IRB Policy may have affected the level of Canadian content for each project.

1.6.5 Economic Modeling

The overall impacts of the IRB Policy were estimated using the input-output model of Statistics Canada based on MCP and PRC contract values, IRB commitments and the industry sectors (SIC codes) and regions affected. The impacts are described in terms of the increment provided to the GDP, employment and government revenue through implementation of the IRB Policy through the years from 1988 to 1997.

1.7 Structure of the Report

Chapter 1 covers the background to the evaluation, a description of the IRB Policy and the evaluation approach.
Chapter 2 discusses the IRB Policy context.
Chapter 3 analyzes the evaluation issues associated with the impacts of the MCP projects.
Chapter 4 analyzes the evaluation issues associated with the impacts of the PRC projects with an IRB component.
Chapter 5 summarizes objectives achievement for the IRB Policy in terms of rationale, objectives, and impacts and effects.

2. IRB Policy Context

An assessment of the impact of the IRB Policy must be viewed in context. Significant factors that influence that impact are domestic and international trade agreements, the state of the Canadian defence industry and the overall level of government procurement. These factors, and their effect on the impact of the IRB Policy, are discussed in this section.

2.1 Rationale for IRB Policy/Historical Perspective

Initial attempts to leverage procurement activity to achieve industrial benefit objectives began in 1974 with the purchase of the Aurora Patrol Aircraft. In part to assure balance in its defence trade with the U.S., Canada began to require, as part of contracts or major acquisitions, that specific IB provisions be met including offsets, technology transfer and investment. Bidding firms were advised that their proposals would be evaluated on the basis of economic benefit to Canada (along with price and technical compliance) and reliance was placed on the competitive nature of the process to induce bidders to offer attractive benefits packages.

This initial approach was developed as a means to derive greater domestic industrial benefit from off-the-shelf purchases of defence equipment from the U.S. The intent was that offsets would reduce the economic drain on Canada of major foreign purchases by providing balancing purchases of other goods and services. This would also improve the government's ability to convince the Canadian business community and the general public of the overall desirability of pursuing financially and technically attractive offshore procurements. IB objectives were established on a case-by-case basis.

These early efforts resulted in contracts with offset benefits to Canada but limited direct Canadian industrial participation. In addition, some political involvement in the procurement process (e.g. CF-18 and CPF contracts) resulted in directed regional distribution of contract work. As a consequence, industry began to question the associated costs and long-term benefits of the IB process at that time. The IRB Policy has built on this experience in two ways: it has created a more transparent process for defining IRB requirements for potential bidders and, with the revisions of 1986, focused on long-term, high quality industrial benefits.

2.2 Trade Environment

Application of the IRB Policy is restricted by a number of domestic and international trade agreements. The most important of these are the Agreement on Internal Trade (AIT), the General Agreement on Tariffs and Trade (GATT), the World Trade Organization Agreement on Government Procurement (WTO-AGP), and the North American Free Trade Agreement (NAFTA). Internationally, the most significant procurement agreement linked to coverage of the defence sector is the Canada/U.S. Defence Sharing and Production Sharing Arrangement (DDSA/DPSA).

There has been only moderate trade liberalization in the defence and transportation sectors in which the IRB Policy primarily operates. The defence market, in particular, remains highly protected and managed in most countries. Defence contracting for goods and services of an essential security nature is exempt from Canada's NAFTA and WTO obligations. Important non-defence sectors not subject to international trade obligations include aspects of shipbuilding, telecommunications, transportation, space, health, and culture.

Certain provinces have, on occasion, expressed concern that Canada's international commitments under the WTO not unduly restrict the federal government's scope for the application of the IRB Policy. Given the limited extent to which IRBs are currently applied to non-defence procurement, the potential crossover is, however, quite small.

It is unlikely that the exclusions applied to defence procurement under the WTO, NAFTA and similar bilateral/regional trade agreements will be modified in the near future. Coverage negotiations for federal procurements under these agreements are expected to be limited to non-defence elements such as the current exclusions for the information technology sector. The more likely impact on the IRB Policy would be through modifications to the DDSA/DPSA or comparable bilateral defence-based agreements. The proliferation of bilateral agreements which waive preferential procurement arrangements deserves review.

The purpose of the AIT is to reduce or eliminate barriers to the movement of persons, goods, services, and investment within Canada. Under the AIT, the IRB Policy is considered a non-conforming procurement measure that can be continued provided that the Policy is reported on annually and reviewed before January 1, 1998 to ensure that the Policy is meeting its regional and economic objectives.

The AIT seeks to have the Policy applied in a non-discriminatory manner. The Agreement states:

> 'The federal government may seek national industrial and regional benefits in procurement exceeding $2 million provided that the evaluation of regional benefits is carried out in a non-discriminatory manner with respect to regions for which the federal government has a general framework of regional development."
>
> Column II of Annex 508.3

As noted in Chapter 1, Phase I of this study will be the basis for the federal government report to the AIT.

2.3 *Government Procurement*

Major Crown Projects (MCPs) and Procurement Review Cases (PRCs) with IRBs represent a relatively small proportion of the total procurement by the federal government[1], as well as by the Department of National Defence:

- Total procurement by the federal government in 1995 was $13.8 billion[2]; and
- Total procurement by the Department of National Defence in 1995 was $5.2 billion.

By comparison, Major Crown Projects (MCPs) with an IRB commitment averaged $249 million per annum over the 1986 to 1996 period. This represents, for 1995, 4.8% of total DND procurement and 1.8% of total procurement by the federal government. Procurement Review Cases (PRCs) with an IRB component averaged $200 million per annum over the same period. This represents, for 1995, 3.8% of total DND procurement and 1.45% of total procurement by the federal government.

The IRB Policy, therefore, can have only a limited effect on the Canadian economy compared to federal procurement spending and even less compared to overall public sector spending ($58.6 billion in 1995 for federal, provincial and local governments). IRBs have usually been applied, however, to procurements of advanced defence or civilian technology products which have a greater impact than general purchases of governments.

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1 Sources: Statistics Canada National Income and Expenditure Accounts, Annual Estimates 1984-1995; PWGSC/non-PWGSC procurement based on preliminary TBS Annual Contracting Activity Report for 1995.

2 This figure includes procurement made by non-commercial Crown Corporations.

2.4 Regional Economic Activity

An important question is the degree to which the regional provisions in the IRB Policy distort the regional distribution of economic activity. Table 2-1 provides the context for examining this question by showing the nominal distribution of production in the Canadian economy. It is important to note that resource industries contribute significantly to the economies of the western and eastern regions. Therefore, these figures may overstate the expected regional distribution of activity from high-technology contracts of the type, as noted, to which the IRB Policy is typically applied.

Table 2-1: 1995 GDP at Market Prices by Region[3]

West	$239,400 M	32%
Ontario	$315,100 M	40%
Quebec	$174,400 M	22%
East	$47,100 M	6%
Total	**$776,000 M**	**100%**

The impact of the IRB Policy in the regions is outlined in Chapters 3 and 4 and discussed in Chapter 5. The Regional Agencies play an important role in the IRB process in promoting an awareness of regional industrial capabilities to bidders for the IRB-related contracts. These Agencies are particularly concerned with helping small- and medium-sized enterprises (SMEs) and have looked to the Policy for leverage in this respect.

2.5 Canadian Defence Industry

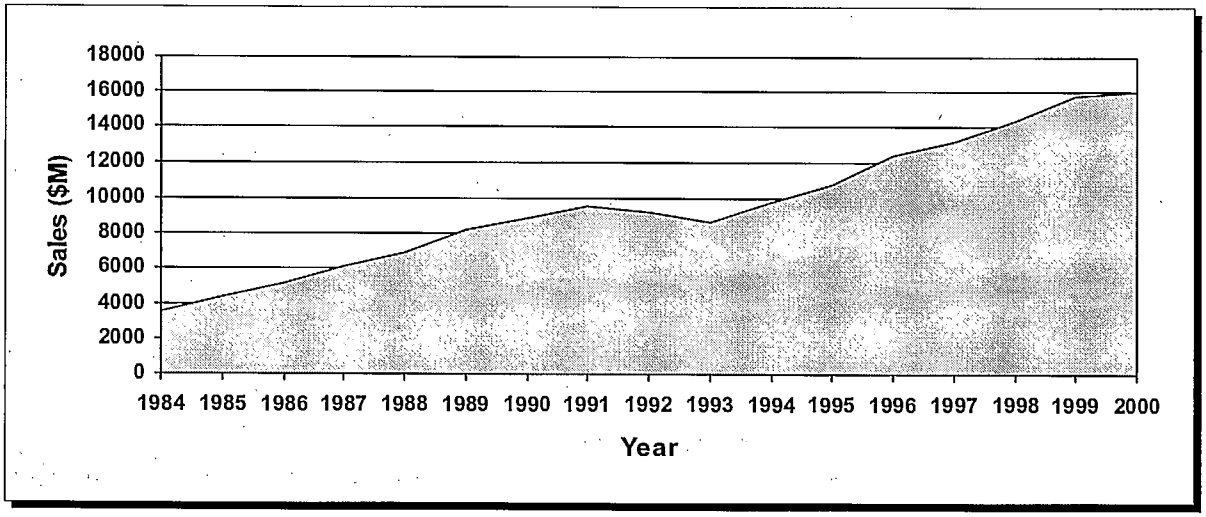
The combination of escalating national debts and the demise of the cold war had a serious dampening effect on the world defence industry in the early 1990s. The results were a decrease in sales, the consolidation of firms, and a general movement to find new commercial applications for defence technologies and skills. In Canada, a number of defence companies failed, and larger foreign companies acquired others creating very large international conglomerates.

Since then, however, defence markets have shown modest growth and the Canadian industry is healthy. Figure 2-1 shows Canadian aerospace and defence industry sales for the period 1984 to 2000 (numbers for 1996 and beyond are estimates). The compounded

3 Source: Statistics Canada http:/www.statcan.ca/english/pgdb/economy/economic/econ15.htm .

annual average rate of growth for the period 1984-1991 was 16%. This decreased dramatically to -5% for 1991-1993, and is expected to improve to 9% for 1994-2000. While Canadian defence sales show some growth, most of this increased growth is attributable to commercial exports by Canadian aircraft manufacturers.

Figure 2-1: Canadian Aerospace and Defence Industry Sales [4]



Canadian companies tend to be small niche players relative to their international competition in defence markets. Because of the small domestic market, the industry is heavily export oriented. Figure 2-2 shows the contribution of exports to Canadian aerospace and defence sales.

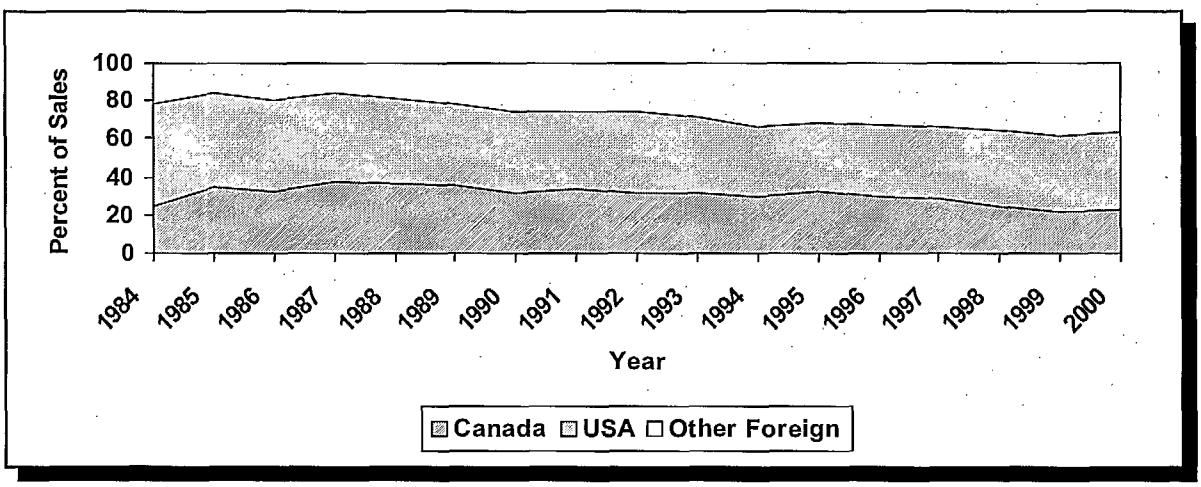
Canadian firms have enjoyed relatively free trade with the significant American market since the late 1950s as a result of the Canada-U.S. DDSA/DPSA.. There are, however, non-tariff barriers such as the security clearance process, the U.S. Small Business Set-Aside Program, the Buy America Act and the congressional scrutiny process.

The U.S. defence market is now shrinking, and other foreign sales are becoming more significant. Canadian companies are being helped in entering these foreign markets through business alliances and supplier relationships established with off-shore primes as a result of IRB requirements. Defence markets are difficult to penetrate because of IRB-type measures giving preference to domestic companies.

4 Source: Industry Canada http://strategis.ic.gc.ca/SSG/ad03265e.html

Since the slowdown in defence markets, all defence companies have attempted to move their skills and products towards commercial applications. The transition is challenging as the business attitudes and practices of the defence industry are not always suited to the commercial marketplace.

Figure 2-2: Canadian Aerospace and Defence Industry Exports[5]



5 Source: Industry Canada http://strategis.ic.gc.ca/SSG/ad03265e.html

3. Analysis of MCPs

This Chapter presents findings on the impacts of the 18 MCPs currently under contract in terms of IRB Canadian Content Value (CCV) and achievements and likely long-term benefits of the IRB requirements.

3.1 IRB CCV and Achievements

Eighteen ongoing and recently completed MCPs were reviewed. Information on the contract value and the IRB CCV was obtained from the original contract and the contract amendments. Information on the achievements was obtained from Industry Canada's verified numbers from the status reports.

The total contract value of the 18 MCPs was $5.7 billion. The IRB CCV is $4.4 billion in Canadian Content Value over a period of 19 years, from 1988 to 2006. Reported achievements, which cover a ten-year period from 1988 to 1997, amounted to $3.5 billion.

Details of the CCV and achievements for each of the 18 MCPs reviewed are provided in Appendix G, Table G-1 by project and in Table G-2 by year. Table G-2 shows the CCV, the incremental CCV, the achievements and the incremental achievements for each year over the 1988 to 2006 period. (A review of the incremental CCV and achievements is provided in Section 3.2 below.)

The last column of Table G-2 shows the average annual CCV over the 1988 to 2006 period, and the average annual achievements over the 1988 to 1997 period. The average annual figures take into account that many of the MCPs are ongoing, and on average, are only half completed.

3.1.1 Canadian Content Value

- Total CCV of $4.4 billion in industrial and regional benefits (IRBs), covering a period of 19 years from 1988 to 2006, consisting of:
  - $3.0 billion in direct benefits; and
  - $1.4 billion in indirect benefits.

- The CCV is distributed regionally as follows:
  - $1.2 billion in direct and indirect benefits in Western Canada;
  - $0.8 billion in direct and indirect benefits in Ontario;
  - $0.7 billion in direct and indirect benefits in Quebec;
  - $0.4 billion in direct and indirect benefits in Atlantic Canada; and
  - $1.3 billion in direct and indirect benefits were not specified to a region in Canada[1].
- Total *small business development* CCV of $321 million. Half of the 18 MCPs had small business CCV included in their contract. The small business CCV are included in the total IRB CCV of $4.4 billion.
- Total CCV of $187 million in *investments* in Canada. Only two of the 18 MCPs had investment CCV included in their contract. The investment CCV are in addition to the total IRB CCV of $4.4 billion.
- Total CCV of $721 million in *sales/purchases* in the future. Only three of the 18 MCPs had future sales/purchases CCV included in their contract. The sales/purchase CCV are in addition to the total IRB CCV of $4.4 billion.
- Total *technology transfer* CCV of $149 million. Only one of the 18 MCPs had a technology transfer CCV included in their contract. The technology transfer CCV are in addition to the total IRB CCV of $4.4 billion.

3.1.2 Achievements Compared to Canadian Content Value

This section compares total achievements (Table G-1) and average annual achievements (Table G-2) against Canadian Content Value (CCV).

- As noted in Table G-1, over a ten year period, from 1988 to 1997, 17 of the 18 MCPs (one MCP did not provide a report) have achieved a total of $3.5 billion in Industrial Benefits compared to a total CCV of $4.4 billion. Taking into account that many of the MCPs are ongoing, the average annual achievement is $389 million compared to an average annual CCV of $234 million (see Table G-2). This consists of:
  - $2.0 billion achieved in total direct benefits compared to a total CCV of $3.0 billion, or an average of $225 million achieved per annum in direct benefits compared to an average annual CCV in direct benefits of $156 million; and

1 There is a significant amount of IRBs among the MCPs (15 out of 18) which is not assigned to a region.

- $1.5 billion achieved in total indirect benefits compared to a total CCV of $1.4 billion, or an average of $165 million achieved per annum in indirect benefits compared to an average annual CCV in indirect benefits of $77 million.

- In terms of Regional Benefits, as noted in Tables G-1 and G-2, the achievements comprised:

  - $0.55 billion achieved in total direct and indirect benefits in Western Canada compared to a total CCV of $1.2 billion, or an average of $61 million achieved per annum in direct and indirect benefits compared to an average annual CCV of $64 million;
  - $1.1 billion achieved in total direct and indirect benefits in Ontario compared to a total CCV of $0.84 billion, or an average of $123 million achieved per annum in direct and indirect benefits compared to an average annual CCV of $44 million;
  - $0.56 billion achieved in total direct and indirect benefits in Quebec compared to a CCV of $0.68 billion, or an average of $62 million achieved per annum in direct and indirect benefits compared to an average annual CCV of $36 million;
  - $0.34 billion achieved in total direct and indirect benefits in Atlantic Canada compared to a CCV of $0.41 billion, or an average of $38 million achieved per annum in direct and indirect benefits compared to an average annual CCV of $21 million; and
  - $0.95 billion achieved in total direct and indirect benefits which were not specified to a region in Canada, or an average of $105 million achieved per annum. It should be noted that one MCP did not provide a report on achievements, and five MCPs did not show their achievements by region.

- Total achievement of $344 million in *small business development* (compared to a CCV of $321 million). Half of the 18 MCPs reported small business achievements (half had small business CCV in their contract). Small business achievements are included in the regional achievement figures (Table G-1).

- Total achievement of $74 million in *investments* in Canada (compared to a CCV of $187 million). Only two of the 18 MCPs reported investment achievements (two had investment CCV in their contract). The investment achievements are in addition to the total IRB achievements; also the two MCPs did not provide a regional breakdown of their achieved investments (Table G-1).

- Total achievement of $265 million in *sales/purchases* in the future (compared to a CCV of $721 million). Only two of the 18 MCPs reported sales/purchases achievements (three had future sales/purchases CCV in their contract). The sales/purchases achievements

are in addition to the total IRB achievements; also the two MCPs did not provide a regional breakdown of their achieved sales/purchases (Table G-1).

- Total *technology transfer* achievements of $940 million (compared to a CCV of $149 million). Only two of the 18 MCPs reported technology transfer achievements (only one had technology transfer CCV in their contract). Technology transfer achievements are in addition to the total IRB achievements; also the two MCPs did not provide a regional breakdown of their technology transfer achievements (Table G-1).

3.2 Incremental Impacts

We have estimated the incremental impacts using a combination of information gathered from interviews, file reviews, status reports and background knowledge (see Section 1.6.4). These incremental estimates are approximations of the impact of the IRB Policy on each project.

We provide three illustrations of where incrementality does/does not apply. First, the clearest example of incrementality applies to procurements with a foreign prime contractor. In these cases, it is highly likely that most if not all of the work would have gone to offshore companies if the IRB Policy had not been in place. The CCV has been increased as a result of the IRB Policy.

A second example involves procurements from the shipbuilding industry. The Canadian Shipbuilding Policy stipulates Canadian content, and for the shipbuilding industry, the IRB Policy would have no incremental impact since the shipbuilding portion of the contract would have gone to a Canadian company anyway. The CCV has not been increased because of the IRB Policy.

A third illustration points to limits on incrementality if a Canadian prime contractor is already located in one of the regions and the Canadian content value has already been maximized through an existing supplier network.

Our assessment of incrementality has been applied to direct benefits only, since it is these benefits which are directly related to the project. Indirect benefits, which are not directly related to the project, have been assessed as being entirely (100%) incremental since these benefits would not have happened without the IRB Policy. Our assessment of the incremental impacts for each MCP is provided below.

MCDV — Canadian prime due to the shipbuilding policy led to Canadian content. Incrementality estimated at 30% for direct benefits.

CC-150	Canadian content attributable to sourcing in Canada. Incrementality estimated to be negligible.
MIL-LAV	Canadian content attributable to sourcing in Canada. Incrementality estimated at 20% for direct benefits.
LAV-RECCE	Canadian content attributable to sourcing in Canada. IRB requirements influenced electronics sourcing in Canada. Incrementality estimated at 30% for direct benefits.
CC130	Unknown. No response from the prime contractor.
LSVW	Canadian content attributable to sourcing in Canada; although sourcing was influenced by IRB requirements. Incrementality estimated at 80% for direct benefits.
HLVW	Incrementality estimated at 80% for direct benefits.
CANTASS	Expanded expertise in towed array systems. Little or no incrementality.
TTT	Foreign prime contractor. Incrementality estimated at 70% for direct benefits.
TCCCS	Without IRBs, this work would have been sourced offshore. Incrementality estimated at 100%.
ISPR	Canadian content is attributable to sourcing in Canada; sourcing is only partially attributable to IRBs; client required Canadian "teaming" presence in Canada. Incrementality estimated at 20% for direct benefits.
CAATS	Without IRBs, this work would have been sourced offshore. Cost premiums possible because of requirement to do work in Canada. Incrementality estimated at 100%.
MAATS	This work was directed to the CAATS prime contractor. Incrementality estimated at 100%.
UTTH	Most of the Canadian content cannot be attributable to IRBs (existing supplier base). Additional military requirements resulted in some

	regional supplier expansion. Incrementality estimated at 10% for direct benefits.
CFSSU	Canadian content is mostly attributable to sourcing in Canada; sourcing cannot be attributable to IRB requirements. Incrementality estimated at 10% for direct benefits.
CP140/AMSA	Foreign prime contractor. Incrementality estimated at 70% for direct benefits.
SRAAWH	All Canadian content and regional content is attributable to IRBs; significant subcontract let in Canada. Incrementality estimated at 100%.
EST	Canadian content is attributable to sourcing in Canada; sourcing cannot be attributable to IRB requirements. Incrementality estimated to be negligible.

Appendix G, Table G-2, shows total CCV, total incremental CCV, total achievements and total incremental achievements for each year over the 1988 to 2006 period. Estimates of the regional incremental achievements could not be made due to the significant amount of achievements that were not specified to a particular region. At the national level:

- Based on a total CCV of $3.0 billion in direct benefits: the 18 MCPs have total direct achievements of $1.5 billion, of which $1.0 billion is estimated to be incremental;
- Based on a total CCV of $1.4 billion in indirect benefits: the 18 MCPs have total indirect achievements of $1.5 billion, of which all, or $1.5 billion is estimated to be incremental;
- Based on a total CCV of $4.4 billion in direct and indirect benefits: the 18 MCPs have total direct and indirect achievements of $3.5 billion, of which $2.5 billion is estimated to be incremental.

Taking into account that many of the MCPs are ongoing, the CCV, achievements and incremental achievements expressed in terms of average annual figures are as follows:

- Based on an average annual CCV of $156 million in direct benefits: the 18 MCPs have average annual direct achievements of $225 million, of which an average of $113 million per annum is estimated to be incremental;

- Based on an average annual CCV of $77 million in indirect benefits: the 18 MCPs have average annual indirect achievements of $164 million, of which all, or an average of $164 million per annum is estimated to be incremental;

- Based on an average annual CCV of $234 million in direct and indirect benefits: the 18 MCPs have average annual direct and indirect achievements of $389 million, of which an average of $277 million per annum is estimated to be incremental.

3.3 Long-Term Impacts

Long-term benefits such as small business development, investments, sales/purchases, technology transfer are not always recorded by the contractors in quantitative terms. We have, therefore, drawn on industry and government interviews and documentation where possible to assess the qualitative and long-term impacts for each MCP. These are listed by category of benefit (eg Canadian content, technology transfer, alliances etc.) in Appendix G, Table G-3.

We provide below a summary of Table G-3.

- Six of 18 MCPs reported that the level of *Canadian content* had been increased because of the IRB Policy. Of those reporting an increase, five indicated that the work would have gone completely offshore, while one indicated that more Canadian suppliers have been used. Many of these offshore companies have established long-term relationships with Canadian suppliers including small businesses, transferred technology to Canadian companies, and, in some cases, given subsidiary companies a product mandate.

- Six of the 18 MCPs commented on the *regional benefits* component of the IRB Policy. Of those commenting, three are in favour of the RB component, two are against, and one was neutral. For those against RBs, the Policy does not support the business case for using existing suppliers, and caused them to use companies that they would not normally have used. For those in favour of RBs it has lead to long-term sustainable business relationships as well as helping the companies to negotiate a better deal (e.g., technology transfer) with their foreign parent.

- Only one of the 18 MCPs commented on the *small business development* component of the IRB Policy, even though nine of the MCPs had small business development CCV in their contracts. The one comment was favourable noting that the Policy has lead to long-term sustainable business relationships with small firms and this has been good for them and for Canada.

- Four of the 18 MCPs commented on the *technology transfer* aspect of the IRB Policy; only one MCP had technology transfer CCV in their contract. Of those reporting, one was unclear as to the significance of the technology transferred and the other three reported positive impacts including the acquisition of new technology, improved skills, qualification as a supplier of the technology, acquisition of world product mandate and export sales, replacement of a foreign company as the supplier of the technology, and long-term sustainable business relationships with foreign companies.

- Two of the 18 MCPs commented on the *investment* component of the IRB Policy; and two MCPs had investment CCV in their contract. Of those reporting, both reported investment by a foreign company to establish plants and a R&D program in Canada.

- Five of the 18 MCPs reported that they have established *long-term sustainable business relationships* with both Canadian and foreign companies as a result of the IRB Policy.

- Eight of the 18 MCPs commented on *exports*. Of those reporting, six indicated increased access to export markets through world product mandates and long-term alliances with foreign companies, while two reported no subsequent exports as a result of the IRB Policy.

- Two of the 18 MCPs indicated that the IRB Policy has created *sustainable employment* for Canadians, with a significant proportion requiring high technology skills.

- Seven of the 18 MCPs commented on the *administration/overhead cost* aspects of the IRB Policy. Of those reporting, three indicated that there are increased incremental costs to administering and reporting on the IRB Policy, while four indicated that the administrative costs were negligible or a normal cost of doing business.

3.4 Summary of IRB Impacts in MCPs

The overall impact of the IRB Policy on MCPs is generally positive. Fourteen of the 18 MCPs have positive impacts compared to four MCPs which have negligible impacts. An overview of the IRB impacts for each MCP follows:

Table 3-1: Summary of IRB Impacts in MCPs

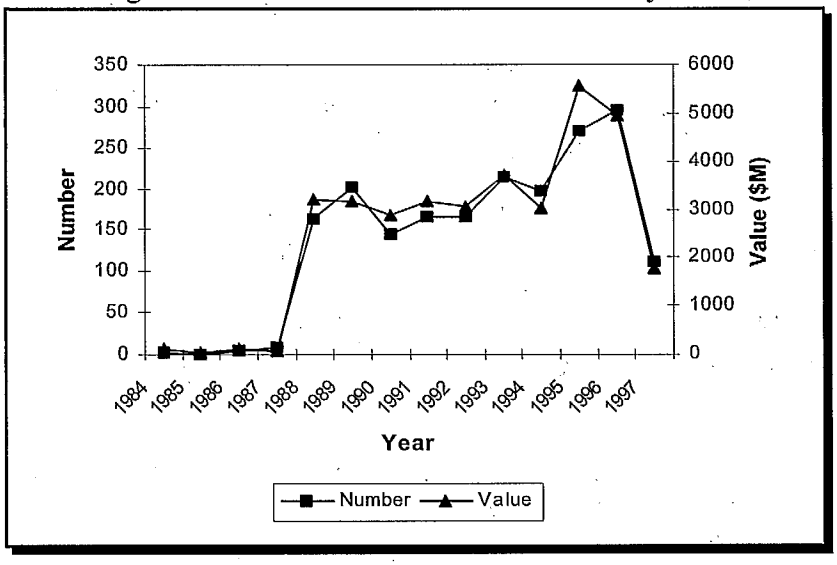
MCDV	New technology for shipyards and software technology; increased supplier base.
CC-150	Very little long-term benefits.
MIL-LAV	Increased Canadian supplier base.
LAV-RECCE	Increased Canadian supplier base.
CC-150	Continued relationship with Canadian supplier base by foreign prime contractor.
LSVW	Increased capability of Canadian prime contractor and expanded Canadian regional supplier base.
HLVW	Negligible long-term benefits. Company was sold and did not retain this type of business.
CANTASS	Prime contractor gained skills and knowledge but no other sustainable benefits.
TTT	Continued relationship with Canadian supplier base by foreign prime contractor.
TCCCS	High-tech export capability in Canadian prime contractor.
ISPR	Increased supplier base in regions. Enhanced product mandate for Canadian divisions of the prime contractor.
CAATS	High-tech export capability in Canadian prime contractor.
MAATS	MAATS is ongoing. IRB achievements will exceed commitments.
UTTH	Negligible long-term benefits.
CFSSU	Negligible long-term benefits. The systems integration sector in Canada is already mature and capable of competing for domestic and offshore projects.
CP140 /AMSA	Canadian suppliers gained exposure/credibility to supply Lockheed future requirements.
EST	Company world product mandate for similar systems; R&D investment by Ericsson in Montreal.
SRAAWH/ ERYX	High quality skills enhancement in Canadian companies; good prospects for foreign sales.

4. Analysis of PRCs

The following sections follow the analysis of PRC projects from the population of all PRCs through to a detailed examination of those PRCs with IRBs. Section 4.1 presents the statistics on all cases reviewed by the PRC committee. Section 4.2 then presents the statistics those which the PRC committee felt should have some IRB component. Section 4.3 presents the results of the file review of those PRCs with IRBs for which the files could be identified and found. Section 4.4 presents the interviews with the PRC companies.

4.1 PRC Record of Review Statistics

Figure 1-1: **Number and Value of PRCs by Year**



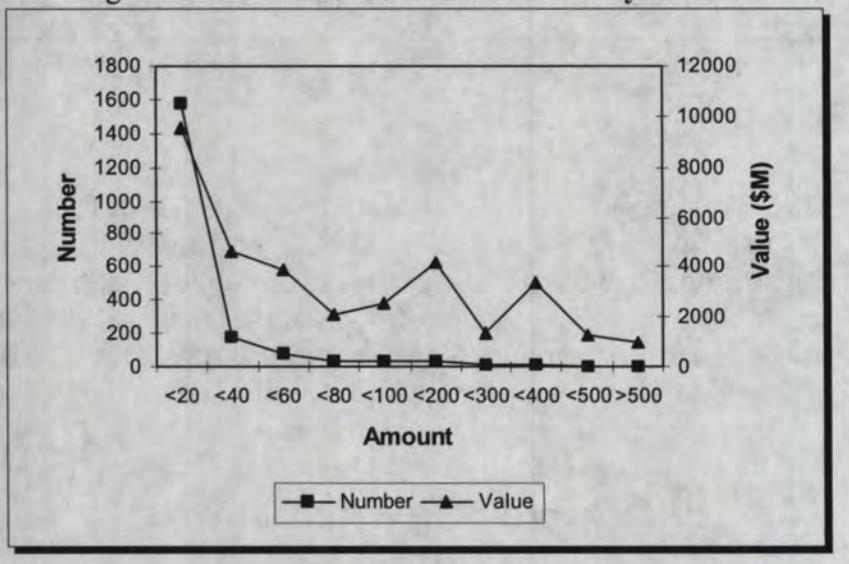
Between 1984 and 1997, the Procurement Review Committee reviewed 1,946 cases[1]. Of these, the majority were from 1988 onward, averaging about 200 per year in that period (see Figure 4-1, left scale). The total value of the cases reviewed was $34.78 billion, averaging $3.44 billion[2] per year from 1988 onward (see Figure 4-1, right scale). Both the total number and value of the PRCs reviewed has tended to increase over time. The numbers for 1997 are incomplete. Note: tables of the numbers used in all graphs are contained in Appendix H.

1 As recorded in the ACOA database.

2 These values are estimates from the PRC Record of Review. Actual contract values may be higher or lower.

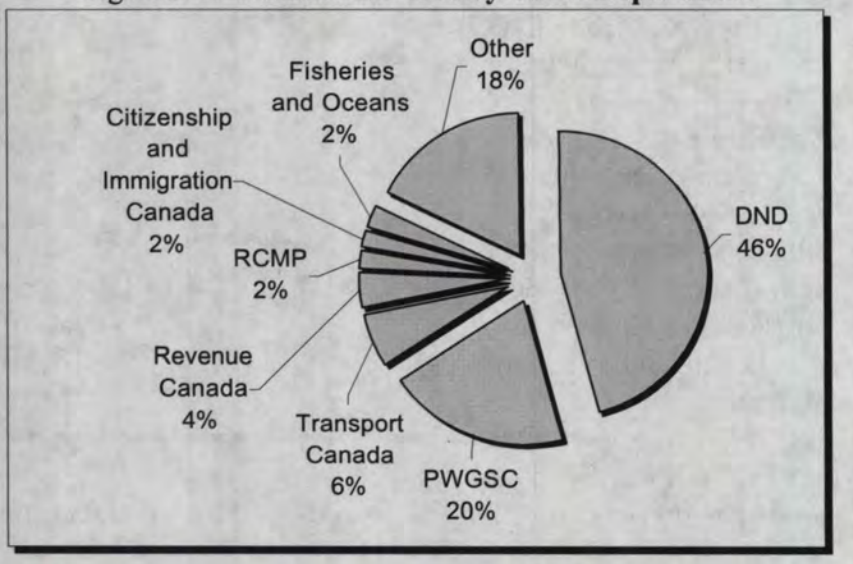
The distribution of the size of the PRCs is shown in Figure 4-2, left scale. 81% are under $20 million (but presumably over $2 million, the threshold to qualify as a PRC). 2.7% are over the $100 million threshold for MCPs. The value of the PRCs within these size categories is shown in Figure 2, right scale. 28% of the total value of the PRCs is in projects under $20 million. 33% of the total value is in projects over $100 million. Note: the scale of the horizontal axis in Figure 2 changes at the < 100 point.

Figure 2-1: **Number and Value of PRCs by Amount**



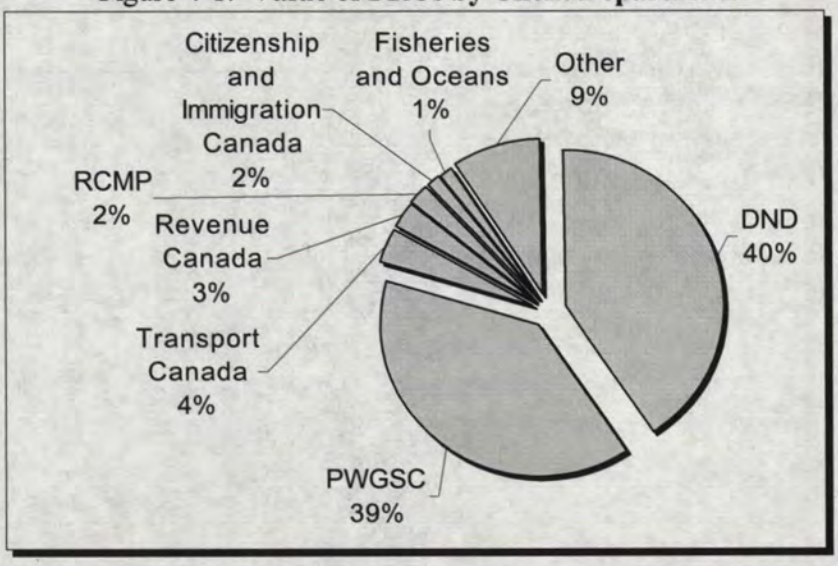
The client departments for the majority of PRC projects are DND, PWGSC, and Transport Canada (see Figure 3). DND accounts for 46% of the projects, PWGSC 20%, and Transport Canada 6%. In total, there are 47 client departments in the PRC database. A number of the projects attributed to Transport Canada are now with NavCan. The proportion of Transport Canada projects can therefore be expected to be less in the future.

Figure 3-1: **Number of PRCs by Client Department**



The value of the PRCs by client department follows a similar trend (see Figure 4). DND accounts for 40% of the value, PWGSC 39%, and Transport Canada 4%.

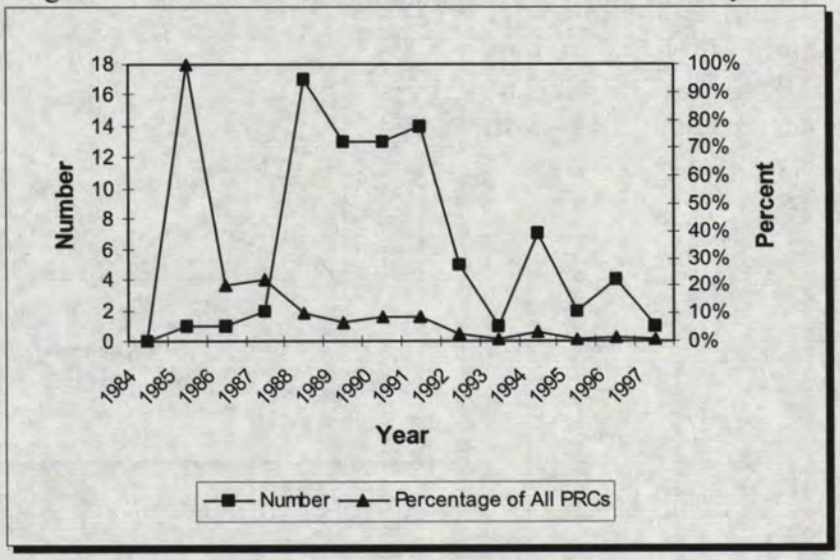
Figure 4-1: **Value of PRCs by Client Department**



4.2 PRCs with IRBs

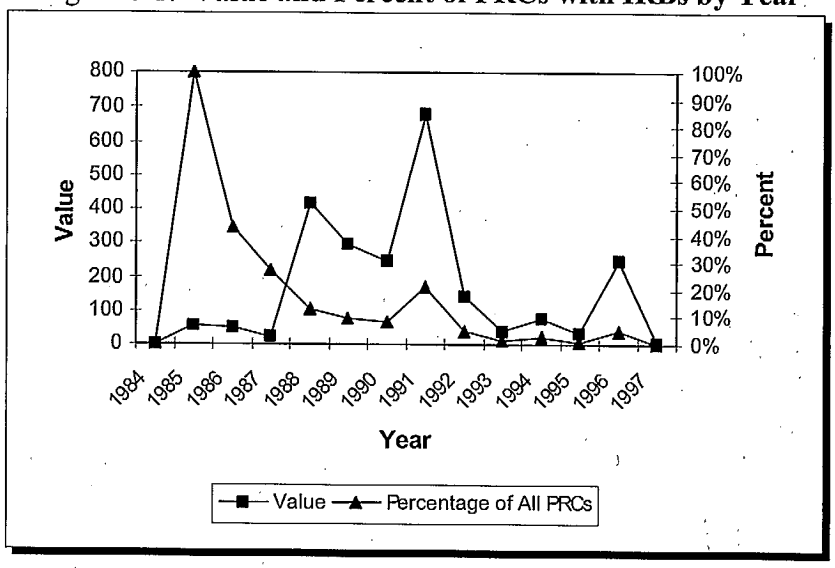
Of the 1,946 PRCs, 81 (4.1%) were found to have some recommendation for Canadian Content, Industrial Benefits, Regional Benefits, or Small Business Benefits. The distribution of these over time by number and percentage of the total PRCs is shown in Figure 4-5. There is clearly an increase in IRB activity in the 1988-1991 period.

Figure 5-1: **Number and Percent of PRCs with IRBs by Year**



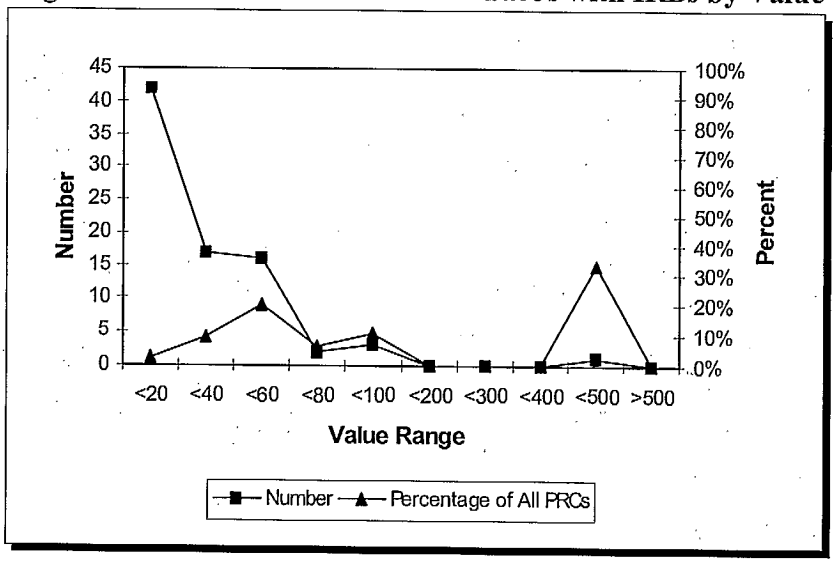
Of the $34.78 billion total value of PRCs, $2.3 billion (6.6%) were found to have IRB recommendations. The distribution of these over time by value and percentage of the total PRC value is shown in Figure 6.

Figure 6-1: **Value and Percent of PRCs with IRBs by Year**



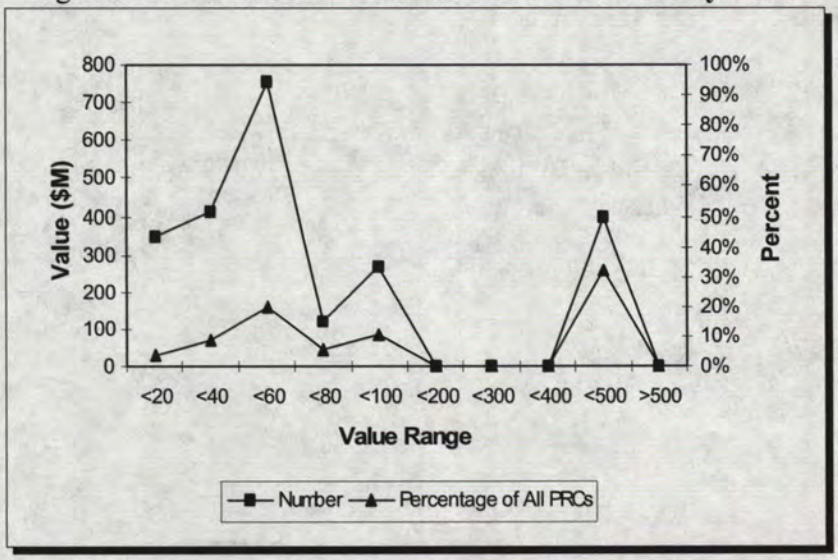
The distribution of the size of the PRCs with IRBs is shown in Figure 7, left scale. 52% are under $20 million and 1% are over $100 million. The percentage of PRCs with IRBs by size is shown in Figure 7, right scale.

Figure 7-1: **Number and Percent of PRCs with IRBs by Value**



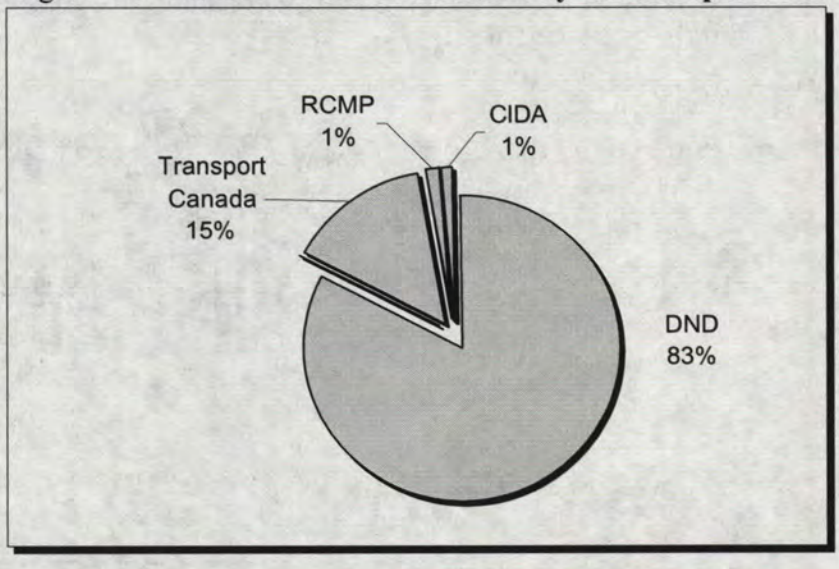
The value of the PRCs with IRBs within these size categories is shown in Figure 8, left scale. 15% of the value of PRCs with IRBs is in projects under $20 million and 17% is in projects over $100 million. The percentage of the value of PRCs with IRBs by size is shown in Figure 8, right scale.

Figure 8-1: **Value and Percent of PRCs with IRBs by Value**



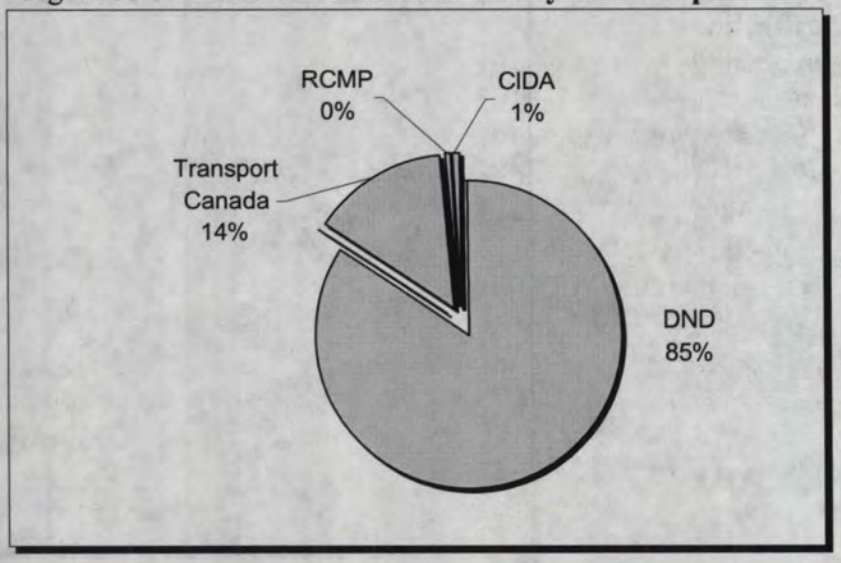
The only client departments for PRCs with IRBs were DND, Transport Canada, RCMP and CIDA (see Figure 9). DND accounts for 83% of the PRCs with IRBs, Transport Canada 15%, and RCMP and CIDA 1% each.

Figure 9-1: **Number of PRCs with IRBs by Client Department**



The value of PRCs with IRBs by client department is shown in Figure 10. DND accounts for 84% of the value, Transport Canada 14.5%, CIDA 1%, and RCMP less than ½ %.

Figure 10-1: **Value of PRCs with IRBs by Client Department**



The distribution of the IRB recommended benefit type is shown in Figure 11. Most PRCs recommended more than one benefit type, and some recommended them all.

Figure 11-1: **Percentage of PRCs Recommending Benefit Type**

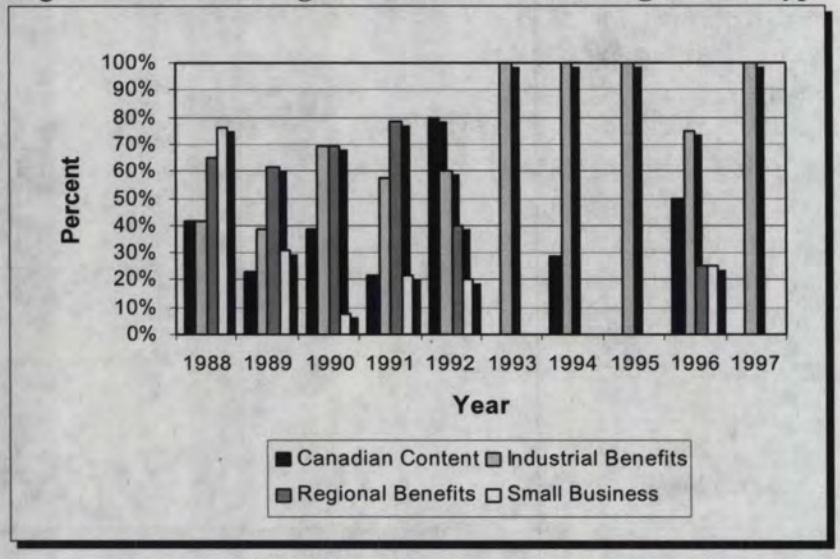
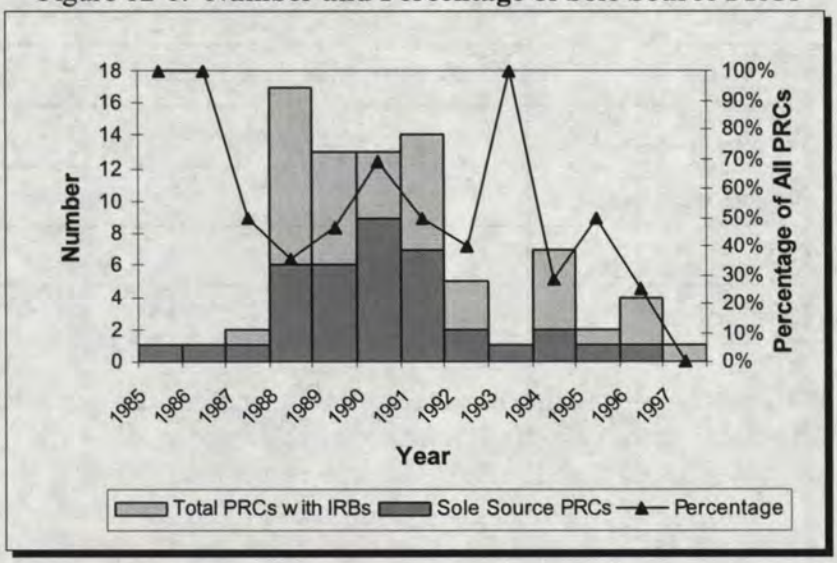


Figure 12 shows the distribution over time of PRCs with IRBs that were awarded on a sole source basis. On average, about 50% of the cases are sole sourced. The impact of sole-sourcing on the government's ability to require IRBs is not clear. In a competitive situation, companies may promise more IRBs to make their proposal more attractive. However, in a competitive situation, the government may have less opportunity to negotiate with the winning company. In a sole-source situation, the government may have more opportunity for negotiation, but the company may feel less need to concede IRB commitments. The empirical evidence on this matter will be examined in the next section.

Figure 12-1: **Number and Percentage of Sole Source PRCs**



4.3 PRC File Statistics

The PRC analysis results to this point have been based on the PRC 'Record of Review'. This record is completed before the RFP is issued and the contract is awarded. During that process, many things can change - in particular the IRB terms and the value of the contract. The analysis in this section is based on information from the PWGSC contract files and shows how the recommendations of the PRC committee were translated into reality.

81 PRCs were identified as having recommendations for IRBs. In 20 of these cases the file could not be identified or found. In 10 cases the project was cancelled before a contract was awarded. That leaves 51 cases where some information could be obtained on which to base the analysis of this section. The values in Table 4-1 are based on the 'Record of Review' estimate. Actual contract values may be higher or lower.

Table 4-1: PRC Status

	Number	Value ($M)
Record of Review	81	2,315
No Information	20	526
Cancelled	10	228
Remaining	51	1561

It must be noted that in many of these cases, some of the desired information was unavailable from the file. Where possible, information was assembled from a variety of sources in the file and from discussions with PWGSC officers.

While in the PRC Committee's opinion there may be reason and opportunity for some PRCs to have IRB associated with them, it would seem that these intentions are not always realized. Table 4-2 shows that of the 51 PRCs on which files could be found, for 43% no evidence could be found that IRBs were associated with the contract. In some of these cases, IRBs may have been provided as a result of informal negotiations and agreements, of which there is no record in the file or in the memories of remaining PWGSC officers.

Table 4-2 also shows that there does not appear to be any significant correlation between success in obtaining IRBs on a contract and whether the prime contractor is Canadian or foreign.

Table 4-2: PRCs with Realized IRBs by Prime Contractor Type

	Domestic Prime Contractor		Foreign Prime Contractor		Unknown Prime Contractor		Total	
With IRBs	10	40%	14	56%	0	0%	24	47%
No IRBs	11	44%	11	44%	0	0%	22	43%
Unknown	4	16%	0	0%	1	100%	5	10%
Total	25	100%	25	100%	1	100%	51	100%

On the other hand, Table 4-3 shows that there is a reasonably greater likelihood of obtaining IRBs from competitively sourced procurements.

Table 4-3: PRCs with Realized IRBs by Contractor Sourcing

	Sole Source		Competitive Source				Total	
With IRBs	11	39%	13	57%			24	47%
No IRBs	16	57%	6	26%			22	43%
Unknown	1	4%	4	17%			5	10%
Total	28	100%	23	100%			51	100%

Figure 13 shows the value of Canadian content for each region by year. Canadian content includes both direct and indirect benefits. This figure differs from previous figures in that the value shown for each year is not based on the data from the PRC review, but rather the actual spending in the year estimated from the information in the project file. The value of Canadian content averages about 47% of the total value of the contracts.

Figure 13-1: **Value of Canadian Content by Year**

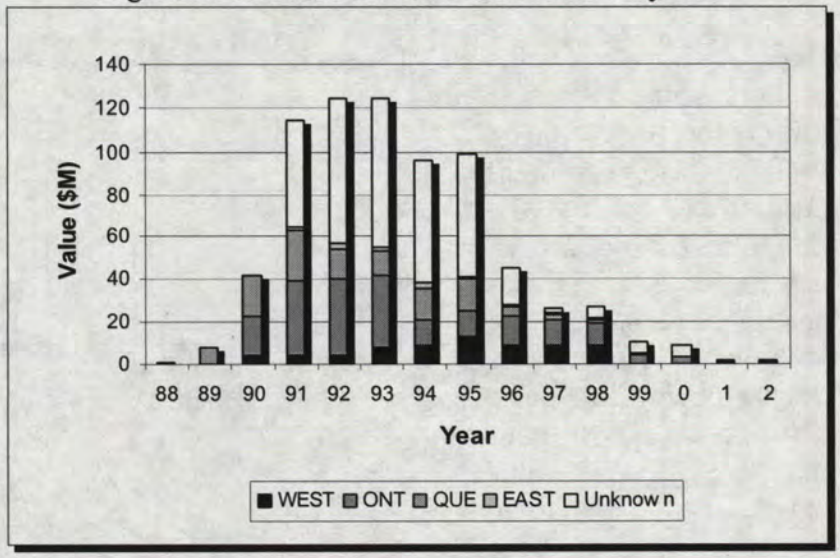


Figure 14 shows how the Canadian content money is distributed among the regions. It is evident that the bulk of the money goes to Ontario, followed by Quebec. However, the location is often unspecified by the contractor (for example, the location of future offsets may not be specified at the time of the contract).

Figure 14-1: **Distribution of Canadian Content by Region**

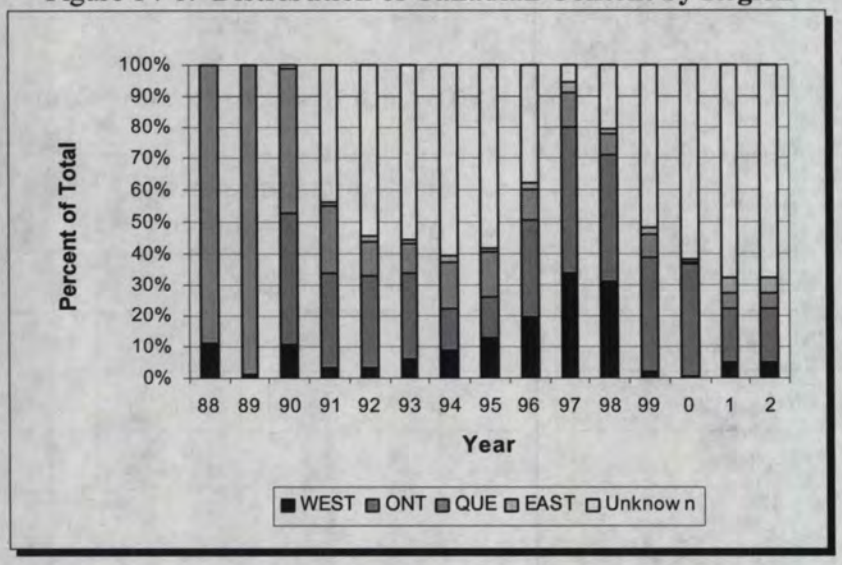


Figure 15 shows the value of incremental Canadian content for each region by year. Incremental Canadian content is the Canadian content shown in Figure 13 which has been decreased by the amount which was deemed would have occurred anyway without the IRB Policy. The value of incremental Canadian content averages about 30% of the total value of the contracts, and 63% of the Canadian content.

Figure 15-1: **Value of Incremental Canadian Content by Year**

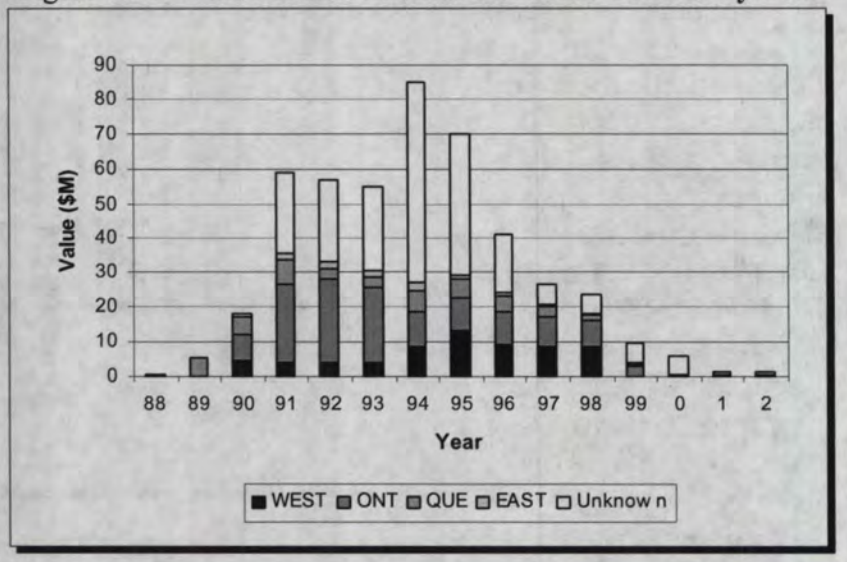


Figure 16 shows how the incremental Canadian content money is distributed among the regions. The pattern is similar to that for Canadian content.

Figure 16-1: **Distribution of Incremental Canadian Content by Region**

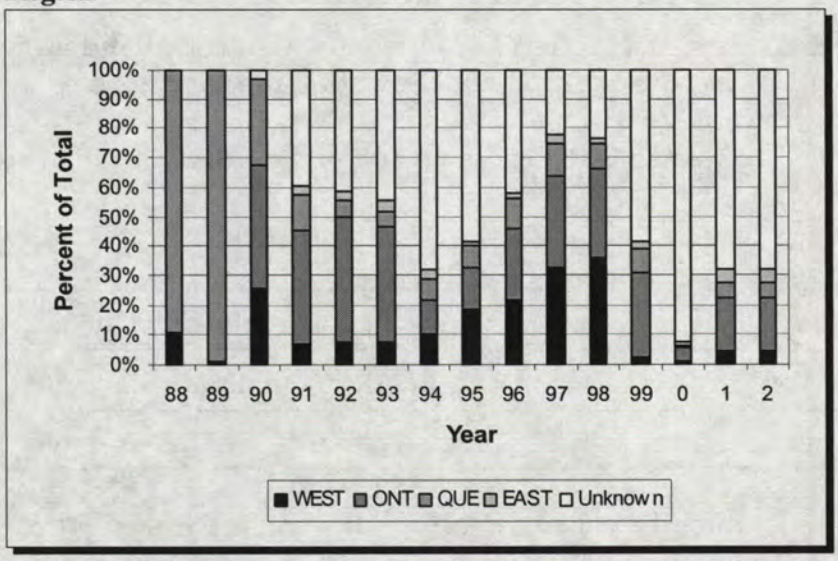
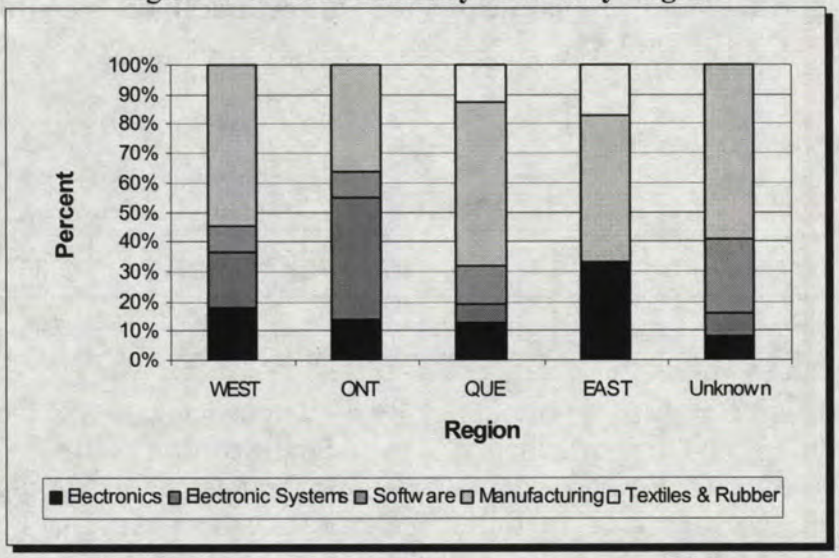


Figure 17 shows the industry sectors involved in the PRC contracts by Region. Ontario is strong in electronic systems work. Software work is relatively evenly distributed among the West, Ontario, and Quebec. Manufacturing is important in all of the regions. In general, the work provides very high quality jobs.

Figure 17-1: **PRC Industry Sectors by Region**



4.4 PRC Company Interviews

Responses to the interview questions were coded and are presented here. Section 4.5 contains comments from the respondents that cannot be captured in these statistics.

1. **Are you better off as a result of the IRB Policy than you would be otherwise?**

Table 4-3

	West		Ontario		Quebec		East		Total	
Yes	2	67%	3	43%	2	50%	5	83%	12	60%
No	1	33%	4	57%	2	50%	1	17%	8	40%

Support for the policy is clearly highest in the Eastern and Western regions, while support in Ontario is mildly negative. On the whole, while a few respondents were either very positive or negative to the Policy, regardless of the direction of their support.

2. **Would your participation in the contract have been different in the absence of the IRB Policy?**

Table 4-4

	West		Ontario		Quebec		East		Total	
Yes	3	100%	4	57%	2	50%	6	100%	15	75%
No	0	0%	3	43%	2	50%	0	0%	5	25%

In spite of the response to the previous question, a clear majority felt that the Policy had influenced the participation of firms on the contract. This is especially true in the Eastern and Western regions where all respondents felt that the Policy had influenced participation in the contract. In those cases where the policy had not affected the choice of subcontractors, it was because the firm chosen was felt to have such unique capabilities that there were no alternatives. It was also felt that subcontractors were not always aware of the influence the IRB policy had on their involvement in a contract.

3. **Have the IRB obligations on the contract been achieved?**

Table 4-5

	West		Ontario		Quebec		East		Total	
Yes	3	100%	6	86%	2	50%	5	83%	16	80%
No	0	0%	1	14%	2	50%	1	17%	4	20%

It is clear that IRB contractual obligations are almost always met, and usually exceeded. Where obligations were not achieved, it was usually only regarding one aspect (for example, not meeting obligations for one of a number of subcontractors).

4. **What sustainable impacts have resulted from the IRB provisions?**

Table 4-6

	West		Ontario		Quebec		East		Total	
Market Access	3	100%	3	43%	2	50%	5	83%	13	65%
Alliances	0	0%	2	29%	0	0%	5	83%	7	35%
Technology Transfer	1	33%	1	14%	1	25%	2	33%	5	25%
Skills Development	3	100%	5	71%	1	25%	4	67%	13	65%

Market access was the most important benefit, especially for those companies in the western and eastern regions. Skills development was also very important. When alliances were mentioned, it was usually in terms of a long-term supplier arrangement, rather than in a business development context. Alliances were extremely important in the eastern region. Technology transfer was not a common benefit.

5. **Have their been any incremental costs of the IRB provisions?**

Table 4-7

	West		Ontario		Quebec		East		Total	
Yes	1	33%	2	29%	0	0%	3	50%	6	30%
No	2	67%	5	71%	4	100%	3	50%	14	70%

There was an almost unanimous opinion that there were no costs associated with the IRB provisions, or if there were cost, that they were minimal and mostly administrative in nature. A number of respondents felt that the costs might even be negative since the Policy resulted in lower cost suppliers being used.

6. **Can subsequent sales be attributed to the IRB provisions?**

Table 4-8

	West		Ontario		Quebec		East		Total	
Yes	2	67%	3	43%	2	50%	5	83%	12	60%
No	1	33%	4	57%	2	50%	1	17%	8	40%

Firms were sometimes able to obtain more work of the same type in the future. Firms in the eastern and western regions were most likely to achieve subsequent sales. There was little evidence of firms leveraging the IRB opportunities into new business development for new markets or products. It was felt that the main benefits of the Policy are to keep money and jobs in Canada in the short-term. It was also felt that the regional aspect of the policy increases the visibility of regional companies.

7. **Has the contract resulted in any sustainable employment.**

Table 4-9

	West		Ontario		Quebec		East		Total	
Yes	2	67%	6	86%	2	50%	5	83%	15	75%
No	1	33%	1	14%	2	50%	1	17%	5	25%

Most of the employment created as a result of an IRB requirement was sustained. However, the numbers were usually small and there was little evidence of the contract being leveraged to multiply the benefits into more jobs in the future.

4.5 Respondent Comments

This section provides some of the comments provided by respondents during the interviews which may not be captured in the statistics of the previous section. These comments are usually isolated opinions and are currently unsupported. However, since they are concerned with process and how the policy is implemented, they will be investigated further in Phase II of this evaluation.

- Firms new to the defence industry may underestimate the costs of doing business in this sector and end-up worse off as the result of a contract than they would have been without it.
- The value of applying the IRB Policy to Canadian prime contractors is questionable.
- Requirements for Canadian contractors and technology transfer are often for reasons of national security, and not a result of the IRB Policy.
- There may be some confusion in government about which department has responsibility for IRBs.
- Government may be losing the expertise needed to negotiate international bilateral IRB agreements for defence procurement.
- Ontario firms may be at a disadvantage.
- Moving work out to the regions may fragment capacity and decrease national competitiveness.

5. Objectives Achievement

In this Chapter, we address the evaluation issues given in Appendix B related to the rationale, objectives, and impact of the Policy.

5.1 Summary

The tangible, short-term impacts of the IRB Policy on the Canadian economy have been positive. These impacts are most pronounced in the Eastern and Western regions. The most significant impact has been to increase the Canadian content of defence procurement in general, which has resulted in the creation of high-quality jobs. The Policy has also been successful in ensuring that regional and small business have the opportunity to participate in these contracts. While the absolute value of the work flowing to the regions has not been disproportionately high, the benefits to regional companies have been very important. The tangible costs of the Policy are considered to be very low.

5.2 Program Rationale

5.2.1 Issue 1: Public Interest

In general, the IRB Policy is seen to operate in the public interest because it supports industrial activity in Canada that might otherwise go offshore. This has been the case particularly where an offshore prime has had to satisfy IRB requirements by establishing a Canadian capability and establishing a Canadian supplier network. The public has benefited through the direct creation of jobs and the export business generated by these new or expanded contractors and suppliers.

5.2.2 Issue 2: Legal Mandate

The IRB Policy helps to fulfil the mandates of Industry Canada and the Regional Agencies. However, given the breadth of their interests and the relatively small share of total government procurement subject to the Policy, the Policy is considered important, but not essential, to achieving their industrial and regional development objectives. WD is unique

among the Regional Agencies in that its Act has a specific reference to industrial and regional benefits giving the Minister responsibility for such benefits in the West.

In the absence of the Policy, the industrial and regional benefits from procurements would be handled on a case by case basis. Since, politically, there will still be a need to seek Canadian content in procurements, IRB requirements would have to be imposed with Cabinet approval, creating an additional administrative burden. The IRB Policy simplifies the process.

5.2.3 Issue 3: Appropriate Role

The IRB Policy is an appropriate role for the federal government in promoting and developing an industrial capability in Canada. In meeting its defence commitments, in particular, Canada has to import more than it exports, and using these procurements to strengthen the Canadian industrial base has always had wide support. In the transport and information technology sectors, also covered by the Policy, Canadian industry has been in a better position to meet procurement demands but, again, it is viewed as appropriate for the government to apply the Policy to transfer technology or bring new technology investments from abroad.

Australia, the Netherlands, Great Britain, and Norway, among others, are in the same position as Canada and have similar policies. The United States, on the contrary, is a major arms producer and a net exporter, and is not in favour of IRB policies, although that country has other policies protecting domestic industries.

5.3 Program Objectives

5.3.1 Issue 4: Strategic Goals

The IRB Policy, as approved by Cabinet in May, 1986, provides the framework for using federal procurement as a lever to promote industrial and regional development objectives. This policy statement established long-term industrial and regional development as a primary objective for major procurements.

The broad goals of the Policy are supported by IRB strategies that are prepared for selected MCPs and PRCs. The strategies consider the particular opportunities offered by the individual procurements and propose the objectives to be achieved in the contract, usually in fairly general terms related to Canadian content, regional distribution and small business development. Special initiatives are specified for some procurements, such as technology

transfer, alliances/joint ventures, market development, skills development, investments and R&D.

The degree of success in translating the IRB strategic goals into project objectives varies. In general, achievement of Canadian content has been excellent, regional benefits has been good, and small business development has been fair. Formal requirements for special initiatives such as technology transfer are rare - though there is evidence that such benefits occur as a matter of course.

MCPs tend to have more formal arrangements, more extensive requirements, and more structured reporting and monitoring of IRBs compared to PRCs. IRB strategic goals appear to be effectively translated into project objectives.

The IRBs of PRC projects are primarily Canadian content and regional benefits. Recommendations for IRB goals from the Review Committee are not translated effectively into project objectives, occurring in only half of the cases.

5.3.2 Issue 5: Barriers

The state of the world defence industry, and the relative position of Canadian companies in that industry, limits the opportunity for substantial long-term economic impacts from the Policy. It is difficult for Canadian companies, and especially small businesses, to sustain a capability in this sector because the market in Canada is limited and access to foreign defence markets is often protected and highly competitive. Furthermore, the Canadian industry is made up of niche players which again limits potential market opportunities unless a long-term supplier relationship with a foreign prime has been established. The difficulty in commercializing defence technologies is another barrier.

The IRB Policy has created new suppliers in the regions with fully acceptable performance. The wide distribution of suppliers in a particular sector can, however, prevent the companies and the sector itself from capturing the synergistic benefits of a clustering approach. Porter[1] and others point to the advantages to the growth of firms in high technology areas of the geographic proximity of suppliers and allied companies because of people mobility, a skill base, risk financing and joint marketing possibilities.

1 Porter, M., the Competitive Advantage of Nations, London, Macmillan, 1990.

The emphasis in the Policy on regional development creates a trade-off, in some instances, between seeding new developments in a region and consolidating Canada's expertise in existing clusters. There is some evidence that the new regional developments could be the beginnings of industrial clusters in the Atlantic and Western regions.

5.4 Program Impacts and Effects

5.4.1 Issue 6: Actual Impacts and Effects

The impacts of the IRB Policy are subtle and complex. As for so many economic policies, the benefits created by the IRB Policy in one part of the economy can create inequities for other parts. How and when to implement the Policy becomes a juggling act between doing the most good and the least harm. Since the impacts are difficult to measure and slow to react, choosing the correct course will never be easy.

Impact on the Economy

The economic impacts of the Policy consist mostly of increasing the Canadian content of work which otherwise would have been done offshore. There is little evidence of this work being leveraged into significant business development opportunities.

The Policy has been applied primarily to large defence procurements. There are few opportunities to apply it elsewhere because of trade agreements and the characteristics that a project needs to achieve IRBs. The privatization of NavCan has further reduced these opportunities.

The Policy has been successful in increasing the visibility of companies in the western and eastern regions. The benefits of this are large compared to the relatively small value of the work that flow to these regions.

The Policy has not been a particularly successful mechanism for promoting small business development beyond the firms in the regions, which are typically small, and which benefit from the regional provisions of the policy.

In order to assess the impact of the Policy, Statistics Canada's Open Interprovincial Input-Output Model was applied to the achievements and incremental achievements for the MCPs and PRCs over the 1988 to 1997 period.

Figure 5-1 shows the impact on GDP and employment. It should be noted that the Input-Output Model estimates GDP to be less than the achievements due to leakages in the economy. These leakages include foreign imports, interprovincial imports, and inventories

and other commercial leakages. The Model estimates a leakage of about 34% of the Canadian Content.

The Model estimates that employment results from the GDP impact at a rate of about one person-year for every $82,600. It should be noted that these employment figures do not necessarily imply the creation of new jobs.

Table 5-1: Summary of Input/Output Analysis

	MCP	PRC	Total
Achievement			
Canadian Content	$3,500,000,000	$981,000,000	$4,481,000,000
Impact on GDP	$2,313,000,000	$648,000,000	$2,961,000,000
Person-Years Employment	27,985	7,844	35,829
Incremental			
Canadian Content	$2,494,000,000	$618,000,000	$3,112,000,000
Impact on GDP	$1,575,000,000	$390,000,000	$1,965,000,000
Person-Years Employment	20,688	5,127	25,815

Table 5-2 compares the distribution of the impact of the Policy as calculated by the Input-Output Model to the actual GDP distribution by region. The impact of the policy on GDP is a reasonable reflection of the actual GDP distribution, indicating that the impact of the policy has no significant regional bias. One would not expect the policy impact to mirror the actual GDP distribution since the economies of the regions have different economic foundations. For example, the economy of the West has a large resource component. Since the procurements affected by the Policy emphasize manufacturing, software, and electronics, the portion of the procurements which can be expected to performed in the West will be less than the West s share of the national GDP

Table 5-2: Distribution of Impact

	Policy Impact on GDP	Actual GDP
West	19.5%	32%
Ontario	40%	40%
Quebec	30%	22%
East	10.5%	6%

Impact on Trade

The Policy is inconsistent with the trend towards more liberalized domestic and international trade policies and the scope for applying the policy may be reduced in the future. However, the Policy is currently similar to those of many other nations and will remain an important instrument until mutual reductions in defence procurement trade barriers can be negotiated. The Policy, and its foreign counter-parts, may be restricting the access of large, export-oriented Canadian companies to foreign markets.

The Policy is not creating significant distortions in the regional distribution of federal contracts. This is because 1) the policy is applied to a small portion of the total value of government procurement, and 2) the regional benefits come more from the opportunity to participate than from the value of contracts which flow to the regions.

Although the Policy has had positive tangible benefits, the possibility of intangible costs should not be forgotten. While the Policy has typically been implemented in a manner which is supportive of sound business decisions, it is fundamentally a restrictive trade policy. Such policies can have intangible economic costs resulting from the market inefficiencies which they can create. For example, the movement of work to the regions may hurt established regional clusters in central Canada, making Canada as a whole less competitive. Whether this has actually happened, cannot be proved or disproved from the results of this study. However, the economic evidence is that, in general, a competitive business development and freer trade are good things.

5.4.2 Issue 7: Incremental Costs

The consensus is that the Policy has a minimal impact on the cost of procurement where there is existing domestic capability. The costs may increase if a domestic capability needs to be created. In such cases, the short-term cost must be weighed against the possible long-term returns from the investment.

There may be long-term costs to the economy that are associated with trade barriers such as the IRB Policy and the inefficiencies they permit in industry.

5.4.3 Issue 8: Longer-Term Benefits

Although the Policy has had positive short-term benefits, the achievement of the Policy objective to create long-term, sustainable impacts is not evident. While there have been some success stories, in general companies have been unsuccessful at leveraging contracts into opportunities for product and market development. This is not surprising given that the Policy is applied predominately to defence procurement and subject to the constraints of that market mentioned previously.

5.4.4 Issue 9: Competing Interests

Typically, the IRB portion of a proposal is evaluated separately but along with components such as performance, price, and risk. The IRB component must be acceptable, but rarely is the IRB scoring rolled up with the other evaluated components. This means that all other competing interests are usually given priority over the IRB interests. The process by which this occurs will be investigated more fully in Phase II of this evaluation.

5.4.5 Issue 10: Industry Participants

Industry is generally supportive of the Policy. Small, regional companies tend to be the most supportive. Larger firms are less enthusiastic as they become more self-sufficient, even those which can credit their existence to former versions of the Policy.

In many instances firms may not realize that their participation in a contract is the result of the IRB Policy.

5.5 Implementation

Improvements to the effectiveness of the Policy are, to a large extent, a function of the process within government for selecting, approving and monitoring procurements with IRB packages and for specifying the IRB requirements. The identification of these improvements is an objective of Phase II of this evaluation.

However, at this point three observations about the implementation of the IRB Policy can be made. First, it is clear that there is a major discontinuity between the PRC committee's recommendation and the specification of IRB benefits in the contract. This is evident from the fact that only about half of the contracts that were recommended for IRBs have evidence

of them in the project files. Also, the lack of a connection between the PRC number and the contract file number is evidence that the system does not adequately monitor IRB progress and success.

Second, initial evidence indicates that the Policy is implemented in an inconsistent manner, so that some contracts have more onerous requirements than others with similar characteristics.

Third, there is evidence that the complexity of the IRB process is increasing. For example, past IRB contractual requirements were often described in a few paragraphs, where recent contracts typically use about thirty pages.

These observations will be investigated further in Phase II of this evaluation.

Appendix A

Committee Composition

Steering Committee Composition

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Appendix B

Evaluation Issues

Rationale

Issue 1: Public Interest

Does the IRB Policy serve a public interest?

Has the situation or the public interest changed since the IRB Policy was defined?

Issues 2: Legal Mandate

Is the IRB Policy necessary to fulfil the legal mandate of Industry Canada?

Is the IRB Policy necessary to fulfil the legal mandate of the Regional Agencies?

Issue 3: Appropriate Role

Is the IRB Policy an appropriate role for government?

What would have been the impact of abandoning any part of the IRB Policy?

Objectives

Issue 4: Strategic Goals

How effective are IRB strategic goals translated into project objectives?

How should IRBs include small business development?

Issue 5: Barriers

Are IRB objectives being achieved? If not, what are the principal barriers to achievement?

Impacts and Effects

Issue 6: Actual Impacts and Effects

What are the impacts and effects, both intended and unintended, of IRB elements of projects?

Issue 7: Incremental Costs

What are the incremental costs associated with IRBs?

Issue 8: Longer-Term Benefits

What are the longer-term strategic benefits associated with IRBs?

Issue 9: Competing Interests

How are competing interests taken into account? (e.g., operational requirements, industrial and regional benefits, schedule, risk, etc.).

Issue 10: Industry Participants

Do IRB industry participants have an appreciation for the IRB Policy and how have they been affected by the Policy?

Appendix C

References

References

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Record of Cabinet Decision: Canadian Annual Procurement Strategy (CAPS) 1989 (The Cabinet Committee on Priorities and Planning) (November 7, 1989)

Memorandum to Cabinet: Canadian Annual Procurement Strategy (CAPS), Ministers of Regional, Industrial Expansion, Western Economic Diversification, Transport, National Defence, and Supply and Services (July 27, 1989)

Record of Cabinet Decision: Canadian Annual Procurement Strategy (CAPS) (July 13, 1988)

Memorandum to Cabinet: Canadian Annual Procurement Strategy (CAPS), Ministers of Regional, Industrial Expansion, Transport, National Defence, and Supply and Services (June 16, 1988)

Record of Committee Decision, The Cabinet Committee on Economic and Regional Development (May 27, 1986)

Memorandum to Cabinet: A Review of Industrial Benefits Policy in Federal Procurement, Minister of Regional Industrial Expansion (January 20, 1986)

Appendix D

List Of Interviewees

Government

Christian Coderre, Federal Office of Regional Development (Quebec)

Glen Crossman, National Defence

Brian Deacon, Industry Canada

Bill Evans, Industry Canada

Guy Gallant, Industry Canada

John Hutchins, Industry Canada

Ron Kane, Industry Canada

David Keys, Public Works and Government Services Canada

Paul Knarr, Atlantic Canada Opportunities Agency

Jacques Laflamme, Public Works and Government Services Canada

Hugh Little, Public Works and Government Services Canada

Jim Lovett, Industry Canada

Colin May, Western Economic Diversification Canada

Cheryl Parks, National Defence

Harvey Reimer, Public Works and Government Services Canada

Craig Rowswell, Atlantic Canada Opportunities Agency

Roman Staranczak, Industry Canada

Kurt Theoret, Industry Canada

Bruce Weir, Public Works and Government Services Canada

Claudette Williams, Industry Canada

Industry

Hani Ayoub, General Electric, Mississauga, Ontario

Stephen Benjamin, W.R. Benjamin Products Ltd., Springhill, N.S.

Mike Bowes, Arvin Special Machinery Limited, Miramichi, N.B.

Rob Bruce, Array Systems, Toronto, Ontario

Darrel Carnegie, Bombardier, Kingston, Ontario

John Currie, INTERNAV, Sydney, N.S.

Ed Darbyshire, Lockheed Martin Canada, Ottawa, Ontario

Dennis Deroin, C-TECH, Cornwall, Ontario

Bill Dowe, Northern Radar, St, John ś, Newfoundland

Luc Dumouchel, Software Kinetics, Stittsville, Ontario

Karl Enners, Allied Signal, Montreal, P.Q.

Ron Fornier, Lexi-Tech, Moncton, N.B.

Mike Gail, Omega Telemus, Ottawa, Ontario

Bill Greer, EDS Canada, Ottawa, Ontario

Shannon Grosko, Lockheed Aeronautics Systems, U.S., Atlanta, Georgia

Madeleine Guibert, Fenco-Maclaren, Ottawa, Ontario

Maurice Guitton, Composite Atlantic Ltd., Lunenburg, N.S.

Vaughn Guy, Computing Devices Canada, Calgary, Alberta

Ray Haydaman, Custom Steel Inc., Winnipeg, Manitoba

Scott Hodgins, Computing Devices Canada, Ottawa, Ontario

Mark Houlton, Systems House Limited, Ottawa, Ontario

Paul Joniga, Belcan Technologies, Montreal, P.Q.

Howard Jones, Raytheon, Waterloo, Ontario

Terry King, Industrial Benefits Association of Canada, Ottawa, Ontario

Phil Lambert, Firstclass Systems Corp., Whiterock, B.C. and Fredericton, N.B.

Renauld Larouche, Mil-Quip, Iberville, P.Q.

Robert Leboeuf, SNC industrial Technologies, Montreal, P.Q.

Richard Lehaye, Sorel Forge Ltd., Sorel, P.Q.

Marlon Lewis, Satlantic Inc., Halifax, N.S.

Nadia Malek, Bell Helicopter Textron Canada, Montreal, P.Q.

Graham Moore, Heli Fab, Winnipeg, Manitoba

Deborah Nesbitt, Hughes, Richmond, B.C.

Doug Phillips, Atlantic Aerospace, Brampton, Ontario

Shawn Power, Steelcore Industries, Buchans, Newfoundland

Jeff Pritchard, Vac-Aero, Oakville, Ontario

Dave Reed, Hughes Elcan, Midland, Ontario

Tony Rotherham, CAE Aviation, Edmonton, Alberta

Murray Sloane, Bristol Aerospace, Winnipeg, Manitoba

Chris Stratton, Apex Industries, Moncton, N.B.

Rudy Voytek, Litton Industries Canada, Toronto, Ontario

Henry Willms, Western Star, Kelowna, B.C.

Linda Wilson, Lockheed Martin Canada, Ottawa, Ontario

Ken Yamashita, General Motors, London, Ontario

Appendix E

MCPs and PRCs Reviewed

Table 1
Estimated Contract Values for Major Crown Projects

Short 7 Title	Description and Contract Period	Estimated Contract Value ($ M)
MCDV	Maritime Coastal Defence Vessels (1992 - 1999)	670.000
MIL-LAV	Militia Light Armoured Vehicle (1989 - 1996)	91.166
LAV_RECCE	LIGHT ARMOURED VEHICLE - RECONNAISSANCE (1995-1997)	553.425
1SRAAW(H)	Short Range Anti-Armour Weapon (Heavy) Missile Project (1993 - 2003)	140.000
LSVW	Light Service Vehicle Wheeled (1992 -1996)	224.942
HLVW	Heavy Logistic Vehicle Wheeled (1988 - 1996)	233.261
CANTASS	Canadian Towed Array Sonar System (1990 -1997)	112.981
CC130AU	CC 130 Hercules Avionics Update (1994 - 1999)	134.942
CFSSU	Canadian Forces Supply System Upgrade (1995 - 1999)	291.000
CAATS	Canadian Automated Air Traffic System (1989 - 1996)	500.000
TCCCS	Tactical Command and control System (1991 - 2001)	1,336.743
CC150 MOD	Airbus Cargo Conversion	81.115
ISPR	Income Security Program Redesign Implementation Contract (1994 - 1997)	110.988
MAATS	Military Automated Air Traffic control (1994 - 1996)	73.000
TTT	Tactical Transport Tanker (1990 - 2001)	183.675
AMSA	Arctic Maritime Surveillance Aircraft (1989 - 2001)	158.997

Short 7 Title	Description and Contract Period	Estimated Contract Value ($ M)
EST	Electronic Support and Training (1993 - 1999)	127.697
UTTH	Utility Tactical Transport Helicopter (1992 - 1999)	705.106
	TOTAL	5,729.037

Values are shown in current year and Canadian dollars ($), representing estimated "Contract Price" at original contract signing.

Table 2
Procurement Review Cases with IRBs

PRC #	Description	Value ($M)
85/86-096	Airfield damage repair project A-1265	53.1
86/87-180	Land tactical area communication system (LTACS) upgrade	50
87/88-058	Tactical Radar Identification and Location System (TRILS)	17
87/88-064	Land Electronic Warfare Communications Emitter Locations Systems	6.5
88/89-024	Canadian airspace management simulator (CAMSIM)	55
88/89-028	Integrated communications control system simulators	7
88/89-070	Interactive graphics display system	6.900
88/89-072	CF-18 OFTT's upgrade to 87X software configuration	6.140
88/89-087	Improved nuclear biological and chemical masks	50.800
88/89-088	Individual night vision weapon sights	24.000
88/89-094	Upgrade of the Canadian forces central computation pay systems	25.1
88/89-096	Operational information display system - Phase II (OIDS 2)	3.25
88/89-101	Electronic warfare control and analysis centre (EWCAC) systems	18
88/89-114	Air targets	6.700
88/89-123	Operational loads monitoring and individual aircraft tracking (OLM/IAT) systems	23.9
88/89-127	Updates to the AN/SLQ-501 (CANEWS) electronic warfare system	40
88/89-128	Transportable microwave radars	40.000
88/89-135	Armoured equipment vehicles and armoured vehicle launch bridge	60
88/89-154	Bell model 212 helicopters	20.000
88/89-157	Artillery regimental data system advanced development model	25
88/89-162	AN/VVS-501 Periscope	3.800
89/90-001	Arctic sub-surface acoustic surveillance system	55.000

PRC #	Description	Value ($M)
89/90-010	Air Target Systems	24.000
89/90-011	TOW 2A Missiles	40.000
89/90-016	Turbo-Jet Aircraft and corresponding flight simulator.	53.000
89/90-040	CF18 Aircraft Centre and AFT Fuselage	15.200
89/90-043	Reserve Pay System	15.090
89/90-073	Electronic Warfare Threat Analysis (EWTA)	3.500
89/90-113	Naval Electronic Warfare Systems	7.500
89/90-117	Electronic Warfare Self Protection Suites	12.400
89/90-139	Camouflage Nets	16.000
89/90-169	AN/SOS-510 SONAR Systems and Short-Based Training System for Portugal	45
89/90-193	.50 Caliber Machine Gun Systems with Quick-Change Barrel	2.3
89/90-197	Runway Visual Range (RVR) Sensors	7.000
90/91-005	Auxiliary Fuel Tanks for CF135 Helicopters	6.700
90/91-028	Upgrade of Blowpipe missiles and Acquisition of Javelin missiles	90
90/91-031	Defence Research and Development project D6474	22.000
90/91-036	Engineering support services	31.000
90/91-037	CF18 F404 Automated Data Acquisition and Processing System (ADAPS)	2.4
90/91-038	Enhanced armour protection advanced development model (EAP-ADM)	10
90/91-044	Harpoon exercise missile and related equipment	15.800
90/91-066	Cartridge, 81mm Illuminating C105 W/Fuze, DM 93-2	10
90/91-083	Repair Parts for the Maintenance of MLVW and ILTIS Vehicles	4
90/91-088	ECP Retrofit Kits for CF-18 Aircraft	9.360
90/91-097	Locomotives for Mozambique	22.000
90/91-114	Minefield lane breaching device	16.000
90/91-144	Loran-C Transmitter System	5.600
91/92-041	Quick Change Barrel Modification Kits	8.000
91/92-044	RAMSES Integrated Support Station (RISS)	22.000
91/92-046	ANS Integrated Maintenance System (AIMS) 91/92-046(R)	85
91/92-047	Canadian Patrol, Frigate Spare Assemblies and Comp	400
91/92-048	C5A1 Machine Gun Replacement Project L2264	21.000
91/92-060	NAVTEK System	2.900
91/92-070	Naval Combat Operators Trainers	36.000
91/92-078	AN/VVS 501 Night Driving Viewers	3.700
91/92-091	Integrated Departmental Financial System (ISFS)	45.000
91/92-093	Marine Simulator Systems	14.800
91/92-117	Electronic Warfare (EW) Systems	9.000
91/92-119	Torpedo MK46 Mod 5 ORDALT Kits	20.000
91/92-129	Target Systems Services (TSS)	3.300
91/92-163	Advanced Direct Fire Control System for Armoured Vehicles	7

PRC #	Description	Value ($M)
92/93-046	L116 - Light Artillery Project	51.900
92/93-106	Systems Engineering and Integration Project (SEIP)	22.000
92/93-119	Avionics Equipment For CP-140 Aircraft	24.400
92/93-125	CT-133 Silver Start Avionics Update- REVISION FROM December 17, 1992	42
92/93-144	Minelayers - FFV 5821	2.100
93Y-261	Electronic Warfare self protection suites	40.000
94Y-084R	Land Tactical Electronic Warfare Improvement (LTEWI)	18
94Y-086R	Maritime Coastal Defence Vessel (MCDV) In-Service Support Contract	32
94Y-110R	Ammuniation Seas - Tribal Class Destroyer	9.000
94Y-195	Semi Automatic Pistol 9MM	9.000
94Y-200	TRUMP Phase II Project - Operational Spares	3.600
94Y-220	AMMUNITION - NAVAL / TORPEDO MK46 MOD 5 ORDALT KITS	9.2
94Y-221	AMMUNITION - SEA / DM 211 ANTI-FROGMAN DEPTH CHARGE	3.5
95Y-198R	CP-140 Sonobuoy Receiver Replacement	20.000
95Y-235	Ammunition - Common User	15.000
96Y-029	CF-18 Radar Warning Receiver Modernization Project	52.218
96Y-125	Track Components for the M113 family of Vehicles (SRAP)	44
96Y-134	Region Operations Control Centre Modernization (SRAP)	93
96Y-221	Unmanned Airborne Surveillance and Target Acquisition System	60
97Y-054	Ammunition Common User	3
	Total	**2306**

Appendix F

Interview Letters

Hickling Ref: 6672

Sept __, 1997

Mr./Ms.

Dear Mr./Ms

Thank you for agreeing to participate in the evaluation study of Canada's Industrial and Regional Benefits (IRB) Policy that we are conducting on behalf of Industry Canada.

I am looking forward to our telephone interview on_____ at_____. I will be asking you for information on your department's views about the IRB Policy in general, and your department's experience with the IRB Policy on the_____ contract in particular. The questions are outlined below.

The evaluation is being conducted in two phases. This first phase concerns the rationale, objectives, impacts, and effects, of the IRB policy. A subsequent phase will examine program delivery and alternatives, and you will have an opportunity to comment on these issues at a later date.

As I am sure you are aware, the Federal Government has determined that its procurement activities should support national objectives beyond simply acquiring the product procured. The IRB Policy provides direction for using federal procurement as a lever to promote industrial and regional development objectives by focusing on long-term industrial development. Federal government procurement objectives in order of priority are: 1) operational requirements, competition, fairness, and accessibility; 2) long-term industrial and regional benefits; and 3) other national objectives such as aboriginal business development and small business development. The primary goal of the IRB Policy is to ensure fair access to major federal procurements for all Canadian companies by bringing Canadian company capabilities to the attention of Canadian and foreign prime contractors.

The following questions will be used to help guide our inquiries during the interview. Please give them some consideration before hand. When evaluating the policy, we are very interested in the extent to which the IRB Policy has changed what would have happened otherwise (incrementality), and the extent to which other factors have contributed to the impact of the Policy (attribution). To the extent possible, please try to consider incrementality and attribution when answering the questions.

General Questions
Is the IRB program an appropriate role for government?
Does the IRB program serve a public interest?
How has the IRB situation changed over the years?
Is the IRB program necessary to fulfil the legal mandate of your organization?
What would be the impact of abandoning any part of the IRB program?
How should the IRB program include small business development?

Contract Specific Questions
How effectively were IRB strategic goals translated into project objectives?
Did the IRB objectives interfere with other interests (function, cost, schedule)?
Did IRBs influence contractor selection?
Have the IRB objectives been achieved?

We also require some summary data to help quantify the impact of the IRB Policy. If possible, please have the following information available for the interview.

Quantitative Data
Contract spending by Region (West, Ontario, Quebec, Atlantic, and Imports)
Contract specific jobs created (Engineers, Technicians, and Other Labour)
Sustainable jobs created (Engineers, Technicians, and Other Labour)

We are sensitive to concerns regarding confidentiality. Anything that you reveal to us as confidential will not be published or attributed, as you wish. While we would appreciate your candid and open responses to our questions, there is no requirement to answer any particular question.

Thank you again for you participation.

Yours sincerely,

_____
Hickling Corporation

Industry Canada Industrie Canada

Ottawa, Canada
K1A 0H5

Your file Votre référence

Our file Notre référence

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September 26, 1997

Dear IRB Evaluation Study Respondent:

Industry Canada, in consultation with National Defence, Public Works and Government Services Canada, Treasury Board Secretariat, Atlantic Canada Opportunities Agency, Federal Office for Regional Development - Quebec and Western Economic Diversification Canada, has contracted Hickling Corporation to undertake an evaluation study of the Federal Industrial and Regional Benefits (IRB) Policy.

The results of the study will be used to improve the effectiveness and efficiency of the Policy's application.

As one component of the study, a representative of Hickling Corporation will have already contacted you to request a telephone interview with the appropriate official(s) in your organization. The interview and your provision of any associated information or data requested from you, as Hickling's representative explained, is voluntary on your part. I understand, however, that the draw on your resources should not require more than two hours of your time.

I am sure that your organization, like Industry Canada, is interested in ensuring that the IRB Policy is effectively administered. I encourage you to take the time to participate in the interview and to provide any information which could be used to strengthen the study. You may choose to be interviewed in English or French.

Thank-you in advance for your cooperation. If you have any questions or comments regarding this work, I would be interested in hearing from you. Please do not hesitate to contact me at (613) 954-1842.

Yours sincerely,

R. Conn

R.F. Conn
Evaluation Manager
Audit and Evaluation Branch

Canada

Appendix G

MCP Data Tables

Table G-1: Summary of the Commitments and Achievements for each MCP

Project	MCDV	CC-150	MIL-LAV	LAV RECCE	CC130
Total Contract Value	$670,000,000	$81,114,792	$91,166,272	$553,425,126	$134,942,267
Bidding Process	Competitive(2)	Sole Sourced	Sole Sourced		
COMMITMENTS					
Direct Commitments	$370,000,000	$16,564,000	$54,699,763	$531,700,000	$46,565,683
Indirect Commitments	$42,157,000	$16,000,000	$36,466,509	$77,500,000	$16,200,000
TOTAL Commitments	$412,157,000	$32,564,000	$91,166,272	$609,200,000	$62,765,683
Regional					
West	$0	$564,000	$13,970,000	$85,100,000	$52,215,683
Ontario	$124,025,000	$0	$0	$0	$8,800,000
Quebec	$31,045,000	$15,000,000	$0	$40,700,000	$250,000
Atlantic	$229,530,000	$1,000,000	$13,970,000	$50,800,000	$0
Unspecified	$27,557,000	$16,000,000	$63,226,272	$432,600,000	$1,500,000
Total	$412,157,000	$32,564,000	$91,166,272	$609,200,000	$62,765,683
Small Business	$42,157,000	$0	$15,000,000	$101,500,000	$0
Investments	$0	$0	$0	$0	$0
Sales/Purchases	$0	$0	$0	$0	$0
Tech Transfer	$0	$0	$0	$0	$0
ACHIEVEMENTS					
Direct Achievements	$295,733,000	$4,136,267	$57,320,000	$356,499,056	$0
Indirect Achievements	$46,757,000	$109,515	$84,980,000	$94,704,102	$0
Total Achievements	$342,490,000	$4,245,782	$142,300,000	$451,203,158	$0
Regional					
West	$49,480,000	$0	$17,340,000	$31,475,436	$0
Ontario	$99,505,000	$0	$0	$0	$0
Quebec	$32,865,000	$0	$0	$40,807,281	$0
Atlantic	$160,640,000	$0	$24,810,000	$66,220,821	$0
Unspecified	$0	$602,121	$0		$0
Total	$342,490,000	$602,121	$42,150,000	$138,503,538	$0
Small Business	$44,744,000	$0	$46,340,000	$113,152,615	$0
Investments	$0	$0	$0	$0	$0
Sales/Purchases	$0	$0	$0	$0	$0
Tech Transfer	$0	$0	$0	$0	$0

Project	LSVW	HLVW	CANTASS	TTT	TCCCS
Total Contract Value	$224,941,700	$233,260,736	$112,980,834	$183,675,031	$1,336,743,000
Bidding Process	Competitive	Competitive(4)		Sole Sourced	Competitive(2)
COMMITMENTS					
Direct Commitments	$103,507,256	$109,632,546	$79,086,584	$9,000,000	$659,866,000
Indirect Commitments	$79,466,322	$173,200,000	$8,320,000	$130,000,000	$560,727,000
TOTAL Commitments	$182,973,578	$282,832,546	$87,406,584	$139,000,000	$1,220,593,000
Regional					
West	$60,526,293	$1,300,000	$350,000	$0	$922,877,000
Ontario	$32,833,245	$247,800,000	$0	$0	$96,206,000
Quebec	$6,389,379	$29,300,000	$0	$0	$41,040,000
Atlantic	$3,758,339	$4,400,000	$350,000	$0	$31,430,000
Unspecified	$79,466,322	$32,546	$86,706,584	$139,000,000	$129,040,000
Total	$182,973,578	$282,832,546	$87,406,584	$139,000,000	$1,220,593,000
Small Business	$0	$0	$11,205,000	$0	$88,500,000
Investments	$0	$0	$0	$0	$116,150,000
Sales/Purchases	$0	$0	$0	$0	$349,227,000
Tech Transfer	$0	$149,200,000	$0	$0	$0
ACHIEVEMENTS					
Direct Achievements	$111,128,228	n\a	$96,532,746	$32,086,228	$473,078,000
Indirect Achievements	$69,488,210	$160,570,993	$3,664,991	$3,400,000	$293,480,000
Total Achievements	$180,616,438	$160,570,993	$100,197,737	$35,486,228	$766,558,000
Regional					
West	$66,868,145	$0	$7,567,663		$156,014,000
Ontario	$32,517,075	$0	$0		$562,766,000
Quebec	$9,087,316	$0	$0		$17,209,000
Atlantic	$2,655,692	$0	$8,472,337		$18,833,000
Unspecified	$0	$0	$0		$11,736,000
Total	$111,128,228	$0	$16,040,000	$0	$766,558,000
Small Business	$0		$7,862,924		$91,299,000
		$0			
Investments	$0		$0		$0
		$0			
Sales/Purchases	$0		$0		$0
Tech Transfer	$0	$0	$0		$0

Project	ISPR	CAATS	MAATS	UTTTH	CFSSU
Total Contract Value	$110,988,463	$500,000,000	$73,000,000	$705,105,610	$291,000,000
Bidding Process	Competitive (2)	Competitive	Sole Sourced	Sole Sourced	
COMMITMENTS					
Direct Commitments	$98,585,370	$144,695,000	$47,437,000	$284,458,000	$79,300,000
Indirect Commitments	$153,000,000	$58,738,000	$3,304,000	$222,300,000	$161,108,000
TOTAL Commitments	$251,585,370	$203,433,000	$50,741,000	$506,758,000	$240,408,000
Regional					
West	$22,238,528	$103,498,000	$45,818,000	$11,975,000	$78,436,000
Ontario	$151,829,595	$90,792,000	$1,198,000	$32,144,000	$61,720,000
Quebec	$50,604,756	$7,716,000	$1,946,000	$420,189,000	$41,719,000
Atlantic	$26,912,491	$1,427,000	$0	$10,000,000	$45,350,000
Unspecified	$0	$0	$1,779,000	$32,450,000	$13,183,000
Total	$251,585,370	$203,433,000	$50,741,000	$506,758,000	$240,408,000
Small Business	$20,661,614	$0	$1,779,000	$12,409,964	$27,697,000
Investments	$0	$70,810,000	$0	$0	$0
Sales/Purchases	$0	$221,776,000	$0	$150,000,000	$0
Tech Transfer	$0	$0	$0	$0	$0
ACHIEVEMENTS					
Direct Achievements	$93,686,349	$143,088,970	$4,872,815	$203,333,940	$19,727,000
Indirect Achievements	$85,465,436	$234,952,009	$801,139	$173,157,696	$119,124,000
Total Achievements	$179,151,785	$378,040,979	$5,673,954	$376,491,636	$138,851,000
Regional					
West	$25,347,521	$114,188,107	$5,236,403	$11,340,430	$59,302,000
Ontario	$103,290,360	$250,459,212	$361,090	$26,248,448	$25,865,000
Quebec	$38,199,516	$12,715,505	$73,954	$337,612,328	$10,179,000
Atlantic	$12,314,388	$140,355	$1,365	$2,524,158	$36,011,000
Unspecified	$0	$535,800	$1,142	$5,260	$7,494,000
Total	$179,151,785	$378,038,979	$5,673,954	$377,730,624	$138,851,000
Small Business	$29,111,675		$0	$7,864,767	$1,975,000
Investments	$0	$73,603,454	$0	$0	$0
Sales/Purchases	$0	$167,346,067	$0	$0	$0
Tech Transfer	$0	$618,988,500	$0	$0	$0

Project	CP140/AMSA	SRAAWH	EST	TOTAL
Total Contract Value	$158,996,503	$140,000,000	$127,696,530	$5,729,036,864
Bidding Process	Sole Sourced	Sole Sourced		
COMMITMENTS				
Direct Commitments	$57,500,000	$98,000,000	$97,062,931	$2,887,660,133
Indirect Commitments	$64,975,000	$42,000,000	$10,000,000	$1,855,461,831
TOTAL Commitments	$122,475,000	$140,000,000	$107,062,931	$4,743,121,964
Regional				
West	$0	$0	$0	$1,398,868,504
Ontario	$0	$0	$0	$847,347,840
Quebec	$0	$0	$0	$685,899,135
Atlantic	$0	$0	$0	$418,927,830
Unspecified	$122,475,000	$140,000,000	$107,062,931	$1,392,078,655
Total	$122,475,000	$140,000,000	$107,062,931	$4,743,121,964
Small Business	$0	$0	$0	$320,909,578
Investments	$0	$0	$0	$186,960,000
Sales/Purchases	$0	$0	$0	$721,003,000
Tech Transfer	$0	$0	$0	$149,200,000
ACHIEVEMENTS				
Direct Achievements	$22,169,285	$16,272,579	$86,564,853	$2,016,229,316
Indirect Achievements	$10,602,276	$62,293,694	$10,000,000	$1,453,551,061
Total Achievements	$32,771,561	$78,566,273	$96,564,853	$3,469,780,377
Regional				
West	$0	$6,285,302	$0	$550,445,007
Ontario	$0	$3,142,651	$0	$1,104,154,836
Quebec	$0	$62,853,018	$0	$561,601,918
Atlantic	$0	$6,285,302	$0	$338,908,418
Unspecified	$0	$0	$0	$20,374,323
Total	$0	$78,566,273	$0	$2,575,484,502
Small Business	$0	$574,564	$0	$342,924,545
			$0	
Investments	$0	$0	$732,337	$74,335,791
			$0	
Sales/Purchases	$0	$0	$732,337	$168,078,404
Tech Transfer	$0	$0	$0	$618,988,500

Table G-2: Summary of the Incremental Impacts for 18 Major Crown Projects

Commitments	1988	1989	1990	1991	1992
Direct	10,963,255	39,550,958	50,129,089	111,378,689	210,437,148
Indirect	17,320,000	33,712,161	44,752,161	99,512,861	145,814,373
Canadian Content	28,283,255	73,263,119	94,881,250	210,891,550	356,251,521
West	130,000	14,619,472	14,663,222	104,232,922	115,817,513
Ontario	24,780,000	36,129,000	36,129,000	43,872,600	68,865,933
Quebec	2,930,000	3,894,500	3,894,500	5,971,500	63,440,647
Atlantic	440,000	2,170,597	2,214,347	5,327,347	35,894,987
Unspecified	3,255	16,449,550	37,980,180	50,559,180	71,304,442
Total	28,283,255	73,263,119	94,881,250	209,963,550	355,323,521

Incremental Commitments	1988	1989	1990	1991	1992
Direct	8,770,604	28,073,029	28,557,644	89,807,244	121,038,937
Indirect	13,856,000	22,008,617	29,008,617	83,769,317	98,724,464
Canadian Content	22,626,604	50,081,646	57,566,261	173,576,561	219,763,401
West	91,000	13,493,917	13,493,917	103,063,617	111,433,164
Ontario	17,346,000	28,695,000	28,695,000	36,438,600	44,720,591
Quebec	2,051,000	3,015,500	3,015,500	5,092,500	17,225,267
Atlantic	308,000	952,042	952,042	4,065,042	10,554,404
Unspecified	2,278	2,109,821	2,109,821	14,688,821	26,784,505
Total	19,798,278	48,266,279	48,266,279	163,348,579	210,717,931

Achievements	1988	1989	1990	1991	1992
Direct	0	5,829,167	20,255,390	138,310,267	213,306,471
Indirect	0	2,181,332	61,344,332	154,855,760	200,531,470
Canadian Content	0	8,010,498	81,599,722	293,166,027	413,837,941
West	0	1,158,571	7,900,589	35,546,808	49,049,732
Ontario	0	0	58,849,588	152,107,667	177,860,574
Quebec	0	0	2,073,000	3,944,333	66,792,916
Atlantic	0	1,848,571	1,848,571	13,962,642	30,812,957
Unspecified	0	0	0	1,805,167	1,806,043
Total	0	3,007,143	70,671,749	207,366,617	326,322,222

Incremental Achievements	1988	1989	1990	1991	1992
Direct	0	426,857	12,161,008	86,916,659	116,200,118
Indirect	0	82,857	59,118,357	111,361,214	134,958,737
Canadian Content	0	509,714	71,279,365	198,277,874	251,158,855

West	0	347,571	7,089,589	26,703,781	38,276,389
Ontario	0	0	58,849,588	152,107,667	160,117,264
Quebec	0	0	2,073,000	3,944,333	17,175,467
Atlantic	0	554,571	554,571	6,030,500	8,524,250
Unspecified	0	0	0	1,805,167	1,805,342
Total	0	902,143	68,566,749	190,591,448	225,898,712

Commitments	1993	1994	1995	1996	1997
Direct	233,212,372	293,501,940	346,651,801	336,036,137	296,920,843
Indirect	151,061,127	123,588,501	210,699,967	208,511,243	215,310,993
Canadian Content	384,273,498	417,090,441	557,351,768	544,547,380	512,231,836
West	115,817,513	78,526,927	163,735,945	155,615,306	147,140,877
Ontario	68,865,933	96,901,880	119,151,008	112,342,267	92,867,754
Quebec	63,440,647	88,979,025	84,763,302	80,586,999	80,638,079
Atlantic	35,894,987	38,082,465	52,275,342	52,949,887	54,158,955
Unspecified	99,326,420	123,880,143	136,498,170	142,124,920	136,498,170
Total	383,345,498	426,370,441	556,423,768	543,619,380	511,303,836

Incremental Commitments	1993	1994	1995	1996	1997
Direct	129,948,028	144,910,466	164,650,379	162,725,496	140,234,687
Indirect	102,542,646	65,670,355	112,664,952	113,039,907	107,713,357
Canadian Content	232,490,674	210,580,820	277,315,331	275,765,403	247,948,045
West	111,433,164	61,315,870	127,818,781	125,986,975	113,418,404
Ontario	44,720,591	62,254,570	60,462,431	59,602,685	43,139,730
Quebec	17,225,267	38,264,362	22,270,781	21,708,685	20,041,992
Atlantic	10,554,404	9,350,826	13,883,882	14,485,950	14,530,302
Unspecified	39,511,778	40,546,655	50,026,780	50,589,455	50,026,780
Total	223,445,204	211,732,283	274,462,655	272,373,750	241,157,207

Achievements	1993	1994	1995	1996	1997
Direct	222,391,220	417,081,376	336,932,763	335,429,089	326,691,573
Indirect	257,056,889	222,482,546	224,381,219	220,230,463	110,487,051
Canadian Content	479,448,110	639,563,922	561,313,982	555,659,552	437,178,624
West	58,579,386	173,956,164	97,547,144	83,289,820	43,416,791
Ontario	180,984,356	68,370,545	171,962,941	174,928,870	119,090,296
Quebec	79,386,675	110,451,941	105,449,490	108,814,015	84,689,549
Atlantic	34,111,789	60,449,731	85,538,720	72,781,839	37,553,595
Unspecified	1,825,033	946,470	2,483,538	9,501,036	2,007,036
Total	354,887,240	414,174,852	462,981,833	449,315,580	286,757,267

Incremental Achievements	1993	1994	1995	1996	1997
Direct	127,419,603	223,298,575	151,439,139	134,158,120	144,830,208
Indirect	202,467,146	125,512,751	89,742,286	89,127,055	71,339,389
Canadian Content	329,886,749	348,811,325	241,181,425	223,285,175	216,169,596
West	46,065,736	149,240,634	50,116,019	34,859,159	25,397,375
Ontario	163,241,046	35,459,042	119,996,154	120,678,200	101,346,986

Quebec	29,769,225	43,497,749	40,252,145	36,139,047	29,905,721
Atlantic	10,128,882	19,240,083	19,979,317	19,414,711	11,426,623
Unspecified	1,824,332	945,769	2,282,130	2,555,028	1,805,628
Total	251,029,221	248,383,276	232,625,765	213,646,144	169,882,332

Commitments	1998	1999	2000	2001	2002
Direct	252,956,468	243,201,014	118,014,520	118,014,520	52,341,843
Indirect	188,284,771	203,261,511	81,316,275	81,316,275	21,557,498
Canadian Content	441,241,240	446,462,526	199,330,795	199,330,795	73,899,341
West	135,826,407	127,529,255	96,178,521	96,178,521	6,608,821
Ontario	65,285,930	66,669,336	7,743,600	7,743,600	0
Quebec	81,223,695	93,400,191	6,874,436	6,874,436	4,797,436
Atlantic	52,590,143	52,904,479	7,131,803	7,131,803	4,018,803
Unspecified	105,387,065	105,031,265	80,474,435	80,474,435	58,474,281
Total	440,313,240	445,534,526	198,402,795	198,402,795	73,899,341

Incremental Commitments	1998	1999	2000	2001	2002
Direct	116,490,298	106,949,288	82,913,306	82,913,306	21,663,706
Indirect	84,177,481	86,644,189	67,367,343	67,367,343	12,606,643
Canadian Content	200,667,779	193,593,477	150,280,650	150,280,650	34,270,350
West	104,991,252	96,174,231	91,533,546	91,533,546	1,963,846
Ontario	22,484,117	22,893,719	7,743,600	7,743,600	0
Quebec	18,971,279	23,608,358	3,016,231	3,016,231	939,231
Atlantic	13,692,944	13,818,678	4,285,308	4,285,308	1,172,308
Unspecified	37,321,450	36,965,650	35,289,350	35,289,350	22,710,350
Total	197,461,041	193,460,636	141,868,034	141,868,034	26,785,734

Achievements	1998	1999	2000	2001	2002
Direct	0	0	0	0	0
Indirect	0	0	0	0	0
Canadian Content	0	0	0	0	0
West	0	0	0	0	0
Ontario	0	0	0	0	0
Quebec	0	0	0	0	0
Atlantic	0	0	0	0	0
Unspecified	0	0	0	0	0
Total	0	0	0	0	0

Incremental Achievements	1998	1999	2000	2001	2002
Direct	0	0	0	0	0
Indirect	0	0	0	0	0
Canadian Content	0	0	0	0	0
West	0	0	0	0	0
Ontario	0	0	0	0	0

Quebec	0	0	0	0	0
Atlantic	0	0	0	0	0
Unspecified	0	0	0	0	0
Total	0	0	0	0	0

Commitments	2003	2004	2005	2006
Direct	51,649,535	40,900,000	40,900,000	40,900,000
Indirect	11,557,498	5,961,538	5,961,538	5,961,538
Canadian Content	63,207,033	46,861,538	46,861,538	46,861,538
West	6,608,821	6,546,154	6,546,154	6,546,154
Ontario	0	0	0	0
Quebec	4,797,436	3,130,769	3,130,769	3,130,769
Atlantic	4,018,803	3,907,692	3,907,692	3,907,692
Unspecified	47,781,974	33,276,923	33,276,923	33,276,923
Total	63,207,033	46,861,538	46,861,538	46,861,538

Incremental Commitments	2003	2004	2005	2006
Direct	21,179,091	12,270,000	12,270,000	12,270,000
Indirect	5,606,643	1,788,462	1,788,462	1,788,462
Canadian Content	26,785,734	14,058,462	14,058,462	14,058,462
West	1,963,846	1,963,846	1,963,846	1,963,846
Ontario	0	0	0	0
Quebec	939,231	939,231	939,231	939,231
Atlantic	1,172,308	1,172,308	1,172,308	1,172,308
Unspecified	22,710,350	9,983,077	9,983,077	9,983,077
Total	26,785,734	14,058,462	14,058,462	14,058,462

Achievements	2003	2004	2005	2006
Direct	0	0	0	0
Indirect	0	0	0	0
Canadian Content	0	0	0	0
West	0	0	0	0
Ontario	0	0	0	0
Quebec	0	0	0	0
Atlantic	0	0	0	0
Unspecified	0	0	0	0
Total	0	0	0	0

Incremental Achievements	2003	2004	2005	2006
Direct	0	0	0	0
Indirect	0	0	0	0
Canadian Content	0	0	0	0
West	0	0	0	0
Ontario	0	0	0	0

Quebec	0	0	0	0
Atlantic	0	0	0	0
Unspecified	0	0	0	0
Total	0	0	0	0

Commitments	Total	Average
Direct	2,887,660,133	151,982,112
Indirect	1,855,461,831	97,655,886
Canadian Content	4,743,121,964	249,637,998
West	1,398,868,504	73,624,658
Ontario	847,347,840	44,597,255
Quebec	685,899,135	36,099,954
Atlantic	418,927,830	22,048,833
Unspecified	1,392,078,655	73,267,298
Total	4,743,121,964	249,637,998

Incremental Commitments	Total	Average Annual
Direct	1,487,635,510	78,296,606
Indirect	1,078,133,259	56,743,856
Canadian Content	2,565,768,769	135,040,462
West	1,175,600,614	61,873,717
Ontario	486,940,234	25,628,433
Quebec	203,219,106	10,695,742
Atlantic	121,580,668	6,398,983
Unspecified	496,632,421	26,138,548
Total	2,483,973,043	130,735,423

Achievements	Total	Average Annual
Direct	2,016,227,316	224,025,257
Indirect	1,453,551,061	161,505,673
Canadian Content	3,469,778,377	385,530,931
West	550,445,007	61,160,556
Ontario	1,104,154,836	122,683,871
Quebec	561,601,918	62,400,213
Atlantic	338,908,418	37,656,491
Unspecified	20,374,323	2,263,814
Total	2,575,484,502	286,164,945

Incremental Achievements	Total	Average Annual
Direct	996,850,287	110,761,143
Indirect	883,709,792	98,189,977
Canadian Content	1,880,560,078	208,951,120
West	378,096,253	42,010,695
Ontario	911,795,947	101,310,661

Quebec	202,756,686	22,528,521
Atlantic	95,853,509	10,650,390
Unspecified	13,023,394	1,447,044
Total	1,601,525,789	177,947,310

Table G-3: Long Term Impacts of 18 MCPS

Canadian Content	CANTASS -- H&SG	Would have gone completely off-shore, would have been 100% foreign content
Canadian Content	CANTASS -- PAS	High probability of this project going off-shore, and 100% foreign content
Canadian Content	SRAAWH (ERYX)	Would have gone completely off-shore, would have been 100% foreign content (France). Allied Signal: Without the IRB Policy, the ERYX project would have probably been purchased entirely offshore and the high-quality Canadian content would not exist.
Canadian Content	EST	Canadian presence began with the establishment of the Winnipeg facility as an IRB for the CP-140 project in the mid 70s, through the establishment of MEL (Ottawa) on the CPF project, Sanders (Ottawa) on the CF-18 project, and Paramax (Montréal) on the CPF project.
Canadian Content	ISPR	High probability of this project going off-shore, probably to a team from USA
Canadian Content	TTT and CP-140/AMSA	More Canadian suppliers have been used
Canadian Content	TCCCS (IRIS)	High probability of this project going off-shore, with no or very few Canadian companies involved
Regional Content	TCCCS (IRIS)	CDC: Ministers required a "significant Western involvement"in the project, thus, CDC proposed the Calgary operation which may not have happened under the normal application of IRB provisions. The success of the Calgary operation may be at the expense of the Ottawa operation. Regional part of IRBs is difficult.

Regional Content	TTT & CP-140 / AMSA	Lockheed: Regional IRBs have been difficult, especially when the government is unable to give additional credit for investments which are now only credited at their face value plus subsequent sales which may come too late to be eligible.
Canadian and Regional Content	CANTASS-SES	CDC: Because CANTASS was already a fairly mature development project by the time IRBs came along, it appears unlikely that IRBs changed very much with regard to Canadian content or the regional breakdown.
Regional and Small Business Content	ISPR	EDS Canada: Experience with IRB policy has been good, it has helped the regions and small business. It has given leverage for EDS Canada to persuade the Parent in the USA to transfer technology into Canada.
Regional Content	CFSSU	Some of the direct work and some follow-on work has been directed to the regions. Without IRBs, this work would likely have been done in Central Canada. IRBs helped in the decision by SHL to acquire Datatech, a BC company.
Regional Content	CAATS	MDA is responsible for $58 million of the $145 million in direct IRB commitments. MDA and Prior Data have enhanced their capability in working with ADA software language being used in CAATS. The project has positioned MDA to access foreign markets for ATC related products.
Technology Transfer	SRAAWH (ERYX)	Hughes-Leitz Optical Technologies (Canada) has replaced Sagem (France) as Aerospatiale's supplier of day sights in a plane's cockpit
Technology Transfer	SRAAWH (ERYX)	Project established Allied Signal as the design authority for the optical electronics package. Transfer of knowledge in optical engineering to Allied Signal
Technology Transfer	SRAAWH (ERYX)	Enhanced Elcan's optical technology capabilities

Technology Transfer	SRAAWH (ERYX)	Sextant Avionique (Canada) qualified by Aerospatiale as a cockpit integrator. There are only three companies in the world that are cockpit integrators: Honeywell, USA; Rockwell, USA; and now Sextant, Canada.
Technology Transfer	ISPR	Design training program developed in Midland, Ontario; CAD/CAM (unigraphics) training centre in St. Catherines, Ontario, TD Bank GM Visa credit car management centre in Canada (previously planned for Cleveland)
Technology Transfer	TCCCS (IRIS)	Improved skills within CDC as a large-systems integrator.
Technology Transfer	CAATS	It is unclear as to the level and amounts of technology transfer from Hughes Aircraft US.
Investment	EST	IRB requirements encouraged Ericsson (Sweden) to carry out a $100 million R&D program in Ericsson Montréal.
Investment	CAATS	Hughes Aircraft, as a result of CAATS IRB requirements, established plants in Winnipeg, Calgary and Richmond and purchased Ernst Leitz in Midland Ontario (now Elcan).
Alliances/Joint Ventures	SRAAWH (ERYX)	Long-term sustainable alliances established by Allied Signal with Thomson (France), Aerospatiale (France) and Hughes Leitz Optical Technologies (Canada)
Alliances/Joint Ventures	ISPR	Long-term sustainable alliances established by EDS Canada with Mind (Manitoba), Sourceworks (Quebec) and Prologic (BC)
Alliances/Joint Ventures	TTT & CP-140/AMSA	Long-term sustainable alliances established by Lockheed with CAE Aviation, Menasco and Hermes
Alliances/Joint Ventures	TCCCS (IRIS)	CDC has found some good new small and medium sized suppliers
Alliances/Joint Ventures	NAADM (CCR)	GE Canada was able to assist Steelcor, Buchans, Nfld, to become a long-term supplier to GE (USA) and to Lockheed Martin (USA)

Access to Export Markets	SRAAWH (ERYX)	Sales to Europe; potential for sales to Singapore and Turkey; overall increased access to world markets.
Access to Export Markets	TTT & CP-140/AMSA	Lockheed has used Canadian suppliers on overseas contracts (see alliances above).
Access to Export Markets	EST	Leverage with the US parent to become the holder of the world product mandate for EST programs within Lockheed Martin Corporation.
Access to Export Markets	TCCCS (IRIS)	CDC is now capable of exporting as a communications system integrator (see technology transfer above)
Access to Export Markets	NAADM (CCR)	GE Canada: the CCR radars are offshore products
Access to Export Markets	CFSSU	The CFFSU contract has given SHL expertise in defence logistics that they may be able to market in Canada and internationally.
Access to Exports	CANTASS	CDC has not madeany subsequent sales of CANTASS or similar towed-array projects
Access to Exports	CAATS	Export sales have not been as good as expected. MDA has sold ATC related products in Australia, Norway, Switzerland and India.
Domestic Sales / Employment	ISPR	EDS Canada hired about 500 people and trained them in high technology skills in 1996; EDS developed a support centre for Bombardier commercial systems; EDS Canada succeeded in other projects such as the Ontario Health Card.
Domestic Sales /Employment	CAATS	Approximately 500 jobs created in Canada for the performance of the CAATS project.
Administration / Overhead	TCCCS	CDC: There are incremental costs to IRBs -- an IRB organization, tracking systems, and more detailed subcontract negotiations.
Administration / Overhead	TTT & CP-140/AMSA	Lockheed: Experience has been mostly positive, and IRBs have not been a barrier to doing good business.

Administration / Overhead	ISPR	EDS Canada: There are minor incremental costs (estimated at $100K/year) for IRBs, but the incremental benefits far outweigh the costs.
Administration / Overhead	CANTASS - SES	CDC: IRB imposed a management and accounting structure
Administration /Overhead	CFSSU	Incremental costs of the IRBs have not been excessive; some overhead costs to ensure that business decisions support the IRB commitments
Administration/ Overhead	CAATS	It is possible that the contract could have been done at a lower cost in the USA. Inflexibility of the IRB contractual requirements may have led to some technical inefficiencies and higher costs
Administration / Overhead	NAADM (CCR)	GE Canada: Administration of IRBs is a long-term, normal cost of doing business with many of GE's clients. General sourcing activities probably add a cost of 2 to 5% to overhead.

Appendix H

PRC Data Tables

CLIENT			Total		IRB		Non-IRB	
Department	**Code**	**Size**	**Number**	**Value**	**Number**	**Value**	**Number**	**Value**
Department of National Defence	DND	1	891	13687.8	67	1943.1	824	11744.7
Public Works and Government Services (	PWGSC	1	386	13151.3			386	13151.3
Transport Canada	Transport	1	116	1232.2	12	331.6	104	900.6
Revenue Canada	Revenue	2	80	936.7			80	936.7
Royal Canadain Mounted Police	RCMP	2	39	707.3	1	9.0	38	698.3
Citizenship and Immigration Canada	Citizenshi	2	42	539.1			42	539.1
Fisheries and Oceans	Fisheries	2	45	467.5			45	467.5
Environment Canada	Other	3	30	332.9			30	332.9
Health Canada	HC	3	21	322.9			21	322.9
Human Resources Development	HRD	3	31	251.7			31	251.7
Industry Canada	IC	3	19	237.3			19	237.3
Canadian International Development Age	CIDA	3	17	236.8	1	22.0	16	214.8
Correctional Services Canada	CSC	3	36	232.4			36	232.4
Agriculture and Agri-Foods Canada	AAFC		12	154.4			12	154.4
Foreign Affairs and International Trade	FAIT		20	147.0			20	147
Canadian Space Agency	CSA		20	135.7			20	135.7
Indian and Northern Affairs Canada	INAC		16	117.2			16	117.2
Veteran's Affairs Canada	VAC		6	116.5			6	116.5
Justice Canada	JC		6	98.8			6	98.8
Blank	B		7	84.0			7	84
Natural Resources Canada	NRCAN		14	78.9			14	78.9
Statistics Canada	SC		19	78.2			19	78.2
Treasury Board Secretatiate	TBS		9	75.3			9	75.3
National Research Council	NRC		15	73.1			15	73.1
Government Telecommunications and Inf	GTIS		6	35.5			6	35.5
Solicitor General Canada	SGC		5	30.1			5	30.1
National Gallery	NG		2	24.0			2	24
Canadian Heritage	CH		3	19.2			3	19.2
Canadian Security Intelligence Service	CSIS		4	18.4			4	18.4
Public Service Commission	PSC		2	17.7			2	17.7
National Archives	NA		2	17.0			2	17
Privy Council Office	PCO		4	16.4			4	16.4
Canadian Museum of Civilization	CMC		1	15.0			1	15
National Film Board	NFB		4	13.1			4	13.1
Defence Construction Canada	DCC		1	10.0			1	10
Finance Canada	FC		2	10.0			2	10
Office of the Auditor General	OAG		1	10.0			1	10
Biotechnology Research Institute	BRI		1	9.8			1	9.8
Federal Office of Regional Development	FORD		2	8.5			2	8.5
Enquires Canada	ENQ		1	7.3			1	7.3
Citizen Forum on Canada's Future	CFCF		1	7.0			1	7
Bank of Canada	BC		2	6.0			2	6
National Museum of Science and Techno	NMST		1	4.0			1	4
Canadian Centre for Management Devel	CCMD		1	3.5			1	3.5
Communications Canada	CC		1	2.9			1	2.9
Western Diversification	WD		1	2.8			1	2.8
Medical Research Council	MRC		1	2.5			1	2.5
Other	Other	1	0	0	0	0		
Total			1946	33785.7	81	2305.7		
			1946	33785.7	81	2305.7		

YEAR	Total		IRB				Non-IRB	
Year	Number	Value	Number		Value		Number	Value
1984	3	125.4	0	0%	0	0%	3	125.4
1985	1	53.1	1	100%	53.1	100%	0	0
1986	5	115	1	20%	50	43%	4	65
1987	9	86.4	2	22%	23.5	27%	7	62.9
1988	163	3186.2	17	10%	415.6	13%	146	2770.6
1989	201	3157.2	13	6%	296	9%	188	2861.2
1990	145	2861.1	13	9%	244.9	9%	132	2616.2
1991	165	3160	14	8%	677.7	21%	151	2482.3
1992	166	3067.8	5	3%	142.4	5%	161	2925.4
1993	214	3698.5	1	0%	40	1%	213	3658.5
1994	197	3014.2	7	4%	75.3	2%	190	2938.9
1995	270	5554.5	2	1%	35	1%	268	5519.5
1996	295	4947.6	4	1%	249.2	5%	291	4698.4
1997	112	1757.6	1	1%	3	0%	111	1754.6
Average	192.8	3440.47	7.7		217.91		185.1	3222.56
Total	1946	34784.6	81		2305.7		1865	32478.9

BENEFIT	**IRB**	
	Number	**Value**
Canadian Content	29	765
Industrial Benefits	50	1605.5
Regional Benefits	43	1365.4
Small Business	23	707.7
Sole Source	38	787.5
Total	81	2305.7

AMOUNT	**All**		**IRB**				**Non-IRB**	
Amount	**Number**	**Value**	**Number**		**Value**		**Number**	**Value**
<20	1575	9533.5	42	3%	346.2	4%	1533	9187.3
<40	176	4647.3	17	10%	414.4	9%	159	4232.9
<60	81	3853.1	16	20%	757	20%	65	3096.1
<80	32	2121.8	2	6%	120	6%	30	2001.8
<100	29	2536.4	3	10%	268	11%	26	2268.4
<200	31	4188.9	0	0%	0	0%	31	4188.9
<300	6	1330	0	0%	0	0%	6	1330
<400	10	3324.5	0	0%	0	0%	10	3324.5
<500	3	1250	1	33%	400	32%	2	850
>500	2	1000	0	0%	0	0%	2	1000
Total	1945	33785.5	81		2305.6		1864	31479.9

TYPE		Number				
Year	Total	CC	IB	RB	SB	SS
1985	1	1	1	0	0	1
1986	1	0	1	1	0	1
1987	2	2	2	0	0	1
1988	17	7	7	11	13	6
1989	13	3	5	8	4	6
1990	13	5	9	9	1	9
1991	14	3	8	11	3	7
1992	5	4	3	2	1	2
1993	1	0	1	0	0	1
1994	7	2	7	0	0	2
1995	2	0	2	0	0	1
1996	4	2	3	1	1	1
1997	1	0	1	0	0	0
	81	29	50	43	23	38

Canadian Content													
Year	WEST	ONT	QUE	EAST	Unknown	TOTAL		WEST	ONT	QUE	EAST	Unknown	
88	0.07	0	0.57	0	0	0.64		0.109375	0	0.890625	0	0	
89	0.07	0	7.97	0	0	8.04		0.008706	0	0.991294	0	0	
90	4.57	17.8	19.54	0	0.52	42.43		0.107707	0.419514	0.460523	0	0.012255	
91	4.07	35.1	23.79	1.75	50.2	114.91		0.035419	0.305456	0.207032	0.015229	0.436864	
92	4.27	36.3	13.95	2.02	67.4	123.94		0.034452	0.292884	0.112554	0.016298	0.543812	
93	7.57	34.32	11.45	2.02	68.47	123.83		0.061132	0.277154	0.092465	0.016313	0.552935	
94	8.67	12.7	14.56	2.17	57.97	96.07		0.090247	0.132195	0.151556	0.022588	0.603414	
95	12.9	12.81	14.61	0.86	57.77	98.95		0.130369	0.129459	0.14765	0.008691	0.58383	
96	8.97	14.17	4.18	0.93	17.3	45.55		0.196926	0.311087	0.091767	0.020417	0.379802	
97	8.77	11.97	2.87	0.78	1.5	25.89		0.338741	0.462341	0.110854	0.030127	0.057937	
98	8.5	10.97	1.87	0.51	5.6	27.45		0.309654	0.399636	0.068124	0.018579	0.204007	
99	0.25	3.97	0.77	0.25	5.6	10.84		0.023063	0.366236	0.071033	0.023063	0.516605	
0	0.07	3.26	0.07	0.07	5.6	9.07		0.007718	0.359427	0.007718	0.007718	0.61742	
1	0.07	0.26	0.07	0.07	1	1.47		0.047619	0.176871	0.047619	0.047619	0.680272	
2	0.07	0.26	0.07	0.07	1	1.47		0.047619	0.176871	0.047619	0.047619	0.680272	
TOTAL	68.89	193.89	116.34	11.5	339.93	730.55							
Incremental Canadian Content													
Year	WEST	ONT	QUE	EAST	Unknown	TOTAL		WEST	ONT	QUE	EAST	Unknown	
88	0.07	0	0.57	0	0	0.64		0.109375	0	0.890625	0	0	
89	0.07	0	5.27	0	0	5.34		0.013109	0	0.986891	0	0	
90	4.57	7.5	5.27	0	0.52	17.86		0.255879	0.419933	0.295073	0	0.029115	
91	4.07	22.8	7.02	1.75	23.4	59.04		0.068936	0.386179	0.118902	0.029641	0.396341	
92	4.27	24	2.95	2.02	23.4	56.64		0.075388	0.423729	0.052083	0.035664	0.413136	
93	4.27	21.33	2.95	2.02	24.47	55.04		0.07758	0.387536	0.053597	0.036701	0.444586	
94	8.67	9.71	6.16	2.43	57.77	84.74		0.102313	0.114586	0.072693	0.028676	0.681732	
95	12.9	9.82	5.41	0.86	40.77	69.76		0.18492	0.140768	0.077552	0.012328	0.584432	
96	8.97	9.88	4.18	0.93	17.3	41.26		0.217402	0.239457	0.101309	0.02254	0.419292	
97	8.77	8.37	2.87	0.78	6	26.79		0.327361	0.31243	0.10713	0.029115	0.223964	
98	8.5	7.37	1.87	0.51	5.6	23.85		0.356394	0.309015	0.078407	0.021384	0.234801	
99	0.25	2.67	0.77	0.25	5.6	9.54		0.026205	0.279874	0.080713	0.026205	0.587002	
0	0.07	0.26	0.07	0.07	5.6	6.07		0.011532	0.042834	0.011532	0.011532	0.92257	
1	0.07	0.26	0.07	0.07	1	1.47		0.047619	0.176871	0.047619	0.047619	0.680272	
2	0.07	0.26	0.07	0.07	1	1.47		0.047619	0.176871	0.047619	0.047619	0.680272	
TOTAL	65.59	124.23	45.5	11.76	212.43	459.51							
Industries													
	WEST	ONT	QUE	EAST	Unknown								
Electronics	0.18	0.14	0.13	0.33	0.08								
Electronic Syst	0.18	0.41	0.06	0	0.08								
Software	0.09	0.09	0.13	0	0.25								
Manufacturing	0.55	0.36	0.55	0.5	0.59								
Textiles & Rub	0	0	0.13	0.17	0								
	1	1	1	1	1								
INTERVIEWS			1	2	3	4	5	6	7	8	9	10	11
	Region	Size	IRB	Benefit	Impact	Fulfilled	Markets	Alliances	Tech Tran	Skills	Costs	Sales	Sustained
1	E	M	1	1	1	1	1	1			1	1	1
2	E	S	1	1	1	1	1	1	1	1	1	0	1
3	E	S	0	0									
4	E	S	1	1	1	1	1	1	1	1	0	1	1
9	E	M	1	0	1	0					0	1	1
10	E	S	0	0									
12	E	S	0	0									
13	E	S	1	1	1	1	1	1		1	0	1	1
14	E	S	1	1	1	1	1	1		1	1	1	0
15	O	M	1	0	1	1	1			1	0	1	1
16	O	M	1	0	0	1	1	1	1	1	0	1	1
17	O	S	1	1	0	1		1		1	0	0	1
18	O	S	1	0	1	1				1	0	0	1
19	O	M	1	1	0	1	1			1	0	0	1
20	O	M	1	0	1	1					1	1	1
22	O	L	1	1	1	0					1	0	0
11	Q	M	1	0	1	1					0	0	0
21	Q	S	1	1	0	0					0	0	0
23	Q	L	1	0	1	0	1			1	0	1	1
25	Q	S	1	1	0	1	1		1		0	1	1
5	W	S	1	1	1	1	1			1	0	1	1
7	W	M	0	0									
8	W	S	1	0	1	1	1			1	1	0	0
24	W	L	1	1	1	1	1		1	1	0	1	1
6													
			20	12	15	16	13	7	5	13	6	12	15
	W	4	3	2	3	3	3	0	1	3	1	2	2
	O	7	7	3	4	6	3	2	1	5	2	3	6
	Q	4	4	2	2	2	2	0	1	1	0	2	2
	E	9	6	5	6	5	5	5	2	4	3	5	5
		24	20	12	15	16	13	7	5	13	6	12	15

APPENDIX E

PHASE II: CASE STUDIES

Appendix E

Phase II: Case Studies
Evaluation of the
Industrial and Regional Benefits Policy

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Appendices

Appendix A: Case Study Selection Criteria
Appendix B: Case Study Format
Appendix C: Case Study Letter of Request

1. Introduction

1.1 Background

The evaluation of the Industrial Regional Benefits (IRB) Policy is being carried out in two phases. A report on Phase I: Objectives Achievement was submitted in December, 1997 and formed the basis for a review of the IRB Policy required by the Agreement on Internal Trade by January 1, 1998.

Phase II: IRB Process was initiated in February, 1998. The main tool for the analysis is case studies of six Major Crown Projects (MCPs) and six Procurement Review Cases (PRCs). The case studies are intended to illustrate how the IRB Policy works in practice in comparison to the process established by the Treasury Board Policy Manual on Capital Plans, Projects and Procurements and set out in a description of the IRB Policy[1] developed as part of the evaluation study.

This interim report on Phase II presents the findings for the case studies.

1.2 Case Study Selection

The selection of the case studies was based on criteria appended to the study terms of reference. These criteria and the list of MCPs and PRCs from which the selection was made are given in Appendix A. In consultation with the Chairman of the IRB Policy Evaluation Advisory Committee, the following projects were chosen for study and are included in this report:

MCP Case Studies
1. Income Security Plan Redesign (ISPR)
2. Marine Coastal Defence Vessel (MCDV)
3. Militia Light Armoured Vehicle (MILLAV)
4. Short Range Anti-Armour Weapon (Heavy) ERYX Missile Project - SRAAW(H)

1 Description of the IRB Policy, Hickling Corporation, June24, 1997.

5. Tactical Command, Control, Communications Radio System (TCCCS/IRIS System)
6. Utility Tactical Transport Helicopter (UTTH)

PRC Case Studies

1. Naval Torpedo Mk 46 Mod 5 Ordalt Kits
2. Target Systems Service (TSS)
3. RCMP Revolver Replacement
4. Transport Canada Integrated Departmental Financial System
5. Electronic Warfare Self Protection Suites
6. Naval Combat Operator Trainers

Each of the MCP case studies is reported in a separate chapter (Chapters 2-7) in the order indicated and the PRC cases are described in Chapter 8.

1.3 Case Study Procedures and Constraints

The case studies were created using documentation and interviews. The format followed in presenting the profile and data collected for each project is given in Appendix B. The evaluation criteria which guided our data collection activities were developed in the Evaluation Framework[2] and are contained in a letter sent to interviewees prior to the interviews (see Appendix C).

The documentation that we planned to access for each case included the IRB strategy, Request for Proposal (RFP), IRB evaluation plans and reports, contracts, and monitoring and verification reports. As noted in the case study write-ups, many of the relevant documents were not available to us because they were either not on file or the appropriate file could not be located.

Part of the difficulty in getting hold of documentation was the absence of corporate history on the case given that a number of the IRB managers appointed by IC and PWGSC at the initiation of the projects have since retired or otherwise were not accessible. We did not have the benefit of interviews with these individuals to provide first hand recollections of events affecting the commitments and achievements of IRBs and views on the IRB process. In the absence of this knowledgeable guidance, the search for documents was necessarily very time consuming and not always productive.

2 Evaluation Framework: Industrial And Regional Benefits Policy, Hickling corporation, March 31, 1995.

2. MCP Case Study #1: ISPR

CASE STUDY #1:
Income Security Programs Redesign (ISPR)

2.1 Project Profile

Project Title	Income Security Programs Redesign (ISPR)
IC Project Officer	Claudette Williams (previously Saskia Meuffels & Andy Morrison)
DSS Manager	Jean Montplaisir (up to 1996)
Contract Value	approximately $260 million
Contract Timeframe	Definition Phase: Aug/92 to June/93 (originally to Aug/93) Implementation Phase: 1994 to 1997
Competitive Process	Competitive
Industry Sector	Information Technology
Regions Targeted	Atlantic, Quebec, Northern Ontario and Western Regions
Client Department	Human Resources Canada (HRC) (initially Health and Welfare Canada)
Prime Contractor	Definition Phase: EDS and Systemhouse Implementation Phase: EDS
Major Subcontractors (Implementation Phase)	DMR Group Inc. (Information technology, applications development) Coopers & Lybrand (Work functions, business processes, TQM) Hay Group (Human resources, organizational development) D.R. Harley Consultants (Management of change, communications) NATIONAL Public Relations (Communications delivery) CDSL (Telephone systems (IVR) Domus Software (Quality assurance)

Project Description:

The objectives of the Redesign Project were as follows:

- improve client services and system maintenance;
- improve security and accuracy of information;
- increase flexibility and responsiveness of the delivery process; and
- improve operational efficiency.

The project focussed on organization, human resources and information technology and was to affect the delivery of the Canadian Pension Plan, CPP Disabilities, Family Allowance and Old Age Security. The project's main goal was to deliver a new Client Service Delivery Network (CSDN) which would maintain and improve the level of service to clients, with reduced resource levels, while managing a client population workload increase.

2.2 Summary Findings and Analysis

2.2.1 IRB Strategy Development

Organization Structure

At the very early stages of strategy development, Industry Canada (IC) expressed concern in regards to the management structure of the project office and the subsequent weighting given to IRB strategy development. IC noted that the IRB authority did not have access to the senior interdepartmental project management committee, IRBs were not included in policy formulation and IRBs were relegated to a secondary level along with functions such as training and organizational change. The Project Management Office was made aware of these concerns and as a result the project definition and implementation phases had the full participation of the IRB authority.

Technical Risk vs IRBs

During the first Senior Project Advisory Committee (SPAC) meeting in December 1991, it was noted that there was a high degree of technical risk associated with the project and it would be necessary to reduce this risk wherever possible. The proposed focus on the development of major systems software as opposed to the use of non-Canadian off-the-shelf packages further increased this risk. There was concern that this technical complexity in conjunction with the necessity to fulfill an array of IRB commitments could be cumbersome for an inexperienced vendor. However, most of the firms that were being considered as primes had experience with IRBs and would be familiar with how this element fit into the broad statement of requirements. The Committee concluded that there must be a balance between the operational requirements and the objectives of the IRB program with the priority being on operational requirements which will "take precedence over the IRBs."

IRB Strategy

The IRB Strategy eventually prepared by the SPAC [3] included the following objectives:

- enhance Canadian capabilities to develop, integrate and manage large information technology projects;
- strengthen Canadian capability in developing major system software;
- develop the ability in Canada to integrate major organizational, human, structural and information system changes in large organizations;
- enhance Canadian companies ' abilities to undertake similar work elsewhere, including gaining access to the export market;
- ensure all regions of Canada have an opportunity to participate in the project and that significant portions of the work are distributed to those regions where the government has established specific initiatives to promote economic growth through procurement; and
- ensure that small business has a significant opportunity to use the project to develop their competitive position.

Roles and Responsibilities

The ISPR Project was a joint Human Resources Canada (HRC) and Public Works and Government Services Canada (PWGSC) project. The interdepartmental environment within which the project was implemented was as follows:

- HRC as the client department;
- PWGSC as the financial and contractual manager;
- IC as the IRB manager in conjunction with ACOA, WD and FORD(Q)); and
- Revenue Canada/Taxation, Employment and Immigration and Veterans Affairs, as eventual systems "users ".

Role of Regions

The regional agencies were heavily involved at the front end of the IRB process. They participated in the development of the RFP as well as bid evaluation. They were vital in offering insight into the needs of their regions and could judge the true "value " of the proposed IRB commitments. The regions remained remarkably unbiased during the evaluation process. Once the contract was in place, the regions had little involvement in the day to day management of the IRB commitments or the monitoring or verification process. This responsibility remained with the IC IRB manager.

3 As per Annex A of the ISPR Treasury Board Submission, July 1991.

2.2.2 *Contracting Process*

Competitive Process

The ISPR project was implemented in the "classic" two stage competitive procurement process consisting of a Definition Phase and an Implementation Phase as outlined below.

- Definition Phase (2 contracts awarded @ $5 million each). The prime objective of this phase was the development of a detailed implementation plan for the establishment of a new service delivery network as well as to conduct activities to position the organizations for change.

- Implementation Phase (1 contract awarded @ approx $250 million). The prime objective of this phase was to put in place the new service delivery network, including the required organization structure, human resources requirements and the information technology needed to support the new network.

RFP Development

When developing the IRB section of RFP, IC prepared a detailed document that outlined in specific terms what would be considered acceptable, what areas needed to be addressed (i.e small business, regional target areas etc), what technology transfer and small business development entailed and stressed the requirement for causality. IC did not dictate what specifically should be delivered and no dollar values, percentages or minimum values were defined. The premise was that the vendors would prepare an IRB package that reflected the way they do business and could compete against other vendor's IRB commitments rather than a standard set of specifications.

Phase I Evaluation Process: Definition Phase

On February 17, 1992 the ISPR Project Office issued a RFP that led to the selection of two prime contractors for the Project Definition Phase. Closing dates for bids were April 23, 1992.

Three individual proposals were received in response to the RFP for the Project Definition Phase from Team Andersen, EDS Canada and Systemhouse.

The IRB evaluation of the Definition Phase bids weighed commitments made in the following areas :

- Direct transactions

- Indirect transactions
- Canadian Value Added commitments (CVA)[4]
- Regional distribution
- Small Business commitments & development
- Liquidated damages and/or holdbacks

Initiatives presented as indirect IRB commitments by all three bidders were not due solely to the ISPR project and were related to ongoing strategies. All proposals offered CVA commitments, one offered regional commitments, all offered small business commitments and one offered liquidated damages. As was to be expected, there was no level of consistency in IRB commitments among the bidders as each bidder approached the IRB aspect of the project in a manner most fitting to their corporate environment.

At this point in the bidding process, IRB commitments towards the Implementation Phase were limited to "best efforts". Detailed descriptions of possible transactions were found in each proposal. All three proposals offered implementation phase targets for CVA, regional distribution, small business commitments and some form of liquidated damages. IRB commitments were to be further detailed and "fleshed out" during the Definition Phase work.

Each bid was given an IRB rating with a corresponding risk assessment which was combined to give an overall IRB ranking. Other factors taken into consideration besides IRBs were proposed technical solutions, price and schedule. The IRBs were weighted second only to operational requirements and were weighted equal to price.

Definition Contracts were awarded to EDS and Systemhouse in August 1992 (original duration of Definition phase August 1992 to August 1993). A key deliverable of the funded Definition Phase was a proposal for the Implementation Phase including a Statement of Work comprised of specific IRB commitments. These IRB commitments were to be investigated and presented in five reports: Company Business Plan, IRB Regional Development Plan, Small Business Supplier Development Plan, Product Plans and Export Plans.

Quality and Quantity of IRBs

In February 1993 HWC proposed a compression of the Definition Phase by two months, moving the receipt of proposals for the Implementation Phase from August 1993 to June 1993. Concern was expressed by IC and regional authorities as to the negative impact this might have on the **quality and quantity** of proposed IRBs for the Implementation Project.

4 Canadian Value Added (CVA) and Canadian Content Value (CCV) were used interchangeable on this project.

It was felt by IC that the IRB information was typically put together toward the end of the definition contract in developing the proposal for the next phase.

Particular concern focussed on the amount of detail that could be expected on individual transactions and on the quality and amount of anticipated indirect benefits. Both contractors indicated that the compression of the Definition Phase timeframe would result in some degradation in the quality of the individual transactions as well as the level of Canadian Content, regional distribution and small Business activity to which they were prepare to commit. A decision was made to proceed with the proposed accelerated time frame with consideration given to the concerns and risks on the IRBs during the on-going Project Definition Phase activities.

Mandatory Minimums

There was some discussion by the SPAC in regards to the possibility of establishing mandatory minium quality for the IRB component of the Implementation proposal. It was noted by IC that targets are taken as a minimum and thresholds may make one or more contractors non-compliant. It was concluded that open competition still appeared to produce the best IRB results.

Phase II Evaluation Process: Implementation Phase

Two vendors, Systemhouse (SHL) and EDS Canada submitted proposals for the Implementation Phase in June 1993. For six weeks in June and July 1993, 170 people from across Canada participated in the evaluation of the proposals. The IRB component of proposals was evaluated by a team lead by IC which included individuals from the regional agencies (FORD-Q, WD, ACOA). The contractual and financial components were reviewed by a team from PWGSC and the technical specifications were reviewed by a team from the client departments. Each evaluation team worked independently in a "closed door" environment.

During this evaluation, bidders were involved in a clarification process. Questions from evaluation teams were forwarded to PWGSC (who acted as a "gatekeeper") and then on to the respective companies for response. Bidders often took the opportunity to add more to their proposal ("bid repair") but it was made clear that this would not be considered part of the original proposal and thus would not be evaluated.

Admissibility of Forecast Sales

Both bidders had a significant shortfall in indirect benefits due to their insistence in including forecast sales (although specifically advised not to do so during the Definition Phase). They were advised that it was preferable to avoid forecast sales as commitments since the vendor is not able to control events to the degree necessary to ensure a solid

contractual commitment. Nevertheless, because forecast sales had been included in IRBs before, and the proportion of forecast sales in both proposals was significant, it was not likely that they would be replaceable.

Therefore, forecast sales were reconsidered as long as they were minimized and were strategic, with direct and descend able linkages with the capabilities created due to the ISPR project. General statements that "increased capability" should result in sales were not acceptable. A direct linkage had to be made between the forecast sales and the associated transactions.

IRB Evaluation

Point ratings of the IRB proposal were not done. The IRB evaluation process was based on an assessment of both quality and risk. In examining the quality of IRBs (both direct and indirect) , the following factors were taken into consideration:

- total dollar value of commitments (CCV);
- level of technology transfer;
- long term effects,
- involvement of small business;
- regional distribution;
- export potential;
- level of commitment of the firm to their proposal; and
- liquidated damages and/or holdbacks.

An IRB quality ranking of excellent, good (plus), good, good (minus), average, poor or unacceptable was given along with a risk rating of low, medium or high.

Combined Evaluation

After each individual team had completed their independent evaluation , the three teams met to discuss the overall proposal and compare findings. In addition to IRBs, the combined evaluation team had to consider:

- Technical Merit
- Business Benefit Derived
- Risk; and
- National Objectives and Cost.

An option analysis and benefit-cost analysis (in accordance with Treasury Board guidelines) was also completed as part of the evaluation process. Overall, SHL was ranked first in IRBS but average in the technical area, whereas EDS was ranked first technically with average

IRB commitments. Of more significance, however, was the fact that SHL was rated unsatisfactory contractually which deemed their proposal unacceptable.

Contract Negotiations

In July 1993,EDS was selected to negotiate the Implementation Project contract. There were some further modifications to IRB commitments during the negotiation process. The IC IRB manager worked closely with EDS to assist in prioritizing the miscellaneous indirect IRBs and clarifying any vagueness. Work eventually commenced on the Implementation contract in March 1994.

Incrementality

Without the IRB policy, EDS felt that the ISPR project probably would have been developed by a team from the US; regional development centres (Halifax, Montreal and Ottawa) as well as regional training maintenance and support systems would not have been established. EDS is currently examining various longer term alliances and new business opportunities with firms that were brought to their attention by regional agencies "the IRB process put us in touch with Canadian companies ". There were minor incremental costs (estimated at $100k/yr) for IRBs, however EDS notes that the "the incremental benefits far outweighed the costs ".

2.2.3 Monitoring and Verification

As the project work got underway, EDS was responsible for fulfilling their IRB commitments and IC was responsible for monitoring and verifying that EDS was meeting these commitments.

EDS felt that the IRB authorities were all "fair and reasonable " and open to negotiate problem areas as they arose. EDS submitted general ledger reports with attached spreadsheets detailing transactions which were then reviewed by IC . IRBs commitments were tied to an annual schedule. EDS felt that relationships with IC and the regional agencies were good as a level of trust developed which helped the process run smoothly. IC was consistently satisfied with the fulfilment of the IRB commitments and felt that EDS had "bought " into the IRB process and philosophy. Project progress was also reported directly to Treasury Board by the Project Office in the form of periodic status reports which detailed performance levels achieved as related to project objectives.

During the course of the project, high risk indirect transactions were monitored closely and possible substitution activities were kept on reserve in case replacements were required.

This was necessary as Indirect IRBs incorporated a wide range of transactions in various sectors and all entailed different degrees of risk.

Impact of Contract Amendments on IRBs

Amendment ONE: In January 1996, the Project Office agreed to amend the contract to make provisions for design changes to meet new operational needs and to correct projected schedule slippages. There were no changes affecting IRBs.

Amendment TWO: In May 1996, it became apparent that the IT application development schedule had slipped again and corrective action was required. The project requested additional funding (in a submission to TB dated July 1996) in the amount of $86 million and a schedule extension of eleven months for the Implementation Phase, moving the "ready to use "date to January, 1998. At the time of this contract amendment, the IRB program had advanced fairly well and was above schedule in terms of the delivery of direct and indirect Canadian content and regional and small business commitments. EDS reported total industrial and regional benefits of $65.6 million against a commitment of $51.9 million.[5] The contractual amendments included 100% Canadian content of the additional contract value; thus the increase in project funding resulted in an identical increase in the direct IRBs commitments. There were some changes to indirect IRB commitments with strict understanding that EDS was responsible for meeting their indirect commitments as set out in the original contract.

Amendment THREE: In January 1997, a third contract amendment was signed. There were no changes affecting IRBs.

Termination of Implementation Contract

Both client and contractor mutually agreed to end the Implementation contract prior to completion due to both cost and schedule overruns. These overruns resulted because of the constantly changing environment in which the project was operating. During the course of the project, the client department changed, legislation was modified and technologies continued to evolve at a rapid rate. A joint planning session took place in the summer of 1997 and it became evident that the project would not finish until 1999 (the original schedule called for completion in late 1997) making it too risky to ensure completion by the year 2000 window. In addition, the costs involved in finalizing the project were deemed too high.

5 ISPR - Funding Submission to Treasury Board, July 1996.

The IRB commitments were also "wound down "with a final report citing achievements to date due in the Spring 1998. The IRB commitments overall were ahead of schedule so no liquidated damages were pursued. A small follow-on contract was negotiated with Human Resources Canada to provide service and maintenance support as-and-when required. IRBs that were deemed feasible to carry over from the original contract have been included in the new contract. IC continues to be responsible for monitoring these follow-on IRBs.

Summary

Overall, the IRB process was implemented in a relatively effective and efficient manner. The process appeared to follow the standard IRB implementation methodology in that it the IRB commitments grew out of an industry strategy, regional agencies participated effectively in the bid preparation and evaluation and IRB commitments were monitored accurately with a hands-on approach and managed with flexibility. There was 'buy in " from the prime contractor who felt that the necessity for IRB commitments forced the project to be more that just a superficial re-tool of a U.S. based product. Although the contract was terminated prior to completion of the project work, the IRB commitments were on schedule and those deemed feasible were transferred to the follow-on service and support contract.

2.3 References

2.3.1 Documents Reviewed

ISPR Project, Treasury Board Submission, July 1991.

Minutes, First Meeting of the Senior Project Advisory Committee (SPAC), December 10, 1991.

IRB Sections of the Definition RFP, February 1992.

ISPR Project - IRB Evaluation Report: Project Definition Phase,no source, assume it must be ISTC, May 1992 (approx).

ISPR Project Progress Report - Definition Phase. Prepared by EDS, December 23, 1992.

ISPR Project Progress Report - Definition Phase. Prepared by EDS, January 29, 1993.

ISPR Project Progress Report- Definition Phase. Prepared by Systemhouse, February 4, 1993.

Minutes, Third Meeting of the Senior Project Advisory Committee (SPAC), February 5, 1993.

Minutes, Fourth Meeting of the Senior Project Advisory Committee (SPAC), March 10, 1993.

ISPR Project Implementation Proposal - Option Analysis and Benefit-Cost Analysis, July 23, 1993.

ISPR Project - IRB Evaluation Report: Project Implementation Phase, no source, assume it must be ISTC, Sept 1993 (approx).

Funding Submission to Treasury Board for Contract Amendment, July 1996.

Various memos and briefing notes prepared by the IRB Authority during ISPR project period.

2.3.2 Interviewees

Bill Greer, IRB Manager, EDS Canada
Saskia Meuffels, former IRB Manager, Industry Canada
Claudette Williams, current IRB Manager, Industry Canada

3. MCP Case Study #2: MCDV

CASE STUDY #2:
Marine Coastal Defence Vessel (MCDV)

3.1 Project Profile

Project Title	Marine Coastal Defence Vessel (MCDV), a component of the Naval Reserve Minecountermeasures Project - NRMP
IC Project Officer	Initially Brian Deacon, currently Kurt Theoret.
PWGSC Manager	Ron Brown
Contract Value	$653M
Contract Timeframe	15 May 1992 - 31 August, 2000
Competitive Process	Competitive with 2 phased-approach: Definition and Implementation contracts
Industry Sector	Marine Sector
Region(s) Targeted	Invited - Regional commitments: mostly Atlantic
Client Department	Department of National Defence, Capt. Roger Westwood
Prime Contractor	Fenco Engineers Inc., M. Guibert, IRB Manager (wholly owned division of Lavalin)
Main Subcontractors	Halifax Dartmouth Industries Ltd., Atlantic German Marine Inc., Atlantic Eduplus Management Group Inc., Quebec Thomson-CSF Systems Canada Inc., Ontario MacDonald Dettwiler and Ass., West

Project Description:

The Naval Reserve Mine-countermeasures Project has as its primary objective the acquisition of 12 fully equipped and supported Maritime Coastal Defence Vessels (MCDV)

to be manned by Canada's Naval Reserve. It is required that the vessels have both a coastal patrol/surveillance and a mine countermeasures capability.

3.2 Summary Findings and Analysis

3.2.1 IRB Strategy Development

IRB Strategy Development Process
The MCDV procurement was linked with defence industrial strategy. The project was seen as an integral part of the defence policy to develop the primary Reserve and help maintain the capability to exercise control over Canadian waters. As well, the mine-countermeasures (MCM) system to be derived from the MCDV project was based on research done in conjunction with DND and was directed at developing Canada's industrial base, particularly in Western Canada.

In line with the procurement objectives[6], the IRB strategy was to optimize Canadian benefits through selecting a Canadian prime, having the MCDV designed and built in Canada, and where competitive, giving preference to Canadian firms for sourcing. As it was expected that most suppliers of this project would be foreign, emphasis was placed on obtaining long term high quality offsets in high technology industries. Regional benefits and small business development were cited as desired components; however, no specific requirements were included in Requests for Proposals (RFPs).

Competitive Process
MCDV was contracted in a two phase process. The first RFP represented a partially funded, competitive one year Project Definition (PD) phase which included the delivery of an Implementation proposal. Bidders were advised that two of the five respondents would be selected for the award of PD contracts, of which one would be selected for implementation. In both phases, interdepartmental evaluations were conducted based on SPAC-approved evaluation plans and Cabinet approvals were sought prior to awarding contracts.

3.2.2 Contracting Process

Evaluation Process
The evaluation of proposals for the Project Definition and Project Implementation phases both considered in priority order:
1- value for money in meeting operational requirements; and

6 No specific documentation was found on the procurement and IRB strategies considered by SPAC - only references in supporting documentation.

2- long term IRBs.

Phase 1 Evaluation Process: Project Definition Proposals
The IRB Evaluation Plan looked at:

- quantity (direct, indirect, small business and regional CCV);
- quality (EGAPU assessment - Excellent, Good, Acceptable, Poor and Unacceptable); and
- risk (management plan) - as the RFP only required Rough Order of Magnitude (ROM) IRBs proposals, the IRB evaluation focussed on the contractor's approach to IRBs and IRB management plans.

The overall evaluation of PD proposals was based on subjective assessments (EGAPU) of strengths and weaknesses rather than numerical weighting in each area evaluated. The overall evaluation seems to have basically been determined by value for money: the two proposals that were technically compliant and proposed to conduct the requested work for the stated cost constraint were considered to represent the best value for money. IRBs in both proposals were considered acceptable[7]. Canadian Shipbuilding and Engineering (CSE) and Fenco Engineers were awarded PD contracts.

Phase 2 Evaluation Process: Implementation Proposals
The evaluation was conducted in five areas, the fourth being IRBs. The IRB proposals/options were analysed against compliancy (EGAPU rating), capability (EGAPU rating) and risk (high, medium, low).

In summary, it appears that Fenco's IRB proposal was ranked first as it closely followed the data and format requirements of the PD contract; it committed to a high level of CCV, specified levels of IRBs, time phasing and small business participation. CSE had lower CCV commitments and did not commit to specific regional benefits.

Roles and Responsibilities
The Project Management Office assumed full responsibility for all evaluation activities and filled all team leader roles. Representatives from IC (lead responsibility in IRB evaluation), WD and ACOA were involved in the evaluation of the definition and implementation proposals. Fisheries and Oceans and External Affairs representatives also participated in the IRB evaluation for the implementation proposals.

Cross-Canada tours to select subcontractors in various regions were conducted with the assistance of regional agencies. IC provided the two PD contractors with lists of over 300 subcontractors and small businesses more or less relevant to the project, which left

7 We have no knowledge of IRB rankings among bidders and against other evaluation areas since the Project Evaluation Report was not availableto us.

contractors with the responsibility for identifying the most relevant firms. Advice/technical expertise from IC in this endeavour would have been appreciated by industry.

Opportunities for Negotiation, Feedback, Modifications
The phased competitive approach in the MCDV project seems to have provided additional opportunities for negotiation, modifications and feedback from IC on IRB proposals. During the PD phase, preliminary IRB submissions were reviewed by an interdepartmental evaluation team which requested clarification and provided significant advice to contractors on inconsistencies and lack of compliance with IRB requirements.

As well, upon completion of the PD phase, final IRB submissions were evaluated in three steps which again provided the IRB evaluation team the opportunity to review IRB commitments. Written clarification questions and face to face meetings addressed IRB questions and compliancy issues. This formal process was not necessarily appreciated by industry since it tended to restrict access by contractors to IC advice during the bidding period.

Late modifications were only made by contractors for deliverables identified as non-compliant with the PD contract. CSE ś IRB proposal was found non-compliant in IRBs as it did not commit to timed-phased IRBs and to specific Canadian or regional content values.

As well, IC notified both contractors that they had given the small business definition a much broader interpretation than was intended by IC, by including subsidiaries of major Canadian companies and even subsidiaries of major contractors (primes) in the project.

It appears that IC could/did not or was not successful in negotiating with Fenco on the specific time phasing of the achievement of IRBs. Fenco ś proposal was considered of higher risk as IRB achievement was tied to contract periods rather than contract years. This was considered a deficiency by IC but still ended up in the IRB contract[8].

Liquidated damages
Statements regarding acceptable levels of liquidated damages were made by IC during the negotiation process. During discussions regarding its Implementation proposal, Fenco proposed to modify its liquidated damages clause from the required 20% to 100%. IC stated that 100% would not be considered acceptable in a court of law as a justifiable predetermination of actual damages. A 20% level[9] was considered sufficient to insure

8 We need to look into the reasons why this could not be negotiated.

9 This does not seem to be the case in other MCPs where damages can be as low as 3%-4% for some specific commitments.

against non achievement of IRB commitments and the proposed modification was rejected.

Incrementality
The MCDV RFPs and implementation contract strongly emphasized the incremental prerequisite of IRBs. The implementation contract defines IRBs as "the contractor's CCV achievement by reason of incremental Canadian purchases, employment, investment, and technology transfer".

As well, offset purchases and other indirect transactions claimed had to be incremental to similar transactions over the three previous years to contract signing. Supporting documentation was to be provided to substantiate the claim that offset purchases were caused by the project.

Definition of Direct and Indirect
Direct benefits were defined through direct Canadian involvement in the project, while indirect benefits derived from activities not directly involved in the production of vessels and equipment for MCDV.

Quality Indirect IRBs
Emphasis was placed in the Implementation RFP on indirect benefits of a required quality level. Offsets in terms of purchases of goods from Canada had to have a minimum of 35% of CCV and donations to Canadian Universities to support marine engineering or naval architect studies would be given IRB credits for five times the value of the donation.

Cost premiums of IRBs
MCDV RFPs appear to have attempted to obtain the value of IRB cost premiums. The PD RFP stated that net economic impact on any existing related Canadian industrial activities was to be assessed by the contractor and that proposals which adversely affected existing industry were discouraged. Cost premiums (if any) to achieve performance requirements and the IRB distribution objectives of the project had to be identified and addressed in the proposal[10].

Contract details/requirements
The Implementation RFP had asked that most of the work be done in Canada, with regard for regional distribution of IRBs and use of small business. Fenco's contract has direct Canadian content commitments of 85% of the total value of the Implementation Contract; substantial committed IRBs to major regions in Canada: Atlantic, $200 million; Quebec, $40

10 This issue remains to be looked into - not clear if firms identified this in their proposals.

million; Ontario, $80 million and West, $50 million; and a significant share of work to Canadian small business, $40 million.

IRB Plans included in the contract are: IRB Management Plan; Regional Distribution Plan; Small Business Plan; Export Marketing Plan; and Plan for Canadian Content in the MCM System.

The contract does not appear to have strong IRB incentives to obtain offsets from foreign suppliers. No such offsets had been concluded at contract signing and the contractor was to continue negotiations with potential offshore suppliers to obtain quality, long term offsets.

IRB Implementation Plan
The IRB Implementation Plan (which forms part of the contract) is comprehensive in its detailed descriptions of IRB management, reporting relationships, appointment of IRB managers and description of tasks for key personnel in the implementation of committed IRBs. The creation, composition and responsibilities of procurement and IRB boards within Fenco are described in great detail. The prime proposed the use of a comprehensive computer program to track procurement activities and record CCV.

Small business
To assist subcontractors in determining available products and services within the Small business category, the prime developed a Canadian vendor source list of potential suppliers - of which some are small businesses.

3.2.3 Monitoring and Verification

Mechanism for Alterations, Modifications to IRBs
Alterations to IRB commitments can be made provided it does not affect specifications, contract price, schedule or overall IRB commitments and prior consent from IC is obtained. The contractor needs to demonstrate to IC's satisfaction that a substitution is of the same quality. IC possesses strong discretionary powers; the IRB contract mentions that IC may waive existing commitments in whole or in part and may accept any transaction as an indirect benefit.

Reporting Requirements
The contractor reported on the achievement of Canadian content, regional distribution, small business participation, time phasing and the implementation of an export marketing plan. Reporting requirements include monthly IRB progress reports, interim reports, periodic IRB reports and Certificates of Compliance at four contract milestones. Reporting processes were developed in case risks were identified and deemed to have an effect on the IRB program.

Certificates of Compliance and supporting documentation are required as evidence of IRB achievements. Verification is only undertaken if IC determines that the information in the Certificate must be verified.

Accountability for IRBs

Prime contractors were required to assume total system responsibility for all aspects of project implementation including delivery of IRBs. IRB responsibilities were passed down to Tier I subcontractors. Tier I subcontractors committed to an IRB reporting system in which IRB coordinators reported to the prime's IRB Manager. In addition, Fenco's Management Plan included the provision that failure to achieve CCV commitments by Tier I subcontractors would also result in the payment of liquidated damages at 20% of the shortfall.

The IC contract is with the prime contractor and technically, IC has no leverage with subcontractors. However, it appears that in one case, the IRB Manager used moral suasion to prevent a Tier I subcontractor from going to an off-shore supplier.

In one instance, the prime contractor became aware that one Tier II subcontractor had experienced a shortfall in commitments. Fenco worked with the Tier I subcontractor to ensure it could provide appropriate offsets in order to achieve its overall commitments.

Verification activities

The only verification report obtained was undertaken by FMA Consultants of Ottawa for IC[11]. Fenco has indicated that reports and supporting documentation requirements were onerous and that verification/follow up activities by IC had been minimal.

The FMA verification was extensive involving: the review of the IRB contract, amendments, correspondence, minutes of meetings, reports, detailed data from the contractor, three Tier I subcontractors and 18 suppliers to justify claims; and, visits to the prime and two Tier I subcontractors. The verification report examined CCV achievements, offsets and foreign content values.

Verification Results

Management of IRB activities at the prime and Tier I sub level was judged satisfactory, although there were some shifts in timing and regional distribution. One Tier II subcontractor had used offsets to compensate direct benefits which were not considered acceptable, therefore changes were required in the subcontractors sourcing.

CCV Calculation process and achievements

11 No other evidence of verification was provided to us.

Canadian content attributed directly to prime and pre-selected subcontractors included management, engineering, labour, associated overheads and profit. Cost estimates and commitments by subcontractors to CCV were based on estimated prices of labour and material costs. The prime evaluated Tier I subcontractor IRB proposals, supported by vendor proposals for best and final price for each procurement package.

It appears for the FMA verification that most of the IRB commitments of subcontractors were achieved due to profits made in negotiating lower priced contracts than estimated with suppliers, which reduced foreign content value of purchases. In period 2 of the MCDV commitments, verification spot checks discovered that $18 million in profits had been claimed as IRB achievements by Tier I subcontractors[12].

A well defined system was developed for submission of purchase orders from Tier I subcontractors to the prime. Tier I subcontractors are required to certify CCV by including information on all invoices and attaching a "Canadian Content Certificate of Compliance" to each invoice.

3.3 References

3.3.1 Documents Reviewed

Evaluation Plan for Proposals for Project Definition, 9 August 1988.

Ministerial Briefing on Evaluation of Proposals for Project Definition, Prepared by PWGSC, 19 June 1989.

Memorandum on the Cost Compliancy Issue in the Evaluation of Project Definition Proposals, Prepared by MCDV Project Manager to MCDV Distribution List, 15 May 1989.

Preliminary Submission on Statement of Work for Project Implementation Proposals, Prepared by Project Management Office, 9 August 1988.

Memorandum on the Interpretation of Small Business Definition, Prepared by IC Manager, 31 August, 1990.

Evaluation Review Board Meeting Notes, Prepared by DND Project Manager, 16 April 1991.

12 Although this is allowed, it is surprising that IRB commitments are actually attained by reducing supplier contract values (and foreign content values) and making a profit which is claimed as CCV.

Debriefing Report on Fenco Engineering Implementation Proposal Evaluation, Prepared by MCDV Project Management Office, 10 October 1991.

IRB Management and Implementation Plans, Prepared by Fenco Engineers Inc., Approved by PWGSC and IC, June 1992.

IRB portion of Implementation Contract, May 1992.

IRB Interim and Periodic Report Format Outline, Prepared by Industry Canada, 6 February 1992.

Verification Report and Appendices for Period 2 Ending on 31 October 1995, Prepared by FMA Consultants, 30 September 1996.

Project Progress Reviews, Prepared by Fenco MacLaren Inc., 24 September 1996; 13 March 1997; June 1997; 16 September 1997.

IRB Periodic Reports and Certificates of Compliance, Prepared by Fenco MacLaren Inc., February 1996, December 1996, January 1998.

Various Specification Change Notifications (Approved Contract Change Proposals), from Aug 1992 to June 1997.

IRB Interim Reports, Prepared by Fenco MacLaren Inc., July 1996 and July 1997.

Interview notes from meeting held with Brian Deacon on MCDV Project in February 1995.

3.3.2 Interviewees

Peter Hall, MCDV Project Office, PWGSC

Kurt Theoret, IRB Manager, Industry Canada

Madeleine Guibert, Fenco Engineering

Don McLure, Macdonald Dettwiler

4. MCP Case Study #3: MILLAV

CASE STUDY #3:
Militia Light Armoured Vehicle (MILLAV)

4.1 Project Profile

Project Title	Militia Light Armoured Vehicle (MIL LAV)
IC Project Officer	Barry Nimetz (during MIL LAV period was Raymond Derry, Helmut Zandl, Lea Clark, and Bill Wienand)
PWGSC Manager	Ted Chapman
Contract Value	Initial Contract Value: $136.1M [13] Final Contract Value: $99.7 M for 199 wheeled LAVs and $9.1M for 22 tracked APCs.[14]
Competitive Process	Sole Source from an Unsolicited Proposal
Industry Sector	Defence
Regions Targeted	West/East
Contract Timeframe	Contract period - 1989 to 1992 (some work in1993) IRB period -1989 to 1995 (completed by 1993)
Client Department	Department of National Defence
Prime Contractor	Diesel Division, General Motors of Canada Ltd. (DDGM) FMC Corporation, California, U.S.A.
Atlantic Subcontractors	Michelin, Nova Scotia;NewTech, Newfoundland;Gasco, Nova Scotia;Thomas Equipment, New Brunswick;YorkTek, New Brunswick Arvin, New Brunswick
Western Subcontractors	EBCO, B.C.;Hastings Brass, B.C.;AMPCO, B.C.;Wrights Canadian, B.C.; Drive Products, Alberta;Heli-Fab, Manitoba;Cormer Group, Manitoba

13 Treasury Board Submission, July 17/89

14 Draft Verification Plan for the IRB Program on MIL LAV. February 1993. ISTC Canada.

Project Description:

The objective of this project was to provide 199 light armoured wheeled vehicles and 22 tracked armoured personnel carriers to the Militia to meet the requirements of land reserve modernization training. The vehicles were for delivery to various Canadian Forces bases across Canada and were to be used by the Militia for training exercises that would be on par with those undertaken by the regular forces.

4.2 Summary Findings and Analysis

4.2.1 IRB Strategy Development

As the project originated from an unsolicited proposal received from the Diesel Division of General Motors (DDGM) in August 1988 , it is unclear as to whether a formal IRB Strategy was in development on the part of the federal government prior to the project conception . However, the sole source justification prepared by Supply and Services in its submission to Treasury Board discussed in some detail an industrial and regional benefit strategy. The strategy focussed on the need to maintain a defence industrial base in Canada which could continue to offer high- quality long-term direct and indirect industrial and regional benefits through direct sourcing of parts and equipment as well as technology transfer, joint ventures and small business development primarily by pursuing the **export** defence market.

The IRB strategy highlighted the need to assist the defence industry in becoming self-sufficient so that they would not depend solely on Canadian government contracts for their survival. More specifically, the project was to provide full capacity production, for a five year period, at the General Motors Diesel Division defence facility based in London and to sustain their sub-contractor supplier base thus allowing them to pursue international opportunities.

4.2.2 Contracting Process

Evaluation Process

There was no Evaluation Plan on file and there was no documentation on how IRBs were weighted against price, technical qualifications or overall quality. There may not have been a traditional evaluation per se since work originated from an unsolicited proposal and there was no competitive bidding process.

However, negotiations did take place with DDGM in regards to improving the quality of the IRB commitments. The initial unsolicited proposal contained few IRB commitments. They were:

- 60% Canadian content;
- 15% regional commitments (at least 10% to the Eastern provinces); and
- Offset foreign content in the vehicles by using Canadian content in future export sales.

The project office wanted to improve on these commitments. Negotiations and discussions pursued and an agreement was eventually finalized which included:

- 60% Canadian content (remained unchanged)
- 40% of contract value to consist of indirect procurement, investments, joint ventures and technology transfer.
- 30% regional commitments (with 15% Atlantic and 15% West).
- 17% small business commitments; and
- Liquidated damages (discussed in more detail on under *IRB Management Plan).*

Many of the additional commitment was at the expense of DDGM s traditional Ontario suppliers.

Contract Decision

In July 1989, a sole source contract was awarded to DDGM to supply 199 light armoured wheeled vehicles. As noted above, it was based on an unsolicited proposal received from DDGM in August of 1988. An Interdepartmental Senior Review Board agreed that the vehicles should be purchased on a sole sources basis due to the:

- lack of any other armoured vehicle manufacturer in Canada;
- commonality with current Canadian inventory;
- unlikeliness of foreign manufacturers to establish Canadian manufacturing facilities for such a small quantity of vehicles;
- necessity to sustain current Canadian production capabilities in the defence industry; and
- opportunity to enable the prime to be in a favourable position to bid on major foreign contracts.

The more urgent and "up-front "reason was that General Motors Corporation would have most likely closed its Canadian defence facility without further contracts. At the time of contract, DDGM had little business and was to be closed. The award of the contract caused considerable public controversy. The press and the opposition questioned the real need for the armoured vehicles and the timing and size of the project.

A second directed contract for the 22 tracked vehicles was separately negotiated with FMC of the U.S.A in July of 1990. FMC had previously manufactured approximately 1,400 tracked vehicles for DND during the 1970s and 80s and there was a need for commonality. As well, there was no capability in Canada to manufacture a tracked armoured vehicle. FMC committed themselves to provide 100% Canadian Content in high technology work as an indirect benefit (through technology transfer) to compensate for the foreign content of the vehicles which were manufactured in the firm ŝ U.S.A facility.[15]

IRB Management Plan

DDGM prepared an *Industrial Benefits Management Plan* (Feb26/90) which committed to providing Canadian content equal to or greater than the total contract value. The IRB commitments discussed below are in line with those outlined in the original project approved by Treasury Board (July 17/89) as well as the contract itself. The area that differs slightly is the commitment to liquidated damages. This is discussed in more detail below.

The following outlines DDGM ŝ IRB commitments in detail as per their IRB Management Plan :

Direct Transactions
These were defined as all items with Canadian content delivered under this contract and included the following commitments:

- Total commitment of $54M or approximately **60%** of the contract value;
- Over achievement and underachievement (to a max of $5M) could be credited or offset respectively against indirect transactions; and
- Failure to achieve the commitment was subject to liquidated damage.

Indirect Transactions
These were defined as any items undertaken in Canada which have been entered into due to the MIL LAV contract and included the following commitments:

- Total commitment of $36M or approximately **40%** of contract value and consists of indirect procurement, investments and joint ventures and technology transfer. Transactions were to be contracted after Jan/89 and achieved no later than July/95;
- Over achievement and under achievements were to be handled in the manner outlined under Direct Transactions; and
- Failure to achieve the commitment was subject to liquidated damages.

15 There is minimal documentation on file discussing the FMC Contract and how IRBs were negotiated, managed and fulfilled.

Regional Participation
The two regions under consideration were East and West and the transactions could be either direct or indirect. The Eastern region included New Brunswick, Nova Scotia, PEI and Newfoundland. The Western region included Manitoba, Saskatchewan, Alberta and British Columbia.

- Total commitment of $27M or approximately **30%** of contract value with 15% in the Eastern region and 15% in the Western region. Transactions were to be achieved no later than July/95.
- Failure to achieve the commitment was subject to liquidated damages.

Small Business Commitment
This was defined as a Canadian manufacturer with less than 250 employees or a Canadian service company with less than 50 employees and included the following commitments:

- Total commitment of $15M or approximately **17%** of contract value. Transactions could be either direct or indirect.
- Transactions were to be achieved no later than July/95.
- Failure to achieve commitment was subject to liquidated damages.

Liquidated Damages

The one area that does differ between the contract and *Industrial Benefits Management Plan* is liquidated damages. The *Industrial Benefits Management Plan* does not commit to specific liquidated damages however, the contract stipulates the requirement for liquidated damages as follows:

Liquidated Damages Requirements as per Contract

Direct-	15% of shortfall (if shortfall is 5% or less) 25% of shortfall (if shortfall is greater than 5%)
Indirect-	10% of shortfall
Regional-	10% of shortfall
Small Business-	10% of shortfall

The contract also specified that the aggregate amount of liquidated damages for all IRB categories would not exceed $4.5 million. It is unclear why these specific liquidated damages 'requirements were omitted from the *Industrial Benefits Management Plan.*

Incrementality

According to GM, without the IRB provision the contracts would probably not have the regional participation that they had. "GM is better off because of their impetus provided by the IRB policy (including political and regional support) to find regional suppliers." The search for regional suppliers resulted in abandoning the use of traditional suppliers in Ontario. Some relationships with new suppliers did not unfold as anticipated due to quality and capacity issues which added risk and further expense in resources to find alternate sources. However, DDGM was successful in establishing about a dozen long term relationships.

GM foreign sales cannot be directly attributed to the IRB provisions. But, where foreign sales have been achieved, many of the Canadian suppliers benefited because they contributed directly to the exported product.

Transfer of IRBs to follow-on Contracts

The MIL LAV contract led to two other follow on DND contractors for DDGM ; Light Armoured Vehicle Reconnaissance Services (LAV RECCE) and Armed Personnel Carriers (APC). Concern has been expressed by IC that IRB commitments are flowing from one project to another and there is no direct causality. The steady stream of indirect IRBs are being repeatedly sited on several projects i.e. Michelin. IC is not able to challenge the contracts in place but they are negotiating with GM to improve the quality of the IRBs with the potential threat that Treasury Board may put options to tender on the contracts.

4.2.3 Monitoring and Verification

Monitoring

A detailed description of the process in which the IRB s were to be tracked and reported was outlined in the *Industrial Benefits Management Plan* prepared by DDGM (Feb26/90). It outlined :

- the process by which support is solicited;
- how projections are made;
- how actual achievements are documented; and
- what reports would be generated.

More specifically, under the reporting section, DDGM agreed to provide Semi-Annual and Annual IRB Reports. Both reports would cover:

- Achievements
- Industrial Benefits change requests/proposals
- Schedule 1 - Sub-contracting information
- Person years of employment
- Problem areas
- Certificates of Compliance

DDGM appeared to be diligent in providing the aforementioned reports as promised with full detail of IRB commitments and achievements. The project team also held numerous Program Status Review Meetings throughout the duration of the project. Although there was several different IRB Manager during the course of the project, DDGM felt there was no significant difference in management style or how the monitoring process was handled.

By 1993, all of the IRB commitments under the contract were met and, in some cases, exceeded. In addition, this was accomplished two years ahead of schedule. At that time, GM noted that although additional benefits would continue to be realised from activities resulting from the project, it would be in the best interest of all parties to terminate the MIL LAV IRB reports and focus their attention on the IRB program for LAV RECCE (a follow on contract). It is not noted what response they received from IC.

Verification

IC was responsible for the verification of the achievements presented in the IRB Annual reports. Two verification reports were produced. One to cover the period from contract signature (July 28/89) to Dec 31/89 and the second covered the remaining three years of the contract 1990, 1991 and 1992.[16] There was no verification report for 1993 although there was a final IRB Annual report dated May 1994 which summarized the full contract period. Upon project closure, IC accepted that all IRB commitments had been met without reservation.

To prepare the verification reports, IC developed a detailed methodology and approach that appeared to be followed at least for the one verification report that was on file. The objectives of the verification reports were to:

- verify the accuracy of the IRB claims submitted in the IRB reports
- assess there reliability of the IRB tracking procedures/systems; and
- ensure that the documentation of the verification process accurately demonstrates the IRB obligations have been fulfilled.

16 It should be noted that correspondance on file detailed a proposed timeframe of mid-1993 for the completion of the 1990/91/92 Verification Report, however no copy of this Verification Report was found on file.

Verification was completed, in the case of the 1989 Verification Report (dated September 1990), by reviewing the IRB Annual Reports and reviewing transactions claimed for consistency and completeness. As well, third party documentation held in DDGM's files was consulted and when judged necessary additional clarification was sought via telephone from third parties.

Summary

Although the project originated from a unsolicited proposal, it appears that an industrial and regional benefits strategy was formulated to guide the project implementation. The IRB commitments originally proposed by DDGM were significantly improved on during contract negotiations. A detailed IRB Management Plan including direct and indirect transactions, regional and small business commitments and liquidated damages become part of the eventual contract. DDGM was successful in meeting and in some cases exceeding these IRB commitments even though that particular division of GM had no experience with IRBs before the MIL LAV project. IRB commitments were closely monitored by IC utilizing a detailed verification methodology.

It was generally viewed as a worthwhile undertaking by GM; "It has been a positive experience and we have never looked on it as a burden". DDGM felt they were able to broaden their Canadian regional supplier base and enhance their skills at a relatively small cost to administration and overhead. However, it should be noted that GM is very experienced and savvy at managing IRB commitments and minimizing the risk these commitments have on the corporate "bottom line". MIL LAV is often sited as a IRB success story but proving true incrementality(how much did GM veer from its regular supplier base and its intended course of business activities) would require more in-depth investigation.

4.3 References

4.3.1 Documents Reviewed

MIL LAV Unsoliciated Proposal - Section 3: Industrial Benefits, Prepared by Diesel Division General Motors of Canada Limited, August 1988.

MIL LAV Treasury Board/Supply and Services Proposal , July 17, 1989.

MIL LAV Industrial Benefits Management Plan Revision A. Prepared by Diesel Division General Motors of Canada Limited. February 26, 1990.

Amendment no. 4 to the Contract. February 5, 1991.

MIL LAV Industrial Benefits Annual Report 1989. Prepared by: Diesel Division General Motors of Canada Limited. April 12, 1990.

MIL LAV Project Verification Plan of the Annual Report 1989. Prepared by: ISTC. September 21, 1990.

MIL LAV Industrial Benefits Annual Report 1990. Prepared by: Diesel Division General Motors of Canada Limited. March 1, 1991.

MIL LAV Industrial Benefits Annual Report 1991. Prepared by: Diesel Division General Motors of Canada Limited. March 1, 1992.

Draft Verification Plan for the IRB Program on the MIL LAV Project for the Reporting Periods: 1990, 1991 and 1992. Prepared by: ISTC Canada. February 1993.

MIL LAV Industrial Benefits Final Report. Prepared by: Diesel Division General Motors of Canada Limited. March 11, 1994.

Industrial and Regional Benefits Management Plan Rev "A "for LAV RECCE. Prepared by Diesel Division General Motors of Canada Limited. February 25, 1997.

Industrial and Regional Benefits Management Plan for LAV RECCE. Submitted to: Diesel Division General Motors of Canada Limited. Prepared by: Computing Devices Canada. August 29, 1997.

Industrial and Regional Benefits Management Plan for LAV RECCE. Submitted to: Diesel Division General Motors of Canada Limited. Prepared by: Delco Defense Systems Operations. September 12, 1997.

Industrial and Regional Benefits Management Plan for the Armoured Personnel Carrier (APC). Prepared for Diesel Division General Motors (DDGM). Prepared by: Delco Defense Systems Operations. June 17, 1997

4.3.2 Interviewees

Barry Nimetz, IRB Manager, Industry Canada
Ken Yamashita, Manager of IRBs, General Motors of Canada

5. MCP Case Study #4: Eryx

CASE STUDY #4:
Short Range Anti-Armour Weapon (Heavy) ERYX Missile Project - SRAAW(H)

5.1 Project Profile

Project Title	Short Range Anti-Armour Weapon (Heavy) ERYX Missile Project - SRAAW(H)
IC Project Officer	Guy Gallant
PWGSC Manager	Pierre Trudeau
Contract Value	Industrialization Phase: $5.9 million Implementation Phase: Initially $250 million - revised to $100 million after 1989 budget
Contract Timeframe	IRB contract: 1993-2003 Implementation contract: 1993-1998
Competitive Process	Sole Source
Industry Sector	Land Defence
Region(s) Targeted	Invited - Regional Commitments: mostly Quebec
Client Department	Department of National Defence
Prime Contractor	Aérospatiale, Guy LeCouf
Main Subcontractors	Allied Signal, Quebec Composite Atlantic, Atlantic Canadian Marconi, Quebec Hughes-Leitz, Ontario Amptech, West

Project Description:

The objective of the project was to acquire approximately 400 SRAAW(H) firing posts and 10,000 missiles to meet the minimum operational requirement of infantry battalions of the NATO committed Land Forces. Eryx missiles are lightweight, human-portable anti-armour guided missiles with a 600 metre range.

France approached the Canadian Department of Defence in late 1986 with an offer to cooperate in the production and evaluation of the ERYX weapon system. Both countries had a common requirement for a short range anti-armour weapon and only the French system was believed to meet DND ŝ operational requirement.

5.2 Summary Findings and Analysis

5.2.1 IRB Strategy Development

Competitive Process
This project had a distinctive procurement process as it involved the industrialization of Canadian subcontractors at DND ŝ expense (during a pre-production preparation phase) prior to the acquisition phase. The pre-production phase was used to confirm the performance of the French Eryx weapon system through a joint evaluation with the French Ministry of Defence; to define the nature of Canadian industrial participation; and to develop the Procurement Contract. The primary IRB objective was to negotiate the maximum level of IRBs.

Cabinet authorized the conduct of negotiations with the French authorities to develop a MOU on joint evaluation, production and procurement of Eryx and eventually granted approval-in-principle for the project and approval to enter the pre-production phase.

IRB Strategy Development Process
In mid-1987, IC, DND, External Affairs and PWGSC participated in discussions regarding the pursuit of the co-production offer. It was recognized early by IC that there was little quality or long term industrial development potential inherent in the component initially offered to Canada by Aerospatiale. Industrialization of Canadian industrial participants was already identified as an objective at a subcontractor level. IC ŝ desire was to have Canadian firms selected based on their ability to perform favourably with established French subcontractors to Aerospatiale, performance being measured in terms of technical and financial capabilities, price, quality, and ability to meet delivery requirements. Manufacturing costs were not to increase due to the participation of Canadian industry in Eryx production.

It was considered that IRB leverage was relatively weak for this project (and of medium risk), given the conditions surrounding the procurement: sole source, preferential price offer, financial advantages to joint evaluation, governmentally approved MOU, and prime ministerial announcement of cooperative initiative. Efforts were made to negotiate desirable offset work for the regions; the technical and system requirements in the Eryx missile procurement necessitated the participation of the larger established aerospace firms which were located in Quebec and Ontario.

The initial IRB strategy included the following:

- emphasis on direct benefits and if necessary, quality tangible and immediate indirect benefits;
- attempt to secure a work share equivalent to the Canadian content of the procurement contract value without incurring unacceptable price increases (premiums);
- foster industrial relationships between Aerospatiale and Canadian companies; and
- secure early receipt of IRBs; timing of IRBs in line with implementation activities was seen as important.

Secondary to obtaining high value IBs, regional and small business benefits were also promoted; however, they were seen as secondary to obtaining high value IBs. No specific requirements were developed for these benefits.

Request for Proposal Requirements

An RFP was developed prior to the pre-production phase, which covered industrialization and acquisition proposal requirements as well as IRBs. Clauses were integrated to allow for negotiations on acquisition IRBs and price after the industrialization contract was signed and up to the signing of the acquisition contract. The RFP asked for 100% direct benefits in terms of CCV with the caveat that should indirect benefits be unavoidable then these must be identified in advance, have at least a 35% CCV and be of high technological quality. The RFP also asked for small business participation and regional distribution (no specifications of amounts). The timing of IRBs was required to correspond to the acquisition so that achievements could be completed as quickly as possible and realized at least by the end of the acquisition contract.

Direct IRBs were defined in the IRB contract as resulting from a transaction related to the Eryx system while indirect IRBs were considered to be those resulting from a transaction not related to the Eryx system. This definition differs from the generally accepted definition found in other MCP contracts in which direct benefits are only those associated directly with the procurement.

5.2.2 Contracting Process

Roles and Responsibilities

Aerospatiale conducted an initial Canada-wide industrial survey, with the help of the regional agencies, to identify possible subcontractors. Later, the main subcontractors were assisted by the regional agencies and the IC negotiation team in a more definitive lining up of industrial partners in visits across the country.

Aerospatiale IRB Proposals

Aerospatiale presented an initial proposal prior to the pre-production phase in 1988. The proposal was evaluated by the interdepartmental evaluation team based on four issues including two IRB related factors: quantity and technological quality of IRBs; and contribution to long term IRB development and to the defence industrial base.

IC assessed that although the proposal agreed in principle to meeting Canada's 100% quantitative IRB requirements, it was deficient in many key respects:

- 50% direct CCV but very dependent on future sales forecasted over an extended 10 year period;
- quality of IRBs lacking; only basic componentry of non-high technology content, minimum technology transfer and build-to-print process;
- Canadian companies had to agree not to enter into competition with Aerospatiale or use transferred technology for any other use than Eryx, i.e. no permission to exploit transferred technology, no product mandate;
- no Canadian marketing rights, except on a case by case basis;
- Canada had to pay all costs of surveying Canadian industrial participants; and
- Canada had to pay a penalty if it decided not to procure the Eryx system after Aerospatiale had transferred technology to Canadian industry.

Aerospatiale's subsequent proposal, following the pre-production phase, committed to direct benefits of 50% of the total procurement - not just of the Canadian content of the total procurement which would be around 70-80%. Therefore, real IRBs would be around 35%-40%. Benefits were of little strategic or technological importance and did not include investments, technology transfers or indirect IRBs.

Aerospatiale submitted revised proposals based on IC negotiations and criticisms in June and November 91, with no substantial improvements to CCV%, IRB quality and specificity of indirect benefits. These proposals were still considered by IC, WD and ACOA as insufficient and unacceptable and it was recommended to DND and PWGSC that they be rejected.

Evaluation of Implementation Proposal

The proposal was evaluated by IC on a quantitative IRB level and circulated to DND, ACOA and WD. IC requested the assignment of an officer to prepare an industrial and technological assessment of the project also at a qualitative level. This would assist in the preparation of a negotiation plan and strategy.

IRB Scenario Development
Following the presentation of an implementation proposal by Aerospatiale, IC developed IRB scenarios to assist in negotiations. These were based on the objective of 100% of CCV in direct and indirect benefits based on Canada's share of the total procurement.

Scenario 1 - Project Ideal:
100% direct CCV of high technological quality, 10%-20% (high) small business participation and distribution within all regions of Canada, commitments achieved in the fastest possible time (6 years) (60%-80% in first 3 years and balance within next 3 years).

Scenario 2 - Attainable expectations:
70% direct CCV of high technological quality and 30% indirect, less than 10% (medium) small business participation, and distribution within all regions, commitments achieved quickly (8 years). For indirect benefits, preference of capital investments, technology transfers, defence-related purchases. Indirect benefits had to be committed to in the contract and specifically identified.

Scenario 3 - Least Acceptable Result:
50% direct and 50% indirect, with no small business benefits, over a 10 year timeframe.

Negotiations
The predominant value of this joint-production project was to create a successful collaborative effort with France and, therefore, senior people from ministries in both countries were involved in discussing its implementation and IRB issues. The IC and Defence ADMs exchanged correspondence on how IRB commitment deficiencies could be dealt with in meetings with Aerospatiale and French Defence representatives. It also became evident that France wanted to make this first foreign sale.

Negotiations with Aerospatiale were held before and after their Implementation proposal was submitted in early 91 with respect to specific suppliers in Canada. IC proposed that including Allied Signal for sourcing of the Thermal Imager would settle the CCV commitment shortfall: it would bring CCV from 35% to 100%. The problem was that France had launched a competition to develop the night vision system and bids were being assessed by Aerospatiale, as the prime.

Sagem of France was Allied Signal's main competitor; the company had a more price competitive proposal but proposed low level IRBs to Canada. The inclusion of Allied Signal

was seen favourably considering that through the Defence Industry Productivity Program (DIPP), IC has contributed $4.5M to Allied Signal to develop the night vision technology.

After five years of significant effort by Canadian and French industry and government, negotiations on the industrialization coproduction contract were completed in April 92 and resulted in a commitment to provide IRBs equivalent to the Canadian procurement with the inclusion of Allied Signal as a subcontractor. The final IRB Contract included commitments of direct IRBs at 70% of the contract value, while indirect benefits were committed at 30%. No specific commitments were included for small business, only a requirement to report on the value of transactions undertaken with small businesses. The definition of small business in this case study defers somewhat from others: it is defined as less than 250 employees in manufacturing, compared to the 100 figure used in other case studies.

CCV Verification

Prior to the signing of the implementation contract, IC examined the CCV content of subcontractors to be involved in the project to verify the real direct CCV. The contract includes profiles of the major subcontractors for all direct and indirect transactions which included information on expected participation in the project, value, CCV, suppliers and small business participation in their activities related to the project.

Definitions

Quality benefits were the focus of the IRB strategy and were clearly defined:

- High quality direct benefits - quality refers to long lasting, substantial work associated with current technology; and
- High quality indirect benefits - clear definition of scope, nature and timing; significant long term economic benefit to Canada; enhancement of the high tech and/or defence base; high degree of certainty of achievement; measurability and monitorability; and direct benefits concurrently with deliverables.

Role of IRB Manager

As noted, the IRB Manager in this project defines direct CCV as transactions using the same technology/product and, therefore, future sales are considered as a direct benefit. The focus is on the long term provision of quality benefits such as strategic alliances, which is why the IRB contract period extends beyond the procurement contract. However the initial IRB strategy had emphasized immediate benefits and the initial evaluations appeared to dislike the proposed extended 10 year achievement period.

As a guarantee for the achievement of all committed IRBs, the contract has a provision for a $10 million letter of credit representing 10% of the total commitment. The contract specifies periods within which achievements must be met to avoid payment to the Crown

of through the letter of credit for a value of 10% of the direct IRB commitment and/or the IRB shortfall.

As in other case studies, the IRB Manager has the power to accept transactions which do not meet the contractual specifications, when he believes it is in the Crown's interest to do so.

IRB Credits
In this case study, IRB transactions are credited differently based on CCV percentages:
- Direct IRBs: if CCV of transaction is over 70%, credit 100% of transaction value
  if CCV less than 70%, credit actual percentage
- Indirect IRBs:
  if CCV of transaction is over 80%, credit 100% of transaction value
  if CCV less than 80% (but over 35%), then credited actual percentage
  investment credited at 100%, technology transfer at actual amount

To be eligible, indirect transactions had to be in high technology sector and be a new commercial initiative.

The contract also included unique crediting clauses not found in other case studies: Overachievements are set aside for future procurement by the government and IRBs achieved before contract signing could be credited.

5.2.3 Monitoring and Verification

Reporting and Verification process
Reporting requirements include progress, interim and annual reports on IRB achievements and it activities in implementing the subcontractor development and small business supplier plans. Annual reports include copies of paid invoices and certificates of compliance as supporting documentation. Not submitting the annual report on achievements within 30 days of the anniversary of the contract would confirm that achievements were nul for that year.

IC provides Aerospatiale with a letter confirming the approval of claimed IRBs following verification of documentation - it has a deadline of 45 days to do so. Annual meetings between the Project Management Office (including IC) and Aerospatiale are held to discuss project implementation and emerging issues.

Achievements and Alterations
The contract specified that modifications or alterations to IRBs have to be requested in writing to IC for approval. Modifications resulting in a reduction of the total IRB commitment or the total Direct commitment are considered unacceptable.

Aerospatiale is delivering on its commitments, although future sales commitments may be difficult to achieve. The IRB Manager is intervening to ensure that this will be made up by indirect benefits pursued with the Canadian subcontractors chosen at the outset of the project. This is in an effort to maximize the long term benefits of the project through fostering sustainable industrial relationships.

IC provided Aerospatiale with an incentive to participate in the purchase of one of its Canadian subcontractors which was closing down. IC applied a multiplier of two in assessing benefits to investments made by Aerospatiale to buy Cellpack in the Atlantic, in partnership with the Government of Nova Scotia. On the other hand, France was refused an IRB credit for a purchase made in Canada (a swap)prior to the Eryx implementation contract. Senior level support from IC and the project management office was required in this decision.

5.3 References

5.3.1 Documents Reviewed

Briefing by IC officer to IC Minister, August 1987.

Memo from IC DM to Minister to seek approval of the IRB strategy, December 1987.

IC Proposal to Treasury Board for Preliminary Approval, June 1988.

Treasury Board Preliminary Project Approval, October 1988.

SRAAW(H) Treasury Board Project Identification Sheet, April 1989.

IRB Scenarios, July 1991.

5.3.2 Interviewees

Guy Gallant, IRB Manager, IC

5.3.3 Issues on Eryx Case Study:

Different definition and use of:
- Direct/indirect benefits
- Small business definition
- Use of letter of credit to guarantee IRBs (payment at 10%) - not liquidated damages

- IRB period varies from implementation period

Contract negotiations:
- high visibility and importance of project for both countries meant that high level diplomats were involved in discussions
- sole source contract allowed for extensive negotiations to obtain IRBs at a minimum IC level

Monitoring:
Required both certificate of compliance and supporting documentation with annual reports. IC has 45 days to accept certificate of compliance.

6. MCP Case Study #5: TCCCS

CASE STUDY #5:
Tactical Command, Control, Communications Radio System (TCCCS/IRIS System)

6.1 Project Profile

Project Title	Tactical Command, Control, Communications Radio System (TCCCS/IRIS System)
IC Project Officer	Initially Don Poole, then Brian Deacon, now Kurt Theoret
PWGSC Manager	Don Seabrooke, TCCCS Project Office
Contract Value	$1,200 million
Contract Timeframe	Contract period18 April 1991- 31 December, 2001 (IRB period from 27 October, 1989 to 31 December, 2001)
Competitive Process	Competitive
Industry Sector	Defence Electronics
Region(s) Targeted	Cabinet Direction to Western Canada
Client Department	Department of National Defence
Prime Contractor	Computing Devices Company (CDC), Ottawa; John Dawson, IRB Director
Main Subcontractors	Racal, UK SD Scicon, UK TRW, US Motorola, US Frontec, Alberta Westbridge, Saskatchewan SED Systems, Saskatchewan Atlantic Research Canada, Ottawa and Edmonton

Project Description
Replace the tactical radios used by Canadian Forces with a new family of combat radios designed to operate in the electronic warfare environment of the modern battlefield. The Project was initially planned to be implemented in three phases: Radio system, Area System and Automated Combat Information System, however based on 1989 federal budget reductions, the last two phases of contract were cancelled.

6.2 Summary Findings and Analysis

6.2.1 IRB Strategy Development

Strategy Development Process
IC Ministerial approval was sought for the Letter of Interest with the IRB component approximately six months after the approval of the Procurement Plan by PWGSC. TCCCS was among the first MCPs to go through Cabinet review following the Cabinet Acquisition Process review implemented earlier that year (1988).

Regional direction appeared at the Cabinet approval-in-principle stage: the approval was for a procurement strategy based on competition between Canadian-based companies, with the understanding that a "substantial" portion of the activity would occur in Western Canada.

The Government announced in July 1988 that small business considerations were to become an integral part of proposals for selected contracts over $10 million, therefore, small business objectives were added to the initial IRB strategy objective.

Roles and Responsibilities
The Interdepartmental Senior Review Board (ISRB) was struck early in the strategy development stage to discuss whether or not the contract should be competitive and whether there should be Definition and Implementation contracts. Meetings were attended by DND, IC, PWGSC, with TB , ACOA and WD as observers. An Interdepartmental MOU was signed.

Competing Interests
In-depth discussions were held over the meaning of "substantial" benefits in Western Canada. WD wanted a minimum of 50% of Canadian Content, while IC and DND were of the opinion that the competitive environment should produce the IRBs for the Western Region. No targets were set in the RFP documents.

IRB Strategy Outline
It was assessed that the project had to rely heavily on foreign technology due to a lack of Canadian technology in tactical systems. The basic fundamental of the IRB strategy was to

establish new, long term capability in Canada for the production, support and export of tactical radio systems and associated capability. Specific objectives included:

- Canadian-based prime;
- production of radio system element in Canada;
- licence agreements which allow for upgrades and exports from Canada;
- small business;
- Canadian content;
- "substantial work" to be directed in Western region (regional direction was not specified in LOI but was included in RFP).

Competitive Process

The procurement process began with the sending of a Letter of Interest (LOI) which went to over 100 companies; of which only 10%were Canadian. Five out of 12 responses were judged to justify the status of qualified prime bidder.

Detailed IRB responses were not required; bidders only had to provide general indications of their capacity and commitment to the IRB objectives, for example, by providing an estimate of overall Canadian content. The LOI was released before the Cabinet directive of Western benefits. It simply indicated that IRBs[17] were to be an important consideration in the selection of the prime contractor.

The Request for Proposal (RFP) was released to a selected to five contractors and three bids were received for the Implementation Contract.

6.2.2 Contracting Process

RFP IRB objectives

The RFP instructed bidders that they should maximise both direct and indirect IRB proposals, the form of which should depend on their own business plans. Emphasis was placed on long-term high-quality IRBs and the RFP defined eligibility criteria for the different types of IRBs. In the case of an indirect (offset) purchase of goods, the CCV was required to be a minimum of 35%, excluding profit, and be incremental to similar purchases undertaken in the previous three years.

Bidders were informed that the primary areas for evaluation of the IRB proposals would be commitments in terms of assessed quality, CCV and risk of commitments. Defined activities with specific Canadian companies would be of more value than general statements of intent, which would have a higher assigned risk factor. In the case of multinational

17 Documentation to be further examined to determine if IRBs a significant factor in the selection of qualified bidders.

companies, an important consideration of risk would be, its historical record of implementing long term quality IRB commitments. (TCCCS was the only project among the six case studies in which the company's track record in achieving IRBs was stated as an evaluation criteria).

The RFP revisited the IRB objectives mentioned in the LOI. It reduced the conditions of some objectives, such as the continuation of manufacture for export; it was recognized in the RFP that this export market is highly competitive and that bidders should examine options for follow-on production that best fit their business plan while optimizing IRBs.

IRB Requirements

The RFP was specific in its IRB requirements and in its discussion of the consequence of omissions. It was stated that the IRB proposal would be an important factor in the evaluation of bids, and failure to commit satisfactory IRBs to Canada, including a substantial portion in Western Canada, would result in the total bid being recommended for rejection. As well, the failure to provide a Small Business Subcontracting Plan and Development Plan would result in a recommendation by the IRB evaluation team that the bid be rejected.

The RFP did not establish a quota for the Western direction of IRBs. Benefits to other regions of Canada were also sought and were promised to receive full credit during the bid evaluation. Further requirements were an Executive Summary, IRB Management Plan, Small Business Development Plan and Business Plan.

Roles and Responsibilities

Once the RFP was issued, IC activities included:

- preparing detailed evaluation plan and coordinating with WD and ACOA;
- liaison with prime bidders and bid team to clarify IRB requirements; and
- carrying out exercise with evaluation team members to test IRB evaluation plan and "decision pad" software utility for IRB evaluations.

The IRB Evaluation Working Group was chaired by IC TCCCS Manager and included at least one designated member from each of IC (a manager), ACOA, WD and PWGSC. The IRB Evaluation Chairman was a member of the Evaluation Board. PWGSC had primary responsibility for the negotiation of draft contracts with the selected bidder.

Evaluation Process

IRBs were one of the four evaluation areas. Once evaluation rankings were received from all areas, the Evaluation Board combined area evaluations/rankings and pricing data into an overall proposal ranking[18].

The evaluation process was to be as follows (we have no confirmation from the files on whether the actual process went exactly this way):

The best IRB proposal would be the one rated as having the best overall IRB package for Canada and also having a substantial Western IRB package. Ideally, the bid with the best Western package would also be the best overall bid. Once IRB transactions were checked for eligibility, they would be subject to the following evaluation:

- Quantitative Evaluation: Canadian Content Value (CCV);
- Qualitative Evaluation: A numerical quality factor is applied as a weight to the quantitative figure, where possible. Otherwise an EGAPU (Excellent, Good, Acceptable, Poor, Unacceptable) rating scale was used. The "decision pad "software was planned to be used to assist in comparing and ranking IRB proposals based on qualitative issues;
- Risk Assessment: A risk factor was established and applied to relevant quantitative figures where applicable.

Based on the evaluation values obtained, the numerical value of IRB transactions would be determined for each type of transaction and an EGAPU rating determined within each region. A re-examination of the Western Region IRB packages would then be undertaken to establish the order of merit with respect to Western IRB commitments. Proposals that did not meet the requirement for substantial Western IRBs would be recommended for rejection (i.e. unacceptable). The remaining acceptable proposals would be ranked in terms of overall benefits to Canada. If two proposals were ranked equally with respect to Canadian benefits, the proposal with the best Western IRBs would rank first.

This final reexamination could result in a change in the EGAPU rating and comments on why one bidder was ranked higher in the IRB Evaluation Report. Bids that did not meet an Acceptable rating for either overall Canadian IRBs or Western IRBs were recommended for rejection. Although a numerical scoring system was used in parts of the IRB evaluation, the plan was to report the IRB results to the Evaluation Board using an overall EGAPU rating[19]. A complete audit trail on how the ratings were achieved was retained by the IRB

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18 There was no further information in the files available to us as to how IRBs were weighed against other areas and how the overall rankings were determined.

19 The IRB Evaluation Report still has to be examined to get relative IRB and Global ranking of proposals.

Evaluation Working Group. The evaluation results were then submitted for Cabinet and Treasury Board approval to proceed into contract with CDC.

Contract Definitions
The determination of CCV was defined in accordance with Canadian General Standards Board "Definition of Canadian Content".

Direct benefits were derived from performance of any part of the work pertaining to TCCCS while indirect benefits derived from activities not directly involved, these include: CCV of export or import replacement sales, technology transfers, investment or product mandates relating to the radio system technology or comparable high technology products.

Small business was defined as an independently owned and operated Canadian manufacturing firm which employs less than 100 full-time personnel or a service firm of less than 50 full-time employees.

High Quality Indirect IRBs
The RFP asked for a minimum of 35%CCV for indirect IRB Goods and Services procurement; the contract was settled at 40%CCV.

CCV Determination
Estimates were used to establish a CCV for each class of goods and services and were submitted to IC for approval. These percentages were then applied to all purchases made from the supplier. A default CCV% was applied to 20% of direct material purchases, therefore CDC had to support the CCV of the remaining 80% of purchases.

Default %CCV were applied when actual CCVs were unknown:
- offshore vendors: 0%CCV
- Canadian representatives of offshore companies: 5%CCV
- Canadian distributors: 25% CCV
- Canadian manufacturers: 60%CCV
- Canadian service companies: 98%CCV

Liquidated Damages
In the RFP, the value of liquidated damages was to be proposed by bidders in their proposals, however the minimum acceptable value was set at 10%. This covers each commitment package separately (not a global damages figure): total CCV, investments, technology transfer, total small business commitment and total Western commitment.

Liquidated damages in the contract actually vary from:
- 100% for direct IRBs and program exports (restricted to a maximum value of $100 million);

- to 10% for product export, procurement, investments and small business;
- to a little over 8% for technology transfer.

Regional Direction in Contract
The IRIS system contract with CDC achieved the government-directed focus on placing a "substantial" portion of the work in the Western Region through a commitment of 74% of the total benefits package. The new CDC facility, "Communications System Division", was the cornerstone for some of the Western development sought.

6.2.3 Monitoring and Verification

Reporting requirements
IRB management requirements are for semi-annual Achievement Reports and annual IRB progress reports, accompanied by a Certificate of Compliance. As well, IRB progress reviews are included in all regular Contract Progress Review Meetings.

CDC has developed a detailed Management Plan describing the responsibilities of key IRB personnel and the functions are included in a computerized IRB tracking system. As well, the Plan describes the subcontractor bid process: RFP, evaluation, contracting.

Verification Responsibilities
Within six months of receiving Certificates of Compliance, IC has to undertake a verification and provide the Contractor with a statement indicating that IRBs claimed are accepted in whole, or in part, or rejected.

IC Discretion
IC has the discretionary power to allow or disallow, in whole or in part any transaction by the bidder, its supplier or a foreign government from qualifying as a Canadian IRB, where it is considered to be of benefit to Canada to do so.

Verification Activities
The first verification of the TCCCS IRBs was done by the Project Manager. The 1993 and 1994 verifications were sub-contracted out to FMA Consultants. The Project Manager remained involved in meetings with CDC. The verifications were extensive: the consultants examined and validated achievements claimed at the prime and subcontractor levels and the calculation of CCV. The verification recommended that CDC provide more detailed information on the technology transfer and CCV claimed for subcontractors.

IRB achievements
Most IRB commitments have been exceeded so far, although with some slippage in schedules. Achievement of Western benefits increased to 77% of total benefits package.

Alterations
The contract includes provisions for IRB modifications should the the Total contract Price change; that is, should the contract value increase, the contractor has to increase the IRB commitments accordingly through increased CCV. All modifications to IRB commitments must have prior consent from IC. Tradeoffs between direct and indirect IRBs can be accepted. Documents on file indicate that some requests for alternative approaches to meeting IRB commitments were made and approved.

6.3 References

6.3.1 Documents Reviewed

Interdepartmental Senior Review Board Meeting Notes, Prepared by: TCCCS Project Manager, Department of National Defence, 30 November, 6 April and 20 June, 1988

TCCCS IRB Strategy, Prepared by Electronics Industrial Benefits Division, Industry Canada, 19 February, 1988.

Industrial Benefits section of the Letter of Interest, Issued by PWGSC, 31 March, 1988.

Treasury Board Decision, Sent to: Deputy Minister of National Defence, 15 September, 1988.

Request for Proposal, Issued by PWGSC, 11 October, 1989.

Proposal Evaluation Plan, TCCCS/IRIS Project Management Office and Evaluation Review Board, May 1990.

IRB Contract between CDC and Industry Canada, Revised Version, 18 February, 1991.

IRB Progress Achievement Report, Prepared by CDC, 19 September, 1997

IRB Management Plan, Prepared by CDC, 21 March, 1997

Verification Report, Prepared by FMA Consultants, 14 September, 1995.

IRB Annual Achievement Report, Prepared by CDC, 31 March, 1995

Interview Notes from Meeting with Brian Deacon, IRB Project Manager, 22 February, 1995.

6.3.2 Interviewees

Kurt Theoret, IRB Manager for TCCCS

7. MCP Case Study #6: UTTH

CASE STUDY #6:
Utility Tactical Transport Helicopter (UTTH)

7.1 Project Profile

Project Title	Utility Tactical Transport Helicopter (UTTH)
IC Project Officer	John Hutchins
PWGSC Manager	Michel Lapointe
Contract Value	Approx. $1,000M
Contract Timeframe	September 9, 1992 to 31 March, 1999
Competitive Process	Sole Source
Industry Sector	Aeronautics
Region(s) Targeted	Directed to West and Atlantic and Cdn supplier
Client Department	Department of National Defence
Prime Contractor	Bell Helicopter Textron Canada
Main Subcontractors	CAE Electronics Canadian Marconi Litton Special Devices

Project Description:
The project was sole sourced as Bell Helicopter Textron Canada (BHTC) in Mirabel was the only Canadian supplier of the type of utility helicopter needed by DND. The first objective of the project was to replace three existing helicopter fleets with a single fleet of UTTHs in which all the basic air vehicles were procured "off-the-shelf" to Transport Canada airworthiness standards. The second was to incorporate and make provisions for the incorporation of subsystems to provide a range of different operational capabilities across the fleet.

With respect to IRBs, Bell was directed to have a Supplier Development Program (to qualify Canadian suppliers) and to source $10M in Atlantic Canada and $10M in Western Canada. BHTC is owned by the US parent company in Texas. An important component of the IRB strategy was to avoid sourcing/subcontracting to the US.

7.2 Summary Findings and Analysis

7.2.1 IRB Strategy Development

DND invited IC to participate in the development of the Statement of Work (SOW) with respect to the IRB component in early 1992. Treasury Board approval was still in the process of being sought when the RFP was issued.

The IRB Objectives were:

- create long term for the Canadian high technology industry sectors, through the establishment of capabilities, knowledge, technologies and markets;
- encourage long-term, qualitative improvements to the capability, capacity, international competitiveness and growth of Canadian firms in the Atlantic, West and Quebec; and
- support, to the highest degree possible, small business suppliers in Canada.

No specific documentation was found relating to the development of an IRB Strategy or TB submissions. We have not found documentation to explain the rationale behind directing $10M to the West and $10M to the East.

Request for Proposal

A Request for Proposal (RFP) was sent to BHTC on June 17 1992 which comprised: the RFP, a Model Contract, Contract Cost Principles, and the Statement of Work. The contractor was informed that the proposal could be negotiated: the RFP included a statement that the Canadian Government reserved the right to negotiate any or all aspects of a proposal to obtain the best overall value or reject any proposal received.

Evaluation Guidelines

The RFP outlined the evaluation process, method and areas, which resemble those of other case studies. The operational and technical requirements appeared to be the primary evaluation area: the proposal had to satisfy all mandatory and offer a significant proportion of the highly desirable operational and technical requirements, as an additional requirement, it had to satisfactorily address, as a minimum, the other general areas including IRBs.

It is not clear how the IRB evaluation was considered in the overall evaluation. The results of each separate area were the object of a review by an Interdepartmental Committee and following negotiation, a recommendation on the acceptability of the proposal and on the award of the contract would be made. The RFP also stated that the IRB proposal would be an important factor in the evaluation and failure to commit acceptable IRBs, with suitable guarantees of performance, could result in the proposal being recommended for rejection. It is not clear if a quantitative or qualitative (EGAPU) grid had been used to assess the overall IRB proposal.

IRB Evaluation Guidelines

No specific minimums or acceptable levels of commitment were stated in the RFP - instead it asked for optimum IRBs. As in other case studies, the Contractor had to provide well defined the contractual commitments and propose transactions which contributed to the stated IRB objectives. Transactions were evaluated according to:

- Quality: enhance long term capabilities and capacity of Canadian suppliers and the exploitation of domestic and international market;
- Quantity: CCV occurring within the contract period; and
- Risk: business policies in Canadian operations, significance of liquidated damages, degree of definition and measurability, schedule, and business risks.

Regional commitments were evaluated based on the effort to forge links with suppliers from at least one region. Small business commitments would be assessed based on the extent to which it makes a commitment to support small business.

IRB Definitions in RFP

The eligible IRB transactions were very well defined in the RFP compared to other case studies. The various types of direct and indirect transactions were described and the level of information detail required on each for the proposal was stated. It also clearly restricted technology transfer and investment to high technology sectors. The criteria for the eligibility of transactions were also well defined by the following elements:

- Causality: incremental benefits;
- Timing: within the contract period;
- Eligible parties: Bell Textron was stated as the only eligible party in the RFP - however this was extended to include affiliated Textron companies in the contract;
- CCV;
- Investment transactions: development of advance technology not resulting in overcapacity
- Indirect purchases: minimum of 40%CCV, incremental purchases of similar technology level as UTTH.

7.2.2 Contracting Process

Response to RFP and negotiation process

In its response to the RFP, the evaluators determined that BHTC failed to fully comply with the IRB requirements and its proposal fell short as measured against the minimum evaluation criteria. IC estimated that BHTC's lack of experience with the IRB policy, the lack of time (one month deadline), the sole source contracting process and the conservative nature of BHTC could explain the proposal's shortcomings.

The initial proposal offered only a maximum of $96M in firm contractual commitments, comprising mainly the items peculiar to the military version of the helicopter as required by DND. The remainder of their initial offer, $180M of overestimated direct content comprising helicopter components supplied by Canadian industry and technology transfer, was offered on a "best efforts" basis only.

The proposal was negotiated and initially, much of the negotiating time was spent informing BHTC on the requirement of the IRB policy and motivating them to improve their proposal to acceptable standards. Bell resubmitted its IRB Management Plan in June 1993, which was approved in July 1993. In this cases study, the possibility of negotiating commitments appears to have facilitated the development of an improved IRB package with which the contractor could agree to.

This negotiation processprobably explains why the signed contract differs from the requirements of the RFP regarding for example the requirement for a small business subcontracting plan, transfer of technology criteria and a unique level of liquidated damages (see below).

CCV negotiations

IC's initial concern was that the basic helicopter model, which forms the basis of the UTTH project, actually had a lower CCV than IC had estimated. Negotiations initially concentrated on understanding BHTC's accounting system to learn more about the existing CCV and also to tie verification of direct CCV in with the company's business practices in order to minimize verification resources. Helicopter components of a dynamic nature (such as engines) were specifically singled out for contractual commitment, as were any components that were sensitive from a regional perspective. The importance of these IRB commitments for IC are reflected in the contract: they are tied to specific Canadian subcontractors, highest in the scale of IRB transactions for applying overachievements, and have the higher 5% liquidated damages.

In its proposal, BHTC had failed to identify in quantitative terms all the IRBs it could offer from the direct UTTHs, such as labour, overhead and profit. IC assisted in the identification of the value and average CCV% of these components for the UTTH helicopter model.

An elaborate system of applying overachievements was written into the contract to achieve a balance between an improved IRB program wanted by IC and Bell's desire for a flexible approach in achieving them. The system has a structured coding which allows BHTC to apply overachievements in high quality IRB values to IRBs of lesser quality and importance.

Canadian supplier development negotiations

A contentious issue during negotiations was the improvement of the existing CCV found in the Bell models manufactured at Mirabel. BHTC was reluctant to alter its sourcing of helicopter components and to commit to a particular subcontractor or region, due to cost competitiveness reasons. To IC, it was apparent that some of the sourcing of the dynamic components of the BHTC helicopters could be done competitively by Canadian companies, instead of the existing suppliers in the US and South Korea.

IC developed a Canadian supplier development commitment to encourage Bell to become more active in developing its Canadian source list for all of its helicopters. BHTC agreed to send out an additional $67M of competitive bid packages to Canadian companies. IC agreed to the possibility of having the supplier development obligation fulfilled by indirect benefits through incremental sourcing of any component, for any helicopter model manufactured at BHTC. IC believed that since Bell's UTTH model was a mature product with an already existing supplier network, the flexibility of allowing BHTC to satisfy its IRB obligations using any of its helicopter models could position Canadian companies to supply components for the next generation of models under development.

The supplier development commitment was augmented by a Bell Textron USA agreement to grant BHTC a spares procurement and avionics engineering mandates. BHTC conducted a competition amongst several potential suppliers and IRBs were included in the evaluation of proposals. Both Canadian Marconi and CAE had superior IRB packages.

IC initially wanted to have the instrumentation of model 430 helicopters done in Canada - but only the design was agreed to. According to the previous IC Manager, Bell's key instrumentation technology still resides in Forth Worth.

Technology Transfer negotiations

Issues were raised by IC regarding the possible violation of the IRB policy's "double-DIPPing" eligibility rule and the dollar value of measurement of technology transfer. The composite tech transfer offered as part of the IRB program, could also receive DIPP funds. IC believed that the tech transfer was incremental and of high importance for BHTC's long term competitiveness, therefore it was included as an IRB eligible transaction, however caveats were included in case DIPP funds were used: only a portion of the CCV would be credited. BHTC argued that DIPP funds would not cover the entire cost of development. It was finally agreed that only if BHTC exceeded the DIPP sales-to-support ratio of 20:1, the

extra sales of components would be an IRB credit, since it would be considered additional to that which the DIPP intended to accomplish.

Bell Textron USA wanted the technology transfer to be valued at their development cost, however, for IRB purposes, tech transfer is measured by the dollar value of the resulting sales, as was stated by IC in the RFP. BHTC felt that committing to a sales figure could not be possible, since it was unknown what the commercial price of this experimental material would be and what customers 'willingness to pay would be. The parties agreed in the contract to consider the achievement of tech transfer transactions through the:
- establishment of a manufacturing capability in Mirabel of the composite technology sub-assembly, achieved when full scale static and dynamic tests are successfully completed; and
- manufacturing and commercial exploitation of the composite technology, measured by the attainment of CCV for sub-assemblies manufactured.

Indirect purchases negotiations
BHTC also wanted to credit indirect purchases of Canadian goods or services by Textron-affiliated companies toward any outstanding IRB obligation. IC believed that these presented business opportunities for Canadian aeronautics products and services, therefore incremental purchases by these companies were included for a total commitment of $1M; although IC also felt that for some of these companies, the causality and developmental nature of their potential Canadian purchases appeared weak. The minimum 40% CCV for indirect purchases which was stated in the RFP was not maintained in the contract.

Contract
The Contract signed in September 92 included the following clauses:

Amendments
Bell was not tied to specified subcontractors: should BHTC demonstrate that the subcontractors were not price competitive or could not deliver with reasonable conditions, Bell could make proposals to amend transactions if of similar quality.

Incrementality
Additional or incremental IRBs refer to the CCV of components used by Bell that are additional to those values existing on June 1992. All IRBs are, therefore, defined as incremental. Proof of incrementality in Canadian content purchases was provided by Bell in at least one report were CCV purchases claimed in each region for each supplier were compared against 1992 purchases.

Liquidated damages
The RFP asked for a single level of liquidated damages, which would be used as an indication of the level of the company's confidence and commitment that a transaction will take place. However, in the contract, each type of IRB transaction has its own level of

liquidated damages; in most cases the level is 5%, except for transactions where risks are traditionally higher, such as in supplier development program, 1%; transfer of composite technology, $250,000; composite technology exploitation, 3%; indirect purchases, 1%; export sales, 1%; and regional commitments, 4%.

Supplier Development Program
BTHC developed a supplier approval system to qualify suppliers. Supplier Quality Assurance (SQA) activities included an initial survey of 31 potential suppliers across Canada during the winter 1992-1993, of which 15 were approved to BHTC's Quality Procurement Specifications. IC has had a verification role in approving these suppliers: IC has refused certain suppliers as they did only had sales offices and no production capabilities in Canada.

Regional distribution
Bell had committed to 20M of incremental CCV sourced from the Atlantic and Western regions under its supplier development program. However, both parties decided in 1994 to dissociate the regional commitment from the supplier development obligation which facilitates the attainment of regional benefits.

Small Business Development
The RFP had mentioned that the Contractor was expected to commit to a specified quantity of CCV for small business activities. In the contract, Bell only committed to a "General Obligation" and not to a specific value: it committed to provide fair and equitable opportunities and to record and report all subcontract values awarded to small business.

CCV
Canadian content value will be determined by the net selling price method.

Additional Contract for Repair and Overhaul
An additional Statement of Work was issued to Bell for a supply support program intended to maintain a high serviceability level for the CFUTTH fleet. A negotiable IRB proposal was requested for incremental IRBs associated with the anticipated acquisition of spares. This proposal resulted in an amendment to the Prime UTTH Contract.

The Contractor committed to have repair and overhaul (R&O) work performed by Canadian companies in the West (not sure why this was directed to the West) regardless of subs elsewhere, unless directed by IC. There are no liquidated damages for this transaction.

7.2.3 Monitoring and Verification

IC Latitude
As in other case studies, IC has some latitude in accepting IRB transactions where it is considered to be of benefit to Canada to do so.

Reporting
The reporting requirements are similar to other case studies and include:

- Progress reviews and quarterly IRB Status Reports to report on activities only;
- End Period Reports to report specific IRB achievements; this includes Statements of Compliance to request IRB credits for numerical CCV or for completed verifiable activities. Although the model contract had specified that documents to substantiate claims had to be provided, IC decided in 1993 that these documents would not be required in further Statements, unless specifically requested as part of the verification exercise.
- IRB Change Proposals - to submit change requests

This case study includes the following particularity in its obligations from IC

- IC has to provide a notice of acceptance or rejection of credits requested within 180 days after receipt of each Statement of Compliance. This was not mentioned in the model contract provided with the RFP and therefore was probably negotiated by Bell.

Disagreement provision:
If there is disagreement between IC and the contractor regarding the achievement of IRB credits, IC has the sole discretion to determine the IRB amount which the contractor shall abide by, subject to the contractor ś right to have the matter adjudicated.

Verification:
After the contract was awarded, the IRB Manager sent, on a regular basis, verification letters to suppliers to ensure they signed expected contracts with Bell. IRB Progress review meetings and reports seem to have been held regularly, which were scheduled with overall project review meetings. The IC manager did not attend all program review meetings but was sent a copy of the minutes. Representatives from the regional agencies (ACOA at least) attended the meetings with IC in some occasions.

IC had an important influence over the format and content of the initial Statements of Compliance submitted. Comments were provided as guidelines so that decision rules can be established with agreement by both parties. IC believed that by having information provided on upcoming opportunities would increase the possibility of Bell and IC publicizing these to Canadian industry. Based on comments from IC, the Quarterly reports were improved as a forecasting tool by indicating IRBs to be claimed (work orders issued), thereby providing advance notice for overachievements or problematic transactions.

IC ensured that Bell used the Industrial Benefits Verification System (IBVS), which was a new electronic system for recording and tracking IRB claims and achievements. In support of IC ś efforts to develop a computerized verification system for certification of IRBs, BHTC

submitted, electronic files containing data to support specific claims. (From the documentation on hand, it is not clear if this system was only used throughout the project)

Delays in Verification by IC - Certificate of Compliance
On certain occasions, IC reminded Bell that IRB are not considered achieved until claims have been verified and Statements of Compliance signed therefore quarterly reports cannot claim benefits until they have been accepted by IC. However, Statements of Compliance submitted by Bell have consistently been certified after the 180 day deadline specified in the IRB portion of the contract. In April 1994, PWGSC sent a notice to IC that they had been advised formally that a large number of Action Items were outstanding in the IRB section of the project from 1992. PWGSC was concerned that, if nothing else, such lengthy delays gave the appearance that the IRB portion of the project was of little interest or importance.

It could be that this coincided with the change in IRB project managers. However, although certificates were accepted earlier in subsequent years, they were still overdue and the subject of reminders from Bell and PWGSC in following years. According to Bell, these delays prevent them from issuing Statements of Compliance until formal comments are received on the previous year's document.

Benefits:
CEA of Montreal has become a supplier of flight simulators to Bell, replacing a US supplier previously used by Bell. Canadian Marconi of Montreal qualified as an avionics systems supplier, through the Bell Supplier Development Program, and is now supplying to additional new clients.

Achievements
As of March 1997, Bell had identified IRBs amounting to 97.56% of its contractual commitment (including IRBs to be claimed). The regional distribution of IRBs shows that commitments to the East are behind: the status by region indicates overachievements in the West, Ontario and 100% in Quebec, while there are important underachievements in the East (41% of achieved commitments).

7.3 Issues on UTTH Case Study:

Involvement of IC
IC involvement was key in obtaining IRBs which respected the criteria of long term and of high value for Canada, even if they were indirect benefits in some cases.

IC was very involved in understanding the company's accounting system to determine specific IRBs. IC provided valuable comments on reporting formats and content to improve on the level of information available.

Contract negotiations:
Sole source case meant that many items were negotiated and changed from the model contract and requirements of RFP (e.g. small business commitments). Contract imposed some costs on the firm: regional commitments and a supplier development plan.

Liquidated Damages:
Very low in most cases, with a maximum of 5%.

Monitoring:
Did not required both certificate of compliance and supporting documentation with annual reports. IC has 180 days to accept certificate of compliance. Acceptance has consistently been late and the object of many complaints from Bell and PWGSC.

7.4 References

7.4.1 Documents Reviewed

Contract, IRB Section, September 1992

CFUTTH IRB Evaluation and Negotiation Issues, IC, 1992.

Various Progress Review Meeting presentations and minutes, from March 1995 to December 1997.

IRB Quarterly Progress Review Meeting presentations and Status Reports: March, June and September 1993, September and December 1994, September 1995, March 1996, March 1997.

Memo from DND to IC Manager regarding IRB instructions for the CFUTTH Statement of Work, 13 May 1992.

Statement of Work, CFUTTH Supply Support, DND, 4 October, 1993.

Missing
Bell - IRB Management Plan

7.4.2 Interviewees[20]

IRB Officer, Bell Helicopter Textron Canada, Ottawa.

20 John Hutchins, IRB Manager, has not been available for interview.

8. PRC Case Studies

8.1 *Naval Combat Operator Trainers*

8.1.1 *Project Profile*

Project Title	Naval Combat Operator Trainers
PRC Number	91/92-70
PWGSC File Number	W8472-3-FC03
IC Project Officer	None
PWGSC Manager	Etienne Lavoie
Contract Value	$14,092,921
Foreign Content	$3,045,100
Contract Timeframe	March 1996 - May 1998
Competitive Process	Competitive
Industry Sector	Electronics
Regions Targeted	NS, BC
Client Department	DND, S. Foreman.
Prime Contractor	MacDonald, Dettwiler and Associates (Richmond, BC; Halifax, NS), Greg Ritch.
Major Subcontractors	First Class (Federicton, NB; White Rock, BC), Logicon (Newport, RI), Canadian Marconi (Ottawa, Ont).

8.1.2 *Requirement*

Acquisition of two electronic, computer-controlled combat trainers consisting of up to 50 student and instructor stations connected to a network.

8.1.3 Summary Analysis

The PRC encouraged the involvement of subcontractors from regions where the equipment will be used (Halifax and Victoria). However, no subcontractors are located in those areas.

There are no IRBs associated with the contract.

8.1.4 PRC

Competitive solicitation from Canadian companies. Companies were encouraged to maximize the involvement of subcontractors from the regions where the equipment will be used.

8.1.5 RFP

Restricted to Canadian Companies. No IRBs.

8.1.6 Contract

No IRBs. Subcontractors: Iotek (bought by MDA), Halifax; First Class, Fredericton & White Rock BC; Logicon, Newport ($3,045,100); Canadian Marconi, Ottawa. Equipment locations Halifax & Victoria.

8.1.7 Monitoring and Verification

No Status Reports.

8.1.8 References

PWGSC project files.

8.1.9 Interviews

Etienne Lavoie, PWGSC, 98/03/09

8.2 Target Systems Services

8.2.1 Project Profile

Project Title	Target Systems Services
PRC Number	91/92 - 129
PWGSC File Number	W06A1-0-FOMK/01-BB W06A1-0-FOMK/02-BB
IC Project Officer	None
PWGSC Manager	Maurice Chow
Contract Value	$3,300,000 (estimate)
Foreign Content	None
Contract Timeframe	1992 - 1993 (estimate)
Competitive Process	Sole Source
Industry Sector	Aviation
Regions Targeted	Regions
Client Department	DND
Prime Contractor	Boeing Canada (Bristol Aerospace), Air Spray Ltd.
Major Subcontractors	None

8.2.2 Requirement

Supply, maintenance and operation of a family of air target systems.

8.2.3 Summary Analysis

The PRC encouraged that the prime contractor to subcontract to firms in the regions where the Government has regional development programs. The prime contractor (Boeing) is located in a region (West) and prefers to deal with local subcontractors. The primary criteria used to select subcontractors is their capability. There is no evidence that the IRB policy has influenced the actions of the prime contractor.

The people interviewed at Boeing and Air Spray do not seem aware of the IRB Policy or of its attempts to influence these contracts.

8.2.4 PRC

Recommended sole source contract to Boeing Canada Technology Ltd., Winnipeg. Boeing to be encouraged to continue to invest in the development and marketing of targets with smaller Canadian firms by subcontracting wherever possible to firms in the regions where the Government has policies for economic development.

8.2.5 RFP

No IRBs.

8.2.6 Contract

No IRBs.

Boeing: Not much knowledge about the IRB Policy. Sub-contractors are chosen because they are capable; some equipment requirements are specialized. Boeing prefers local suppliers (Manitoba and Alberta). IRBs have not resulted in any changes in how the contracts are run. No reporting.

Air Spray Ltd.: Provide towing services. No knowledge of IRBs.

8.2.7 Monitoring and Verification

None.

8.2.8 References

PWGSC project files.

8.2.9 Interviews

M. Parent, Bristol Aerospace, 98/02/17
Richard Covlin, Air Spray Ltd., 98/02/17

8.3 Transport Aircraft Electronic Warfare Self-Protection Suites

8.3.1 Project Profile

Project Title	Transport Aircraft Electronic Warfare Self-Protection Suites
PRC Number	93-261
PWGSC File Number	W8475-4-JL01/01-QC W8475-4-JL02/01-QC W8475-4-JL02/02-QC
IC Project Officer	Guy Gallant
PWGSC Manager	Bob Wight
Contract Value	$22,612,523
Foreign Content	$22,612,523
Contract Timeframe	August 1995 - 1998
Competitive Process	Sole Source
Industry Sector	Electronics
Regions Targeted	None
Client Department	DND, Bruce Hodgins.
Prime Contractor	Lockheed Martin Fairchild Defense Systems (formally Loral Electronics Systems) (Yonkers, NY), R. Suffecool
Major Subcontractors	None

8.3.2 Requirement

Provision of Transport Aircraft Electonic Warfare Self-Protection Suites for the Radar Warning Receiver (RWR) for the CC-130 Hercules Aircraft.

8.3.3 Summary Analysis

Loral Electronics had the only system available off-the-shelf which could meet the required delivery date. The PRC recommended that IRBs be negotiated after contract award. The

company made some attempts to obtain Canadian content, but were not successful. The are no IRBs associated with the contract.

8.3.4 PRC

Loral 56M, manufactured by Loral Electronics Systems, Yonkers, New York, (now Lockheed Martin Fairchild Defense Systems) is the only RWR available off-the-shelf that can meet the operational delivery date. Sole source contract. Industrial and Regional Benefits to be negotiated between the supplier and Industry Canada, to be carried out in parallel with, but independent of normal procurement activities (i.e. not in original contract, contract to be amended).

8.3.5 RFP

None.

8.3.6 Contract

No IRBs. "The Canadian Content for the proposed contract is nil. There will be no creation nor maintenance of Canadian jobs."

PWGSC Memo - "A number of meetings were held between IC and the supplier and during the contract period the company tired to team with Lockheed Canada, Montreal for training requirements which were not accepted by DND due to the extremely high cost. The supplier tried also to negotiate with Lockheed Canada Winnipeg for the supply of electronic boards (not related to this project) but that also failed to mature. As a result it is not known if any benefits were supplied or negotiated by IC".

8.3.7 Monitoring and Verification

None.

8.3.8 References

PWGSC project files.

8.3.9 Interviews

Bob Wight, PWGSC, 98/02/19.

8.4 RCMP Revolver Replacement

8.4.1 Project Profile

Project Title	RCMP Revolver Replacement
PRC Number	94-195
PWGSC File Number	M0077-5-D300
IC Project Officer	John Ellis
PWGSC Manager	Bernard Fournier
Contract Value	$9,188,825
Foreign Content	$9,188,825; 161% IRBs
Contract Timeframe	June 1995 - June 1999
Competitive Process	Competitive
Industry Sector	Small Arms
Regions Targeted	None
Client Department	RCMP, Roger Laroche
Prime Contractor	Smith and Wesson (Springfield, Mass), Bob Gates.
Major Subcontractors	Alma Aluminum (Que)

8.4.2 Requirement

Procurement of 9mm semi-automatic pistols under the Small Arms Replacement Program (SARP) for the Royal Canadian Mounted Police.

8.4.3 Summary Analysis

The PRC required that an IRB package be included in proposals. It was felt that this contract would promote the small arms industry in Canada. In the end, the contract went to a firm in the U.S. and provided no benefit to the Canadian small arms industry. Further IRBs were negotiated after contract award. The total IB package was 161% of the contract value. However, 99% of this was a low quality, indirect benefit for the purchase of aluminum. Since, Canada is a major supplier of aluminum, it is not clear that this is truly a benefit incremental to the IRB Policy.

There are provisions for liquidated damages in the contract. However, benefits may be freely interchanged and there is a low ceiling, so they are unlikely to have much impact. Achievement to date is about 56% of commitment, consisting of 99% aluminum purchases.

8.4.4 PRC

The PRC recommended that the pistols be acquired competitively. Bidders were to be asked in the RFP to provide an Industrial and Regional Benefits package. The contractor was to be selected on the basis of price and technical requirements. IRBs were then to be negotiated with the recommended contractor.

8.4.5 RFP

On file. 10 (21) pages. Bidders requested to provide an IRB package with their proposal. Liquidated damages to form part of contract. No regional requirement. Semi-annual reports. Canadian content = 100% if > 90%, = actual if < 90%.

8.4.6 Contract

Canadian Content 161% of the Total Contract Price. Direct Transactions >1%. 80% within 3 years, 100% within 4 years. Indirect Transactions >99%. 80% within 4 years, 100 % within 5 years. No regional requirement. Semi-annual reports. Liquidated damages - Direct Transactions 50% of shortfall less than 80%, Indirect Transactions - procurements 40%, investments and joint ventures 0%, technology transfer 0%, all of which are interchangeable. Total damages may not exceed $500,000.

Committed				
$ 103,000	100%	17,200 Lanyard studs	TransCanada Machining	Sask
$ 17,000	100%	17,200 Bilingual manuals	Virtual Graphics	Ont
$15,750,000	100%	12.6M lbs aluminum	TBD	Ont/Que
Uncommitted (no penalty, may be exchanged for above)				
$ 6,200,000	+90%	700,000 Firearm locks	TBD	Ont
$ 1,500,000	TBD	Ballistic clothing	Barrday	Ont
$ 33,000	TBD	Padlocks	TBD	TBD
$ 2,700,000	+90%	Firearm parts	TBD	Ont

8.4.7 Monitoring and Verification

Status report (6/1/95-6/30/97)				
$ 99,365	100%	23,380 Lanyard studs	TransCanada Machining	Sask
$ 816	100%	Manual translation	Louis King	Que

$ 8,259	100%	Instruction manuals	Central Ontario Web	Ont
$8,994,625	100%	Aluminum	Alma	Que

$9,103,065 TOTAL

8.4.8 References

PWGSC project files

8.4.9 Interviews

Bernard Fournier, PWGSC, 98/03/11

8.5 Naval Torpedo MK46 Mod5 Ordalt Kits

8.5.1 Project Profile

Project Title	Naval Torpedo MK46 Mod5 Ordalt Kits
PRC Number	94-220
PWGSC File Number	W8476-4-CG13/01-BM W8472-1-BB03/01-BM
IC Project Officer	
PWGSC Manager	Gregg Kirkpatrick
Contract Value	$8,939,874
Foreign Content	$8,937,874, 100% IRBs
Contract Timeframe	February 1995 - April 1999
Competitive Process	Sole Source
Industry Sector	Ammunition
Regions Targeted	
Client Department	DND, M. Plourde
Prime Contractor	Alliant Techsystems (Hopkins, Minnesota), Ross Craddock
Major Subcontractors	

8.5.2 Requirement

Provision of 39 Torpedo MK46 Mod 5 Ordalt Kits.

8.5.3 Summary Analysis

The PRC required that the contractor provided IRBs equal to 100% of the contract value, which the contractor agreed to. The requirement on this contract is being combined with those on two other contracts. The benefits are generally of high quality. Commitments on direct benefits are not being met, but commitments on indirect benefits are being far exceeded and can be traded for direct commitments. Best effort goals in the West are being met, but best effort goals in the Atlantic are not.

8.5.4 PRC

Recommended sole source contract to Alliant Techsystems. Alliant Techsystems to provide IBs equal to 100% of the contract value.

8.5.5 RFP

None.

8.5.6 Contract

Total Canadian Content 100% of contract value. Direct Transactions >35%, 80% by April 1, 1996, 100% by April 1 1997. Indirect Transactions >65%, 80% by April 1, 1996, 100% by April 1, 1997. Direct and Indirect may be traded. Regional distribution >10% Atlantic, >10% Western. Semi-annual reports. Liquidated damages Direct if <95% CC pay 15%, Indirect procurement 15%, investments and joint ventures 15%, tech transfer 15%, interchangable. Limit of $1,000,000. CC >80% counts as 100%.

8.5.7 Monitoring and Verification

January 1995. Combined with three other contracts. Exceeded Indirect. 25% of Direct. Met Western. Not close on Atlantic.

8.5.8 References

PWGSC project files.

8.6 Land Tactical Electronic Warfare Improvement - EWCAC

8.6.1 Project Profile

Project Title	Land Tactical Electronic Warfare Improvement - EWCAC
PRC Number	94-84
PWGSC File Number	W8476-4-GE11
IC Project Officer	
PWGSC Manager	Bruce Weir
Contract Value	$18,168,266
Foreign Content	$6,488,786
Contract Timeframe	February 1996 - October 1998
Competitive Process	Competitive
Industry Sector	Electronics
Regions Targeted	None
Client Department	DND
Prime Contractor	Lockheed Martin Canada Inc.
Major Subcontractors	Software Kinetics (Ottawa, Ont) TES Limited (Ottawa, Ont)

8.6.2 Requirement

Provision of an Electronic Warfare (EW) Control and Analysis Centre, an automated system for the command and control of the Canadian Army's EW assets and for the analysis of tactical signal intelligence.

8.6.3 Summary Analysis

IRBs consist solely of a statement of Canadian content. There is no indication that the IRB Policy had any positive influence on the contract. The DND need to have a Canadian company qualified to support the product in the future was driven by national security requirements and not the IRB Policy.

8.6.4 PRC

The PRC recommended that the contract be competitive, that direct Canadian industrial participation be optimized, and that sufficient technology be transferred to Canadian companies to enable hardware and software integration and maintenance of EWCAC in Canada.

8.6.5 RFP

'Bidders must examine this Request for Proposal carefully to identify the opportunities to generate long-term high-quality IRBs, through transactions directly related to the development and production of the EWCAC. " 11 pages.

8.6.6 Contract

Direct benefits as follows:

Lockheed Martin Canada	$ 7,420,100
Software kinetics	$ 1,481,000
TES Limited	$ 1,035,000
TBD	$ 675,700
Total	$10,611,800

Liquidated damages of 10%.

8.6.7 Monitoring and Verification

Unknown

8.6.8 References

PWGSC files.

8.6.9 Interviews

Bruce Weir, 97/10/08

Appendix A

Case Study Selection Criteria

Case Study Selection Criteria

1.1 *Initial Data Collection*

Based on Industry Canada lists, 26 Major Crown Projects (MCPs) were examined in the process of selecting the list of recommended case studies. Characteristics of the various MCPs were summarized from Industry Canada documentation, interview notes from the Industrial and Regional Benefits (IRB) Evaluation Framework consultancy, and interviews with IRB Project Officers and regional agency representatives.

1.2 *Selection Process*

Selection criteria were finalized, and recommended case studies selected, in consultation with IRB project officers and representatives of regional agencies.

1.3 *Criteria*

To ensure that the selected case studies provide a balanced view of the 1986 IRB Policy, its implementation, and subsequent monitoring, the following characteristics were taken into consideration:

- Sector: Marine, IT, Defence Electronics, Land Defence or Aeronautics
- Contract Type: Sole Source or Competitive
- Contract Period: MCPs awarded prior to the 1986 IRB Policy were excluded from consideration. Recent MCPs with limited track records and accrued benefits were also excluded; however, one new project was selected to provide a current example of the IRB Policy process and implementation.
- Operating Department: DND, TC or HRD
- Technology: Off-the-Shelf to Developmental

- Regional Distribution: Balance of MCPs with IRB commitments implemented in various regions.

- Special Circumstances: MCPs in which no formal IRB package was developed (due to "time is of the essence" and urgent circumstances) were excluded, as were MCPs where current circumstances would impede access to critical information from contractors (e.g. ongoing litigation).

As general considerations, the nationality of the prime contractor, past project assessments by Industry Task Forces and the one or two phase competitive process were also assessed in the selection of case studies.

1.4 Characteristics of Selected Case Studies

We present below two tables which illustrate the characteristics of our initial selection of 11 MCPs. We propose to exclude three MCPs which "duplicate" others on our list, i.e. they have no unique characteristics, as defined by the selection criteria. The excluded MCPs are represented in italics in the following tables.

Short descriptions and the rationale for selection of the eight recommended case studies follow the tables below.

1.5 Case Study Descriptions

1. Maritime Coastal (Mine Countermeasure) Defence Vessel (MCDV)

This MCP involves the acquisition of 12 maritime coastal defence vessels for use by the reserves. This is an example of a competitive MCP in which market forces generated benefits in the Atlantic region and implemented after the 1986 IRB Policy.

2. Tactical Command, Control & Communications Systems (TCCCS)

The provision of a family of radios (vehicular-lightweight) combined with switching, local area distribution and the truck network to form an integrated system. This is a very large MCP involving a large number of contractors from different countries which received Cabinet Direction to generate Western benefits.

3. Canadian Automated Air Traffic System (CAATS)

The project objective was to modernize the existing ATC EDP infrastructure, increase system efficiency and controller productivity. CAATS is interesting as one of the few MCPs sponsored by Transport Canada. This case study will allow in particular for the examination of benefit and monitoring activities since it has recently been completed and all final project assessments have been prepared.

4. Income Security Plan Redesign (ISPR)

Delivery of client server network for the distribution of old age security and pension cheques and the dissemination of associated information. ISPR is one the few projects in the information technology sector and the client Department is HRD.

5. Light Service Vehicle Wheeled (LSVW)

LSVW involves the replacement for the 5/4 ton pick-up truck and shelters. It is a good example of a competitive land defence project which has generated regional benefits.

6. Short Range Anti-Armour Weapon (Heavy) Eryx Missile (SRAAW(H))

The project involves the provision of a short range anti-tank weapon system. This MCP is of interest since it was a sole source contract given to a foreign prime contractor and in which regional benefits were committed to in Quebec.

7. Armoured Personnel Carriers (APC)

This project plans for the acquisition of 651 armoured personnel carriers (APCs), in which purchases will be made in groups of 240 APCs. As the latest MCP negotiated, it will provide for an assessment of the progress and lessons learned in the application of the IRB Policy.

8. Utility Tactical Transport Helicopter (UTTH)

This MCP plans for the acquisition of 100 helicopters to provide tactical transport of troops and equipment with a secondary role of search and rescue, surveillance and fire fighting. This is an example of a sole source contract in the aeronautics sector with balanced regional commitments.

Project Title	Project	Sector	Contract Type	Contract Period	Dept	Tech y	Regional Distribution
Maritime Coastal (Mine Countermeasure) Defence Vessel	MCDV	Marine	Competitive	1992-1999	DND	COTS+ Dev l	Atlantic
Tactical Command, Control & Communications Systems	TCCCS	Defence Elect	Competitive	1991-2001	DND	Dev l	West
Canadian Automated Air Traffic System	CAATS	Defence Elect	Competitive	1989-1996	TC	Dev l	West and Ontario
North American Air Defence Modernization	NAADM/COMS	Defence Elect	Competitive	1988-1996	DND	Dev l	West
Canadian Towed Array Sonar System-Shipboard Electronics	CANTASS-SESS	Defence Elect	Sole Source	1990-1996	DND	Dev l	West and Ontario
CC130 Hercules Avionics Update	CC130AU	Defence Elect	Competitive	1994-1999	DND	Dev l	West
Income Security Plan Redesign	ISPR	IT	Competitive	1994-2002	HRD	Dev l	Ontario
Light Service Vehicle Wheeled	LSVW	Land Defence	Competitive	1992-1996	DND	ROTS	West and Ontario
Short Range Anti-Armour Weapon (Heavy) Eryx Missile	SRAAW(H)	Land Defence	Sole Source	1993-2003	DND	MOTS	Quebec
Militia Light Armoured Vehicle	MIL-LAV	Land Defence	Sole Source	1989-1996	DND	ROTS	Balanced
North Warning System	NWS	Land Defence	Competitive	1988-	DND	COTS	West and North
Utility Tactical Transport Helicopter	UTTH	Aeronautics	Sole Source	1992-1999	DND	COTS	Balanced

1.6 PRC Case Study Selection

Note: PRCs in brackets are alternative selections, in case problems are encountered with the primary selection.

	Foreign	Domestic
Evidence of IRBs		
Sole Source	94-220 (91/92-119)	91/92-129 (91/92-78)
Competitive	94-195 (92/93-46)	94-84 (91/92-91)
No Evidence of IRBs		
Sole Source	93-261	(91/92-44)
Competitive	(91/92-93)	91/92-70

Appendix B

Case Study Format

Case Study Format

DRAFT CASE STUDY #X: Title (Total 5-6 pages)

1.1 Project Profile (1.5 pages)

Project Title	
IC Project Officer	
PWGSC Manager	
Contract Value	
Contract Timeframe	
Competitive Process	
Industry Sector	
Regions Targeted	
Client Department	
Prime Contractor	
Major Subcontractors	

Project Description: 5 - 6 lines

1.2 Summary Findings and Analysis

(3 pages)

1.2.1 IRB Strategy Development

(govt ś wishes)

1.2.2 Contracting Process

(Industry response - bidding, negotiation, evaluation)

1.2.3 Monitoring and Verification

1.3 References

(List of Documents Reviewed and Interviewees) (1 page)

Detailed List of Potential Issues/Sub-Headings

1.4 Summary Findings and Analysis

(3 pages)

1.4.1 IRB Strategy Development

(govt's wishes - Procurement Strategy, IRB Strategy, RFP)

- Description of roles/confusion of roles of different agencies: IC/regional agencies/PWGSC/DND

- Treasury Board application - IRB strategy, regional direction details (if applicable)

- IRB Strategy/RFP:
  - types of directives given/how specific in terms of liquidated damages, types of benefits, emphasis on quality, long term, regional direction...
  - complexity/number of plans required: small business, management plans...

1.4.2 Contracting Process

(Industry response - bidding, negotiation, evaluation)

- Description of roles/confusion of roles of different agencies: IC/regional agencies/PWGSC/DND

- Bidding Process

- Evaluation Plan
  - Type of evaluation: quantitative, qualitative, EGAPU
  - Competing interests: how IBs rate against RBs; how IRB evaluation fits in global evaluation; how IRB rating affects final decision
  - Definitions: how long term defined, how direct/indirect defined, how CCV calculated (theory)

- Negotiations, Modifications to proposals, Clarification questions

- TB application for approval of Contractor, debriefing (only if need be)

In contract:
- Liquidated damages mechanism

- Mechanisms for substitutions, modifications of IRB commitments
- How specific are commitments: to subs, to certain quality types of IRBs
- How incrementality is addressed in calculating IRBs
- Accountability of implementation: IC, prime, subs...

1.4.3 Monitoring and Verification

- Description of roles/confusion of roles of different agencies: IC/reg. agencies/PWGSC/DNC

- Reporting Requirements and level of supporting documents required

- Substitution/Modifications in practice

- CCV calculation in practice

- Verification Provisions in Contract (theory) and Verification activities (practice) undertaken

- Completion Report and Activities

Appendix C: Case Study Letter Of Request

Mr./Ms.

February __, 1998
Hickling Ref: 6721

By Fax:

Dear Mr./Ms.:

Thank you for agreeing to participate in the evaluation study of Canada=s Industrial and Regional Benefits (IRB) Policy that we are conducting on behalf of Industry Canada. An introductory letter from Industry Canada is attached.

I am looking forward to our telephone interview on _____ at _____. I will be asking you for information on your company=s views about the IRB Policy in general, and your company =s experience with the IRB Policy on the _____ contract in particular. The questions are outlined below.

The evaluation is being conducted in two phases. The first phase concerned the rationale, objectives, impacts, and effects, of the IRB policy, and it has been completed. This second phase will examine the process of Policy implementation.

As I am sure you are aware, the Federal Government has determined that its procurement activities should support national objectives beyond simply acquiring the product procured. The IRB Policy provides direction for using federal procurement as a lever to promote industrial and regional development objectives by focusing on long-term industrial development. Federal government procurement objectives in order of priority are: 1) operational requirements, competition, fairness, and accessibility; 2) long-term industrial and regional benefits; and 3) other national objectives such as small business development. The IRB Policy uses federal procurement as a lever to bring Canadian company capabilities to the attention of Canadian and foreign prime contractors.

The following questions will be used to help guide our inquiries during the interview. Please give them some consideration before hand. When evaluating the policy, we will be considering the following IRB process stages: 1) project conception to RFP, 2) proposal preparation to contract award, and 3) project activity to completion.

../2

Questions:

- How does the IRB Policy work in theory and in practice?
- What roles have Industry Canada, the Regional Agencies, PWGSC, the sponsoring department, and industry played in each stage of the process?
- Is there confusion in the roles of the government players?
- Who is accountable for implementation of the IRB Policy?
- How are competing interests in a procurement taken into account in the IRB process?
- Do industry participants in the IRB process have an appreciation for the IRB Policy and how they have benefited from it?
- Is monitoring and verification of IRB commitments essential?
- Can monitoring and verification be achieved more cost-effectively?
- Is there a discontinuity between the PRC committee's recommendation and the specification of IRB obligations in the contract?
- Is the IRB Policy implemented in a consistent manner across projects?
- Is the complexity of the IRB process increasing?
- How is Canadian Content defined in practice?
- Is the IRB Policy implemented in a non-discriminatory fashion with respect to the regional distribution of benefits from federal procurement?

We are sensitive to concerns companies have regarding confidential or proprietary information. Anything that you reveal to us as confidential or proprietary will not be published in any document. While we would appreciate your candid and open responses to our questions, there is no requirement to answer any particular question.

Thank you again for you participation.

Yours sincerely,

Hickling Corporation

David Arthurs

APPENDIX F

PHASE II: WORKSHOP

Evaluation of the
Industrial and Regional Benefits Policy

Workshop on the IRB Policy Process and Future

Workshop Highlights

Prepared for:

Industry Canada
Audit and Evaluation Group

Prepared by:

Hickling Corporation

June 15, 1998

Project: 6721

Executive Summary

Background

This document presents the highlights from a Workshop on the Industrial and Regional Benefits (IRB) Policy Process and Future that was held on May 28, 1998.

The Workshop contributed to an evaluation of the IRB Policy. The Evaluation was conducted in two phases. Phase I was completed in December 1997, and focused on issues concerning policy rationale, objectives achievement, and impacts. The Workshop was held as part of Phase II, which concentrated on the remaining issues of process efficiency and effectiveness.

The Workshop brought together representatives from industry and most of the government departments concerned with the definition and implementation of the IRB Policy. The objective of the Workshop was to review the major issues concerning the IRB Policy, and to develop recommendations that addressed those issues and that would improve the efficiency and effectiveness of the Policy in the future.

Process

The Workshop progressed through the following four stages

- IRB Policy objectives and benefits – Participants developed a ranking of the major objectives and benefits of the IRB Policy.
- IRB Policy Issues Discussion – Participants discussed the issues identified by the IRB Policy Evaluation.
- IRB Policy Issues Identification and Clustering – Participants contributed additional issues and grouped them into eight clusters.
- IRB Policy Recommendations – Participants made recommendations that addressed each of the eight issue clusters.

A Group Decision Support System (GDSS) was used to help facilitate the Workshop. This system uses a network of computers designed to support idea generation, idea consolidation, idea evaluation, and planning.

Results

IRB Policy Objectives and Benefits

The following are the top eight objectives and benefits of the IRB Policy identified by participants:

1. Positioning Canadian industry to compete in the global market.
2. Stimulating Canadian industry to be competitive in the world market.
3. Creating international markets for Canadian goods and services.
4. Creating jobs.
5. Assisting the growth and competitiveness of Canadian industry.
6. Using the leverage of Canadian government purchases to stimulate Canadian economic development.
7. Maximizing reinvestment of Canadian taxpayers dollars in the Canadian economy.
8. Creating and sustaining long-term benefits for Canadian industry.

There is a substantial amount of duplication among the objectives and benefits identified here, indicating a high degree of consensus among participants as to the three main themes of the IRB Policy:

- Canadian industry competitiveness in world markets,
- Long-term industrial growth, and
- Job creation.

It is interesting to note that Phase I of the evaluation found that, while the IRB Policy has been successful in ensuring Canadian content and high quality jobs from procurement, Canadian industry competitiveness in world markets and long-term industrial growth have not, in fact, been realized.

Other important objectives and benefits identified by the Workshop participants include regional development, small business development, skills development, and managing the political aspects of procurement.

IRB Policy Issues Discussion

The following are the major issues that emerged from the Evaluation before the Workshop, and that were discussed by the participants:

- IRB Strategy Development
- Evaluation
- Monitoring and Feedback
- Consistency
- Resources

There was general agreement among the Workshop participants that the issues identified during the Evaluation are valid.

The most significant issue is the resource constraint created by government downsizing that impedes implementation of the IRB Policy.

IRB Policy Issues Identification and Clustering

The following are the IRB Policy issues developed by the Workshop participants:

1. Consistency
2. Benefits
3. Monitoring and Feedback
4. Evaluation
5. Standardization
6. Resources
7. Application
8. International Agreements

The issues derived here are very similar to those that emerged from the Evaluation, listed above. The eighth issue, International Agreements, is additional.

IRB Policy Recommendations

The recommendations from the Workshop can be clustered into five major themes:

- **IRB Guide** – Produce an IRB Guide detailing the IRB Policy and process from project identification to completion for government and industry.

- **IRB Reporting** – Produce periodic reports on IRB costs, commitments, achievements, and lessons learned. Provide comparisons with the experiences of other countries. Make these reports public.

- **IRB Strategy** – Provide more meaningful direction to industry for each procurement that establishes the government' s expectations in the context of an industry strategy. Ensure that industry provides input to both the procurement strategy and the industry strategy.

- **IRB Secretariat** - Integrate together regional agencies, IRB officers, the procurement review secretariat, and IRB officers in Industry Canada into an IRB secretariat in Industry Canada.

- **International Study** – Study the impact of international bilateral IRB agreements such as waivers, trading, banking, etc.

Table of Contents

Background

Introduction

The Workshop on the IRB Policy Process and Future was held on Thursday, May 28 at the Minto Place Suite Hotel, 433 Laurier Avenue West, Ottawa.

The following sections provide the evaluation background, the workshop description, a description of the GDSS technology that was used to facilitate the workshop, the workshop agenda, the participant list, and a set of questions that was used to stimulate thought and discussion.

Evaluation Background

The Industrial and Regional Benefits (IRB) Policy, as approved by Cabinet in May 1986, provides the framework for using federal procurement as a lever to promote long-term, high quality industrial and regional development in Canada.

The IRB Policy can be applied to procurement opportunities that are valued in excess of $2 million and not subject to the North American Free Trade Agreement (NAFTA), the General Agreement on Tariffs and Trade (GATT), or the World Trade Organization (WTO) Agreement on Government Procurement. These procurements fall within one of two categories – Major Crown Projects (MCPs), usually more than $100 million, or Procurement Review Committee Cases (PRCs), which are outside of the MCP regime. The process for implementing the Policy depends on the category of the procurement, although the two processes are similar. For MCPs, formal interdepartmental project management offices and Senior Project Advisory Committees are established in accordance with Treasury Board guidelines. The Procurement Review Committee, made up of representatives from a number of government departments and the regional agencies, reviews PRCs for IRB opportunities.

The Workshop was part of an Evaluation of the IRB Policy. The Evaluation was conducted in two phases. Phase I was completed in December 1997, and focused on issues concerning policy rationale, objectives achievement, and impacts. The Workshop occurred during Phase II, which concentrated on the remaining issues of process efficiency and effectiveness.

Phase I

In Phase I of the Evaluation, a broad investigation of the benefits and impacts of the IRB Policy was conducted through mini case studies across the population of MCPs and PRCs.

Phase I found that the tangible, short-term impacts of the IRB Policy on the Canadian economy have been positive and most pronounced in the Eastern and Western regions. The most significant impact has been an increase in the Canadian content of procurement in general, resulting in the creation of high-quality jobs. The Policy has also been successful in ensuring that regional and small business companies have been given the opportunity to participate in federal government procurement contracts. While the absolute value of the work flowing to the regions was not found to be high, the benefits to regional companies have been very important. The tangible costs of the Policy were found to be very low.

Although the Policy has provided benefits in the short run, the achievement of the Policy' s objective of long-term, sustainable impacts was not clearly evident. While there have been some success stories, in general companies have had difficulty in leveraging contracts into product and market development opportunities. This is not surprising given that the Policy is applied predominately to defence procurements. Defence markets have been static, the defence industry is very competitive, foreign defence markets are often protected, and the translation of defence products and skills into commercial markets is difficult.

Phase II

Phase II of the Evaluation consisted of case studies of six MCPs and six PRCs. The case studies were intended to illustrate how the IRB Policy works in practice. The issues identified from the case studies were discussed in the Workshop.

Workshop Description

The Workshop brought together representatives from industry and most of the government departments concerned with the definition and implementation of the IRB Policy. It covered issues related to both MCPs and PRCs; in most cases the issues are similar.

The Workshop began by reviewing the major issues concerning the IRB Policy that had emerged from the Evaluation up to that point. Workshop participants were given the opportunity to elaborate on these and to contribute additional issues.

The objective of the Workshop was to develop recommendations that addressed these issues and that would improve the efficiency and effectiveness of the Policy in the future. In developing the recommendations, consideration was given to the potential benefits and problems, the interdependencies, the organizational responsibilities, and the resource implications of the recommendations. All of the parties at the Workshop were receptive to change and eager to improve the implementation of the Policy.

GDSS Workshop Facilitation

A Group Decision Support System (GDSS) was provided for use by the Workshop participants. It was used to help identify and address issues related to the IRB policy and its implementation.

The GDSS consists of a network of computers accessing software designed to support idea generation, idea consolidation, idea evaluation, and planning. Each Participant had his/her own computer terminal from which to interact with the group electronically. The tool supports, but does not replace, verbal interaction; typically 30% of interactions take place on the computers.

Advantages of using the GDSS over a traditional workshop approach include better idea generation and alternative evaluation, full and equal participation by group members, and automatic documentation of deliberations.

Agenda

The following was the agenda for the day:

09:00 Opening Remarks & Introductions
09:15 Background on Project
09:30 Technology Warmup: Benefits & Objectives of Policy
10:00 Issue Presentation and Discussion
10:15 Brainstorm Other Issues
10:45 BREAK
11:00 Discuss Issues, Cluster, Select
12:00 LUNCH
12:45 Development of Recommendations
14:15 BREAK
14:30 Discussion of Recommendations (Implications, Who should do what, etc.)
15:45 Next Steps
16:00 Close

Participation

Participants in the workshop were drawn from industry and the government departments most concerned with the IRB policy. In addition, there were two facilitators and a number of observers.

Participants

1.	Beate Alaoui	Treasury Board Secretariat
2.	Ted Chapman	Public Works and Government Services Canada
3.	Christian Codère	Canada Economic Development (Quebec)
4.	John Dawson	Computing Devices Canada
5.	Bill Greer	EDS

6. Madeleine Guibert	Industrial Benefits Association of Canada / SNC Lavalin
7. Ron Kane	Industry Canada
8. Terry King	Industrial Benefits Association of Canada / Nichols Offset
9. Paul Knarr	Atlantic Canada Opportunities Agency
10. Pierre Lalonde	Canadian Defence Industries Association / Aerospace Industry Association of Canada / Litton
11. Madeleine Martin	Procurement Strategy Committee Secretariat
12. Cheryl Parkes	Department of National Defence (afternoon only)
13. Kurt Theoret	Industry Canada
14. Claudette Williams	Industry Canada

Facilitators

1. David Arthurs	Hickling Corporation
2. Erik Lockhart	Queen' s University Executive Decision Centre

Observers

1. Rob Conn	Industry Canada
2. Andrew Kirby	Hickling Corporation
3. David Low	Hickling Corporation

Preliminary Questions for Discussion

The following questions were given to participants before the Workshop to indicate the type of issues to be discussed and for which recommendations would be developed in the afternoon of the Workshop. The final list of issues evolved out of the discussion of these questions during the morning.

- Should the definition of the IRB Policy be changed to more accurately reflect the realities of 1) the constraints affecting the application of the policy, 2) the opportunities for Canadian benefits, and 3) the resources available to administer the policy?
- Should the IRB Policy continue to be applied to PRCs?
- Should the resources devoted to IRB implementation and monitoring be increased?
- Should the direction provided to Project Officers concerning the objectives and implementation of the policy be increased with a view to improving consistency?
- Should the government put more effort into linking the IRB objectives of a particular procurement with long term industrial development objectives and strategies?
- Should the government provide more guidance to contractors on the IRB objectives of a procurement?

- Should the IRB aspects of bids be factored into the bid evaluation in a quantitative manner?
- Should a system be implemented to monitor the overall status of IRB impacts?

IRB Policy Objectives and Benefits

Process

In the first exercise of the day, participants were asked to describe the most important benefits or objectives of the IRB Policy. The group generated a list of 38. They were then asked to select the six they felt were the most important. The following list orders the benefits or objectives according to the number of votes received.

Results

Total Votes	Benefit or Objective
6	1. Positioning Canadian industry to compete in the global market.
5	2. Stimulating Canadian industry to be competitive in the world market.
4	3. Creating international markets for Canadian goods and services.
4	4. Creating jobs.
3	5. Assisting the growth and competitiveness of Canadian industry.
3	6. Using the leverage of Canadian government purchases to stimulate Canadian economic development.
3	7. Maximizing reinvestment of Canadian taxpayers dollars in the Canadian economy.
3	8. Creating and sustaining long-term benefits for Canadian industry.
3	9. Creating long-term benefits for Canadian industry.
3	10. Investing in the development of Canadian capabilities .
2	11. Creating business linkages to offshore markets.

2	12. Improving the balance of trade and the quality of employment in high technology industries.
2	13. Supporting and sustaining existing Canadian business enterprises.
2	14. Providing a structure to manage political interference in capital procurements.
2	15. Developing small businesses in Canada.
2	16. Preventing leakage from the Canadian economy created by buying off-shore.
2	17. Accessing and developing businesses in the designated regions.
2	18. Generating industrial and regional benefits for Canada.
2	19. Developing long-term sustainable high-tech employment for Canadians.
2	20. Developing industry in all regions of Canada.
2	21. Developing Canadian businesses though government procurement.
1	22. Increasing Canadian industry capabilities.
1	23. Introducing small businesses to prime contractors
1	24. Obtaining meaningful socio-economic benefits for Canada and those regions of the country that need government assistance to develop local economies.
1	25. Creating an environment for the development of small business.
1	26. Helping to keep business in Canada.
1	27. Transferring technology.
1	28. Facilitating the growth of Canadian industry.
1	29. Providing advanced warning of upcoming government procur ements to government agencies involved with regional development.
1	30. Managing the political aspects of federal government procurement.
1	31. Expanding the technical capabilities of Canadian industry through the transfer of technology from offshore sources.
1	32. Helping multi-national enterprises recognize the benefits of doing business in Canada.
1	33. Precluding the outflow of Canadian capital.

1	34. Providing government with a tool to influence the development of a sector strategy.
0	35. Providing jobs for Canadians.
0	36. Bringing valued-added to the Canadian economy
0	37. Meeting the "political" realties of defence spending vis-à-vis taxpayers.
0	38. Creating a defence industrial base.

Discussion

There is a substantial amount of duplication among the objectives and benefits identified here, indicating a high degree of consensus among participants as to the three main themes of the IRB Policy:

- Canadian industry competitiveness in world markets,
- Long-term industrial growth, and
- Job creation.

It is interesting to note that Phase I of the evaluation found that, while the IRB Policy has been successful in ensuring Canadian content and high quality jobs from procurement, Canadian industry competitiveness in world markets and long-term industrial growth have not, in fact, been realized.

Other important objectives and benefits identified by the Workshop participants include regional development, small business development, skills development, and managing the political aspects of procurement.

IRB Policy Issues Discussion

Process

Five major issues had emerged from the Evaluation before the Workshop: IRB strategy development, evaluation, monitoring and feedback, consistency, and resources. They were presented to the Workshop participants and discussed. The Workshop participants later augmented and refined these issues. The following sections contain the description of the issues presented to the participants and notes on their discussions.

Results

IRB Strategy Development

Presentation

Industry Canada, in cooperation with the regional agencies, is responsible for developing an IRB strategy that promotes both strategic sectoral and regional objectives for each MCP and those PRCs recommended for IRBs.

IRB strategies are not, in general, linked to sectoral strategies through, for example, a Sectoral Competitiveness Framework that would place the procurement in the context of an approach to longer term industrial or regional development. The strategies sometimes go no further than calling for a Canadian prime.

The strategies have usually been vaguely worded, permitting wide interpretation by industry of the kind of IRB package that would be acceptable. While the intent has been to encourage bidders to propose specific IRBs that will support company business development strategies as well as meeting the wider government objectives for IRBs, the effect has often been confusion and poorly integrated plans that have limited impact.

In particular, the linkage between the industrial situation and the PSC review is weak. The PSC decisions appear often to be made in isolation, without an understanding of, or a long-term strategy for, the industry that will be impacted by a procurement.

Discussion

- What objectives should have been transferred? Was there anything there to be transferred?

- Diminished resources – there are fewer people in government to develop strategies. Strategy development used to occur at inter-departmental meetings; there are now fewer of these gatherings (e.g. helicopter).
- There is less procurement strategy development for many reasons (lack of focus on objectives, resources, alignment between overall goals and front line tactics).
- Being more strategic in our project approach will allow us to do more.
- There are difficulties with the government being too prescriptive because it forces government to recognize winners / losers)
- It is in industry' s interest for there to be clearly defined goals (achieving high quality IRBs etc.)
- Can we achieve long term IRBs for projects worth $2 to 100million?
- Need to define scope / boundaries.
- With fewer MCPs and more PRCs, it will be even more important to improve the process for PRCs.
- For projects <$40M, it makes more sense to impose the Canadian content policy.
- There is a need for a set of criteria that distinguishes among projects that will be treated by Canadian content guidelines vs. a more strategic approach. Where does it make sense to apply our resources? Possibly base criteria on the $ value of procurements.

Evaluation

Presentation

IRBs are assigned a pass or fail grade and are not normally in a position of overriding technical compliance and price. In fact, they almost never play a role in the contract award decision. This may decrease their effectiveness.

For PRCs, IRB requirements are often ' recommended' to be pursued with ' best efforts' , and as a result they are not taken seriously by either the contractor or the contract authority.

For PRCs, the linkage between the PSC recommendation and the terms of the contract is weak. In the majority of cases, the recommendations of the PSC are not translated into contractual requirements. There are almost always valid reasons for this; often the recommendations were made without full knowledge of the situation or the situation changes before contract award. However, given the large number of cases in which the PSC recommendation is not implemented, the effectiveness of their involvement must be questioned. The PSC is not aware

of the situation because, as discussed below, they have no mechanism to receive feedback on the results of their decisions.

Negotiation of IRBs with the bidders is usually not possible. However, where negotiations with the bidder have been possible (for example, sole-source contracts), higher quality benefits have been produced.

Discussion

- With a vaguely defined IRB objective, it has been difficult to fail (any road will do, if not clear on direction).
- Do we take IRBs out of the procurement process?
- Companies spend a lot of time trying to understand political will & IRB factors (not technical and price factors).
- Going through the process of submitting detailed IRB plans is very valuable (even in case of losers).
- Changing an IRB transaction involves a lot of administrative burden when going through PWGSC. Getting one transaction changed in ISBR took three months.
- Assigning "points" on the IRB portion of the bid evaluation was tried 20 years ago, but failed because the system did not allow enough leverage. We get more leverage by not putting weights on IRB criteria.

Monitoring and Feedback

Presentation

Reporting requirements tend to be standard across projects, that is, progress reports at quarterly, semi-annual and annual intervals, and certificates of compliance. However, how projects have been monitored has depended on the IRB manager, who is often faced with scarce resources. In general, the quality of monitoring has been poor, although this does not necessarily mean that companies are not meeting their obligations.

Liquidated damages are a part of many contracts. While the majority of companies exceed their obligations, penalties have not been imposed when IRB commitments are not met.

A fundamental tenet of sound decision making is the importance of feedback from previous decisions, however there is a serious lack of feedback within the IRB system about aggregate project performance. This is most evident for PRCs where there is no feedback to the PSC committee on the results of PSC recommendations. The severity of the problem is indicated by the fact that there is no way to correlate PRC numbers with PWGSC contract numbers.

Discussion

- How will government know what makes good business sense for each company?
- Shouldn't take flexibility away. Other countries have useful models (eg. South Africa - $ credit incentives declared in the RFP).
- Liquidated damages are a useful tool for the prime contractor when negotiating with subs.
- Need teeth in the policy in order for it to be imposed. Need a thoughtful plan in order to meet requirements.
- The quality of monitoring is poor due to resource limitations.
- Is there merit in moving to self-policing approach where industry does its own reporting?
- We ask companies for certificates of compliance and then we go in and audit, does this make sense? There is some subjectivity in the IRB business - we are estimators and have to make judgement calls. The value of audits is that the government and company become aligned in the way the process is set up (similar to Quality Assurance).
- Aggregate reporting is needed to illustrate regional differences.
- Feedback needs to be based on comparison with original objectives and intended strategies. Feedback should go to policy makers, politicians and also back to industry.
- Use the Internet to get IRB info out early, BEFORE the RFP comes out.
- Should we have a handbook / definition of what is an acceptable IRB?
- It is important that industry wave the banner for IRBs (if industries feel it is useful).

Consistency

Presentation

Both the PRCs and the MCPs have marked inconsistencies in the manner in which the IRB process has been pursued. The inconsistencies arise, in part, because of the differing nature of the procurements. But, how the process is implemented and enforced is, for the most part, left to the discretion of the Project Officer. While this provides a high degree of flexibility to react to particular circumstances, it has resulted in very inconsistent application across projects. The degree and style with which the policy has been applied seems to depend primarily on the attitude of the individual officer. When officers change on a project, the application of the policy can also change dramatically. There seems to be little formal direction from senior management concerning Policy implementation. There is no documentation to guide either Project Offices or contractors.

For example, there are inconsistencies across contracts in the definitions of direct and indirect benefits, the definition of small business, the emphasis on long term and high quality benefits, the basis for calculating Canadian content values, and on the levels of liquidated damages demanded.

Discussion

- Probably originates with lack of a clear goal and vision right at the start.
- Evolved into 3-4 different sectors - sectors went their own way. Within each sector, there is consistency but when you work with a multinational across the sectors, there is lack of consistency.
- How can the government respond with a policy that addresses multi-sector, multinationals? With these types of large companies, need to allow lots of time because of bureaucracy.

Resources

Presentation

Recent Federal Government downsizing has severely depleted the resources that the government, and Industry Canada in particular, has to devote to implementing and monitoring IRBs. Other departments have picked up some of the slack, but may have less commitment since IRBs are not central to their interests and mandates.

Discussion

This issue was not explicitly discussed since it had arisen as a contributing factor in all of the previous discussions.

Discussion

There was general agreement among the Workshop participants that the issues identified during the Evaluation are valid.

The most significant issue is the resource constraint created by government downsizing that impedes implementation of the IRB Policy.

IRB Policy Issues Identification

Process

With the discussion of the issues identified by the IRB Policy Evaluation as an introduction, the Workshop participants brainstormed to identify additional issues. 49 issues were identified. Participants then voted on the six that they each felt were the most critical, allowing the issues to be ranked. The top 18 issues (those with two or more votes) were merged into clusters of similar ideas, resulting in six issues. After reflecting on these six, the participants decided to add an additional two, for a final total of eight issues.

Results

Issue Identification

Total Votes	Issues
7	1. Lack of clear reporting mechanisms to politicians, industry, and senior departmental officials on IRB results.
5	2. Need for more consistency in applicat ion of IRB policy and improved transparency of IRB policy objectives and practices
4	3. Need to rethink how we implement the policy using Internet, MOU with industry, strategic sector objectives.
4	4. Agreement on the definition of long-term IRBs.
4	5. How to streamline IRB process to match resources available across government without diluting high level IRB objectives?
4	6. Having industry participate in the IRB equation at an early stage in the procurement process.
3	7. Aligning Policy to Government prio rities and enunciated targeted sector strategies (trade, investment).
3	8. Whereas other countries are paying more and more attention to IRB's, Canada is devoting less and less resources to them. A Cabinet submission may be required to rectify this situation and to highlight the high value attached to IRB's by industry.
2	9. Cost and benefits of the IRB policy compared to other economic development instruments.
2	10. Lack of understanding of IRB policy within client departments

2	11. Improved resource level for managing the IRB policy
2	12. Having a clear and meaningful Industrial Policy for Canada, of which IRBs would form part.
2	13. Lack of clearly stated objectives, guidelines and monitoring mechanisms.
2	14. Standardized approach for applying IRBs, lay ing the basis for standardized reporting on benefits achieved, leading to more meaningful reporting to Ministers, Industry, etc.
2	15. Narrowing the application parameters of the Policy to lever maximum benefits for least resource input
2	16. Consistency in IRB terms and definitions.
2	17. Need to re-examine how the government plans its procurements.
2	18. Selling the "Policy" to stakeholders (politicians, senior officials, industry).
1	19. Trading in IRB's between countries, including "Reciprocal Waivers" should be opened to negotiation on a case by case basis.
1	20. Negotiation of bilateral agreements with other countries for defence procurement.
1	21. Need to readjust policy objectives to reflect the new global context.
1	22. PRCs are increasing in number s and MCPs decreasing. Therefore, the value of using PRCs is increasing significantly. However, the process for extracting IRBs from PRCs is severely faulty.
1	23. Support of client department once the RFP is issued.
1	24. Complexity of the administratio n of IRB policy; make sure it is supportive, not adversarial.
1	25. Balancing an IRB policy that focuses on selected industry sectors versus general IRB principles that benefit established companies that can offer meaningful benefits in numerous sectors.
1	26. Articulating the Policy and its implementation process (give it concreteness).
1	27. Level the playing field with other countries and their IRB-type policies.
1	28. Lack of IC guidance/leadership to industry (and government)
1	29. The absence of an IRB policy guideline/manual describing what Canada's overall objectives are.
1	30. Lack of understanding of the benefits of the IRB policy to Canadian Industry.
1	31. Need for a guide or handbook to be published for industry and government on IRB policy and practice.
1	32. In view of the different trade agreements, is the IRB policy still pertinent? Or has it become a Canadian content policy in disguise?
1	33. Would industry be willing to have their IRB commitments and achievements as public records?
1	34. What does off-the-shelf mean to IRB strategies and plans?
1	35. DND's perception that IRBs are an impediment and cost driver to their procurement projects.
1	36. A global understanding of what the IRB policy is and what IC wishes to achieve.
0	37. Contractual information - what or how much can be published?
0	38. Identify common goals and objectives.

0 39. Assistance to Canadian Industry in developing strategies to meet international IB requirements.
0 40. Taking non-value added process work out of system.
0 41. Lack of definition of what constitutes a long-term benefit.
0 42. Lack of clear enforcement mechanisms.
0 43. Centralized responsibility for monitoring and reporting IRBs
0 44. Achievement of short-term jobs/benefits only; no exponential growth of jobs/benefits.
0 45. Need to examine alternative delivery services for the policy; for example, contracting out monitoring.
0 46. Providing clearer guidance (not prescription) to industry on what and how desired benefits/outcomes will be ' rewarded' .
0 47. Standardization of definition, reporting format, would be helpful.
0 48. IRB policy seems to be a subsidy in disguise without achieving benefits that exceed term of project
0 49. Industry Canada should review the obligations being demanded of Canadian companies by the international community.

Issue Clustering

The numbers in brackets indicate the issue numbers from the Issue Identification section above.

1. Consistency

- Need for more consistency in application of IRB policy and improved transparency of IRB policy objectives and practices. (2)
- Aligning Policy to Government priorities and enunciated targeted sector strategies (trade, investment). (7)
- Having a clear and meaningful Industrial Policy for Canada, of which IRBs would form part. (12)
- Consistency in IRB terms and definitions. (16)

2. Benefits

- Cost and benefits of the IRB policy compared to other economic development instruments. (9)
- Whereas other countries are paying more and more attention to IRB's, Canada is devoting less and less resources on them. A Cabinet submission may be required to rectify this situation and to highlight the high value attached to IRB's by industry. (8)

3. Monitoring and Feedback

- Selling the "Policy" to stakeholders (politicians, senior officials, and industry). (18)

- Lack of clear reporting mechanisms to politicians, industry, and senior departmental officials on IRB results. (1)
- Lack of understanding of IRB policy within client departments. (10)

4. Evaluation

- Lack of clearly stated objectives, guidelines and monitoring mechanisms. (13)
- Agreement on definition of long term IRBs. (4)
- Need to re-examine how the government plans its procurements. (17)
- Evaluation process

5. Standardization

- Standardized approach for applying IRBs, laying the basis for standardized reporting on benefits achieved, leading to more meaningful reporting to Ministers, Industry, etc. (14)

6. Resources

- Narrowing the application parameters of the Policy to lever maximum benefits for least resource input. (15)
- Improved resource level for managing the IRB policy. (11)
- How to streamline IRB process to match resources available across government without diluting high level IRB objectives? (5)
- Need to rethink how we implement the policy using Internet, MOU with industry, strategic sector objectives. (3)
- Having industry participate in the early stages of the procurement process. (6)

7. Application

- Determining where the policy should be selectively applied.

8. International Agreements

- International IRBs: Trading in IRBs between countries should be allowed on a negotiated case by case basis (government to government).

Discussion

The issues derived here are very similar to those that became evident during the Evaluation. The eighth issue, International Agreements, is additional.

IRB Policy Recommendations

Process

The Workshop participants were asked to make recommendations that address the eight issues developed in the previous section. To do this, they were divided into four working groups, with each group responsible for two issues. They were asked to structure their responses in the form of recommendations, implications for the IRB process of the recommendations, and who should be responsible for implementation of the recommendations. At the end, the results from the working groups were presented to the Workshop for comments.

Results

Issue 1: Improved transparency of policy / consistency in application

Key Recommendations

1. Re-invigorate the IRB policy through Cabinet direction - tying in the PRC policy with the MCP and Aboriginal industrial benefits policies.

2. Production of an IRB Guide or Internet site detailing the IRB policy and the processes from project identification to completion.

3. Provide a formal government sponsored information briefing to industry for each project with a focus on the government's IRB expectations for the project - industry input may alter government's expectations and approach (This briefing is different from client sponsored briefings which are focused on technical specifications.)

Process Implications

a. Positive support for IRB policy by giving political support and direction to it and possibly more resources.

b. A more rational approach to preparing a meaningful IRB package and transactions.

c. A more positive rapport between government and industry.

Responsibility

- Industry Canada - lead
- Regional Agencies and Treasury Board - support
- Others as required

Issue 2: Cost & Benefits of IRB policy relative to other Economic Development instruments

Recommendations

1. Publish every three years a public report on IRB government administration costs and industry achievements (domestic focus).
2. Produce a periodic assessment (every three years for example) comparing Canadian IRB policy requirements, costs and results with other countries having similar policies to get a better understanding on the economic impacts of these policies as well as on the advantages/disadvantages for Canada (international focus).

Process Implications

1. a. Develop standard reporting guidelines.
   b. Develop mechanisms to collect and maintain the information in cooperation with industry.
   c. Prepare and publish report.
2. a. Develop framework for analysis.
   b. Develop data collection and maintenance mechanisms.
   c. Prepare and publish report.

Responsibilities

Industry Canada

Comments from Participants

- Is information available in other countries on commitments & achievements? (UK, Denmark).
- Why not annually? (cost, achievements may be longer term, trends over 3 years, project reporting period)

- How to determine costs/benefits?

Issue 3: Selling the Policy to stakeholders

Recommendations

1. Under Industry Canada lead, develop a comprehensive aide-memoir to Cabinet setting out the results of the IRB Policy Evaluation, e.g. its achievements to-date, both its government input and industry response costs, its constraints and weaknesses, opportunities for improved output at low resource input, international considerations.

2. Develop, under an interdepartmental IRB Committee, a comprehensive ongoing approach for documenting, reporting, and facilitating an industry/government dialogue on the achievement and working of the Policy:

   - Annual Reporting to Parliament, and

   - Annual public reporting, e.g. internet access to quantitative data and " success stories'.

3. Industry to provide input into the formulation of government priorities, policies and programs on the paramount importance of the IRB Policy to industry competitiveness vis-à-vis other industrial development tools.

4. Promulgate an IRB Policy Guide setting out its objectives and enabling processes / evaluation criteria.

Process Implications

1. a. Could help align expectations with the realities of the marketplace.

   b. Would provide a better basis for a more focussed allocation of government resources.

2. a. Could raise issues of equitable distribution of federal procurement spending i.e. "fair share" concerns.

   b. Could divert limited resources from "managing" the strategic front end of the process.

Responsibilities

Industry Canada – lead

Issue 4: Lack of objectives, evaluation process, guidelines & monitoring, definition

This issue was divided into the following three sub-issues by the working group.

Issue 4.1: Lack of clearly stated objectives / Evaluation Process

Recommendations

1. Be more specific in defining strategies related to individual procurements – Obtain buy-in by the client department.
2. Allow industry to contribute to the development of the IRB strategy early in the process (internet).
3. Have a mandatory IRB baseline requirement - evaluation is pass or fail - if fail no long considered.

Process Implications

a. Consultation between stakeholders.

Responsibilities

Industry Canada lead, supported by regional agencies, client departments, and PWGSC.

Issue 4.2: Guidelines and monitoring mechanisms

Recommendations

1. IRB Manual for Government and for Industry.
2. Lessons learned should be documented for all projects.

Process Implications

a. Dedicated resources to develop.

Responsibilities

Industry Canada, supported by Agencies and Associations.

Issue 4.3: Agreement on definition of long-term IRB

Recommendations

1. Interpret IRB policy for today's environment / definition of long term

Implications

a. Dedicated resources to develop

Responsibilities

Industry Canada lead with input from Treasury Board, DND, Agencies and Associations.

Issue 5: Standardized approach for applying IRBs

Recommendations

1. Make public the IRB commitments and achievements.
2. Make information available on the Internet.

Process Implications

a. Industry endorsement.

b. Dedicated resource to establish and maintain database.

Responsibilities

Industry Canada and Industry Associations.

Comments from Participants

- Must have industry support to release infoormation/commitments (might tell them upfront)
- For contract winner, can only get contractual information, NOT proposal

Issue 6: Improved resource level of managing policy

Recommendations

1. Sign MOUs for IRBs with winning contractors instead of making the IRB plan part of a formal contract through PWGSC.
2. Integrate together regional agencies, IRB officers, the procurement review secretariat, and IRB officers in Industry Canada into an IRB secretariat in Industry Canada using a matrix approach in order to create a large enough critical mass.

Process Implications

1. a. Develop a model MOU with linkages with the RFP as well as associated mechanisms to manage the MOU once signed.

2. a. Negotiate an agreement between the parties.

Responsibilities

Industry Canada

Participant Comments

- Virtual group?
- These recommendations need more work/time

Issue 7: Determining where policy should be selectively applied

Recommendations

1. Government should, through consultation with industry associations, enunciate clear strategic outcomes to be obtained through the Policy to grow targeted industrial sectors for the new knowledge-based economy and these should be made visible to industry.
2. The IRB evaluation process should "reward" those proposals that offer tangible support to the government's desired strategic industrial development objectives.
3. More useful criteria should be developed to help select those procurements that offer the greatest leverage to secure high quality, sustaining benefits.
4. Move to more strategic management approach and away from transactional, audit approach.

Process Implications

1. a. Would explicitly focus the government industrial development efforts on a few key sectors - could lead to "backlash" from those sectors not included.
2. a. Policy could become detached from "market place realities".
3. a. Could lead to bidders undertaking measures that do not align to their business interests - and perhaps lead to "hidden costs" being passed on to government.
4. a. Would allow better management of resources and reduce administrative costs in government and industry.

   b. Could lead to company commitments not being met.

Issue 8: International IRBs / Waivers

Recommendations

1. To further study the impact of making the one time only submarine IRB-waiver package as a given Canadian government industrial development policy before applying waivers to other projects - requires a govt / industry involvement that would lead to a MC to ministers since this is a major change in direction for the Canadian government

2. In the short term, no IRB waivers would be granted without a corresponding, high quality and competitive IRB package to Canadian industry

Implications

a. Gain a better understanding of the impacts of waivers, trading, banking, etc.

b. Political pressure necessary to resolve the inability of Canadian companies' to deliver their IRB obligations in the UK.

Responsibilities

Industry Canada with support from the Regional Agencies, industry, and Foreign Affairs.

Discussion

The recommendations presented above can be clustered into five major themes:

- **IRB Guide** – Produce an IRB Guide detailing the IRB Policy and process from project identification to completion for government and industry.

- **IRB Reporting** – Produce periodic reports on IRB costs, commitments, achievements, and lessons learned. Provide comparisons with the experiences of other countries. Make these reports public.

- **IRB Strategy** – Provide more meaningful direction to industry for each procurement that establishes the government' s expectations in the context of an industry strategy. Ensure that industry provides input to both the procurement strategy and the industry strategy.

- **IRB Secretariat** - Integrate together regional agencies, IRB officers, the procurement review secretariat, and IRB officers in Industry Canada into an IRB secretariat in Industry Canada.

- **International Study** – Study the impact of international bilateral IRB agreements such as waivers, trading, banking, etc.

APPENDIX G

PHASES I AND II: INTERVIEWEES

Phase I

Government

Christian Coderre, Federal Office of Regional Development (Quebec)

Glen Crossman, National Defence

Brian Deacon, Industry Canada

Bill Evans, Industry Canada

Guy Gallant, Industry Canada

John Hutchins, Industry Canada

Ron Kane, Industry Canada

David Keys, Public Works and Government Services Canada

Paul Knarr, Atlantic Canada Opportunities Agency

Jacques Laflamme, Public Works and Government Services Canada

Hugh Little, Public Works and Government Services Canada

Jim Lovett, Industry Canada

Colin May, Western Economic Diversification Canada

Cheryl Parks, National Defence

Harvey Reimer, Public Works and Government Services Canada

Craig Rowswell, Atlantic Canada Opportunities Agency

Roman Staranczak, Industry Canada

Kurt Theoret, Industry Canada

Bruce Weir, Public Works and Government Services Canada

Claudette Williams, Industry Canada

Industry

Hani Ayoub, General Electric, Mississauga, Ontario

Stephen Benjamin, W.R. Benjamin Products Ltd., Springhill, N.S.

Mike Bowes, Arvin Special Machinery Limited, Miramichi, N.B.

Rob Bruce, Array Systems, Toronto, Ontario

Darrel Carnegie, Bombardier, Kingston, Ontario

John Currie, INTERNAV, Sydney, N.S.

Ed Darbyshire, Lockheed Martin Canada, Ottawa, Ontario

Dennis Deroin, C-TECH, Cornwall, Ontario

Bill Dowe, Northern Radar, St, John ś, Newfoundland

Luc Dumouchel, Software Kinetics, Stittsville, Ontario

Karl Enners, Allied Signal, Montreal, P.Q.

Ron Fornier, Lexi-Tech, Moncton, N.B.

Mike Gail, Omega Telemus, Ottawa, Ontario

Bill Greer, EDS Canada, Ottawa, Ontario

Shannon Grosko, Lockheed Aeronautics Systems, U.S., Atlanta, Georgia

Madeleine Guibert, Fenco-Maclaren, Ottawa, Ontario

Maurice Guitton, Composite Atlantic Ltd., Lunenburg, N.S.

Vaughn Guy, Computing Devices Canada, Calgary, Alberta

Ray Haydaman, Custom Steel Inc., Winnipeg, Manitoba

Scott Hodgins, Computing Devices Canada, Ottawa, Ontario

Mark Houlton, Systems House Limited, Ottawa, Ontario

Paul Joniga, Belcan Technologies, Montreal, P.Q.

Howard Jones, Raytheon, Waterloo, Ontario

Terry King, Industrial Benefits Association of Canada, Ottawa, Ontario

Phil Lambert, Firstclass Systems Corp., Whiterock, B.C. and Fredericton, N.B.

Renauld Larouche, Mil-Quip, Iberville, P.Q.

Robert Leboeuf, SNC industrial Technologies, Montreal, P.Q.

Richard Lehaye, Sorel Forge Ltd., Sorel, P.Q.

Marlon Lewis, Satlantic Inc., Halifax, N.S.

Nadia Malek, Bell Helicopter Textron Canada, Montreal, P.Q.

Graham Moore, Heli Fab, Winnipeg, Manitoba

Deborah Nesbitt, Hughes, Richmond, B.C.

Doug Phillips, Atlantic Aerospace, Brampton, Ontario

Shawn Power, Steelcore Industries, Buchans, Newfoundland

Jeff Pritchard, Vac-Aero, Oakville, Ontario

Dave Reed, Hughes Elcan, Midland, Ontario

Tony Rotherham, CAE Aviation, Edmonton, Alberta

Murray Sloane, Bristol Aerospace, Winnipeg, Manitoba

Chris Stratton, Apex Industries, Moncton, N.B.

Rudy Voytek, Litton Industries Canada, Toronto, Ontario

Henry Willms, Western Star, Kelowna, B.C.

Linda Wilson, Lockheed Martin Canada, Ottawa, Ontario

Ken Yamashita, General Motors, London, Ontario

Phase II

MCP Case Studies

ISPR

Bill Greer, IRB Manager, EDS Canada

Saskia Meuffels, former IRB Manager, Industry Canada

Claudette Williams, current IRB Manager, Industry Canada

MCDV

Madeleine Guibert, Fenco Engineering

Peter Hall, MCDV Project Office, PWGSC

Don McLure, Macdonald Dettwiler

Kurt Theoret, IRB Manager, Industry Canada

MILLAV

Barry Nimetz, IRB Manager, Industry Canada

Ken Yamashita, Manager of IRBs, General Motors of Canada

ERYX

Guy Gallant, IRB Manager, Industry Canada

TCCCS

Kurt Theoret, IRB Manager for TCCCS, Industry Canada

UTTH

IRB Officer, Bell Helicopter Textron Canada, Ottawa.

PRC Case Studies

Naval Combat Operator Trainers

Etienne Lavoie, PWGSC

Target Systems Services

Richard Covlin, Air Spray Ltd.

M. Parent, Bristol Aerospace

Transport Aircraft Electronic Warfare Self-Protection Suites

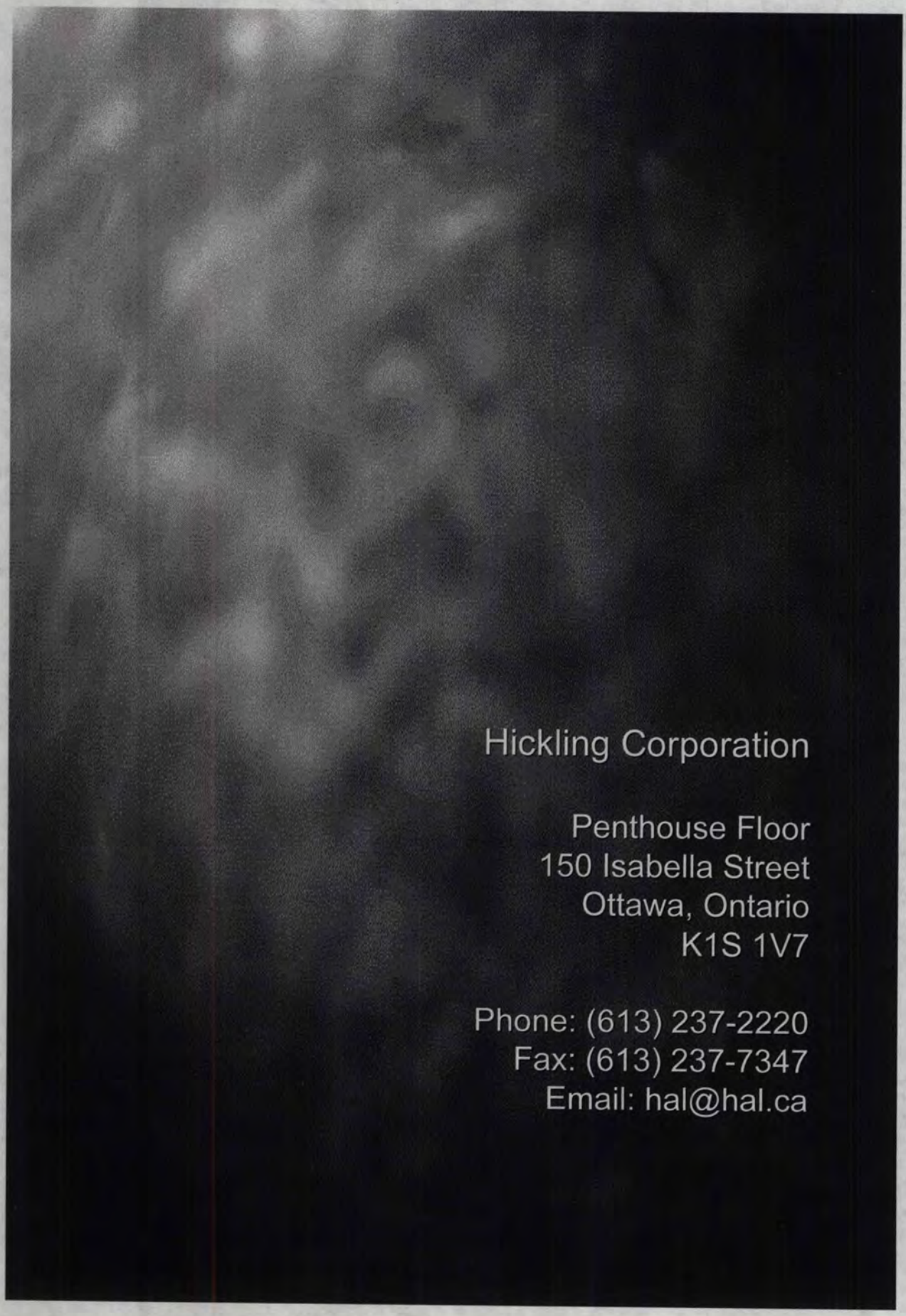
Bob Wight, PWGSC

RCMP Revolver Replacement

Bernard Fournier, PWGSC

Land Tactical Electronic Warfare Improvement - EWCAC

Bruce Weir, PWGSC



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