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**INDUSTRY SCIENCE & TECHNOLOGY CANADA (ISTC)
INTERNATIONAL PRIORITIES AND STRATEGIES
FOR FY 91/92**



Canada

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INTERNATIONAL PRIORITIES AND STRATEGIES
FOR FY 91/92**

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INDUSTRY, SCIENCE AND TECHNOLOGY CANADA (ISTC)

INTERNATIONAL PRIORITIES AND STRATEGIES

FOR FY 91/92

OVERVIEW

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OVERVIEW

This document summarizes ISTC's international priorities and strategies. These flow from the identification of 17 key priority industry sectors and the 9 related priority countries which the department judges will have the largest pay off for industrial and trade development. The "priority sectors" section is intended to provide a concise statement of the strengths and needs of certain key industry sectors and the consequential implications for the Government's international trade, investment/technology and R&D strategies. The "country strategies" section cross-references these sectoral priorities for individual foreign markets; it also summarizes for each priority country, activity underway or envisaged by ISTC, particularly as regards industrial and S&T cooperation.

The purpose of the document is to contribute to EAITC's Missions Operational Plan process - and thereby strengthen consensus and the development of integrated work plans between the two departments.

Context

ISTC's corporate mission is to promote international competitiveness and excellence in industry, science and technology. In an increasingly integrated world economy, trade, investment/technology, and research and development linkages are key, inter-related building blocks critical to the international competitiveness of Canadian industry. From ISTC's perspective, this raises two essential issues for international program planning. First, the importance of articulating Canadian industry sector requirements and strengths as they bear upon international strategies. Second, the importance of identifying foreign market opportunities for pursuing such interests and conveying such information effectively to Canadian firms. Close collaboration between ISTC and EAITC is essential to achieve this.

ISTC's top international priority is to support Canadian industry's efforts to seize the market opportunities arising from the FTA. The main focus is lending support to both traditional approaches such as trade fairs and missions and marketing activities, but at a heightened level of intensity. Also, we are supporting initiatives to provide companies with more specific USA market intelligence.

As the Government's "Going Global" strategy recognizes, it is also timely to re-assess Canada's S&T relationships more broadly. The overriding objective, from ISTC's perspective, is to maximize access to technologies that are critical for the competitiveness of our industries.

Our initial S&T focus has been on Japan. Areas of complementary R&D strengths have been studied and areas of potential cooperation between the two countries identified. A Japan Science and Technology Fund (JSTF) has been created to support a variety of activities such as bilateral research projects, researcher visits, and infrastructure support to promote closer ongoing links between research associations in Canada and Japan, as well as the dissemination in Canada of research and knowledge from Japan. Effective implementation of this newly-developed strategy is a priority.

ISTC is developing a similar approach to Europe with studies to be funded under the "Going Global" strategy. The initial focus will be on: assessing the implications of EC 1992 and pan-European R&D programs for our existing S&T agreements; obtaining feedback from the Canadian private sector as to their concerns with respect to European S&T activity; and evaluating the degree to which mutual access to research consortia, R&D networks, etc. could or should be developed with EC counterparts.

There is also a need to examine the scope for closer technology collaboration with the United States. This issue was not directly addressed in the FTA, but is increasingly important in the context of how and where any "peace dividend" is spent, the growing significance of R&D as a competitive weapon (especially as regards advanced manufacturing technology), and the newly-shared preoccupation with environmental clean-up and protection.

The promotion of new investment in Canada, particularly investment which provides leading edge technologies to Canadian industry, remains a key ISTC interest and underscores our collaboration in this area with Investment Canada and EAITC. Through its sectoral expertise and intelligence, ISTC will focus on identifying specific technology opportunities that will assist Canadian companies to be more competitive and more capable of exploiting the expanded North American market opened up through the FTA. Investment which brings managerial excellence and market access will also be targeted.

Sectoral Priorities

The cornerstone of the ISTC international interest is its sectoral priorities. These flow from ISTC's industrial intelligence base and are based on a comprehensive knowledge of the range of Canadian industries' needs and capabilities to meet international opportunities and challenges. To assist in the planning of international activities, ISTC has identified seventeen key sectors for priority attention.

ISTC will concentrate most of its international effort and its resources on these industry sectors. The seventeen priority sectors identified are:

1. Advanced Industrial Materials
2. Advanced Manufacturing Technologies
3. Agri-food Industry
4. Aircraft and Aircraft Systems
5. Auto Parts
6. Biotechnology
7. Consulting Services
8. Defence Electronics
9. Environment Industries
10. Fashion Apparel
11. Fishery Products
12. Health Care Products
13. Information Technologies
14. Ocean Industries
15. Pulp and Paper
16. Tourism
17. Wood Products

The priorities section of the document, describes for each of the above sectors the competitive context and identifies consequential international interests in trade, investment/technology and R&D. Specific elements which derive from the strategy could include gathering and disseminating intelligence on market opportunities, undertaking sector-specific market development initiatives, identifying new technology sources and potential partners for collaboration, encouraging new investment to fill strategic gaps in Canadian industry, and identifying international R&D projects which may be of direct interest to Canadian firms. Clearly, Canadian Missions play a key role in identifying opportunities in foreign markets and in proposing specific activities.

Country Strategies

The "country strategies" section sets out ISTC's perspective on key foreign markets. These strategies identify the sectoral priorities for individual markets and describe key elements of ISTC's own international program activity, largely in the area of industrial cooperation and S&T.

The United States remains our priority market. ISTC attaches importance to intensifying its already considerable support for trade development activity, and to improving the quality of its USA market intelligence. ISTC intends to integrate better its USA market efforts with those of EAITC. Effort will be made to accelerate the move from generic FTA activities to approaches targeted at the sectoral and sub-sectoral level, including initiatives which will help to provide Canadian firms with better intelligence on current opportunities and developments in specific U.S. regional markets. Further efforts will be undertaken to help individual companies assess their competitive positions and to better focus government support programs on the needs of particular industry sectors and of individual firms.

ISTC is looking to strengthen Canada-USA technology cooperation. Opportunities include joint program interests focusing on increasing university-industry linkages and technology dissemination networks, strengthening relations with the Department of Commerce and other key agencies on information exchange and joint planning for S&T, and closer cooperation and industry engagement in such specific fields of mutual priority interest as environmental protection and advanced manufacturing technology.

Within Asia, the ISTC focus is predominantly on Japan with emphasis on investment and technology. As a country of enormous and growing economic power, Japan is of particular interest at this time because of its intense commitment to research and development and its growing propensity to more fully accommodate its trading partners' interests. The ISTC approach builds on strengthening industrial cooperation through various agreements with MITI and Japanese enterprises and intensifying S&T linkages, principally through the recently established Canada Japan Science and Technology Fund. Elsewhere in Asia, our interests are more narrowly focused on trade and oriented to positioning Canadian industry for future opportunities. In particular, this approach is currently being applied for the Republic of Korea, the "Chinas" and Thailand/ASEAN.

In Western Europe, the emerging unified market requires a more strategic approach which should attempt to make greater efforts to encourage and accommodate joint ventures, investment and other mechanisms which will assist Canadian firms to access both European technology and the rapidly evolving European market. Even this approach will be difficult as many European firms look more and more inward in response to the unification of their markets and the opening of Eastern Europe. Nonetheless, we believe it is worthwhile, to encourage and work with Canadian firms to penetrate this market as the potential pay-off to success is substantial. The attached material, highlighting ISTC interests in each of Germany, Italy the U.K. and France has been prepared to correspond to EAITC's country-specific planning process.

In summary, ISTC is proposing to take a more targeted and integrated approach in pursuit of its international activities. Nonetheless, ISTC recognizes that there will be specific opportunities in sectors and countries outside the priority areas and will be prepared to pursue these opportunities on a case by case basis.

PRIORITY SECTORS

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INDUSTRY, SCIENCE AND TECHNOLOGY CANADA (ISTC)

INTERNATIONAL PRIORITIES AND STRATEGIES

FOR FY 91/92

PRIORITY SECTORS

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<u>SECTOR</u>	<u>RATIONALE</u>
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2. Automotive Parts	Sector Campaign ISB Concentrated Efforts
3. Environmental Industries	Sector Campaign ISB Concentrated Efforts
4. Ocean Industries	Sector Campaign in Ocean Technology ISB Concentrated Efforts
5. Aircraft and Aircraft Systems	ISB Concentrated Efforts in USA and UK
6. Defence Electronics	ISB Concentrated Efforts in USA and Europe
7. Information Technologies	Sector Campaign for Software
8. Agri-Food Industry	ISB Concentrated Effort in Technology/Investment
9. Consulting Services	ISB Concentrated Efforts in Trade
10. Fashion Apparel	Sector Campaign
11. Fishery Products	Sector Campaign ISB Concentrated Efforts
12. Advanced Industrial Materials	ISB Concentrated Efforts STP, TOP, AIM and special studies
13. Biotechnology	ISB Concentrated Efforts and STP
14. Health Care Products	Sector Campaign in Medical Devices ISB Concentrated Efforts
15. Pulp and Paper Products	Sector focus for Forest Industries Sector Campaign ISB Concentrated Effort in R&D
16. Wood Products	Sector focus for Forest Industries Sector Campaign ISB Concentrated Efforts
17. Tourism	Cabinet Policy ISTC Concentrated Efforts

GLOSSARY AND EXPLANATORY NOTE ON LEVELS OF EFFORT CONCEPT

The ISTC International Plan has been organized to describe the international dimensions of industry sector strategies and horizontal organizations. In order to allow ISTC managers to indicate a sense of their priorities, the concept of "levels of effort" has been developed. Within each of the four business functions (Basic Research), Applied R&D), Investment/Technology and Trade), the choice among the following three levels of effort was guided by the strategic criteria:

Concentrated (CE):

Sectors in this category meet most of the relevant strategic criteria and may be the focus of major thrusts of policy/sector campaigns. There would be concentrated groups of activities and significant proposed expenditures of resources by the organizations involved in implementation. One measurable example would be considerable planned international initiatives by sector staff.

Limited (LE):

This category would include sectors which meet some of the strategic criteria, and a limited number of proactive initiatives to take advantage of opportunities, niche areas in particular. There would be moderate resources expended on these sectors, perhaps to support activities EAITC has indicated a willingness to fund. Only a few international initiatives would be involved.

Maintenance (ME):

This category would encompass all other sectors which meet few of the strategic criteria. The category involves reactive (but possibly considerable) services for businesses or other organizations' activities. No new proactive initiatives, nor planned international travel, would be involved. This level of activity would account for only a basic level of resources per sector, such as recruitment for EAITC-funded events, or making appointments at missions.

Priority Sector: Advanced Manufacturing Technologies (AMT)

Context:

The AMT sector includes manufacturers of automated fabrication and assembly equipment, robotics, machine vision, automated materials handling equipment, and computer-based systems. Many firms are also active in the production of non-AMT products, such as machine tools, and in the system integrators which combine non-AMT and AMT products to form computer-controlled and flexible manufacturing cells. The majority of firms is small to medium sized and many have already developed sales in the North American market, which are expected to reach \$25 billion by 1991.

The Canadian AMT producer sector is feeling the impact of higher interest rates and a stronger Canadian dollar vis-à-vis the USA. However, the FTA, and a lessening of protectionism abroad, coupled with a growing demand internationally for AMT, provide opportunities for firms with leading-edge technologies and products.

The amount of AMT technology developed in Canada is very small compared to that generated by the US, Europe, and Japan, where companies receive government funding through defence-related and other programs. Canadian firms are generally smaller and receive less funding than their international competitors. Still, a relatively high potential for research exists in Canada and initiatives are needed to encourage R&D projects. Departmental programs such as the Microelectronics Systems Development Program are being used to fund R&D projects involving both AMT producer and user firms, and can be used to involve foreign partners.

A \$1.25 million AMT Sector Initiative, now underway, focuses on the Canadian producer and user sectors and identifies steps which will stimulate the growth of the producer sector. It also seeks to enhance the adoption of AMT within Canadian industry. Studies and analyses now underway will increase producer and sector opportunities, and assess technology gaps, barriers to the adoption of AMT, and the capabilities of Canadian producers to compete domestically and in the international marketplace. This initiative is approaching the mid-point and tangible results will be seen by the end of the year.

Priority Sector: Advanced Manufacturing Technologies (AMT)

A recent development is the Intelligent Manufacturing System (IMS) Project proposed by Japan which consists of a \$1.2 billion, 10 year joint international research program for the development of the next generation computer-integrated manufacturing facilities. Of this total, the Japanese government and industry is expected to contribute \$720 million, with the remainder to come from industry in North America and Europe. There appears to be private sector interest in IMS in Canada and ISTC is making arrangements to determine the extent major AMT firms would participate in specific projects.

International Strategy:

The key international priorities are to enhance competitiveness by increasing technology transfer, joint ventures, and joint R&D with foreign partners. The focus includes the US, Japan, and Western Europe.

Continued support through existing and possibly new EAITC/ISTC programs for both technology development and technology transfer are essential to this sector. There is presently very little funding assistance available for major AMT R&D projects, or to support Canadian participation in international projects. Canada has only a handful of large producers with the personnel and financial resources to carry out R&D projects in this sector. There is a need to assist small and medium size firms to market their products internationally.

The primary trade objective in this area is to expand export sales to the US taking advantage of opportunities arising out of the FTA, and to develop in sales in other foreign markets which are growing at an annual rate in excess of 12 per cent, concentrating on Western Europe and Japan.

Priority Sector: Advanced Manufacturing Technologies (AMT)

Country Focus:

Priority Countries	Trade	Tech/Inv	Applied R&D
USA			
Atlanta	LE	CE	CE
Los Angeles	LE	CE	CE
Chicago	LE	CE	CE
Cleveland	LE	CE	CE
Detroit	LE	CE	CE
Asia			
Japan	LE	CE	CE
Korea			
China			
ASEAN			
Europe			
Germany	LE	CE	CE
Britain	LE	CE	CE
Italy	LE	CE	CE
France	LE	CE	CE

Contact Persons:

Director of Machinery and Electrical Equipment:
W. H. Terry, 954-3279
AMT Sector Campaign: Gayle Duggan, 954-3264

Priority Sector: Automotive Parts

Context:

The Canadian auto parts sector is restructuring in order to respond better to the changing practices and policies of both the traditional North American and the new Asian vehicle assemblers. Vehicle producers have indicated that there will be fewer direct parts suppliers; and that those which remain will be required to undertake sustained product development and be competitive on a cost/quality technology basis. Parts and assembly producers will be required to undertake product design and development functions in-house, to institute a program of continuing cost reduction and to satisfy the vehicle manufacturers' demands for just-in-time delivery and upgraded quality control. Canada enjoys certain competitive advantages, such as its close proximity to the largest concentration of modern assembly capacity in the world, and has demonstrated competitiveness in a North American context. The acquisition of new product and process technology will be encouraged and supported to improve the competitiveness of the Canadian industry. In geographic terms, Canadian parts companies will continue to concentrate on the US as the primary market, but will increasingly focus on technology acquisition in Western Europe and Japan. Attention will also be directed at maintaining and expanding traditional and new markets in Europe and Asia.

International Strategy:

An increasingly high level of cooperation and partnership prevails between ISTC and EAITC in the automotive sector. Both departments have jointly developed and are now working together to implement geographic automotive strategies, covering technology, investment and trade.

The investment strategy is to encourage assemblers and parts manufacturers to locate facilities in Canada for global supply, to encourage assemblers to increase CVA by expanding their assembly operations in Canada and sourcing more Canadian parts.

In technology, the strategy is to increase technology transfers and awareness in Canada by fostering cooperation between Canadian and foreign companies, and to assist Canadian companies to upgrade their facilities and production processes.

Priority Sector: Automotive Parts

In trade development, the strategy involves identifying sourcing opportunities with North American and offshore vehicle assemblers and their Tier I suppliers, and identifying market sectors in key foreign markets in Western Europe and Asia where Canadian parts exports can be competitive.

Another dimension to the sector's strategy is to build on the success of the original equipment sector, in the aftermarket. At present the OE parts industry has sales of \$14 billion, over 80 per cent of which is exported. The goal is to utilize this strength to lever some opportunities in the replacement market.

Although there will be ongoing activities throughout the world, ISTC, in cooperation with EAITC, will pursue a targeted investment, trade and technology prospecting program for the following high priority regions - Japan, US, Korea, Europe and Mexico.

Country Focus:

Priority Countries	Trade	Tech/Inv	Applied R&D
USA			
Atlanta	CE	CE	
Los Angeles	CE	CE	CE
Boston	LE		
Buffalo	LE		
Chicago	CE	CE	
Cleveland	LE	CE	
Detroit	CE	CE	CE
Minneapolis	LE		
New York	CE	CE	
Washington	CE		
Asia			
Japan	LE	CE	CE
Korea	LE	CE	LE
China		LE	
ASEAN		ME	
Europe			
Germany	LE	CE	CE
Britain	LE	LE	LE
Italy		ME	CE
France		LE	

Priority Sector: Automotive Parts

Contact Person:

Director of Automotive Directorate:

Slawek Skorupinski, 954-3797

Automotive Corporate Development Division:

Don Campbell, 954-3727

Automotive Sector Development Division:

W. Whiting, 954-3707

Priority Sector: Environmental Industries

Context:

The Canadian environmental industry has strengths associated with resources and extractive industries, large scale power and water projects, industrial processes, environmental clean-up, transportation infrastructure, waste disposal, and municipal services.

Canadian capabilities marketed abroad fall into the areas of potable water, industrial waste water, waste services, instrumentation, environmental consulting and analysis, and geographic information systems. Emerging areas of interest are in air pollution control, detection monitoring systems, clean up of soils and recycling.

There are 1500-2000 firms in Canada delivering a full array of environmental goods and services. Out of this number, less than 100 are consistently active in exporting, and include many consulting and engineering services.

The world sees Canada as a leader in sound environmental management and technology development, largely as result of public sector and political leadership. The industry can seize many growing opportunities in OECD countries, newly industrialized countries (NICs) and the less developed countries (LDCs) of the Third World. To date, Canadian manufacturers have shown a singular export interest in the US market. Third World projects are the export market choice of the engineering and environmental consulting disciplines.

ISTC's environmental industries sector campaign targets the tasks of identifying, exploring and developing Canadian participation in this nascent global sector. The aims are to improve business climate, gain new technology and investment, and the penetrate domestic and export markets.

International Strategy:

The US market is the key international focus. Opening new markets in East/West Europe and pursuing large contract awards in newly industrialized countries are next on the agenda.

Priority Sector: Environmental Industries

With the US, the plan is to pursue both trade and technology opportunities. An initiative is underway to develop a special understanding with the US to strengthen, or gain preferred access to the US market, for trade, research and technology development by Canadian environmental companies. The Canada-US Defence Production and Development Sharing Agreement is a model under consideration.

Another initiative is to develop a plan of action to ease entry of Canadian companies into the lucrative US market for land remediation and restoration. The US Government has said there is not enough capacity in the US to meet its needs.

Efforts to increase participation in US trade shows, seminars and conferences will continue. As well, a strategy to better penetrate the US industrial wastewater market is in process. Action shall follow on the waste and air pollution markets.

The lead thrust in Western Europe will continue to be the sourcing and transferring of technology. Increasing attention to bolstering trade of Canadian environmental goods and services under the Europe 1992 umbrella will follow. The Netherlands, West Germany and France are the prime sources for environmental technology. Within Eastern Europe, Canadian firms are showing an initial interest in building a presence in Czechoslovakia and Hungary. They may, in alliance with European companies, directly pursue entry into those markets.

Japan is a valuable source of environmental know-how. Efforts will intensify to secure its technology and investment in Canada to serve the North American market. Investigation will continue for trade opportunities with Japan through missions and participation in appropriate trade fairs and consultations with the Ministry of International Trade and Industry (MITI).

Our immediate goal in the NICs is to gain increased participation of Canadian companies in major environmental projects. Risk assessment, environmental planning, monitoring, and management are potential areas of involvement. These activities provide an opening to the future supply of Canadian environmental equipment to these markets.

Priority Sector: Environmental Industries

Country Focus:

Priority Countries	Trade	Tech/Inv	Applied R&D
<hr/>			
USA			
Atlanta	LE	LE	LE
Los Angeles	CE	LE	CE
Boston	LE	LE	LE
Buffalo	LE	LE	LE
Chicago	LE	LE	LE
Cleveland	LE	LE	LE
Dallas	LE	LE	LE
Detroit	LE	LE	LE
Minneapolis	LE	LE	LE
New York	LE	LE	LE
San Francisco	LE	LE	LE
Seattle	LE	LE	LE
Washington	CE	LE	LE
<hr/>			
Asia			
Japan		CE	CE
Korea	LE		
China	CE		
ASEAN	CE		
<hr/>			
Europe			
Germany	CE	CE	LE
Britain	LE	LE	LE
Italy	LE	LE	LE
France	CE	CE	CE
<hr/>			

Contact Persons:

Director of Machinery and Electrical Equipment:

W. H. Terry, 954-3279

Environmental Industries Division: Patrick Lennon, 954-3216

Priority Sector: Ocean Industries

Context:

The ocean science subsector is comprised of small, privately owned, technologically advanced, but financially weak companies. Many of these companies have established an internationally recognized expertise and are highly oriented toward the export markets. (60 per cent of the subsector's sales are exported.) Government laboratories, agencies, departments, oil companies, and the military are major customers. Research and development and product innovation are key factors for these companies to maintain a competitive edge.

An Ocean Industries Sector Campaign will undertake studies of the domestic and international markets for specific technologies, and will be useful in identifying future initiatives and promotional work. The technological fields which these studies will address are: Marine Robotics (manned, unmanned and autonomous underwater vehicles with their supporting systems); Ocean Information Systems (mapping, ocean data collection and management systems); and Cold Ocean Technology (ice engineering, remote sensing and specialized goods and services for extreme cold conditions).

International Strategy:

The international focus in the sector is to facilitate the formation of strategic partnerships and joint ventures in order to gain better access to international markets, and to assist the producers of specialized components to export their products, both on a component basis and as part of a package of marine assemblies. The recent success of British Columbia and Japanese companies in a joint venture dealing with subsea communications and deep-sea diving systems is an excellent example.

The key area of concentration will be Europe, and the movement towards greater integration by 1992 will accentuate this. The large number of marine research institutes and agencies located in Europe, the EC's Marine Science and Technology (MAST) Program with a \$140 million budget coupled with the huge expenditures on North Sea oil and gas operations, make the European market a prime target for Canadian companies in this sector. The changes in Eastern Europe and the extensive problems with the environment should lead to new opportunities in this area.

Priority Sector: Ocean Industries

The approach in the United States will be to market complete marine systems packages, rather than components, thereby building on successes already gained in the US market.

Country Focus:

Priority Countries	Trade	Tech/Inv	Applied R&D
USA			
Dallas		CE	
Asia			
Japan			CE
Korea			
China	CE		
ASEAN			
Europe			
Germany	CE	CE	CE
Britain	CE	CE	CE
Italy			
France	CE	CE	CE

Contact Persons:

Director, Marine, Urban, and Rail: André Lafond, 954-3081
Marine Systems Division: Brenda Baird, 954-3759

Priority Sector: Aircraft and Aircraft Systems

Context:

Markets for aircraft and aircraft systems are international in scope. Canadian firms compete successfully in this world environment by concentrating on select market niches: examples include corporate and regional commuter aircraft, civil helicopters, turboprop and turbofan engines for these aircraft, cabin air conditioning and pressurization systems, aircraft flight control systems, de-icing and anti-icing systems, and landing gear components. Over 70% of the industry's sales are exported.

The sector's success has been based largely on its ability to design, develop and manufacture a range of specialty products within particular world market niches. Although the key market for the sector remains the U.S., new expanding markets in Europe and the Pacific Rim are taking on greater significance and steps will have to be taken to ensure that Canadian firms have access to them.

Given the importance of technology to this sector and the small size of the Canadian industry, participation in foreign research and development ventures is viewed as essential. This is accomplished through collaborative efforts, joint ventures, consortia arrangements and Defence Development Sharing Arrangement projects with the US. Technology transfer is also accomplished through direct purchase or licensing arrangements.

International Strategy:

The larger firms in the sector are well established in international markets and fully capable of mounting their own initiatives. For them the focus of ISTC's efforts includes the development of long term corporate MOUs, assistance to mitigate/remove market access impediments, ensuring level playing field conditions for sector firms, promoting Canadian interests in international joint projects and providing supplemental intelligence on markets and technology to the sector.

For the smaller firms in the sector, ISTC's activities focus on providing marketing assistance through the provision of market intelligence, market identification and international exposure, and through participation in trade fairs and missions such as investment and technology transfer prospecting in Europe and elsewhere.

Priority Sector: Aircraft and Aircraft Systems

ISTC's activities focus on supporting and amplifying the marketing efforts of EAITC by pursuing specific opportunities for sector companies identified by attendance at trade shows, fairs, conferences, and foreign company visits. Market access is also supported through the use of DIPP and industrial benefits leverage. In addition, continuing discussions and/or negotiations are conducted with the parents of Canadian firms concerning the future directions (including new investment) planned for their Canadian operations.

Country Focus:

Priority Countries	Trade	Tech/Inv	Applied R&D
<hr/>			
USA			
Atlanta			CE
Los Angeles	CE	CE	CE
Boston	CE	CE	CE
Chicago			
Cleveland	CE	CE	CE
Dallas	CE	CE	CE
Detroit	CE	CE	CE
Minneapolis			
New York	CE	CE	CE
Seattle		CE	
Washington	CE	CE	CE
<hr/>			
Asia			
Japan	LE	LE	LE
Korea			
China			
ASEAN			
<hr/>			
Europe			
Germany	CE	CE	CE
Britain	CE	CE	CE
Italy	LE	LE	LE
France	CE	CE	CE

Contact Person:

Director of Aircraft, Propulsion, and Missile Systems:
William Laycock, 954-3082
Propulsion and Aircraft Subsystems Division:
Roger Saberton, 954-3292

Priority Sector: Defence Electronics

Context:

The defence electronics sector is highly export-oriented, primarily towards the U.S. The other export markets are the NATO countries, Pacific Rim nations, and occasional opportunities in other geographical areas, subject to export licensing and sometimes the availability of concessional financing.

The strengthening Canadian dollar is adversely affecting the competitiveness of this sector, which largely competes against U.S. firms for sub contracts on programs run by large U.S. prime defence contractors. The cuts in defence budgets, resulting from disengagement vis-a-vis the Soviet Union and massive budget deficits, are also expected to adversely affect the sector over the long term as new weapon system procurements become fewer and are stretched out over longer procurement cycles, and competition among the major U.S. defence contractors becomes fiercer for the remaining programs.

European economic integration is resulting in a realignment of continental defence markets and defence contractors. It is anticipated that a much more homogeneous market will be served by fewer, larger, and more integrated multi-national European firms, making it more difficult for Canadian firms without a European subsidiary or partner to compete.

International Strategy:

Exports are the number one priority in this sector, primarily with the U.S. The decline in U.S. defence budgets and resulting increased competition, as well as the emergence of more potent European competitors make it imperative to both develop new market areas, as well as diversify into other product areas, including commercial electronics, building on the technological strengths gained in serving the very demanding defence markets.

Priority Sector: Defence Electronics

Technology and innovation are key to the sector's competitiveness. Significant investment in Research and Development by the firms in the sector is augmented by the Department's Defence Industry Productivity Program (DIPP). Support of the special, long running relationship with the U.S. in the form of the bilateral Defence Development and Defence Production Sharing Arrangements (DDSA and DPSA), the PEMD program, and by no means least the technology-intensive Industrial Benefit requirements on major Canadian defence procurements are other means through which the Department is helping the sector to grow. The USA will therefore be the key focus for seeking out technology intensive investment, whereas Europe will be the target for collaborative research and development.

Country Focus:

Priority Countries	Trade	Tech/Inv	Applied R&D
USA			
Atlanta	CE		
Boston	CE		LE
Buffalo	CE		
Cleveland	CE		
Dallas	CE		
Detroit	CE		
New York	CE		
San Francisco	LE		
Washington	CE		LE
Asia			
Japan			
Korea			
China			
ASEAN			
Europe			
Germany	CE		CE
Britain	CE		CE
Italy			
France	LE		

Contact Persons:

Director, Defence Electronics and Space Systems:

Robert Burns, 954-3415

Defence Electronics Division: Robert Hawkins, 954-3779

Priority Sector: Information Technologies

Context:

The Information Technologies (IT) industry is recognized as a strategic industry by all governments. It is an industry characterized by rapid growth, constant technical change, international competition, and an ongoing requirement for considerable investment in R&D. The Canadian market is of insufficient size to support a Canadian IT industry. Thus firms from the outset must be internationally competitive to survive. The Canadian IT industry has annual revenues of about \$30 billion. Seventy per cent of this revenue is from exports, mainly to the United States. The industry is composed of computers, telecommunications, microelectronics, instrumentation, electronic components and software.

Although Canada faces strong pressure from foreign markets for IT products within the country, and is facing a trade deficit approaching \$8 billion, there are a number of niche markets where Canadian producers excel. In the telecommunications area, radio communications, multiplex, data network equipment and switching companies are internationally recognized. Canada has a number of excellent companies working in the instrumentation and process control sector, particularly related to geophysical and geological equipment, environmental controls, navigation, remote sensing and optical measurement. Canadian firms have acquired renown in certain niche markets of software development including the fields of geographic information systems, resource exploration, hospital systems, user tools, and government administrations.

The FTA will have little effect on Canadian access to US markets and American competition in our domestic market, both of which are quite open. In spite of a requirement to work on bilateral liberalization of government procurement, small areas of both markets will remain protected.

International Strategy:

Technology and Investment are important cornerstones in promoting IT and the use of IT in Canada. ISTC is focusing attention on increasing the availability of investment capital to the IT industry. One way to so do, is to attract foreign investment. Work is also being undertaken to establish strategic alliances for product development and marketing. Licensing agreements are also being encouraged.

ISTC is encouraging the telecommunications and microelectronics sectors to focus on collaborative research and development, international joint ventures for R&D, research consortia, and personnel exchanges among the scientific, research and commercial communities.

Priority Sector: Information Technologies

All sectors of IT recognize the importance of trade. The United States has the biggest share of the world market, and is recognized as the leader in many aspects of IT development. The US is Canada's major market and major competitor and as such most of the effort is directed there. Although Europe and Asia are rapidly growing markets, they receive less emphasis than the US.

Country Focus:

Priority Countries	Trade	Tech/Inv	Applied R&D
USA			
Los Angeles	LE	CE	CE
Boston	LE	CE	
Chicago	LE		
Dallas	LE	CE	CE
New York	LE		
San Francisco	LE	CE	CE
Washington	LE	CE	CE
Asia			
Japan		ME	
Korea			
China	LE	LE	
ASEAN	LE	LE	
Europe			
Germany	LE	LE	LE
Britain	LE	LE	LE
Italy			
France	LE	LE	LE

Contact Persons:

Director of Technology Management: Ash Sahi, 954-4094
Information Technology Division: Ruth Girard, 954-2894

Priority Sector: The Agri-Food Industry

Context:

The agri-food industry, with the exception of red meat, distilling, and edible oils, is domestic-market oriented. The industry has been stable due to protection from international competition through tariffs or barriers. However, these mechanisms soon will not be as powerful deterrents as they once were, as changes in our international trading arrangements begin to exert their influence in the market. In order to remain an important player in the international environment, the industry must stem import inroads in the domestic market, improve its competitiveness through lowering costs, and find niche markets at home and abroad.

The industry faces many challenges in the near future: the removal of tariffs under the FTA, the possible effects of the current round of negotiations on the GATT, the expected changes in the EC preparing for 1992, and the environmental issues, among them a required 50 per cent reduction in packaging wastes by the year 2000. The industry's options are constrained by small scale operations, high input costs, interprovincial barriers to trade, and a low level of technology.

The FTA will have the most immediate effect, removing tariffs and possibly other protective measures such as import quotas. While most dairy and poultry products are expected to remain unaffected by the FTA, these two areas are vulnerable under the current round of GATT negotiations. Plants will respond through specialization, restructuring or relocation, depending on individual circumstances, as former production patterns become unprofitable.

In spite of low tariffs applied on Canadian products entering the EC, a variable levy system and other technical barriers to trade make the EC a less attractive export market than it was in recent times. As well, as a result of the 1992 single market, Europe will be much more efficient, better able to supply its own needs and a stronger competitor for Canadian firms in third countries.

International Strategy:

Industrial co-operation, technology transfer, joint ventures, and investment prospecting are the priority activities for the agri-food sector. The strategy differs by subsector. In the red meat industry, trade and technology related activities are the focal activities. In the processed foods subsector, the activities centre around intelligence and technology transfer.

Priority Sector: The Agri-Food Industry

The US, our principal trading partner, is the prime focus of our attention. To address competitiveness concerns brought about by the FTA, primarily the effect of the high input costs of supply managed commodities, ISTC has established a Food Policy Task Force to research the relationship between public policy mechanisms, such as marketing boards, and ingredient costs. ISTC is part of an interdepartmental working group working towards the harmonization of standards between Canada and the US in an effort to facilitate cross border trade and rationalization options for the industry.

Our second area of interest is the European Community where the focus is on intelligence gathering, technology joint ventures, and investment prospecting. The former is facilitated through active interchange in the Canada/EC Working Group on Processed Foods and various missions, such as one being developed now on new developments in packaging technologies.

Our non-US/EC interests lie in furthering the export reach of red-meat products and improving cost competitiveness through adaptation of new meat packing technologies. Both objectives will be developed this year in missions to Australia and New Zealand which are formidable competitors, trading partners and potential markets, primarily of pork.

EAITC's Technology Inflow Program will be an important factor in the success of these initiatives.

Priority Sector: The Agri-Food Industry

Country Focus:

Priority Countries	Trade	Tech/Inv.	Applied R&D
USA			
Atlanta		ME	ME
Los Angeles	LE	ME	CE
Boston		ME	ME
Chicago	LE	ME	CE
Dallas		ME	ME
Minneapolis	LE		
San Francisco		ME	CE
Washington	LE		
Asia			
Japan		CE	CE
Korea			
China			
ASEAN		ME	
Europe			
Germany	LE	LE	
Britain		ME	CE
Italy		ME	
France		ME	ME

Contact Persons:

Director of Food Products: Sandra Humber, 954-3511
Grocery Products Division: Rick Cooper, 954-3087
Animal and Plant Products Division:
Gordon McGregor, 954-2936

Priority Sector: Consulting Services

Context:

This sector consists of a highly diversified group of industries providing advice to business on a fee basis. They are among the fastest growing service industries and offer services which have important impacts on the productivity of client operations. Their activities are characterized by high value-added and very high Canadian content. The important exportable components include: environmental services; scientific and technical services including consulting engineering, architecture and survey and mapping; agricultural consulting services; industrial/graphic/interior design services; management consulting; commercial education and training services; and health care services. Most firms are small, with activities aimed at the domestic market; significant export sales are generated, but mainly by a few large firms enjoying worldwide reputations.

International Strategy:

The major ISTC focus is on trade development, particularly with respect to support for the smaller and medium sized firms in these areas. These firms have limited resources with which to identify and develop foreign markets and can benefit greatly from ISTC/EAITC services, such as provision of information, program support for market identification and project bidding, and logistical support for market exploration and identification of potential joint-venture partners.

A strategy for the export of Canadian tradeable services is being developed jointly by ISTC and EAITC. Currently, ISTC's objective is to encourage consideration of selected foreign markets by various export-ready consulting firms. The priorities for environmental consulting firms are the ASEAN countries of Indonesia, Philippines, Malaysia, Singapore, and Thailand. The first four of those are the countries of emphasis for agricultural and management consulting. The ASEAN region and the Middle East are areas of emphasis for commercial education and training, and health care services. The markets for consulting engineering and architecture are much wider spread. For design firms, the focus is on the USA and Singapore. Our approach will involve market studies, trade shows, and incoming and outgoing missions. A successful environmental services mission visited the ASEAN region over the period May 25-June 15, 1990.

Priority Sector: Consulting Services

Selected firms in the environmental services field have proprietary technology to sell/license and have access to some government support to help identify suitable partners/projects. In the field of technology, the focus is the ASEAN region - Indonesia, Malaysia, Philippines, Singapore, and Thailand. In the longer term, FY 1992-93, firms may be looking for European technology and partners to undertake projects in that unified market.

Country Focus:

Priority Countries	Trade	Tech/Inv	Applied R&D
USA			
Los Angeles	LE		
Boston	LE		
New York	LE		
San Francisco	LE		
Asia			
Japan			
Korea			
China			
ASEAN	CE	LE	
Europe			
Germany			
Britain			
Italy			
France			

Contact Persons:

Director of Commercial Service Industries:

Peter Sagar, 954-2994

Consulting Services Division: Chris Charette, 954-2948

Priority Sector: Fashion Apparel

Context:

The Canadian clothing industry, like those of all other developed nations, is unable to compete on a cost basis with imports from low-wage countries. As a result it is being forced out of the production of basic commodity apparel items to focus on higher value-added fashion products and services, where price is less of a competitive factor.

Technology plays an important role in these efforts. Over the past decade, there have been a number of developments in applying new technologies to clothing through computer aided design (CAD), manufacturing (CAM), material flow management and point-of-sale monitoring. While these advances have not had a significant impact on the overall labour intensity of the industry, they have assisted its flexibility and speed in responding to market conditions.

Due to the small size of the Canadian market some product opportunities are not large enough to support viable operations. With the opening up of the U.S. market under the FTA, Canadian firms have an opportunity to broaden these markets on a North American basis. For many firms this will not be an easy task as the industry has historically been characterized by small, entrepreneurially managed companies. While this is changing, many firms do not have the production, financial or human resources to maximize their market opportunities.

International Strategy:

A major focus of ISTC's activity is the provision of specialized strategic market information, by price segment, on the American and selected European markets to assist the industry in developing customized export strategies. Increased exports, to the U.S. market in particular, will broaden the industry's first-hand export experience and will act as a springboard for entry into other world markets in 5 to 10 years. By that time the MTNs may have contributed to breaking down foreign trade barriers.

Much of the ISTC activity is being funded under the Fashion Apparel Sector Campaign (FASC). The latter also includes developing ways to improve industry management and technical skills and to encourage cooperation between apparel designers, manufacturers and the domestic textile industry.

Priority Sector: Fashion Apparel

Attention is also being devoted to raising industry's level of awareness of new emerging technologies, particularly those being developed in Japan and Europe whose industries tend to be more technically advanced. ISTC organizes technical trade show tours and seminars, sets up technical missions and disseminates consultant reports on important equipment trade shows.

Country Focus:

Priority Countries	Trade	Tech/Inv	Applied R&D
<hr/>			
USA			
Atlanta	LE	CE	
Los Angeles		CE	
Boston	LE		
Buffalo	LE		
Chicago	LE		
Cleveland	LE		
Dallas	CE		
Detroit	LE		
Minneapolis	LE		
New York	CE		
Seattle	LE		
Washington	LE		
<hr/>			
Asia			
Japan	ME	CE	ME
Korea			
China		ME	
ASEAN			
<hr/>			
Europe			
Germany	CE	CE	ME
Britain	CE		
Italy			
France			

Contact Person:

Director of Textiles, Clothing and Footwear:

Richard Pageau, 954-3585

Fashion Apparel Division: Jim Heppell, 954-2853

Priority Sector: Fishery Products

Context:

Commercial fisheries, although not a major contributor to the aggregate national economy, is very important when considered on a regional basis. The fish processing sector is an export-oriented industry, (over 80 per cent). The prime destination is the USA (54 per cent), which for several products represents the only market. Proximity to the major consuming areas, traditional trade relations and favourable exchange rates during the 1980's have contributed to a heavy reliance on the US market, particularly in groundfish (fresh and frozen) and some higher value shellfish products. Americanization of the huge groundfish fisheries in Alaska and growing market acceptance of lower priced whitefish pose a formidable competition to Canadian groundfish exports, especially when resource shortages in certain species limit traditional supply capabilities. On the positive side, tariff reductions open up the US market for further processed products and hitherto under-utilized species provide a new raw material base and opportunities for diversification. The rapidly growing aquaculture sector (salmon and shellfish) will account for an increasing share of the industry's output.

Exports to Japan, currently 21 per cent of the Canadian total, have increased rapidly, from \$319 million in 1985 to \$495 million in 1989. There is no apparent reason why this trend should not continue, so long as Japanese disposable income continues to increase. The European Community currently receives 16 per cent of Canadian exports, and it is hoped that this market will become more open after the current round of GATT talks. Market development and technology transfer programs with the East Bloc are also a possibility.

A Sector Campaign has been launched which focuses on market development, technology development, aquaculture development and human resource development. Phase II, a series of focused studies in these key areas, is underway in 1990/91. The results will be an important part of future plans.

Priority Sector: Fishery Products

International Strategy:

Trade is the number one priority in the fishery products sector, primarily with the USA, Japan, and the EC. To become more competitive, the industry must adopt greater market-responsiveness and export higher value-added products for which strong demand exists in the industrialized countries. The process of integration in Europe, with a large fish and seafood deficit, offers special opportunities for Canadian firms to arrange joint ventures with European partners. Marketing under-utilized species will likely require non-traditional trading approaches.

International competitiveness is key to the viability of the sector; the gathering of policy, technology and marketing intelligence on Canada's competitors is of paramount importance. Alaska, Scotland, South America, the Scandinavian countries and Japan are prime candidates.

Technology development to enhance productivity and international competitiveness through the support of selective R&D and the acquisition of advanced processing technologies is a secondary focus. Technology fact-finding missions are planned to active R&D countries and to explore technology cooperation and market development opportunities in the USSR and Eastern Europe. Efforts in technology should be concentrated in three areas: the development of new products; the development of environmentally-friendly processing technology; and the development of more efficient processing techniques to optimize returns from the available resources on the Atlantic coast. Technology development is an important secondary focus, after trade and market development.

Priority Sector: Fishery Products

Country Focus:

Priority Countries	Trade	Tech/Inv	Applied R&D
USA			
Atlanta	CE		
Los Angeles			LE
Boston	CE		LE
Chicago	CE		
Seattle		CE	CE
Asia			
Japan	CE	LE	CE
Korea			
China			
ASEAN	LE		
Europe			
Germany	LE	LE	LE
Britain	CE	CE	LE
Italy		LE	
France	CE	CE	CE

Contact Persons:

Director of Food Products: Sandra Humber, 954-3511
Fishery Products Division: Alain Gauthier, 954-2927

Priority Sector: Advanced Industrial Materials (AIM)

Context:

Advanced Industrial Materials (AIM) can be described as either of recently developed new materials or existing materials with improved properties. They generally fall within either of these categories: advanced ceramics, metals and alloys, new polymers, advanced composites and coating technologies. These impact on all manufacturing sectors as AIM are incorporated into products, for example carbon reinforced alloys for the tennis racket frames, titanium nitride coated tools with an extended working life, boron nitride break seals, etc... World market for AIM is expected to grow from an estimated \$18.3 billion in 1988 to \$44.4 billion by 1998.

AIM are a priority to ISTC:

- due to their potential impact on all manufacturing sectors, they could play a key role in making Canadian firms internationally competitive,
- due to their intrinsic high value-added nature they could contribute significantly to improving the structure of the Canadian economy, traditionally based on the exploitation of natural resources.

The Canadian AIM scene is characterized by:

- natural resources giants which are world leading multinationals and which have recently been observed to be moving their AIM business outside Canada to where their customers are,
- small and medium size R&D intensive firms with a great need for both market intelligence abroad because of their limited resources, and market sponsorship abroad usually through associations with end-user firms. These are very much niche-type firms,
- the critical importance of the new "supplier-user" relationship brought about by the ability, through new materials technologies, to create a new material for each individual end-products specifications.

North American materials firms, which had historically enjoyed world leadership both in traditional and in new materials, have seen their leadership position being eroded by Japan and more recently Europe in certain areas. This is not due to the lack of R&D expertise and capabilities, but rather to the apparent inability to achieve substantial advanced material commercialization or to translate new materials technologies into international competitive advantage in manufacturing.

Priority Sector: Advanced Industrial Materials (AIM)

Our strategy to develop AIM includes fostering domestic application showcases, identifying opportunities and diffusing market intelligence to Canadian firms, encouraging R&D investment by multinationals and emphasizing "dual use" technologies (i.e. a material developed for one purpose used for another application, for example using defence related material in commercial applications). Contributing to our strategy is the STP program which supports private sector led alliances doing R&D and leading edge technology application development.

International Strategy:

Given this environment our international strategy has three elements. First, in order to capitalize on the possibility of accommodating foreign firms inside R&D alliances funded through STP, we will be seeking partners. Ideally alliances are formed between a material firm and an end-user/customers firm, because this type of alliance automatically overcomes the commercialization weakness identified above.

Second, to aid our SME's we would be looking at obtaining intelligence such as new AIM products and technologies abroad, quantitative market information, new major R&D initiatives, etc. These would be diffused to our network.

Third, we are looking at identifying good ideas implemented abroad, foreign practices that may be applicable to Canada such as material clubs and details on the Material Matters program used to promote materials in the UK.

We will be pursuing our strategy of supporting Canadian materials Associations to lead on the international scene, through mechanisms such as twinning agreements, and encourage lobbying of foreign parent companies of Canadian subsidiaries for more AIM world product mandates for Canada and increased R&D.

Priority Sector: Advanced Industrial Materials (AIM)

Country Focus:

Priority Countries	Trade	Tech/Inv	Applied R&D
USA			
Washington		CE	CE
Asia			
Japan			CE
Korea		ME	ME
China			
ASEAN			
Europe			
Germany		CE	CE
Britain		CE	CE
Italy			
France		CE	CE

Contact Person:

Director, Advanced Industrial Materials:
Anthony Stone, 954-3084

Priority Sector: Biotechnology

Context:

Biotechnology is an enabling technology with profound implications for numerous sectors. It is a key factor in maintaining and strengthening Canada's international competitiveness, most importantly in health products, the agri-food industry, and resource-based sectors. The biotechnology industry in Canada is made up of approximately 300 companies, mostly small and mid-size firms developing specific biotechnological products and processes, along with the biotechnology divisions of larger firms. Most of these companies are too small to operate and compete internationally.

The first survey of the Canadian biotechnology industry (Canadian Biotech '89: On the Threshold) showed that many of Canada's biotechnology companies are poised for a period of growth in the 1990s. They are facing significant challenges in attracting highly qualified researchers and management personnel, dealing with intellectual property rights, and finding financial investment sources. The development of alliances, to avoid duplication of effort and allow the capture of quickly changing markets, is another priority.

International Strategy:

ISTC, in conjunction with EAITC and Investment Canada, is encouraging and helping Canadian companies to establish technology transfer programs and partnerships between biotechnology producers and potential users. The US, Europe and Japan have been targeted as possible foreign partners. In the past two years considerable emphasis has been placed on incoming and outgoing missions, exchanges and one-on-one company links. A key part of the strategy has been to develop ties with foreign industrial biotechnology associations and to work through them to promote Canada's strengths.

A major part of the future international strategy will revolve around the International Biotechnology Conference which Canada will be hosting in 1992 in Montreal. Many international activities in 1990 and 1991 will be geared to generating an interest world-wide in this conference and to ensuring that it acts as a showcase for Canada's biotechnology strengths and continuing role in the international biotechnology community.

Priority Sector: Biotechnology

Country Focus:

Priority Countries	Trade	Tech/Inv	Applied R&D
USA			
Boston		CE	CE
San Francisco	CE	CE	CE
Washington	CE	CE	CE
Asia			
Japan	LE	CE	LE
Korea			
China			
ASEAN			
Europe			
Germany	LE	LE	
Britain	LE	LE	LE
Italy			
France	LE	LE	LE

Contact Persons:

Director of Chemicals and Bio-Industries:

Dr. Elizabeth Dickson, 954-3138

Biotechnology Division: Carol Cheffins, 954-3042

Priority Sector: Health Care Products (Medical Devices)

Context:

Canada boasts a highly diversified and burgeoning medical devices industry which enjoys a strong market demand (listed among the top ten world markets) and provides ready access to the lucrative US market. Structurally, the industry is comprised of branch plants of large MNE's as well as a large number of smaller Canadian owned firms.

With a long history of product innovation, eg. pacemakers, Canada remains an excellent source of novel medical technologies. Canada's highly sophisticated and diverse medical device manufacturing sector produces more than 1200 classes of medical devices with particular emphasis on cancer therapy (cobalt therapy), cardiovascular devices and imaging products. More than one-third of Canada's medical devices production is exported with almost two-thirds shipped to the US.

The industry is undergoing a period of rationalization and mergers resulting in intensified global competitive pressures, a trend being reinforced by the FTA.

International Strategy:

ISTC has adopted a two pronged strategy to respond to these international pressures:

- i) the development of a Sector Campaign in Medical Devices to build on the innovative base by matching Canadian technological strengths and the industry's recipient strengths with international opportunities.
- ii) Initiatives aimed at obtaining for Canadian subsidiaries, R&D mandates and expanded geographic product mandates.

Access to the US market is seen as the key priority for growth and expansion of this industry sector, followed by access to the European market and emerging East bloc markets.

In addition, the East bloc countries (particularly USSR and Poland) are being targeted as sources of unexploited medical technologies which could be transferred to Canada.

Priority Sector: Health Care Products (Medical Devices)

Country Focus:

Priority Countries	Trade	Tech/Inv	Applied R&D
USA			
Atlanta	ME		
Los Angeles	LE	LE	LE
Boston	CE	LE	LE
Buffalo	CE		
San Francisco	ME	LE	LE
Asia			
Japan			
Korea			
China	ME		
ASEAN	LE		
Europe			
Germany	CE	CE	LE
Britain			LE
Italy		LE	LE
France	ME	LE	LE

Contact Person:

Director of Chemicals and Bio-Industries:

Dr. Elizabeth Dickson, 954-3138

Health Care Division: Dr. George Michaliszyn, 954-3077

Priority Sector: Pulp and Paper Products

Context:

Pulp and paper is Canada's third largest manufacturing industry, and Canada is the world's largest exporter of pulp and paper products. Many companies are big enough to make international arrangements without government intervention, through their own marketing networks. About 65 per cent of these exports go to the US.

Until late 1988, Canadian pulp and paper mills were working at full capacity. More recently, a slump in demand has left many plants operating at less than full capacity, and price discounting is common. Customer concerns about possibly carcinogenic levels of dioxins and furans in the paper, and requirements for high levels of recycled paper, mean that plants may have to remodel their operations.

Processed paper products, such as packaging, are primarily for the domestic market, although certain lines, such as wallpaper, are export-oriented mainly to the US. There has been little real growth since 1985. High raw material costs, high labour rates, low productivity, and increased foreign competition plague this subsector, and an inflow of new technology is needed to enhance sagging productivity.

International Strategy:

As noted above, much of the pulp and paper industry runs without any government intervention. ISTC's priority is to seek intelligence regarding relevant markets and technologies, especially for companies affected by the FTA, such as fine paper producers. Assistance will be offered to individual firms that wish to diversify or expand their export markets, in order to regain Canada's lost share of the US market. In particular, market opportunities to diversify into Europe and into Asia should be explored. To this end, plants are encouraged to shift production to higher value-added paper grades. ISTC also encourages plants to invest in recycling and deinking plants, in response to North American environmental concerns.

Priority Sector: Pulp and Paper Products

ISTC has an initiative for encouraging applied R&D in the forest products sector, and is encouraging the creation of consortia among various groups, as well as joint research and development, and technology transfer programs, with foreign firms in the US and in Europe. In the processed paper products subsector, special emphasis is being put on packaging, corrugated containers, and folding cartons. ISTC carries out little research directly, but funds are made available for specific projects and information on results collected.

Country Focus:

Priority Countries	Trade	Tech/Inv	Applied R&D
<hr/>			
USA			
Atlanta		LE	
Los Angeles	CE	LE	
Boston	CE	LE	
Chicago	CE	LE	
Detroit	LE		
Minneapolis	LE	LE	
New York	LE	LE	
Seattle	LE		
Washington	CE	LE	CE
<hr/>			
Asia			
Japan	LE	LE	LE
Korea	LE		
China	LE	LE	
ASEAN			
<hr/>			
Europe			
Germany		LE	CE
Britain			
Italy			
France			
<hr/>			

Contact Persons:

Director of Forest Products: Rocco Delvecchio, 954-3082
Pulp and Paper Products Division: Bruce Gourlay, 954-3054

Priority Sector: Wood Products

Context:

The wood products sector is highly export-oriented, mainly towards the US market. In the past, exports were very strong, but a strengthened Canadian dollar relative to the US dollar has made US suppliers more competitive, and higher interest rates have reduced the North American housing market. This decline in residential construction is expected to continue over the next several years. An export charge on softwood lumber and a duty on shakes and shingles exported to the US aggravate an already difficult situation.

Further processed wood products are affected not only by these economic factors, but also by the small scale of most operations. This leads to duplication of effort and prevents economies of scale. This area would benefit from restructuring and rationalization.

Canadian suppliers now face strong pressure from foreign suppliers and alternate materials, both at home and abroad, and growing international protectionism. As well as being hit by the US measures noted above, new product standards are being proposed for Europe which may exclude some Canadian goods from the European market. The Japanese Spruce-Pine-Fir (SPF) tariff on Canadian lumber imports is also a hindrance.

International Strategy:

Trade is the number one priority in this sector, primarily with the US. The decline in the North American housing market, as well as the expected increase in competition under the FTA, require the development of alternative markets. Offshore, our principal focus is Europe, and in particular the UK, France, and Benelux. As well, we are looking at Asia, especially Japan and Korea. ISTC, the provinces and industry are working together to this end. COMDP and EAITC's PEMD program are important supporting instruments.

Priority Sector: Wood Products

Technology development is key to competitiveness in this sector. In the past, little R&D has been done within Canada; but ISTC's new forest products R&D and Innovation program has been developed to provide funding for research and new product or process development within Canada. Most technology has also been imported. EAITC's Technology Inflow Program enables Canadian companies to assess the technology and R&D of other major wood-using countries, mainly in Western Europe and Japan, which might be used in Canada. The support of selective R&D and importation of technologies is therefore an important secondary focus.

Country Focus:

Priority Countries	Trade	Tech/Inv	Applied R&D
USA			
Asia			
Japan	CE	LE	
Korea		LE	
China	LE		
ASEAN			
Europe			
Germany	CE	CE	LE
Britain	CE	LE	LE
Italy	CE		
France		LE	LE

Contact Persons:

Director of Forest Products: Rocco Delvecchio, 954-3082
Wood Products Division: Earl Kelly, 954-3031

Priority Sector: Tourism

Context:

The tourism sector includes both tourists and the industrial components that supply goods and services for tourism. The components are: transportation; accommodation; restaurant; retail trade; and recreation and entertainment.

Tourism enriches Canada's economy by \$7.2 billion annually in foreign exchange. The tourism industry can best be expanded by increasing the numbers and expenditures of foreign business and pleasure tourists in Canada. International tourism expenditures represented over 28 per cent of the total tourism industry revenues in 1989 compared to 22.7 per cent in 1980. Tourism ranked third among Canada's top foreign exchange earners in 1990, after motor vehicles and auto parts.

The Canadian tourism plant has some excess capacity of international calibre and saleability across Canada, primarily in the spring, fall and winter seasons. ISTC market research shows opportunities to increase revenues for Canada from the continuing expansion globally in international travel. There is a good level of awareness of Canada as a travel destination generated by major international-calibre events such as Expo'86 and the 1988 Calgary Winter Olympics and increased international market development efforts of the public and private sectors. Canada is price competitive, although there has been erosion in this factor lately, in part because of exchange rate changes. In addition, the industry fears that the GST will make Canada less price competitive.

The new Federal Tourism Policy, approved in July 1990, reviews the state of the tourism industry and establishes Canada's priorities. Over the next five-year period, ISTC will focus on advocacy, providing business services and international marketing. The latter includes the delivery of comprehensive and integrated advertising, public relations and travel industry development campaigns in Canada's primary international markets. Within the overall structure of its national marketing programming, ISTC provides EAITC with strategic direction and primary funding for the delivery of post level tourism market development activities.

Priority Sector: Tourism

International Strategy:

ISTC's goal is to support and promote the international competitiveness and excellence of the Canadian tourism industry. This translates into increasing the revenue from international visitors to Canada. This is usually accomplished not only by increasing the number of visitors, but also by extending their length of stay and increasing their expenditures.

At the consumer level pleasure travel, and the meetings, conventions and incentive travel by business persons can be influenced most effectively. They are, therefore, the targets of federal efforts. ISTC's program is a balance between developing high-yield, high potential markets and products with significant growth potential and sustaining demand from traditional markets.

The United States is the major market, followed by Japan, the United Kingdom, France and West Germany. Opening new high-yield markets in these countries is the priority for the 1990s.

Key international priorities include:

Export trade development

- maximizing the yield on marketing dollars invested by targeting those customers that research indicates offer the greatest potential in terms of international receipts;
- increasing the dollars in the national marketing program from private and public sector partners;
- creating "packages" that effectively integrate the products and services into tourism experiences that can compete in the marketplace;
- identifying opportunities for new product development or major upgrading/expansions to meet international market demands and circumstances;
- seeking to ensure establishment of passenger air route rights that provide adequate capacity and reasonable tariffs in order to bring visitors from our markets of greatest potential to Canadian destinations;

Priority Sector: Tourism

Technology

- increasing productivity by technological innovation and application to tourism operations;
- increasing the use of technology in the distribution of Canadian tourism products globally;

Financing/investment

- improving the awareness and understanding of the business of tourism among financial institutions;
- increasing the profile of tourism as a priority sector for targeted foreign investment; and,

Business services

- providing, in a timely manner, actionable information and intelligence that will facilitate industry decisions on international market and product development and industry issues.

Priority Sector: Tourism

Country Focus:

Priority Countries	Trade	Tech/Inv	Applied R&D
<hr/>			
USA			
Atlanta	CE	LE	CE
Boston	CE	LE	LE
Buffalo	CE	LE	LE
Chicago	CE	LE	CE
Cleveland	CE	LE	LE
Dallas	CE	LE	LE
Detroit	CE	LE	CE
Los Angeles	CE	LE	CE
Minneapolis	CE	LE	CE
New York	CE	LE	CE
San Francisco	CE	LE	CE
Seattle	CE	LE	CE
Washington	CE	LE	CE
<hr/>			
Asia			
Japan	CE	LE	CE
Korea	LE		ME
China (Hong Kong)	LE	LE	ME
ASEAN (Thailand)	LE		ME
<hr/>			
Europe			
Britain	CE	LE	CE
Germany	CE	LE	CE
France	CE	LE	CE
Italy	LE		ME
<hr/>			

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INDUSTRY, SCIENCE AND TECHNOLOGY CANADA (ISTC)

INTERNATIONAL PRIORITIES AND STRATEGIES

FOR FY 91/92

COUNTRY STRATEGIES

SEPT. 90

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COUNTRY STRATEGY: UNITED STATES OF AMERICA (USA)

INTRODUCTION:

With a GNP of over \$4 trillion, the USA is the largest and most diversified economy in the world. It is Canada's most dominant economic partner with trade (\$97.9 billion) accounting for 73 per cent of total Canadian exports and 65 per cent of imports (\$87.9 billion) for 1989. Canada's special relationship and position within the USA is unique in our international relationship and indeed, with the passage of the FTA, unique as well for the USA.

As the cornerstone of the government's competitiveness strategy, the FTA opens up new opportunities especially for small and medium-sized enterprises. At present, about one quarter of Canada's 40,000 manufacturing firms export to the USA. Considerable scope exists for Canadian firms to improve their growth and profitability by selling their products in the USA.

The FTA environment has added a new dimension to investment promotion. It is no longer sufficient to offer market access to Canada to a USA investor as the reason for establishing a business in Canada. It is necessary to make a specific case why a company in a particular industry would benefit from an established presence in Canada. The identification, the packaging and the marketing of specific investment opportunities to USA firms must be guided by Canadian industry sector and company needs.

Major USA firms with operations in Canada will be under considerable pressure to rationalize their North American operations in response to the FTA, as well as position themselves favourably in response to Europe 1992 and emerging opportunities in the Pacific Rim. From an investment perspective, these can be perceived as either an opportunity or a threat. Continued Canadian operations either in its present capacity or with new and enhanced mandate must be encouraged.

With FTA, USA investments can move even more freely into Canada. Effort will have to be made to ensure that they are aimed at increasing the competitive capability of Canadian firms, not purely at taking over existing Canadian firms with a view to eliminating competition.

COUNTRY STRATEGY: UNITED STATES OF AMERICA (USA)

From a R&D standpoint, the USA is both the largest market for Canadian technology goods and services and Canada's largest source of technology. The special defence relationship and export control laws which mirror those of the USA, give Canada special access to USA technologies.

The USA is active in all areas of R&D and leads the world in most sectors except for consumer electronics, though it can lay claim to most of the basic innovation in that industry. It spends about 2.8 per cent of its GNP on R&D. Government and industry finance about equal shares of R&D, but industry actually performs about 70 per cent of the work. There is no explicit industrial or technology policy. The USA federal government views its role in S&T as having two primary goals: (a) support basic research including academic research, where there is no economic motivation for industry to work on its own; (b) fund R&D for national security purposes. Officially, all other civilian R&D is best determined and financed by the private sector.

Competitiveness is an overriding concern of the USA government. The issues and the vocabulary are very similar to those in Canada, e.g., technology commercialization and diffusion, cost of capital, education, role of government, foreign investment. There are two major differences however: (a) there is a preoccupation with Japan and (b) there is no lead agency on competitiveness issues with the US government.

The United States remains Canada's most important source of export tourism revenue, earning approximately \$3.6 billion in 1989. The USA is everybody's target as well as its own best customer. Increased competition by established destinations and heavy marketing of new products and new destinations place the Canadian public and private sectors under tremendous pressure to retain and expand market share.

STRATEGIC OBJECTIVES:

The mandate of ISTC is to promote the international competitiveness of Canadian industry and excellence in industry, science and technology. The key objective is to maximize the benefits from the FTA.

COUNTRY STRATEGY: UNITED STATES OF AMERICA (USA)

Trade

Accelerate the move from generic FTA activities to more sectorally targeted approaches and enhance the integration of efforts at the sub-sectoral level.

Improve USA market intelligence: sector/product focused, identification of niches, detailed regional market characteristics, nature of emerging USA competition, technology related opportunities, investment and strategic partnering potential.

Strengthen efforts to help companies assess their competitive position and develop appropriate responses.

Focus better the spectrum of government support programs on the needs of particular industry sector and individual firms. Do more to improve the "export readiness" and strategic planning prior to companies' participation in USA market development initiatives. Improve their (companies) capacity for sustained follow-up.

Research and development

Pursue the development of a strategy for getting the most out of Canadian science and technology relations with the USA.

Investment

Enhance the competitive capabilities of Canadian industry.

Evaluate and develop as needed a post FTA investment promotion strategy for the USA.

Tourism

Increase tourism export revenues to Canada.

COUNTRY STRATEGY: UNITED STATES OF AMERICA (USA)

STRATEGIC APPROACH:

Trade

In fulfilling its objectives, ISTC intends to integrate better its efforts with those of EAITC especially at the sectoral and sub-sectoral level.

In this respect, ISTC is working with EAITC to commission a study aimed at identifying the USA regions which would offer the most promising economic development prospects and, in these regions, the most rapidly developing economic sectors and companies, and matching these with Canadian firms. If successful this approach could be expanded to other states and sectors.

In order to encourage and ensure that Canadian companies are in a position to take advantage of opportunities under the FTA, ISTC has developed a program of strategic planning seminars and workshops aimed at specific sectors.

ISTC intends also to get its regional offices directly involved with specific USA posts. The idea is to promote and encourage the North South linkages and acquire in-depth knowledge of specific USA regional markets. This intelligence will be useful to Canadian firms and would help them to take advantage of the FTA, match their capabilities with market opportunities identified by the post and ensure proper follow-up.

Research and development

ISTC will increase its efforts to get the most out of Canada's science and technology relations with the USA. Canada will have to take the initiative on cooperative ventures, not because of the lack of goodwill on the USA part, but because the USA is more concerned with Japan and Europe. It is not envisaged however to seek an umbrella agreement.

ISTC is planning to establish better relationships with the Department of Commerce and is proposing to invite small groups from that Department for workshops on common issues and interests and possible areas of cooperation.

COUNTRY STRATEGY: UNITED STATES OF AMERICA (USA)

ISTC will follow up on business opportunities in the environment area, for example, in the multi-billion dollar USA military base clean-up. The possibility of a Canadian industry sponsored meeting on environmental business opportunities will be explored.

ISTC will be following very closely the development of the industrial technology extension concept as well as the new technology centres, mainly to look for an application in Canada, and exploring the concept of a continental technology diffusion network.

Similarly, the Department will examine the possibilities of making more Canadian companies and universities part of the USA National Technological University Network. Access for Canadian companies to participate in the Department of Defense programs will be promoted.

An information exchange will be set up with the Congressional Office of Technology Assessment, and the possibility of personnel exchanges will be explored.

ISTC will explore the role that the Centres of Excellence can play as catalyst to stimulate linkages between Canadian/USA firms and institutions, and in the diffusion of innovation.

Investment

Depending on the nature and structure of the Canadian industry and its needs, ISTC will encourage increased joint ventures, technology transfers, licensing arrangements, strategic alliances and equity investment between Canadian and USA firms. There will be some direct calls on USA subsidiaries in Canada and their corporate headquarters to encourage them to increase their operations in Canada or provide world mandate.

The program of corporate calls carried out by the USA posts continues to be useful to ISTC for obtaining information on USA companies' strategies, in response to the globalization of markets.

In cooperation with its partners, KAITC and Investment Canada, ISTC will promote the undertaking of an extensive evaluation of our IDP to determine the need for adopting our investment strategy to a post FTA environment.

COUNTRY STRATEGY: UNITED STATES OF AMERICA (USA)

Tourism

Capitalize on targeted segment's increased awareness and improved perceptions of Canada's urban and urban-rural products/travel experiences for vacation, getaway and discretionary business travel.

Continue efforts against upscale/seniors markets in the New England, Mid Atlantic, East and West North Central census regions, while developing new/improved activities against these markets in the Pacific (primarily California), South Atlantic (primarily Florida) and West South Central (primarily Texas) census regions. Continue to focus efforts targeting business-travellers on corporate meetings, conventions and incentive travel.

Establish new marketing alliances with traditional and non-traditional partners to develop new products and upgrade existing products appealing to high-yield targets. Strengthen Canada's image as a major four-season travel destination with a distinct identity.

COUNTRY STRATEGY: UNITED STATES OF AMERICA (USA)

ISTC SECTOR PRIORITIES:

	<u>Basic Research</u>	<u>Applied Research</u>	<u>Technology Investment</u>	<u>Trade</u>
Adv. Ind. Mat. (AIM)		X	X	
Adv. Mfg. Tech. (AMT)	X	X	X	X
Agri-Food Products		X		X
Aircraft & Air. Sys.	X	X	X	X
Automotive Parts	X	X	X	X
Biotechnology	X	X	X	X
Consulting Services				X
Defence Electronics		X		X
Environmental Ind.	X	X	X	X
Fashion Apparel			X	X
Fishery Products		X	X	X
Health Care Products		X	X	X
Information Tech.	X	X	X	X
Ocean Industries			X	
Pulp and Paper	X	X	X	X
Tourism	X		X	X

COUNTRY STRATEGY: UNITED STATES OF AMERICA (USA)

Other sectors which have been identified for concentrated attention include: automobile, secondary and service and industries equipment, energy, heating and air conditioning, iron and steel, fabricated metal and construction products, chemicals, distribution services, furniture, leisure products, textiles, defence. These sectors have primarily a trade and investment/technology focus.

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COUNTRY STRATEGY: JAPAN

INTRODUCTION:

Japan is the world's second largest economy, the largest source of capital in the world, and an emerging global leader in technology.

Japan is our 2nd most important trading partner, a key, indeed critical source of portfolio investment, and now the third largest direct investor in Canada. While total trade exceeds \$20 billion, and the trade balance is narrowly in our favour, our exports still contain only 6 per cent fully manufactured goods, whereas Japanese imports are almost entirely fully manufactured.

Japanese industrial structure is uniquely shaped by globally oriented trading houses which centre large industrial and financial groups and with which ISTC has MOU's with four of the largest (Mitsubishi, Mitsui, C. Itoh, and Nissho Iwai). These trading houses account for most of Japanese trade transactions, are major international investors, both equity and debt, and are increasingly active in third country arrangements. While still centred in Tokyo, increasingly these operations are becoming truly multinational companies with regional headquarters in the USA (i.e. New York) and Europe (usually London) having more and more decision-making authority. With offices throughout the world their intelligence nets are unrivalled and critical not only to their own competitiveness but also to the policy formulation and decision-making of the Japanese government ministries and agencies.

Government-industry cooperation centers on the Ministry of International Trade and Industry (MITI) and is a factor in the Japanese success story. ISTC has a Joint Understanding on Industrial Cooperation with MITI which plays an important role in shaping Japanese industrial structures.

Japan is now the world's largest aid donor, and is opening up participation in their aid program to other nations. The Export-Import Bank, with which ISTC also has a Letter of Understanding, is a key instrument for delivering this aid program, through its program to recycle some \$20 billion in "untied" support for capital projects.

COUNTRY STRATEGY: JAPAN

Japan has long been a recognized world leader in applying technology. Recently, however, the focus of the Japanese government has shifted to technology development. The key Japanese government scientific ministry, the Science and Technology Agency, is taking the lead in examining how to promote creativity and ideas at home and to import creativity and ideas from abroad. The Human Frontier Science Program, in which Canada is a member, is a prototype example of a Japanese led, international centre of excellence, and a forerunner of what might emerge in the future.

The USA is by far Japan's key international partner - economic, strategic, and political etc.. Of late, however, large trade imbalances in Japan's favour have created major "trade frictions" between the two countries. However, the resulting negotiations between the USA and Japan, while testy, have further opened up the Japanese domestic market and encouraged more Japanese investment abroad. In this environment, our approach would be to ensure Canadian interests are not overlooked by Japan.

Sustaining Japanese attention on Canada is further complicated by the impending unification of the western European market and the opening of Eastern Europe and the USSR which have sent Japanese companies scurrying to these markets to establish positions.

In the fall of 1989, a high level mission (Morohashi) of Japanese industry leaders visited Canada to update their views on Canada as a country in which to invest, and in particular, to examine the effects of the FTA. While providing a highly favourable report, they noted that it was still too early for a final opinion on the effects of the FTA and their intention is to monitor developments including how the dispute mechanism will actually work. Indeed their interest in the FTA is further accentuated by the USA discussions now underway with Mexico. Japanese investors are also monitoring very closely developments on the Canadian constitutional front.

In 1986, a Science and Technology (S&T) Cooperation Agreement was signed. In 1988, Prime Ministers Mulroney and Takeshita commissioned a study to identify promising areas for mutually beneficial scientific collaboration (The Complementarity Study). One result within Pacific 2000 and the Going Global Strategy has been the establishment of a five year, \$25 million Japan Science and Technology Fund (JSTF) to support the development of scientific and technological collaboration, both in the public and private sectors.

COUNTRY STRATEGY: JAPAN

Japan is Canada's most important Asia-Pacific travel market. In 1989, it replaced Britain as Canada's second most important source of tourism export revenue, earning \$296.5 million. Supported in part by Japan's efforts to increase outbound travel as a means of ameliorating its massive trade surplus, Canada continues to generate new interest as a pleasure travel destination and a prime opportunity for tourism infrastructure investment.

STRATEGIC OBJECTIVES:

- Attract value-added Japanese direct investments, particularly in the manufacturing sector, through joint ventures, technological tie-ups, licensing arrangements, and in certain sectors, greenfield investment.
- Increase levels of Canadian value-added exports and particularly fully manufactured goods.
- Strengthen Third Country collaboration with Japanese partners particularly in Thailand/ASEAN and the PRC.
- Assist Canadian firms in accessing Japanese aid projects both through the Japanese Export-Import Bank and through Japanese aid agencies.
- Promote and facilitate entry of Canadian enterprises into Japan.
- Promote S&T linkages between Canadian and Japanese public institutions and private sectors.
- Strengthen Canadian business community understanding of opportunities with Japan and Japanese business practices.
- Increase tourism export revenue to Canada.

COUNTRY STRATEGY: JAPAN

STRATEGIC APPROACH:

As part of ISTC's approach to deal with the comprehensive interests it has with Japan, ISTC and MITI have signed a Joint Understanding on Industrial Cooperation. This provides a framework not only to exchange views on industrial policy and therefore to shape the climate for Canadian-Japanese industrial relations, but also to encourage more joint ventures, licensing agreements, joint research and development projects and increased two-way investment between the private sectors. Biotechnology, aerospace, advanced industrial materials, microelectronics, machinery and electrical equipment (advanced manufacturing technologies) and environment are the sectors presently under consideration.

As well as shaping the government framework, ISTC has established direct working relationships with leading Japanese trading houses: Mitsubishi, Nissho Iwai, C. Itoh and Mitsui. Memoranda of Understanding have been signed with all these to strengthen relationships between Japanese and Canadian enterprises and promote Canadian interests in Japan, in Canada and in third countries.

ISTC has signed a LOU with the Export-Import Bank of Japan to promote investment in Canada, to enhance value-added exports, as well as to improve Canadian company access to untied capital funds and export credits. Through our MOU relationship we will identify projects for Canadian participation: The Lavalin/Mitsubishi joint venture project in Bangkok is one example where EXIM is involved. ISTC will also be posting a senior officer in EXIM to learn more about their business.

To promote investment, ISTC will undertake with Investment Canada and EAITC to deal with concerns raised by the Morohashi Investment Mission, in conjunction with our on-going dialogue with MITI, and the various other Japanese organizations with which we have MOUs. Also we will actively promote our priority sectoral investment interests both within Canada to subsidiaries of major Japanese enterprises and when we visit Tokyo.

ISTC will be encouraging S&T linkages with Japan, particularly involving industry, and looking to the Japan S&T (JSTF) Fund for selective funding support.

ISTC will continue to work with JETRO, a key international arm of MITI, to promote industrial cooperation.

COUNTRY STRATEGY: JAPAN

ISTC SECTOR PRIORITIES:

	<u>Basic Research</u>	<u>Applied Research</u>	<u>Technology Investment</u>	<u>Trade</u>
Adv. Ind. Mat. (AIM)		X	X	
Adv. Mfg. Tech. (AIM)	X	X	X	X
Agri-Food		X	X	
Aircraft & Air. Sys.		X	X	X
Automotive Parts	X	X	X	X
Biotechnology	X	X	X	X
Fashion Apparel			X	X
Fishery Products		X	X	X
Ocean Industries		X		
Pulp and Paper	X	X	X	X
Tourism	X		X	X
Wood Products		X	X	X

ACTION PLAN:

1. Strengthen the sectoral focus and ensure participation of the department, industry and associations in the LOU's with the trading houses so that opportunities for business and collaboration are not missed.
2. Develop and implement action plans in cooperation with industry associations and Japanese partners to promote and facilitate market penetration into Japan of value-added manufactured products.
3. Building on the report of the Investment Mission, identify ISTC priority sectors for joint ventures or investments involving technology.

COUNTRY STRATEGY: JAPAN

4. Strengthen our involvement with the large network of Japanese Trading Houses and Canadian subsidiaries of Japanese firms in order to develop direct linkages with Canadian firms.
5. Sensitize the department to the potential for Canadian firms in Japan by organizing a country day.
6. Build on the personnel exchange program developed with Export-Import Bank, Mitsui and Mitsubishi and implement an action plan to provide information and identify opportunities to Canadian industry.
7. Within the context of the R&D priorities, identify the sectoral and technological areas and develop an action plan to ensure that industry and institutions are aware of the opportunities for collaboration.
8. Continue to work interdepartmentally to ensure delivery of the Japan Science and Technology Fund.

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COUNTRY STRATEGY: REPUBLIC OF KOREA (ROK)

INTRODUCTION:

Canada's trade with Korea has been characterized in recent years by large and growing deficits. Trade figures for 1988 indicate that, next to Japan, Korea is our largest trading partner in the Pacific, both as an export market (principally resources and materials - \$1.2 billion) and as a source of imports (fully manufactured products - \$2.3 billion).

An export-led economic growth, averaging over 10 per year over the past few years, has resulted in many considering Korea as the next Japan. In fact, its industrial structure resembles that of Japan, in that it is dominated by large conglomerates, including major manufacturers which concentrate on exporting to the North American market.

Korea has been criticized for fuelling its economic growth through aggressive exporting and protectionist measures. Its new policies for economic restructuring include a move to reduce its dependence on exports by shifting to sustained domestic growth, with a gradual opening of its markets to imports. Despite what appears to be a fairly impressive technology base, Korea's economy relies extensively on licensing arrangements with foreign entities. Its large scale manufacturing sector is dependant to a great extent on resource inputs rather than sophisticated components.

Fuelled by a large balance of payments surplus and supported by its new economic restructuring policy, Korea is looking at overseas investment opportunities. In 1988, the Export-Import Bank of Korea (EXIMBANK) was created as a mechanism to assist with import and export activities as well as foreign investment. Although Hyundai Automotive and the Shinho Group are currently the only major Korean investments in Canada, a number of other opportunities exist for increasing exports, direct investment, joint ventures, partnerships, etc.

COUNTRY STRATEGY: REPUBLIC OF KOREA (ROK)

STRATEGIC OBJECTIVES:

- To strengthen bilateral industrial cooperation linkages.
- To increase exports to Korea, particularly for Canadian value-added products.
- To redirect Korean investment from the USA to Canada, and to encourage joint ventures and technology transfers.
- To explore the potential for developing Science and Technology linkages.
- To increase tourism export revenues to Canada.

STRATEGIC APPROACH:

In April 1986, a Memorandum of Understanding (MOU) on industrial and economic cooperation between Canada and Korea was drafted but never signed. Recent discussions between Canadian and Korean officials confirm a mutual interest in signing the MOU. The intent is to set the framework for furthering our economic and industrial relations and to facilitate industrial cooperation in specific sectors.

Furthermore, ISTC will discuss strengthening linkages with Korea's major trading conglomerates such as Samsung, Daewoo and Goldstar, perhaps ultimately leading to LOUs as with the Japanese. Such discussions would signal to Japan that Canada has other options in the Pacific Rim and is pursuing them.

With the Korean government's new market liberalization policies, increasing opportunities are available for Canadian manufacturers to export to Korea. ISTC will work to identify Canadian companies which have the potential and interest to take advantage of these new opportunities. Consideration will be given to developing a closer working relationship with certain Canadian manufacturing associations for export oriented activities.

COUNTRY STRATEGY: REPUBLIC OF KOREA (ROK)

In support of Canadian export efforts, as well as to solidify our corporate ties, we will look at developing a closer working relationship with EXIMBANK. The Korean government set up this financial institution as an overseas investment office to provide information and counselling service to Korean firms. At that time, EXIMBANK established an import program by which Korean trading companies were given access to \$2.5 billion in foreign exchange funds to finance imports. In 1989, \$150 million USA was made available through EXIMBANK to provide financial assistance to overseas investment projects, an increase of over 300 per cent over the funds available in 1988. Closer working relations with the EXIMBANK would be a stepping stone in initiating the redirecting of part of these funds to projects in Canada or Canadian related projects in third world countries.

ISTC will continue the working relationship with the Korean Trade Promotion Organization (KOTRA) to promote both exports to, and joint ventures in, Korea.

Korea is a secondary market with some potential to develop business beyond natural market growth. As such the Post qualifies to put forward one-off activities for consideration under the ISTC-Tourism/EAITC Emerging Markets Opportunity Fund.

ISTC SECTOR PRIORITIES:

	<u>Basic Research</u>	<u>Applied Research</u>	<u>Technology Investment</u>	<u>Trade</u>
Adv. Ind. Mat. (AIM)	X	X		
Automotive Parts	X	X	X	X
Pulp and Paper				X
Tourism	X			X

In addition, ISTC is involved and interested in major trade development opportunities in the fields of power equipment (particularly nuclear), defence electronics (such as communications systems), and information technology (specifically telecommunications) as well as potential cooperation in third markets via such fields as consulting services.

COUNTRY STRATEGY: REPUBLIC OF KOREA (ROK)

ACTION PLAN:

1. Develop, negotiate and sign a Memorandum of Understanding with Korea's Ministry of Industry and Trade.
2. To further discussions to strengthen relations with EXIMBANK and major Korean conglomerates (such as Samsung, Daewoo and Goldstar).
3. Initiate and lead missions in the priority sectors.
4. Participate in Canadian Business Week to increase Canadian presence with investment seminars, business forum, tourism seminars, cultural activities, etc.
5. Implement Canadian investment promotion mission for priority sectors, including Canadian tourism industry opportunities.
6. Investigate potential for strengthening Science and Technology collaboration with Korea.
7. In cooperation with CIDA, investigate opportunities for joint ventures in Third World countries with EXIMBANK and MTI.
8. Sensitize the Department to the potential for Canadian firms in Korea by organizing a country focus day.

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COUNTRY STRATEGY: CHINA

INTRODUCTION:

ISTC's China strategy includes Taiwan, Hong Kong, and the People's Republic of China. The PRC is the world's most populous country, with 1 billion people, and represents a highly attractive market. Our major exports are in cereals, fertilizers, pulp and wood products. Hong Kong and Taiwan, the more developed countries, are active investors in Canada and possible entry points into the PRC. Taking all three together, our trade balance with China (-\$1.8 billion in 1989) shows that Canada's exports to China can be greatly increased.

To do business with the PRC, however, is difficult and time-consuming. Unlike other priority countries, China is a developing country in need of infusions of foreign technology and capital in order for economic modernization to take place. The daunting Chinese bureaucracy, with its emphasis on technology transfer rather than simple imports, has kept all but the most sophisticated or persistent Canadian companies out of this market. Some observers characterize the PRC as being comparable in economic development to the Japan of 1950. The eruption of violence in the Spring of 1989, and subsequent negative Western reaction, has interrupted economic progress in China. Many foreign traders and investors have reevaluated their interests and altered their capital positions. This has contributed to the PRC going into deficit on its balance of payments account and has left the PRC short of the foreign exchange which has tended to fuel its economic development.

Hong Kong, the British outpost and free enterprise centre of the China group, is to be integrated with the PRC in 1997. Many Hong Kong entrepreneurs, recalling the events of 1949, are nervous about what will happen, and are therefore in the process of diversifying out of Hong Kong.

Taiwan is a rapidly developing economy still dominated by a number of key Chinese families who came after 1949. With \$70 billion in foreign reserves, tied with Japan for the largest monetary reserves in Asia, Taiwan is an active international investor. Unlike Hong Kong, Taiwan has its own natural resources and is better able to create economies of scale in developing its industries.

COUNTRY STRATEGY: CHINA

STRATEGIC OBJECTIVES:

- Develop working relationships and partnerships with the Chinese, so that Canada will be an ally in good standing when the PRC begins to fulfil its economic potential.
- Continue to selectively identify projects and sectors which can create and foster "home bases" and networks for Canadian firms.
- Attract and focus Hong Kong and Taiwan investment into areas of interest to Canada.

STRATEGIC APPROACH:

Our approach to the PRC must be highly focused. We will look at major export projects as we have in the energy sector. Canada has a limited export financing capacity, diminished further because the PRC is a spoiled market. Nonetheless, with our international competitiveness in the energy sector, we should be able to protect our position in the PRC market. We will also want to coordinate our activities with those of International Financial Institutions active in the PRC market, such as the World Bank. In addition, we will pursue Third Country Cooperation opportunities in the PRC through our Japanese connections.

A second key element of our approach will be to promote a greater understanding of Chinese business methods and structures in the three jurisdictions by facilitating exchanges and establishing selective industrial cooperation mechanisms.

ISTC does not currently have a Letter of Understanding with any Chinese agency, since a Chinese counterpart for ISTC is not readily identifiable. However, preliminary discussions have been underway on how to strengthen industrial cooperation with MOFERT which will be continued and expanded into the other jurisdictions (Taiwan and Hong Kong).

COUNTRY STRATEGY: CHINA

In May 1986, a Memorandum of Understanding (MOU) on Science and Technology between Canada and the PRC was initiated. The MOU, which related mainly to the transfer of Canadian expertise to China through the exchange of information, remains unsigned. A signed MOU, followed by a formalized industrial agreement, might give us access to the PRC's technologies in space and nuclear energy.

Since 1986, ISTC has contributed to the financial operations of the Canada-China Trade Council (CCTC) which maintains permanent offices in Beijing and Toronto. The Council assists and guides Canadian firms in dealing with China. The CCTC could also be used to widen opportunities for Canadian business in Hong Kong and Taiwan, though there are similar organizations (eg. the Canada-Hong Kong Business Association and the Canada-Taiwan Trade Council) active in both jurisdictions. We will work to strengthen linkages between the CCTC, related interest organizations and ISTC branches.

ISTC SECTOR PRIORITIES:

	<u>Technology Investment</u>			<u>Trade</u>		
	<u>HK</u>	<u>Taiwan</u>	<u>PRC</u>	<u>HK</u>	<u>Taiwan</u>	<u>PRC</u>
Airframe Services			X	X		X
Automotive Parts		X	X	X		
Clothing	X					
Consulting Services		X		X		
Environmental Ind.				X		
Fishery Products				X	X	
Grocery Products		X				
Health Care Products				X		X
Information Technology	X	X				
Ocean Industries						X
Pulp and Paper			X	X		X
Wood Products						X

COUNTRY STRATEGY: CHINA

In addition, ISTC is looking at major projects and trade development in the fields of: energy, electrical equipment, industrial chemicals, telecommunications, transportation, and textiles.

ACTION PLAN:

1. Organize a China Day in ISTC to sensitize ISTC personnel to the international dimensions of our departmental mandate and specifically to provide understanding and knowledge of China's potential opportunities.
2. Continue to explore possibilities to strengthen industrial cooperation in particular sectors through the Embassy to MOFERT, and other PRC agencies.
3. Review the PRC S&T capability with a view to identifying potential areas of cooperation as a determining rationale to whether or not entering into a formal S&T agreement would be mutually beneficial.
4. Work closely with the CCTC and its counterparts for Taiwan and Hong Kong:
 - (a) to utilize the excellent source of expertise and contacts in China that have been developed through the CCTC, and
 - (b) to develop better linkages between the CCTC and various ISTC branches.
5. Use Taiwan and Hong Kong as entry points to the PRC by developing a good network of contacts in these areas.

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COUNTRY STRATEGY: THAILAND/ASEAN

INTRODUCTION:

The ASEAN group (Malaysia, Singapore, Thailand, Indonesia, Brunei and The Philippines) are at various stages of economic and industrial development, but as a group are economically explosive. Other industrialized countries are actively positioning themselves in this region, Canada and some Canadian companies have begun to respond to this economic/trade opportunity.

Thailand has, during the last few years, emerged as the most successful economic performer in the ASEAN region and has achieved a certain level of industrial development.

Overall growth in GDP hit a peak in 1988 at 11 per cent and is expected to continue growing at a rate of over 9 per cent over the next five years. The manufacturing sector showed an increase of over 13.5 per cent in 1988. The rate of growth for investment, both foreign and domestic was 33.6 per cent in 1988. Exports in 1989 reached almost C\$20 billion, with textile products, rice and rubber products showing the highest volume ranging from C\$3 to C\$1.3 billion. Bilateral trade with Canada is approximately C\$400 million annually and yields a surplus in favour of Thailand of about C\$80 million. Lavalin of Canada, a joint venture partner with Mitsubishi and EXIM Bank of Japan, is on the verge of a "flagship" sale of a \$4 billion Rapid Transit System in Bangkok.

CIDA currently promotes its "Industrial Cooperation" Program with Thailand but expects to phase that out over the next five years as Thailand reaches its next stage of economic development.

Due to its regional leadership and its potential to be a gateway to ASEAN, Thailand has been a strategic base for Japan and is increasingly so for European countries. We share that perspective.

COUNTRY STRATEGY: THAILAND/ASEAN

STRATEGIC OBJECTIVES:

- Our long term objective is to establish a Canadian-industry presence in ASEAN. For the short term ISTC will focus on strengthening the Canadian position in Thailand, then through that country to the entire ASEAN region, by initially concentrating on trade (e.g. mass transit), opportunities followed by increasing Canadian investment in Thailand through partnerships, joint ventures and strategic alliances.
- To increase tourism export revenues to Canada.

STRATEGIC APPROACH:

Facilitate the successful conclusion of the Lavalin Rapid Transit project in Bangkok.

Coordinate and channel to Canadian industry and technology interests, the CIDA funded (\$15 million over five years) "Enterprise Collaboration" Project which will be managed by the Canadian Imperial Bank of Commerce (CIBC) in Bangkok.

Secure Thailand and ASEAN trade, technology, and joint venture opportunities flowing from Japanese companies with which ISTC has close working arrangements.

Coordinate the implementation of the Canada-Thailand Economic Cooperation Agreement (ECA) which calls for economic, commercial and industrial cooperation as well as participates in the Joint Agricultural Committee, under the ECA, to deal with cooperation in agriculture and agri-food.

Thailand is a secondary market with some potential to develop business beyond natural market growth. As such the Post qualifies to put forward one-off activities for consideration under the new ISTC-Tourism/EAITC Emerging Markets Opportunity Fund.

COUNTRY STRATEGY: THAILAND/ASEAN

ISTC SECTOR PRIORITIES:

ISTC has identified priority sectors for Thailand/ASEAN as follows:

Indonesia	1
Malaysia	2
Phillippines	3
Singapore	4
Thailand	5

	<u>Technology Investment</u>	<u>Trade</u>
Airframe System	-	1, 4, and 5
Automotive Vehicles	-	1 and 2
Business Services	-	2, 3 and 5
Construction Equip.	-	1 and 2
Consulting Services	1, 2, 4 and 5	1, 2, 4 and 5
Distribution Service	-	2
Electrical Equipment	1 through 5	1 through 5
Energy Equipment	-	1 and 2
Environmental Industries	-	4
Fishery Products	-	4 and 5
Health Care Products	-	4 and 5
Rail Systems	-	1, 3, 5
Resource Equipment	-	1 through 5
Software & Comp. Services	4	-
Telecommunications	-	1, 4 and 5
Urban Transportation	-	1 and 2
Tourism	-	5

COUNTRY STRATEGY: THAILAND/ASEAN

ACTION PLAN:

1. Jointly with Agriculture Canada, EAITC, CIDA and the ISTC Sector Specialists to:
 - (a) develop a two-year plan to follow-up on the ISTC/Agriculture Canada visit in May 1990.
 - (b) implement the findings and recommendations contained in the Gelda Scientific Study that identifies opportunities for cooperation in agri-food between Canada and Thailand, Indonesia and Singapore.
2. Work with CIDA and CIBC to implement the Enterprise Collaboration Project by actively participating and influencing the planning of activities.
3. Work directly with Japanese companies (trading companies, banks) on third country cooperation and positioning.
4. Pursue internally (ISTC) and in partnership with EAITC bilateral agreements similar to the Joint Agricultural Committee that would be entered into between ISTC and its Thailand counterparts.
5. Sensitize the Department to the potential for Canadian firms in Thailand/ASEAN by organizing a country day.

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COUNTRY STRATEGY: UNITED KINGDOM (U.K.)

INTRODUCTION:

The United Kingdom (U.K.) remains Canada's third largest bilateral trading partner and most important customer in Europe. Even though Britain has a considerable trade deficit, it has a trade surplus with Canada. Canadian exports to Britain remain dominated by forest products, metals and ores and fish, but in recent years there have been increases in electrical, machinery, telecommunications and optical equipment.

As a result of the massive privatization program, opportunities for alliances may exist in these sectors: steel, transport, energy and communications. Other opportunities will result from the significant growth in the offshore oil and gas industries, rapid development of electronic and micro-electronic technologies and a continuous rise in the service industries.

Britain is Canada's second most important source of foreign direct investment. U.K. investments in Canada are broadly based across manufacturing and services industries. In addition, almost all the largest U.K. companies have subsidiaries in Canada, which provide Canadian businesses with extensive networks in the U.K. and in Europe.

Historically, Britain is one of two key sources of technology for Canada, the other being the USA. Of late, however, this flow of technology has slowed. Nevertheless the U.K. is at the leading edge of technology in several areas. It would appear time to re-examine whether or not there should be more attention paid to promoting technological collaboration with the U.K.

As Canada's third most important source of tourism export revenue, earning \$295 million in 1989, the United Kingdom is Canada's most important European travel market. Strong travel patterns generated by immigration ties continue to be reinforced by new interest in Canada as a pleasure travel destination.

STRATEGIC OBJECTIVES:

- To increase the number of Canadian firms and institutions pursuing industrial and technology cooperation with British partners both for the U.K. and the unified European market (1992).

COUNTRY STRATEGY: UNITED KINGDOM (U.K.)

- To encourage and increase British investment, joint ventures, licensing agreements and technology transfers in Canada to take advantage of the FTA.
- To expand Canadian exports of value-added products especially in the priority sectors.
- To increase tourism export revenue to Canada.

STRATEGIC APPROACH:

Canadians and Canadian industry have longstanding cultural, trade and economic ties with the U.K. For a large portion of the trade and economic relationship, government involvement is not needed. However, small and medium-sized firms, especially those which have not or are just recently involved in that market will require ISTC's assistance.

Activities will be developed and implemented in areas where the government to government umbrella can be used to initiate and foster relationships and alliances between firms or institutions from both countries. However, in view of the British government's reluctance to become involved too deeply in S&T matters, ISTC should attempt to pursue Canadian interests through industry associations from both countries. In looking to strengthen ties, there are a number of programs that can be called on to support initiatives (IRAP, TIP, Going Global).

As London is a global business and financial centre ISTC and the post should themselves and through Canadian subsidiaries in the U.K. gather intelligence on what is happening in Europe and the Middle East.

Tourism market development activities will concentrate on the establishment of new strategic alliances with the U.K. and Canadian private sectors targeting high-yield market segments. Post efforts are directed toward revitalizing the tired product line.

COUNTRY STRATEGY: UNITED KINGDOM (U.K.)

ISTC SECTOR PRIORITIES:

	<u>Basic Research</u>	<u>Applied Research</u>	<u>Technology Investment</u>	<u>Trade</u>
Adv. Ind. Mat. (AIM)		X	X	
Adv. Mfg. Tech. (AMT)	X	X	X	X
Aircraft & Air. Systems	X	X	X	
Automotive Parts		X	X	X
Biotechnology	X	X	X	X
Clothing				X
Defence Electronics		X		X
Environmental Industries			X	
Fishery Products		X	X	X
Health Care Products		X		
Ocean Industries		X	X	X
Pulp and Paper	X			
Software			X	
Wood Products		X	X	X
Tourism	X		X	X

ACTION PLAN:

1. With Investment Canada and the post, identify suitable partners in our priority sectors for joint ventures or investments involving technology. This could involve a technology/investment mission to the U.K.

COUNTRY STRATEGY: UNITED KINGDOM (U.K.)

2. In support of the above objective work with Canadian industry associations to identify and pursue specific opportunities. Identify and encourage Canadian industry associations/U.K. industry associations joint efforts.
3. As part of the ISTC initiative to examine how to strengthen the S&T relations with Europe, identify the areas of complementarity capabilities and interests in research and developments between Canada and Britain and mechanisms for facilitating collaboration within the framework. Within the context of the emergent R&D priorities identify the key sectoral or technological areas and develop a program to enhance this awareness of opportunities to do business with the U.K.
4. Work with the High Commission in London to identify trade opportunities for Canadian firms in the significant growth sectors. At the same time, work jointly with the ISBs, the Regional Offices and Canadian trade and industry associations to determine Canada's supply capabilities in those sectors where there is an identified potential in the U.K.
5. To sensitize the department to the potential for Canadian firms in Britain by organizing a country day.
6. To exploit the large network of U.K. subsidiaries in Canada in order to develop linkages with Canadian firms that would enable the latter to expand into the U.K. and also into Europe.
7. With selected Canadian public and private sector partners, identify suitable U.K. traditional and non-traditional partners for tourism market development high-yield joint ventures.

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COUNTRY STRATEGY: FRANCE

INTRODUCTION:

France is the world's fourth largest economy and Canada's sixth largest trading partner. Canadian exports to France are mainly wood and wood products, minerals and metals, chemical and mechanical products, and fishery products. French exports are mainly manufactured products. France has a \$700 million trade surplus with Canada.

French direct investments in Canada are accelerating rapidly. France is now our fifth most important source of foreign investment.

Business and economic relationships between France and the province of Québec have traditionally been very good for cultural and historical reasons. Over the last few years, Canada's political and economic relationship with France has been strengthening. French businesses are now establishing new ventures, not only in Québec but also in other regions of the country, particularly in Ontario. The French industry is clearly interested in expanding their presence in North America and accessing the North American market through Canada where they feel more at ease at the initial stage.

France is also a major generator of R&D. For instance, of the large number EUREKA projects taking place, France is leading the field following Germany.

France's top priority in economic relationships is Western Europe and more particularly Germany. France is a gateway to the Eastern European countries especially to Poland and Romania. By developing strong alliances with French firms, Canadian companies could also benefit from the unified European market and the opportunities emerging from Eastern Europe.

France is Canada's fifth most important source of tourism export revenue, earning \$156.9 million in 1989. Travel patterns generated by immigration ties continue to be reinforced by new interest in Canada as a pleasure travel destination.

COUNTRY STRATEGY: FRANCE

STRATEGIC OBJECTIVES:

- Promote industrial and technological cooperation between Canadian and French partners not only for the French market but also to establish position in the unified Europe and to access Eastern Europe.
- Encourage French investment, joint ventures, licensing agreements and technology transfers in Canada to take advantage of the access to the North American market which the FTA permits.
- Promote S&T cooperation between French and Canadian partners by actively identifying specific Canadian enterprises and institutions including joint research and development projects.
- Expand Canadian value-added exports especially in the priority sectors.
- Increase tourism export revenues to Canada.

STRATEGIC APPROACH:

The Economic and Industrial Cooperation Agreement signed January 15, 1987 and the Exchange of Letters on S&T Cooperation that occurred in 1973 under the 1965 Canada/France Cultural Agreement are important frameworks for pursuing industrial, technological and scientific cooperation between Canada and France. ISTC plays a key role in these agreements by determining the sectors for collaboration and by recommending and implementing specific initiatives.

France's decision to decentralize to the regions initiated approximately ten years ago has established strong regional governments. ISTC will develop the linkages with these regional governments to aid Canadian companies and identify business opportunities. In particular ISTC will pursue linkages with the following regions: Rhône-Alpes (plastic and biotechnology), Toulouse (avionics) and l'Ile-de-France (services).

Tourism market development activities will concentrate on the establishment of new strategic alliances with the French and Canadian private sectors targeting high-yield market segments.

COUNTRY STRATEGY: FRANCE

ISTC SECTOR PRIORITIES:

	<u>Basic Research</u>	<u>Applied Research</u>	<u>Technology Investment</u>	<u>Trade</u>
Adv. Ind. Mat. (AIM)		X	X	
Adv. Mfg. Tech. (AMT)		X	X	X
Aircraft & Air. Systems		X	X	X
Automotive Parts			X	
Biotechnology	X	X	X	X
Defence Electronics				X
Environmental Ind.		X	X	X
Fishery Products		X	X	X
Health Care Prod.		X	X	
Information Tech.		X	X	X
Ocean Industries		X	X	X
Tourism	X		X	X
Wood Products		X	X	

COUNTRY STRATEGY: FRANCE

ACTION PLAN:

1. Define the list of priority sectors and identify specific initiatives to table at the next meeting of the Canada/France Joint Economic Commission under the bilateral Agreement of the Economic and Industrial Cooperation. This is scheduled for June 1991, in Ottawa. Continue to implement the agreed action plan established at the last meeting of the Joint Economic Commission. Sectors offering possibilities for increased cooperation were then identified, notably environment, aeronautics and biotechnology. Related supporting activities were held and will be taking place as described in this action plan.
2. Identify appropriate mechanisms and key persons in French regional governments and councils to facilitate the identification of mutually interesting sectors and the subsequent development of joint action plans.
3. In cooperation with EAITC, promote the private sector participation within the context of the S&T exchange of letters and review mechanisms to permit such involvement. This issue should be discussed at the next Canada/France Scientific Mixte Commission scheduled for December 1990, in Ottawa.
4. Continue to promote exchanges of personnel between ISTC and the French Ministry of Industry.
5. Within the context of the S&T exchange of letters, continue to encourage cooperation between major Canadian and French Engineering schools and universities especially in the advanced materials sector and in the biotechnology sector. The first exchange of personnel between ISTC and the French Ministry of Industry occurred in the biotechnology sector in the spring of 1989.
6. Ensure Canadian private sector participation at the Pollutec trade fair to be held in Lyon in November this year. Promote a mission of Canadian companies involved in the environmental industry sector in 1991. This initiative results from the personnel exchange program which had an ISTC official into France for eight weeks in spring 1990.

COUNTRY STRATEGY: FRANCE

7. As a follow-up to the Symposium on the aerospace industry held last spring in France, contact the Canadian participants and other parties involved and develop a work plan and initiate an incoming or an outgoing mission in other areas of France that would solidify linkages already developed and generate new opportunities.
8. To exploit the network of Canadian subsidiaries of French firms in order to develop linkages with Canadian firms that would enable the latter to expand into France and also into Europe.
9. To sensitize the department to the potential for Canadian firms in France by organizing a country day.
10. With selected Canadian public and private sector partners, identify suitable French traditional and non-traditional partners for tourism market development high-yield joint ventures.

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COUNTRY STRATEGY: FEDERAL REPUBLIC OF GERMANY (FRG)

INTRODUCTION:

The Federal Republic of Germany (FRG) is Canada's third largest source of foreign direct investment (after USA and U.K.), fourth largest trading partner (after USA, Japan and U.K.) and most important Western European partner in science and technology. Germany has a trade balance surplus of \$2.1 billion with Canada. Canadian exports to Germany include pulp and paper, iron ore, motor vehicle parts while German exports to Canada include motor vehicles and parts, machinery and chemicals.

As the economic engine of Europe, the FRG is expected to play a key role in the unified Europe. With the unification of West and East Germany now underway, this role will be even more important. The unified Germany has a 78 million population which in itself constitutes a major segment of the European market. Germany also has strong economic linkages to Eastern Europe which Canadian companies could benefit from by developing industrial alliances with German firms.

Germany, as a key technological power, also provides a model in successfully commercializing R&D. Canada has already taken steps to become familiar with the German approach. For example, in the Spring of 1989, the Deputy Minister of ISTC led a fact-finding mission of senior government and industry officials to Germany.

Canada has a bilateral science and technology agreement with the Federal Republic of Germany since 1971. The Agreement has turned out to be an instrument primarily for collaboration between government scientists, but offers the possibility to more substantive involvement.

New German direct investment in Canada doubled in 1989, reaching about \$1 billion. As a result, Canada moved up to rank 8th among Germany's top investment destinations, surpassing Italy and Norway. Of interest is a paralleled drop of new German investments to the USA.

Germany is Canada's fourth most important source of tourism export revenue, earning \$167.6 million in 1989. Strong travel patterns generated by immigration ties and interest in Canada for outdoor travel experiences continue to generate interest in Canada as a pleasure travel destination. Recent travel from West Germany to Canada has failed to maintain the same growth rate as Canada's other major European markets.

COUNTRY STRATEGY: FEDERAL REPUBLIC OF GERMANY (FRG)

STRATEGIC OBJECTIVES:

- Encourage investment, joint ventures, licensing agreements and technology transfers between Canadian and German enterprises in Canada to take advantage of the FTA.
- Encourage industrial and technological cooperation between Canadian and German partners to take advantage of opportunities resulting from a unified Germany, a unified European market and Eastern European possibilities.
- Expand Canadian exports of value-added products especially in the priority sectors to offset the current trade deficit that exceeds \$2 billion.
- Strengthen S&T cooperation by actively identifying and supporting Canadian initiatives with firms, institutions and universities.
- Reverse a predicted decline in tourism export revenues to Canada.

STRATEGIC APPROACH:

In the mid 1980's, the German Ministry of Economics and ISTC's predecessor department established an informal working group that discussed a wide range of economic cooperation activities. These discussions oriented our approach since the German government advised that industries and their associations preferred to deal directly with their counterparts in other countries. Consequently, linkages between industry and business associations in the respective countries should be strengthened through our initiatives.

Direct German investment in Canada has increased significantly in 1989 and this activity should be continued and supported through strengthening ISTC's networks with Canadian and German industry association affiliations.

COUNTRY STRATEGY: FEDERAL REPUBLIC OF GERMANY (FRG)

Germany is a key technological power and as such an attractive potential source of technology for Canadian industry. Most Canadian firms do not have the internal resources to generate the technology required to compete internationally. There is a need to form R&D alliances with domestic and foreign partners. ISTC can assist industry by providing information and helping to create the environment which will enable Canadian and German companies to cooperate.

The Canada/Germany Science and Technology Agreement provides a basis to our bilateral relationship in research and development. The 20th anniversary of this agreement will be marked by the consultations meeting in Canada in 1991. With the number of federal departments involved in research activities, it is important that ISTC take the lead to ensure that the research proposals have a direct link to industry needs.

The effect of Europe 1992 will be to remove a number of trade barriers encountered by exporters to Germany. ISTC will continue to assist in the identification of market opportunities especially for value-added products.

Tourism market development activities will concentrate on the establishment of new strategic alliances with the German and Canadian private sectors, targeting high-yield segments to develop and promote new products such as cultural-urban and touring travel experiences.

COUNTRY STRATEGY: FEDERAL REPUBLIC OF GERMANY (FRG)

ISTC SECTOR PRIORITIES:

	<u>Basic Research</u>	<u>Applied Research</u>	<u>Technology Investment</u>	<u>Trade</u>
Adv. Ind. Mat. (AIM)		X	X	
Adv. Mfg. Tech. (AMT)	X	X	X	X
Agri-Food Industry		X	X	
Aircraft & Air. System		X	X	X
Automotive Parts		X	X	X
Biotechnology			X	X
Clothing			X	X
Defence Electronics		X		X
Environmental Ind.		X	X	
Fishery Products		X	X	X
Health Care Prod.		X	X	X
Ocean Industries		X	X	X
Pulp & Paper	X	X	X	
Software				X
Tourism	X		X	X
Wood Products		X	X	X

COUNTRY STRATEGY: FEDERAL REPUBLIC OF GERMANY (FRG)

ACTION PLAN:

1. Develop and implement action plans to further increase German direct investment in Canada by targeting on potential German investors either based on industry sector opportunities or on linkages already established between Canadian provinces and German counterparts.
2. Develop a series of investment/technology focused presentations in conjunction with international trade shows in Germany, where German Canadians have offered to participate to highlight Canada's advantages as a country in which to do business.
3. Develop the terms of reference to arrange the exchange of personnel between the two Ministries Canada/FRG.
4. Identify opportunities linked to the priority sectors and encourage Canadian and German industry associations to collaborate.
5. Work with the Trade Missions in Germany to identify trade opportunities for Canadian firms in the growth sectors. At the same time, work with Canadian industry to enhance their competitiveness and supply capability.
6. Lead and coordinate the Canadian position, in relation to the Canada/Germany Science and Technology Agreement, to ensure that the research projects are relevant to industry needs and market opportunities.
7. Undertake a study to identify the areas of technological complementarity between Canada and Germany to include some of the neighbouring countries such as Switzerland, Austria, Sweden and the Netherlands. Following identification of priorities, organize outgoing missions to Germany, focusing on SMEs and companies in the high priority sectors, to promote technology alliances and joint ventures in the context of Europe '92.
8. Strengthen the involvement with the growing network of the German companies in Canada.

COUNTRY STRATEGY: FEDERAL REPUBLIC OF GERMANY (FRG)

9. Sensitize the Department to the potential for Canadian focus in Germany by organizing a country day.
10. Identify suitable German traditional and non-traditional partners for tourism market development, high-yield joint ventures featuring touring and urban-cultural products for selected Canadian public and private sector partners.

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COUNTRY STRATEGY: ITALY

INTRODUCTION:

The Italian economy is modernizing very rapidly to take advantage of the challenges and opportunities offered by the Single European Market. With West Germany, France and Britain, Italy is one of the Big Four of the EEC. It is now "a major European economy of equivalent status to France and the U.K."

Canada's trade relations with Italy have been excellent. Our export to Italy in 1989 have reached \$1.1 billion while our imports have totalled \$2.0 billion. Canadian major export items include: pulp wood, ores slag and ashes, wheat, lumber, nuclear reactor parts and equipment, aircraft engines and parts, copper, iron and steel, sulphur, electrical machinery.

A unique feature of Italy's industrial structure is its large and powerful state holding system comprised of IRI (Institute for Industrial Reconstruction), ENI (National Company of Petroleum) and EFIM (Manufacturing Industry Shareholding and Financing Corporation). Together with the large industrial concerns such as Ferruzzi (agri-food), Olivetti (informatics), Fiat (auto), Montedison (chemical), Benetton (clothing), they account for 64% of Italy's direct exports. The country's vast network of small enterprises have flourished and are responsible for the remainder.

The drive for technological development and modernization has been promoted by the policies of successive Italian governments, both directly and through a wide variety of institutions ranging from giant industrial enterprises in the state and private sectors to small industrial scientific institutes, government laboratories and research institutes, and university faculties. The State Holding Companies are a major element of this network.

The quality of research performed in the private sector is excellent and there is extensive and growing collaboration particularly with other European countries and the United States. The Italian authorities recognize this need for increased collaboration and have encouraged it both domestically and through participation in EEC programs. Italian industry seems to have found relatively few research partners in the Canadian private sector.

COUNTRY STRATEGY: ITALY

Italy's recent interest in industrial modernisation and relaxation of controls on investment abroad open up opportunities for investment and cooperation between Canadian companies and the Italian private sector. These changes should also increase opportunities for Canadian companies to develop joint ventures and technology transfers with the Italian private sector.

Italy is a key gateway to Eastern European countries and is welcome in many countries. By developing strong industrial alliances with Italian firms, Canadian companies could benefit from the unified European market (1992) and the opportunities emerging from East Europe.

STRATEGIC OBJECTIVES:

- Encourage effective collaboration between Canadian and Italian enterprises both in Italy to take advantage of the investment climate and in Canada to take advantage of the FTA.
- Pursue S&T cooperation initiatives with Italian partners by actively supporting specific Canadian initiatives through promoting the use of seed money and funding from Going Global and other programs.
- Foster industrial cooperation between Canadian firms and institutions with Italian partners in light of opportunities resulting from a unified European market and in Eastern Europe.
- Expand Canadian exports of value-added products especially in the priority sectors.
- Increase tourism export revenues to Canada.

COUNTRY STRATEGY: ITALY

STRATEGIC APPROACH:

The Canada/Italy Economic and Industrial Cooperation Agreement signed in August 1988, provides a basis to our bilateral relationship. ISTC is a member of the Canada/Italy Working Group set up under the Agreement. ISTC plays a key role in this group in determining the sectors for collaboration. The next meeting of the Canada/Italy Working Group takes place in late 1990 or early 1991.

Central to ISTC's approach to Italy, the State Holding Companies are very significant economic partners in Italy and given the potential and the interest in pursuing collaborative arrangements with Canadian groups, ISTC will continue our efforts to increase our contacts and develop a useful network with these organizations.

ISTC has also signed a Memorandum of Understanding with ENI (Ente Nazionale Idrocarburi) to pursue specific ventures in the oil and gas sector and the chemical industry. A meeting of the ISTC/ENI Steering Group is planned for the fall of 1990 and could become the occasion for a mission of Canadian firms to the various subsidiaries of ENI.

ISTC has had a preliminary discussion with ENEA (Commission for Nuclear and Alternative Energy Sources) on how best to promote further collaboration between Canadian and Italian enterprises with a focus on research/development activities. New initiatives with this organizations were suspended as it was going through a major reorganization. ISTC will renew discussions and pursue the possibility of a MOU with ENEA.

A study commissioned by ISTC has helped identify opportunities for collaborative arrangements at the subsidiary level of IRI, EFIM and ENI in a number of specific sectors. ISTC proposes to identify and develop action plans with each of the sub-organizations.

The Italians have proposed to enter into a S&T agreement with Canada. ISTC will take part in interdepartmental consultation related to this proposal.

In tourism, Italy represents a secondary market with some potential to develop business beyond natural market growth. As such the Post qualifies to put forward one-off activities for consideration under the ISTC-Tourism/EAITC Emerging Markets Opportunity Fund.

COUNTRY STRATEGY: ITALY

ISTC SECTOR PRIORITIES:

	<u>Basic Research</u>	<u>Applied Research</u>	<u>Technology Investment</u>	<u>Trade</u>
Adv. Mfg. Tech. (AMT)	X	X	X	X
Airframe Sys. & Sub. Sys.		X	X	X
Automotive Parts		X		
Environmental Industries	X	X	X	X
Fishery Prod.			X	
Health Care Prod.		X	X	
Tourism	X			X
Wood Prod.				X

In addition to these sectors, ISTC has a number of sectors of concentration particularly for technology/investment. These are: resource equipment, electrical equipment, furniture products, leisure products, textile, footwear and leather, converted wood and paper products.

ACTION PLAN:

1. Develop collaborative arrangements with IRI, EFIM and ENEA and Canadian firms and organizations. A meeting will take place on the occasion of ISTC officials' visit to Italy in the Fall of 1990. Develop and implement a work plan as well as formal events.
2. As a result of the meeting of the ENI/ISTC Steering Group in the fall of 1990, develop and implement a work plan which could include a Canadian mission to visit the various subsidiaries of ENI.

COUNTRY STRATEGY: ITALY

3. Examine interdepartmentally the Italian S&T proposal and develop specific initiatives under this agreement.
4. Develop departmental views on priority sectors and approach to table at the next meeting of the Canada/Italy Joint Working Group which should take place in late 1990 or early 1991.
5. As part of the advanced manufacturing technology sector campaign, commission a number of studies on the European market and technology as well as Italy. The major European suppliers of AMT are Germany, Italy and Switzerland.
6. Sensitize the Department to the potential for Canadian firms in Italy by organizing a country day.

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