CANADA'S EXPORT STRATEGY

The International Trade Business Plan

1995/96

An Integrated Plan for Trade, Investment and Technology Development

The International Trade Business Plan is made up of an **Overview** highlighting Canada's international business development priorities, and a series of **Industry Sector Strategies**, which include lists of planned international activities. The following documents are available:

Overview

1. Advanced Manufacturing Technologies
2. Agriculture and Food Products
3. Aircraft and Parts
4. Automotive
5. Biotechnologies
6. Business, Professional and Educational Services
7. Chemicals, Plastics and Advanced Materials
8. Construction Products
9. Consumer Products
   - Apparel and Fur
   - Textiles
   - Footwear
   - Sporting Goods (including recreational watercraft)
   - Tools, Hardware and Housewares
   - Residential Furniture
   - Business and Institutional Furniture
10. Cultural Industries
11. Defence Products
12. Environmental Equipment and Services
13. Fish and Sea Products
14. Forest Industries
15. Information Technologies and Telecommunications
   - Sector Overview
   - Computers and Peripheral Equipment
   - Electronic Components
   - Geomatics
   - Instrumentation
   - Software Products and Computer Services
   - Telecommunications
16. Medical and Health-Care Products and Services
   - Medical Devices
   - Pharmaceuticals
   - Health-Care Services
17. Minerals and Metals
18. Oil and Gas Products and Energy Equipment
19. Power Equipment
20. Primary/Secondary Industrial Machinery
   - Mining, Forestry, Pulp and Paper
   - Agricultural Technology, Machinery and Equipment
   - Ocean and Marine Shipboard Technology
21. Rail and Bus Equipment
22. Space
23. Tourism

For information on how to receive the Overview, or additional Industry Sector Strategies, please call: **1-800-267-8376**

All monetary figures in this document are expressed in Canadian dollars unless otherwise indicated.

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Defence Products

The defence products industry sector is divided into three main areas: Aviation, Marine and Land.

Defence-related Products for Aviation Markets

- avionics products such as cockpit displays and flight controls;
- aircraft mission products such as radar and surveillance systems;
- air traffic control (ATC) systems such as oceanic systems and airport systems;
- airport equipment such as lighting systems and microwave landing systems;
- aircraft simulators and computer-assisted trainers;
- software products for airborne computers and ATC systems;
- helicopter cable-handling systems.

Defence-related Products for Marine Markets

- maritime navigation and communications products such as GPS & Loran C receivers, and aircraft to satellite communications systems;
- naval sensors such as sonars, radars and acoustic systems;
- vessel traffic management systems and harbour control systems;
- security systems for perimeter intrusion protection and shipboard security;
- shipboard machinery controls and communications systems;
- shipboard fire control systems and combat systems;
- ship components;
- replenishment-at-sea systems;
- ships (patrol frigates and MCDVs);
- water purification treatment systems.

Defence-related Products for Land-based Systems

- security systems such as surveillance and protection products;
- military trucks, utility and light armoured vehicles and components;
- communications systems such as HF/RF radios and emergency locators;
- land-based sensors such as radars and infra-red (IR) systems;
- detectors for radioactive substances, X-rays, explosives, narcotics, etc;
- robotics systems for chemical and nuclear waste handling, medical and chemical processing plants and bomb disposal;
- simulators and trainers for nuclear plants and hydro generators;
- software products for land-based computers in unstable environments;
- displays for vehicles and C4I centres;
- alternative power sources and special batteries;
- small arms, propellants and ammunition;
- waste treatment systems for nuclear, biological and chemical waste;
- precision optics such as fibre-optics instruments and special lenses;
- advanced materials such as composites and ceramics.

International Environment

The international environment continues to experience rapid change characterized by a trend toward mergers, alliances and consortia by many large defence firms. Government fiscal restraints and declining defence budgets are a reality in most

Western economies, resulting in policies for the development and acquisition of new systems and weapons. Declining global defence spending and significant cuts in procurement have also had a major impact on industrialized nations.

While expensive programs are being scaled down or terminated, a growing recognition that lighter modern conventional forces are required for national and international security commitments exists. Today's defence industry is characterized by high technology products incorporating sophisticated hardware and software. Defence procurement worldwide is shifting from specialized defence-only products to dual-use ones, including commercial off-the-shelf products. Markets that represent the most promising areas for the global defence market's future growth include life-extension and improvement programs, repair and overhaul (R&O) and spare parts for existing equipment, environmental technology, the acquisition of equipment for new light, rapid-response peacekeeping forces.

Key defence markets are shifting from North Atlantic Treaty Organization (NATO) countries to the Asia-Pacific region and the Middle East countries. The United States is by far the largest defence market in the world. However, sales to the U.S. are declining due to budget constraints, legislative barriers and increased domestic competition. The domestic situation has forced U.S. companies to compete more vigorously in the international market, supported by government. Consequently, the U.S. has increased its share of the international defence market over the past four years.

Governments in North America and Europe continue to encourage economic diversification of defence industries from traditional military production to alternative dual-use production. Dual-use products and technologies meeting defence requirements continue to offer "downstream promise," particularly in the fields of simulation and training, robotics, environmental technologies and security products.

Characteristics of the international environment are:

- rapidly advancing technologies and strong competition;
- declining defence spending (NATO countries);
- emerging markets for traditional weapons systems in Middle East and Pacific Rim markets;
- the overall market for defence electronics is increasing due to rising electronic content in new military hardware;
- increased emphasis on the development of dual-use technologies;
- an increase in market access problems as domestic governments attempt to reserve procurement for domestic suppliers;
- more open and competitive access to most marine, avionics, simulator and air traffic control markets from new trade agreements;
- extremely difficult access to European markets;
- teaming arrangements with domestic partners are essential for penetrating foreign markets;
- civil markets in aviation and marine systems are still suffering from the recession, although simulation and training device markets continue to grow;
- a growing air traffic control market resulting from greater access in Eastern Europe and Asia and the need to update old equipment to meet modern standards.

There will continue to be opportunities for companies involved in the following areas:

- unique defence products meeting niche market needs;
- maintenance and upgrades that enhance existing defence capabilities;
- equipment and training for peacekeeping commitments which includes preventive diplomacy and deployment, peacemaking, peacebuilding, observer missions, and humanitarian assistance operations;

- simulation and training;
- dual-use products and technologies;
- research and development (R&D) contracts to advance state-of-the-art subsystems;
- ATC and airport security products as a result of infrastructure growth in the Asia-Pacific region.

These opportunities will depend on greater international co-operation, product standardization, off-the-shelf procurement and co-operative R&D efforts for the development and modernization of systems and weapons.

Canadian Position

The defence-related sector is composed of approximately 500 small- to medium-sized companies, including the defence divisions of several U.S. and offshore-based multinational corporations. Only a few companies have annual sales in excess of $100 million. A recent survey of the major players indicates that overall annual sales are estimated at $4 billion, with about two thirds exported. The industry currently employs about 30 000 people. Generally, firms within the defence and related products industry sector rely primarily on domestic and U.S. markets. Over 80 percent of exports go to the United States.

Canadian companies in this industry sector are generally smaller than those in other industrialized nations. In spite of declining, highly competitive markets worldwide, Canadian firms have concentrated their efforts on developing subsystems and components for niche markets where they can be world leaders. The industry is an important contributor to Canada's high technology base. Successful products and services include:

- precision optics;
- robotic systems;
- bomb disposal suits and systems;
- light armoured vehicles;
- helicopter haul-down systems;
- explosive and narcotics detectors;
- acoustics, IR/RF and microwave processors, software and sensors;
- shipboard systems: machinery control, distributed computer system shipboard communications, displays, sonars and sonobuoys;
- communications systems: combat radios and radio relays and satellite communications;
- fire control systems for ships, tunnels and armoured fighting vehicles;
- avionics: flat-panel displays, GPS receivers and antennae, surveillance radars, inertial and radio navigation systems;
- simulators and training devices for aircraft, ATC, task trainers;
- ATC: oceanic systems, ATC systems, approach radar, microwave landing systems, communications systems, navigation aids.

Under the Canada-U.S. Defence Production Sharing Arrangement, Canadian industry enjoys privileged access to U.S. defence markets, exempting Canada from basic "Buy America" legislation. U.S. legislation also defines Canadian industry as part of the domestic industrial base. However, over the years, specific-purpose legislation such as the Berry Amendment, from which Canada is not exempted, has restricted industry access either directly or indirectly by making it subject to bureaucratic interpretation. With reduced defence expenditures, access is becoming more difficult. Canadian firms must concentrate on improving long-term strategic relationships with their U.S. counterparts. They will also have to develop new technologies and innovative defence products and services that respond to the needs of major U.S. defence customers if they are to succeed. Although the U.S. continues to be Canada's largest market for defence products and Canada imports a large majority of its defence products from the United States, strong markets for niche products are emerging in Asia-Pacific and the Middle East.

Accessible and suitable markets exist for Canadian products in the newly industrialized economies of the Asia-Pacific and Middle East regions. These include the Republic of Korea, Malaysia, Thailand, Indonesia, Egypt, Saudi Arabia, and Kuwait. Canada has recently procured defence industrial co-operation memorandums of understanding (MOUs) with Saudi Arabia and Australia; others are under consideration. Unless Canadian firms develop a local presence, they should deal through local agents familiar with the local business and political culture. Local production may be required and overhaul facilities are essential. Although considerable time, effort and commitment are required to finalize any sale in the Asia-Pacific and Middle East regions, these markets have much potential. More focussed effort is required to promote Canadian technology and expertise in defence products to realize full market potential.

In Europe, Canadian companies have had some success in penetrating niche markets with unique, competitively priced products. While it will be increasingly difficult to enter these traditional defence markets, Canada is in a good position to benefit from the European Union's continuing preoccupation with security and anti-terrorism measures. Canadian businesses will have to strengthen their competitive position by forging strategic joint-venture partnerships and other alliances, including establishing branch plants, to make significant inroads in the European marketplace where co-operation among European countries is growing.

Strategic Direction

Government efforts will concentrate on helping industry to improve long-term strategic relationships with their U.S. counterparts and to access newly industrialized economies in the Asia-Pacific and Middle East regions.

Priority Countries and Growth Markets

- Priority countries include the United States, Republic of Korea, Saudi Arabia, Kuwait, Malaysia, Indonesia and China. Growth markets include China, Taiwan, Indonesia, Saudi Arabia, Kuwait, Korea and Turkey.

Marketing Support

- Encourage and assist industry initiatives in developing alliances, partnerships and related business arrangements, particularly in Asia-Pacific and Middle East markets. This involves continued liaison with Canadian embassy military attachés who identify and establish key contacts in the foreign country defence community (Department of Foreign Affairs and International Trade [DFAIT], Industry Canada [IC], Department of National Defence [DND]).
- Participate in strategically directed outgoing and incoming industry trade missions, major international trade fairs and promotional activities, in the U.S. and Asia-Pacific priority countries, particularly in the fields of avionics, simulation and training, robotics, advanced materials, defence security products, marine and environmental products and services, to assist industry in accessing global markets (IC, DFAIT, DND).
- Seek to increase the competitiveness of Canadian firms and the adoption of best manufacturing practices through promotion of Canadian industrial and government participation in the U.S. Navy's Best Manufacturing Practices (BMP) program (IC, DND).
- Provide Canadian suppliers with unique export assistance to help small- and medium-sized enterprises enter the export marketplace, e.g. Progress Payment Program, Canadian Commercial Corporation (CCC), Export Development Corporation (EDC).
- Identify and advise Canadian suppliers of potential export business opportunities through CCC, and the Aerospace Industries Association

of Canada. This involves informing firms of important policies affecting purchase decisions such as government procurement practices, possible financing requirements, import restrictions, internal government industrial support programs, requirements for local manufacturing content, technology transfer, and/or joint venture participation as conditions of sale.

- Strengthen ties between government and industry associations by liaising with existing defence industry associations (Canadian Defence Preparedness Association, Aerospace Industries Association of Canada) to develop and implement joint projects focussing on marketing, new technology developments, investment, joint ventures, skills upgrading, purchasing and contracting (IC, DFAIT, Public Works and Government Services Canada [PWGSC], DND).

Market Access

- Endeavour to improve Canadian access to key U.S. defence and aviation markets by monitoring the U.S. legislative environment to help better position Canadian companies and by intervening with key decision makers in an effort to counter growing protectionist sentiment; negotiating international MOUs and joint venture prospecting (DFAIT, IC, DND).
- Through the implementation of the Industrial and Regional Benefits Policy (IC, Atlantic Canada Opportunities Agency [ACOA], Western Economic Diversification [WED], Federal Office of Regional Development - Quebec [FORDQ]), encourage prime contractors in federal procurement contracts to work with competitive Canadian companies to promote sector development, improve market access and export sales.

Developing Technologies

- Encourage new investment and technology transfer by providing potential global customers with information such as a new comprehensive defence and defence-related capability guide, and an electronic library of defence information (IC, DFAIT, DND).
- Co-ordinate visits to U.S. Department of Defense laboratories by Canadian companies with unique capabilities, to encourage new Defence Development Sharing Agreements that will promote technology transfer and improve market access and procurement contracts (IC, DFAIT, CCC, DND).
- Through participation in the North American Defence Industrial Base Organization, encourage Canadian industrial participation in activities that promote the integration of the defence and commercial industrial sectors and the greater use of dual-use products and technologies (DND, IC, PWGSC).
- Encourage investment in research and development through the delivery of funded programs (Defence Industry Productivity Program) to Canadian producers of defence products, as well as in developing dual-use products for niche markets in areas of advanced and emerging technologies (peacekeeping and environmental) in co-operation with the defence end user (IC, DFAIT, DND).

New Long-term Markets

- Facilitate liaison between Canadian and foreign military and provide contact points between company and foreign military representatives through established industrial co-operation MOUs with priority countries in the Asia-Pacific and Middle East regions. Canada has MOUs with Saudi Arabia and Australia; others are under consideration (DND, DFAIT).
- Provide Canadian suppliers with unique export assistance, including counter-trade agreements, to assist them in exploiting emerging markets in the Asia-Pacific and Middle East regions (CCC, EDC, foreign military sales).

Contacts

Industry Canada
Marine and Defence Manufacturing
and Defence Electronics Systems
235 Queen Street, 6th Floor East
Ottawa K1A 0H5
Tel.: (613) 954-3388
Fax: (613) 991-9469

Department of Foreign Affairs
and International Trade
United States Trade and Tourism Development
Division
125 Sussex Drive
Ottawa K1A 0G2
Tel.: (613) 944-8821
Fax: (613) 944-9119

Department of National Defence
Industrial Development - Marine and Land
101 Colonel By Drive
Ottawa K1A 0K2
Tel.: (613) 945-7099
Fax: (613) 995-2305

Defence Products

Activity	Date	Location	Dept.	Contact
Africa and the Middle East				
Defence and Security Products Mission from Kuwait	Oct-95	Canada/Various	DFAIT	613-944-6983
Asia-Pacific South				
Royal Thai Navy Mission	TBD	Esquimalt	DFAIT	613-995-7662
Security Asia '95: Info Booth	Apr-95	Singapore	DFAIT	613-996-5824
Defence Seminar and Exhibition	Sep-95	Canberra	DFAIT	613-995-7652
Langkawi International Maritime Aerospace Exposition LIMA '95: Info Booth	Dec-95	Langkawi	DFAIT	613-996-5824
East Asia				
Market Study: Korea Defence Aerospace Opportunities	Apr-95	Seoul	DFAIT	613-995-8744
Naval Equipment Mission from Seoul	Jul-95	Vancouver, Toronto, Montréal, Halifax	DFAIT	613-995-8744
Airshow Canada: Incoming Missions	09-Aug-95	Vancouver	DFAIT	613-995-8744
Japan				
Airshow Canada 1995: Japanese Mission	09-Aug-95	Abbotsford	DFAIT	613-995-8596
United States				
Canadian Showcases	TBD	Washington, D.C.	DFAIT	613-944-9481
Canadian Technology Workshops	TBD	Washington, D.C.	DFAIT	613-944-9481
Market Study: Aerospace, Defence & Security	Apr-95	Minnesota, Colorado	DFAIT	613-944-9481
Aerospace & Defence Newsletter	Apr-95	Washington	DFAIT	613-944-9481
Mission to Warner-Robbins Air Force Base	Apr-95	Macon	DFAIT	613-944-9481
Market Studies in U.S. Defence Sector	Apr-95	Washington, D.C.	DFAIT	613-944-9481
Mission to Defence Contractors	May-95	Buffalo	DFAIT	613-944-9481
Mission in from U.S. Army Communications and Electronics Command	May-95	Eastern Canada	DFAIT	613-944-9481
Subcon '95	Jun-95	Toronto	DFAIT	613-944-9481
Canada Day - Fort Monmouth	Jun-95	Fort Monmouth	DFAIT	613-944-9481
Mission to Rome USAF Laboratories	Jun-95	Rome, N.Y.	DFAIT	613-944-9481
Defence Industrial Supply Centre Mission: Info Booth	Jun-95	Canada	DFAIT	613-944-9481
Airshow Canada '95	09-Aug-95	Abbotsford	DFAIT	613-944-9481

Note: Dates and locations are subject to change.

Activity	Date	Location	Dept.	Contact
USMC Modern Day Marine Show	Sep-95	Washington	DFAIT	613-944-9481
Interservice-Industry Training System Conference	Nov-95	Atlanta	DFAIT	613-944-9481
USAF Plant Visits	Nov-95	Dallas	DFAIT	613-944-9481
Defence Conversion Project Mission: Partnering	Nov-95	Chicago	DFAIT	613-944-9481
AFCEA Signal Symposium	Dec-95	Augusta	DFAIT	613-944-9481
Mission to U.S. Coast Guard	Dec-95	New Jersey, Atlanta	DFAIT	613-944-9481
SBA Partnership Project Mission	Jan-96	Washington	DFAIT	613-944-9481
Canada Day - Wright-Patterson AFB	Jan-96	Dayton	DFAIT	613-944-9481
Competition Advocate's Shopping List - ATCOM	Feb-96	St. Louis	DFAIT	613-944-9481
CANEX '95: National Stand	Feb-96	Philadelphia	DFAIT	613-944-9481
Canada Day - Tank Automotive Command Display	Mar-96	Warren, MI	DFAIT	613-944-9481
Western Europe				
Paris Airshow '95: National Stand	11-Jun-95	Paris	DFAIT	613-996-5555

Acronyms and Initialisms Used in The International Trade Business Plan

(This list does not include sector-specific references)

ACOA	Atlantic Canada Opportunities Agency
AG Can	Agriculture and Agri-Food Canada
ASEAN	Association of Southeast Asian Nations
BBS	electronic bulletin board system
BOSS	Business Opportunities Sourcing System
CCC	Canadian Commercial Corporation
CIDA	Canadian International Development Agency
CIS	Commonwealth of Independent States
CSA	Canadian Standards Association
DFAIT	Department of Foreign Affairs and International Trade
DFO	Department of Fisheries and Oceans
DND	Department of National Defence
EC	Environment Canada
EDC	Export Development Corporation
EU	European Union
FITT	Forum for International Trade Training
FORDQ	Federal Office of Regional Development - Quebec
FSU	former Soviet Union
FTA	Canada-U.S. Free Trade Agreement
GATT	General Agreement on Tariffs and Trade
GDP	gross domestic product
GNP	gross national product
HRDC	Human Resources Development Canada
IC	Industry Canada
IDRC	International Development Research Centre
IFI	international financial institution
ISO	International Standards Organization
ITBP	International Trade Business Plan
ITC	International Trade Centre
MAPAQ	Ministry of Agriculture, Fisheries and Food of Quebec
MDB	multilateral development bank
NAFTA	North American Free Trade Agreement
NATO	North Atlantic Treaty Organization
NRC	National Research Council
NRCan	Natural Resources Canada
NRCan-CFS	Natural Resources Canada - Canadian Forest Service
OECD	Organization for Economic Co-operation and Development
PEMD	Program for Export Marketing Development
R&D	research and development
SMEs	small- and medium-sized enterprises
UNEP	United Nations Environmental Program
WED	Western Economic Diversification
WTO	World Trade Organization