Waterloo Defence Research Forum

2019-10-09

Waterloo, Canada
Southern Ontario’s innovative and dynamic economy is a key driver of Canada’s growth…

Strengths in Automotive, Aerospace, Agri-Food, and Life Sciences, as well as North America’s second largest Financial Services and ICT clusters. Also, footprints in emerging growth areas of AI / Data Analytics, Cyber, Quantum Computing, IoT, and Regenerative Medicine.
Ontario’s Defence Sector

• $5.3 billion per year in sales, over half of Canada’s defence industry
• Ontario’s defence industry is home to firms ranging from large multinationals to high-performing SMEs, across the aerospace, marine, land vehicle and IT sectors
• Twelve of the top 25 global defence companies have a manufacturing presence in Ontario
• Ontario has over 300 companies that provide defence products and services
Regional Development Agencies (RDAs)

Supporting the needs of Canada’s regional economies
### RDA Roles

<table>
<thead>
<tr>
<th>Role</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Convenor</strong></td>
<td>Bring together key stakeholders to explore collaborations that will advance Canada’s Innovation and Skills Plan</td>
</tr>
<tr>
<td><strong>Co-investor</strong></td>
<td>Invest funding in targeted projects along with other partners and investors to stimulate the economy</td>
</tr>
<tr>
<td><strong>Pathfinder</strong></td>
<td>Refer applicants to other available funding partners if not a match</td>
</tr>
<tr>
<td><strong>Champion</strong></td>
<td>Promote the assets of the region to raise its profile nationally and internationally; as well as work to fulfill federal government priorities in the region</td>
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</table>
Why are RDAs Involved in Defence Procurement?

- Economic impact of the defence industry
- The defence industry is present across Canada with regional specializations
- Current and future business opportunities of considerable value
- Industrial and Technological Benefits (ITB) Policy’s objectives align with our mandate and role
FedDev Ontario’s ITB Unit

• The Agency’s mandate is to promote economic growth and diversification in southern Ontario
• We leverage Canada’s ITB policy to connect Ontario-based companies & researchers with opportunities to work with Prime contractors that have won, or are planning to bid on, major Canadian defence projects
• We work closely with our colleagues at MEDJCT to share information and resources in support of Ontario’s defence sector
FedDev Ontario & MEDJCT

We promote Ontario’s industrial capabilities and our strong innovation ecosystem at regional, national, and international conferences and trade shows.

* Not an exhaustive list
FedDev Ontario & MEDJCT

We also work closely with other Federal & Provincial government departments, industry associations, post-secondary institutions, research centers, and companies of all sizes to keep on top of current opportunities and learn about upcoming ones. These include:

* Not an exhaustive list
How We Help the Defence Industry

Clarity:
Helping you better understand the ITB Policy and its requirements

Hosting:
Events (e.g. B2B/B2G) and organizing supplier development tours

Promoting:
Canadian capabilities at meetings, trade shows, and events

Connecting:
Canadian suppliers, post-secondary institutions and research centres with defence contractors
FedDev Ontario’s ITB Unit

FedDev Ontario and the Ontario government work together to help defence companies fulfil their obligations under the ITB policy and find the supply chain and research partners they need, here in Ontario.

FedDev Ontario’s ITB Unit is:

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www.feddevontario.gc.ca
FedDev Ontario and the Ontario government work together to help defence companies fulfil their obligations under the ITB policy and find the supply chain and research partners they need, here in Ontario.

Key contacts at MEDJCT’s Aerospace and Manufacturing Unit:

<table>
<thead>
<tr>
<th>Role</th>
<th>Name</th>
<th>Email</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manager</td>
<td>Ben Willoughby</td>
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</tr>
</tbody>
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www.investinontario.com/defence
Industrial & Technological Benefits Policy

• The Industrial and Technological Benefits (ITB) policy was established to promote significant business opportunities for Canadian industry through federal defence and security procurement projects.

• Based on the policy, companies awarded defence contracts are obligated to undertake business activities in Canada equal to 100 percent of the value of the contract.

• Defence and Canadian Coast Guard contracts valued at over $100M are subject to the policy; contracts valued between $20M and $100M are reviewed and ITB policy may be applied.
How does the ITB Policy Benefit Canada?

• Contributing to more than 46,000 jobs and 4.7 billion to GDP annually.
• Enhancing investments across Canada that align with regional industrial strengths.
• Supporting Canadian supply chain participation and small and medium business growth.
• Significantly increasing collaborative innovation and skills development through partnerships with universities, colleges, and research centres.
• Providing export opportunities.
Value Proposition

WHAT IS THE VP?

- A bidder’s economic proposal to Canada
- The weighted and rated element of contractor selection along with technical and cost elements
- Designed through internal market analysis, industry engagement and third party defence analytics

OBJECTIVES OF THE VALUE PROPOSITION

1. Support long-term sustainability
2. Support the growth of prime contractors and suppliers in Canada
3. Enhance innovation
4. Increase export potential
5. Leverage opportunities in skills development and training
ITB Value Proposition Proposal

**MANDATORY REQUIREMENTS**
- Commitment to achieve the total contract value in ITB activities
- A commitment of 15% of bid price to work with Small and Medium Businesses (SMBs)
- Commitment to achieve transactions according to the performance schedule
- Acceptance of the ITB Terms and Conditions
- Signed Mandatory Requirements Certificate
- Detailed ITB Plans, e.g. SMB plan, Regional plan, Gender & Diversity Plan
- Could include other requirements

**RATED CRITERIA**
Commitments under Value Proposition Pillars (note: pillars may change based on project):
- Defence Sector Work
- Research and Development
- Canadian Supplier Development
- Exports
- Skills Development & Training

Commitments become part of the contract signed with the winning bidder

**IDENTIFIED TRANSACTIONS**
- Transactions equal to no less than 30% of bid price
- Each transaction should correspond to a targeted Value Proposition Pillar
Skills Development and Training

• New Value Proposition Pillar
• To enhance or address a gap in Canadian workforce skills and training capability or capacity
• Examples
  • Work integrated learning programs (e.g. co-operative education, work placements)
  • Apprenticeship programs
  • A new or existing skills development program at a post secondary institution
Gender and Diversity Plan

• Bidders will be asked to provide a gender and diversity plan

• May include the following:
  • Approach to promoting diversity, inclusion, equality
  • Corporate anti discrimination policies
  • Training to educate workforce on diversity and inclusion
  • Statistics on proportion of designated groups employed at all levels in Canada
  • How diversity and inclusion are factored into supplier selection methods in Canada
  • A mandatory element only will not receive an evaluated score
Canada’s Key Industrial Capabilities

**EMERGING TECHNOLOGIES**
- Advanced Materials
- Cyber Resilience
- Remotely-piloted Systems and Autonomous Technologies

**LEADING COMPETENCIES & CRITICAL INDUSTRIAL SERVICES**
- Aerospace Systems & Components
- Defence Systems Integration
- Ground Vehicle Solutions
- Marine Ship-Borne Mission and Platform Systems
- Shipbuilding, Design and Engineering Services
- Training & Simulation
- Artificial Intelligence
- Space Systems
- Armour
- Electro Optical / Infrared Systems
- In-Service Support
- Munitions
- Sonar & Acoustic Systems

Key Definitions

- **Obligation**: Contractual requirements that the Contractor must meet.
- **Canadian Company**: A commercial enterprise incorporated in Canada and which has ongoing business activities in Canada.
- **Eligible Donor**: (1) Prime Contractor and its parent corporation, subsidiaries, divisions and subdivisions and (2) Tier One Suppliers and its parent corporation, subsidiaries, divisions and subdivisions.
- **Recipient**: Canadian Company or organization that receives from the Contractor or an Eligible Donor, the commercial or business activity described in a Transaction.
Key Definitions Continued...

• **Tier One Supplier:** Company that performs a specific portion of the work directly for the Contractor, producing or servicing a major subassembly or major component that is installed or used in the platform or system being procured.

• **Post Secondary Institution:** University or College.

• **Public Research Institution:** Organization engaged in research and funded primarily from public resources (e.g. National Research Council of Canada).

• **Cash Contribution:** Cash payment or purchase or shares.

• **In Kind Contribution:** License, equipment, knowledge transfer, marketing and sales support.
Canadian Content Value (CCV)

• Contractors must achieve their ITB obligations in CCV

• The portion of the value of a product or service that includes eligible Canadian costs

• Can be expressed as a dollar value ($) or as a percentage

• Calculated using Net Selling Price Method or Cost Aggregate Method
CCV Eligible Costs

- Parts and materials
- Transportation
- Wages and salaries
- Utilities, insurance, rent
- General and administrative expenses
- Travel expenses
- Profit
CCV Ineligible Costs

- Government funding
- Imported materials, labour, and services
- Royalty and licence fees paid outside of Canada or by Recipient
- Bid preparation costs
- Taxes and duties
- Fees to lobbyists or third party consultants
Net Selling Price Method

- Product or service has a substantiated selling price
- Begin with the total selling price of the product or service
- Minus the applicable custom duties and taxes
- Minus any ineligible costs
- The remaining value is the CCV
Net Selling Price Method - Example

- Company A sells Product J at a price of 395.00/unit
- Company A sells 20 units
- 13 % Harmonized Sales Tax (HST)
- Foreign materials are valued at $ 37.00/unit
- What is the Transaction Value, CCV $ and CCV %?
Example Continued...

Total Transaction Value

=Price/Unit x No. of Units

= $395.00 \times 20

= $7,900.00
Example Continued...

Unit CCV $
= $395.00 -(0.13 \times 395.00) -$37.00
= $306.65

Total CCV $
= $306.65 \times 20
= $6,133.00
Example Continued...

Unit CCV %
= ($306.65/$395.00) × 100
= 77.63%

Total CCV %
= $6,133.00/$7,900.00
= 77.63%
Cost Aggregate Method

• Used when a product or service cannot be assigned a substantiated selling price (e.g. in house production).

• The Canadian Content Value is the sum of all eligible costs.
Cost Aggregate Method - Example

- Company A will undertake program management of the project at a value of $2,500,000 with the following Canadian costs:
  - Labour $1,250,000;
  - Materials $75,000;
  - Overhead $25,000;
  - General and Administrative $12,000; and
  - Profit $90,000.
- What is the CCV $ and CCV %?
Example Continued…

\[ CCV \quad $ = \quad $1,250,000 + \quad $75,000 + \quad $25,000 + \quad $90,000 \]
\[ = \quad $1,440,000 \]

\[ CCV \quad % = \quad ($1,440,000/$2,500,000) \times 100 \]
\[ = \quad 57.60\% \]
Transactions

• A business activity undertaken for ITB purposes
• Between a Contractor or Eligible Donor and a Recipient
• Carried out by means of a contract, sales agreement, license agreement, letter of agreement or other similar instrument in writing
• Has an identified dollar value
Transaction Types

**Direct:** Related to the Statement of Work

**Example:** Irving Shipbuilding awarded a $8.9 million contract to ABCO Industries Limited for the design and construction of 12 metre landing craft for the Royal Canadian Navy’s Arctic Offshore Patrol Ships.
Transaction Types

**Indirect:** Not related to the Statement of Work

**Example:** IRCO Automation, a small Ontario based business, was selected by BAE Systems to design, fabricate and install a complete line of mechanized welding and positioning systems to help make submarine missile tubes for the United States Navy’s Virginia class submarines.

This contract is a result of Irving Shipbuilding selecting BAE Systems to supply its MK 38 25mm Gun for each Arctic Offshore Patrol Ship being built for the Royal Canadian Navy at the Halifax shipyard, and Canada’s ITB Policy.
Small and Medium Business (SMB) Transactions

• Recipient is a SMB and the SMB’s product or service has a CCV of at least 70%, will have its credit awarded as follows:
  • Portion of transaction’s CCV that is equal to or less than $1 million will be deemed to have 100% CCV for reporting and verification purposes
  • The portion of the transaction’s CCV that is over $1,000,000 will use the actual CCV
Example

• Contractor selects SMB to provide rigid hull inflatable boats.
• The contract is $5 million and the CCV percentage of the boats is 77%.

To calculate CCV:

$1 million \times 100\% \text{ CCV is } $1 million
$4 \text{ million} \times 77\% \text{ is } $3.08 \text{ million}
Total CCV is $4.08 \text{ million or 81.6\%}$
Skills Development and Training Transactions

- Donation of equipment or resources at current market value (e.g. computers or software)
- Hourly rate of pay for knowledge or technology transfer
- Salaries of students for work integrated learning (cooperative education program)
- Sponsorship costs for apprenticeship programs
- Contribution to the personal certification of a Canadian citizen or permanent resident
Skills Development and Training Transactions

- Contribution to **skills development program**, including not for profit organizations
- **Educational costs**, including tuition or course fees, and travel expenses incurred in Canada
- ITB credit equal to value of cash and/or in kind contributions
- **5 x multiplier** if transaction is for **Indigenous Peoples** or **Indigenous educational or training facilities**
Research and Development Transactions

• Contribution to a Post Secondary Institution for research or establishment of a research chair

• Collaborative research undertaken with a Post Secondary or Public Research Institution

• Cash contributions eligible for a 5 x multiplier

• In kind contributions subject to a valuation report
R&D Transaction Examples

• Company ABC contributes 500,000 to establish a research chair in Artificial Intelligence at the University of Toronto. Company ABC receives an ITB credit equal to $2.5 million.

• Company XYZ invests $10 million at a local college to develop a welding program aimed at women and donates equipment valued at $1 million. Company XYZ receives an ITB credit equal to $51 million.
Consortium Transactions

• Research and development activities

• Membership:
  1. Contractor or Eligible Donor
  2. Minimum of 1 Canadian Company
  3. Minimum of 1 Post Secondary Institution or Public Research Institution

• Can include cash and/or in kind contributions

• Eligible cash contributions will receive a multiplier of 5

• In kind contributions are not eligible for a multiplier
Consortium Transaction Example

• Lockheed Martin Aeronautics Company contributed $1,000,000 to the British Columbia Institute of Technology to help design and support the creation of 3D simulation technology. This contribution helped to leverage a $500,000 contribution from Western Economic Development Canada and a $380,000 in kind contribution from NGRAIN Corporation.

• How is ITB Credit calculated?
Example Continued

• Contractor or Eligible Donor: $1,000,000 cash
• Canadian company: $380,000 in kind
• Government: $500,000 cash
• Post Secondary Institution: BCIT

• Value of cash contributions is $1,000,000 is eligible for 5x multiplier -- $5,000,000
• Add in-kind donation --$5,380,000 is total CCV
Investment Framework (IF) Transactions

- Contribution to a **Small and Medium Business for Research and Development** and/or **Commercialization**
- Contribution can be cash or in kind. In kind is subject to a valuation report.
- Must have a duration of at least 5 continuous years
- Eligible Donor and Recipient cannot be the same company
- Includes a business plan
IF Transactions Continued…

- **9x** multiplier for *cash for R&D or license for IP*
- **7x** multiplier for *cash to purchase equipment or donation of equipment*
- **4x** multiplier for in-kind *knowledge transfer or marketing and sales support*
- **50%** of credits received directly once investment is made and remaining **50%** of credits apportioned over remaining years
IF Transaction Example

• Forge Hydrocarbons received a $4 million cash investment from Lockheed Martin to further develop its renewable fuels technology.

• Lockheed Martin received a total ITB credit of $36 million ($4 million x 9). 18 million year 1 following the investment and $4.5 million years 2 to 5.
Venture Capital Fund (VCF) Transactions

• Pooled group of investments to grow Canadian small businesses
  • Less than 50 employees in service based industries
  • Less than 100 employees in manufacturing based industries
• Managed by a third party (e.g. bank, trust company, investment company)
• Investments in specific sectors: life sciences, health, advanced materials, advanced manufacturing, environment, information and communications technologies, and aerospace and defence.
VCF Transactions Continued…

• Initial investments must be less than $1 million and remain with the small business for a minimum of 3 years
• Investment is eligible for a 5 x multiplier
• The multiplied credit cannot exceed 5% of the obligation value
Investments for Future Sales

- Cash or in kind investment with a Canadian company
- Credit is based on the future sales of the Canadian company as a result of the investment, but there is a cap
- Eligible future sales = (future sales / capitalization or value of investment)
- Investment must remain with a Canadian company for a minimum of 3 years
- Value of initial cash or in kind investment credited only after future sales surpasses initial value
Thank You
FedDev Ontario Funding

FedDev will invest over $1 billion in Ontario between 2018 and 2024 through our funding initiatives. We are seeking innovative projects that:

- Increase the number of high-growth firms
- Strengthen key clusters and build on areas of regional innovation strength
- Increase the commercialization of new and innovative technologies, products or processes
- Increase business investments in the adoption and/or adaptation of leading-edge technologies
- Create and maintain highly skilled jobs
- Increase the value of exports
- Promote inclusive growth and participation of traditionally underrepresented groups such as women, Indigenous Peoples and young entrepreneurs
FedDev Ontario Funding Streams

1. The **Business Scale-up and Productivity Stream** aims to accelerate the growth of firms and assist with the adoption and adaptation of new, innovative technologies that support scale-up, productivity, development of and entry into new markets to help companies become globally competitive.

2. The **Regional Innovation Ecosystem Stream** aims to create, grow and develop strong and inclusive regional ecosystems that support business growth and innovation, as well as the entrepreneurial environment necessary to foster more innovative regional economies and increase the competitiveness of small- and medium-sized enterprises (SMEs).

3. The **Community Economic Development and Diversification Stream** aims to develop, diversify and transform local economies by promoting small business development, community innovation and strategic collaborations.
FedDev Ontario Funding Streams

• If you are considering applying for funding, we would like to hear your ideas.

• Talk to your FedDev ITB representative to get feedback and advice about eligibility and how to scope & position your project before completing the online application.

• When you’re ready, apply online at:

  http://www.feddevontario.gc.ca
## FedDev Ontario Funding Streams

<table>
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<tr>
<th>Eligible Applicants</th>
<th>Stream 1: Business Scale-up and Productivity</th>
<th>Stream 2: Regional Innovation Ecosystem</th>
<th>Stream 3: Community Economic Development and Diversification</th>
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<tbody>
<tr>
<td>Incorporated businesses</td>
<td>Incorporated businesses*</td>
<td>Incorporated businesses*</td>
<td>not-for-profit organizations*</td>
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<tr>
<td>Indigenous Organizations</td>
<td>not-for-profit organizations</td>
<td>Indigenous Organizations*</td>
<td>not-for-profit organizations*</td>
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<td>Funding Range</td>
<td>$500k to $10 million</td>
<td>$500k to $10 million</td>
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<td>$250k to $5 million</td>
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<td>Max % of Project costs</td>
<td>Up to 35% of eligible project costs</td>
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<td>Up to 75% non-capital, 50% capital</td>
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*Project must be located in a community outside of a large metropolitan area, in transition, and/or facing economic hardship and decline.*
Funding Stream 1: Business Scale-up and Productivity

- Accelerate the growth of firms
- Assist with the adoption of new, innovative technologies that support scale-up and productivity
- Development of and entry into new markets to help companies become globally competitive
- No-interest, repayable contributions from $500k up to $10 million per project
- Up to 35 percent of project costs
Funding Stream 2: Regional Innovation Ecosystem

• Create, grow and develop strong and inclusive regional ecosystems that support business growth and innovation

• Build the entrepreneurial environment necessary to foster more innovative regional economies

• Increase the competitiveness of small- and medium-sized enterprises (SMEs)

• Non-repayable contributions from $500k up to $10 million per project

• Up to 50 percent of project costs
Funding Stream 3: Community Economic Development and Diversification

- Generate sustainable, inclusive growth
- Help small and rural communities in southern Ontario to fully participate in, and benefit from economic opportunities
- Non-repayable contributions from $500k up to $5 million per project for not-for-profit organizations
- No interest, repayable contributions from $250k up to $5 million per project for incorporated businesses, including Indigenous businesses
- Up to 50 percent of project costs