



CRITICAL  
INDUSTRIAL  
TECHNOLOGIES



## **Call for CIT Technology Development Sites**

### **Call for Proposals**

The Critical Industrial Technology Initiative (CIT) is seeking proposals from interested and eligible parties to become a Technology Development Site under the initiative in four specific areas (as outlined in the TDS Focus section below) to support Ontario SMEs in the testing, validation and demonstration of new products and services to grow their companies through the integration of Critical Technologies.

### **Overview of the Critical Industrial Technologies initiative**

The integration of critical technologies is the global future of industry. Through the Critical Industrial Technologies initiative Ontario industry will converge with innovative SMEs to amplify Ontario's rich critical technology capabilities and propel four key sectors of Ontario's economy to the forefront of this transformation.

#### **Four key sectors:**

- Mining
- Advanced Manufacturing (non-auto)
- Agri-Food
- Construction

#### **Critical technology areas:**

- 5G & advanced networks
- AI
- Blockchain
- Robotics
- Cybersecurity
- Quantum

The Critical Industrial Technologies initiative will support Ontario SMEs to develop new IP faster and at a greater scale for the benefit of the province and beyond. By also investing in talent development to advance the knowledge and training of critical technologies, Ontarians are poised as leaders in the global industrial economy to tackle the dynamic future.

The Critical Industrial Technologies initiative is a Government of Ontario initiative led by OCI.



## **Technology Development Sites (TDS(s))**

Technology Development Sites (TDS(s)) under this initiative, leverage existing, or industry built regional strengths and capabilities across Ontario, with each site having a unique focus area relating to one of the four focus Strategic Sectors and/or six Critical Technologies. The sites provide unique testing labs and capabilities to SMEs to develop, test and demonstrate/showcase their Critical Technology solution. These sites will allow SMEs to tap into sector specific assets, resources and capabilities and provide a sandbox for the integration of critical technologies into SME products and services.

## **TDS Requirements**

Under the Critical Industrial Technologies initiative TDS's will be required to undertake the following:

1. Provide SMEs with no cost access to existing infrastructure/testing capabilities including specialized equipment, hardware and software for the testing, development, demonstration, and/or integration of one or more of each Critical Technologies into new products and services. Access will be provided for SMEs approved under the following two Critical Industrial Technologies initiative programming streams
  - Technology Access Program (TAP)
  - Development and Commercialization Program (DC)
2. Manage the onboarding and technical support of SMEs at the TDS
3. Conduct outreach and marketing activities to support the attraction and engagement of Ontario SMEs to the TDS and initiative.
4. Implement a process to track SME utilization of the TDS and share on a regular basis the data with OCI. Note: A minimum of 2 hours of access must be provided to each SME. A minimum of 1 hour of technical support must be provided to each SME by the relevant TDS Delivery Partner(s)
5. Develop a data security plan that is reviewed and updated on an annual basis.

## **Eligibility**

The Applicant must be a not-for-profit or an academic institution with established testing labs and capabilities that SMEs will utilize to develop, test and demonstrate/showcase their Critical Technology solution. The site must allow SMEs to tap into sector specific assets, resources and capabilities and provide a sandbox for the integration of Critical Technologies into SME products and services.



### The Applicant Must:

- Be a not-for-profit organization or academic institution located in Ontario.
- Have existing physical testing labs and capabilities located in Ontario that align with the specific Strategic Sector(s)/Critical Technology(ies) testbeds described in the **Required Technology Development Site Focus** areas below that SMEs can utilize to develop, test and demonstrate/showcase their Critical Technology solution.
- Have the capacity and demand to support a minimum of 10 SMEs throughout the CIT initiative duration.
- Begin SME projects immediately after approval.
- Allow SME to have unincumbered access to the site for testing/validation/ demonstration (e.g. no requirements to work only as part of a student project, access times during regular working hours, etc.).
- Meet the infrastructure and technical expertise requirements detailed below in the **Required Technology Development Site Focus** (Note: Additional calls will be held where the Technology Development Site Focus will differ and cover different areas of the initiative)

### Not eligible:

- SME/MNE/Municipalities/NGOs/economic development corporations/industry associations are not eligible to apply.
- Organizations who do not have dedicated infrastructure/platforms/technology development facilities in Ontario.
- Organizations who do not meet the infrastructure and technical expertise requirements detailed in the **Required Technology Development Site Focus**.

### Required Technology Development Site Focus

In this specific call we are looking for potential TDS(s) with the following focus/infrastructure and testing capabilities. Note subsequent calls will be launched with different focus areas.

#### Cybersecurity

Cybersecurity focused TDS(s) will provide capabilities to support SMEs in understanding their current cyber readiness, weaknesses and their cybersecurity posture through rigorous testing and evaluation. Proposed sites must:

- Have dedicated, physical testing environments equipped with cutting-edge, advanced cybersecurity tools/assets and simulated attack scenarios (Sample Facility: Cyber Range).



- The site should support SMEs looking to improve the cybersecurity posture and resilience of their solutions through cybersecurity services, including but not limited to, application vulnerability assessments, cybersecurity incident response simulations, and disaster recovery planning.
- Provide services, software, hardware, and technical expertise to help SMEs bolster their cybersecurity resilience, enabling SMEs to plan, anticipate, and contain current/future cyber incidents and threats.

### **Advanced Networks**

Advanced Networks focused TDS(s), will provide a site where SMEs will be able to access a high-performance computing infrastructure to leverage their computing resources. Proposed sites must:

- Provide a dedicated, tailored compute environment for multiple SMEs concurrently running their projects and meeting their hardware/software/network requirements to optimize performance for application workloads.
- Have a virtualized testing environment to insulate concurrent projects from one another to minimize interference and ensure a smooth workload for each SME project.
- Be compliant with data security and privacy best practices and requirements to protect sensitive SME data and IP. This includes having data isolation, access controls, data encryption, incident response plans, and data deletion policies in place.
- Have sufficient capabilities to enhance various aspects of software development and testing, including scale, interoperability, load, analytics, simulations, and AI model training.

### **Construction**

Construction focused TDS(s), will provide a site where SMEs will be able to test, develop, validate and demonstrate their product on a live construction site/project. Proposed sites must:

- Provide SMEs with access to a live construction site/project.
- Allow SMEs to implement, develop, and test their Critical Technology solutions in the design, build, operate, and/or maintenance phases of the construction lifecycle at the site on a real-life construction project.
- Provide SMEs with the appropriate support, instructions, and procedures on the physical construction site to effectively collaborate with the construction project management teams.
- Enable SMEs to work with a General Contractor (or a similar project management organization) to implement, deploy, and/or validate their Critical Technology solutions based on the specific needs, project timelines, and outcomes of the construction project.



### Robotics

Robotics focused TDS(s) will provide a site where SMEs will have access to robotics testing capabilities to advance or integrate robotics into their products. Proposed sites must:

- Provide SMEs with a diverse range of stationary and mobile hardware-based robotics systems (e.g. UAVs, UGVs, robotic arms) in outdoor and indoor environments.
- In addition to a range of robotic form factors, facilities must have the necessary hardware (e.g. sensors, controllers, power supply), software (e.g. licenses, ROS), and other technical infrastructure (e.g. safety equipment, network communications) to support the development, testing, validation, and integration of robotics-based capabilities for SMEs.
- Be outfitted with 5G network infrastructure services and assets to support the validation of cellular-enabled robotics systems.

### Use of Funds

The applicant is required to submit a needs-based budget that outlines the costs required to deliver the TDS requirements described above. The budget should outline the proposed costs to be requested from OCI against the matching contributions at a minimum ratio of 1:1.5 and cover the period of – TDS approval date up to September 30<sup>th</sup>, 2026.

Matching Requirements Example:

Total Eligible TDS Costs	CIT Contribution	Minimum Matching Contribution
\$750,000	\$300,000	\$450,000

The overall cost of delivery per SME proposed should not exceed \$55,000. Funding will flow from OCI to the Applicant organization. All budget items must comply with the eligible project costs table given at the end of this document.

As part of the agreement, OCI reserves the right to revise the approved funding amounts based on the evaluation of the business plan, or failure to achieve the matching requirements.

### Operating Period and Reporting Expectations

- The TDS will be operating from TDS approval date to September 30, 2026. All final reporting will be due by December 15, 2026.
- The TDS will report on progress semi-annually. Funding disbursements are made on approval of semiannual reports.
- Funding is provided on a reimbursement basis with a one-time initial advance upon activation.



- Refer to the eligible expenditures guide in the Business Plan Template for a list of allowable expenses.
- Note that funding is intended to support clients through the site's resources and facilities. It is not meant to be used to seed clients or directly fund client projects.

## Evaluation Criteria

Applicants' proposals will be evaluated on the following categories:

- Applicant organizations' background, experience, and track record of success.
- Quality and strength of the organization's site, role, proposed governance structure of the TDS.
- Description of proposed TDS area(s) of focus: value proposition, SME demand for the site and overall potential impact and expected outcomes.
- Capacity of the applicant organization to provide access to SMEs, including the expected number of SMEs to be supported.
- Description of proposed TDS site: physical space(s), technology platforms, facilities and specialized equipment, other infrastructure, and compliance to standards.
- Alignment of the proposed TDS with the eligibility criteria and Required TDS Focus outlined for this specific call.
- Strength of Data Security Plan and mechanisms to effectively safeguard SME's intellectual property.
- Quality, effectiveness, and diversity of proposed activities, and how these activities will support Ontario SMEs to achieve incremental benefits to economic development, job creation, and trade for Ontario.
- Description of the SME onboarding process and access to the TDS capabilities services and offerings.
- Complementarity of the proposed activities to other established TDS activities, no duplication.
- Proposed budget and use of funds, ensuring realistic budgeting and demonstrating value for money.
- Quality and strength of the outreach and marketing plan to effectively engage with organizations across the region.
- Secured and eligible matching funding with a minimum 1:1.5 match.
- Strength, diversity, and value of partnerships (including private sector partners and partnerships with other organizations) and their contributions, roles, leadership, and commitment to the site.
- Intellectual Property policies enabling open innovation.
- Risk-mitigation strategy detailing how potential risks impacting milestones will be alleviated.

## Application Submission Process

- 1) Applicants should review the full Call for Proposal details, eligibility, and requirements prior to applying.
- 2) If eligible, contact Jason Lee at [jlee@oc-innovation.ca](mailto:jlee@oc-innovation.ca) to initiate an application on the AccessOCI portal.
- 3) Complete the application and upload the Business Plan onto the AccessOCI portal.
  - Your proposal must be submitted through the system by 13:00 on October 2<sup>nd</sup>, 2024.
  - An internal review will be conducted. Only complete applications meeting the requirements above will be approved and advanced to an External Review Panel.
  - External review consists of a panel of experts who will score your proposal.
  - A decision is expected in late October/November 2024
  - Awarded proposals will undertake a contracting process with OCI outlining the terms and conditions of the TDS project.

### Contacts:

Jason Lee,

Director of Strategic Programs,

[jlee@oc-innovation.ca](mailto:jlee@oc-innovation.ca)



## Business Plan Template

# Critical Industrial Technologies Initiative

## *Business Plan and Proposal for Technology Development Site*

Organization Name: *Insert Name*

### Lead Contact/Signing Officer

Name:		Position/Title:	
Email:		Phone:	
Street Address:			

### Financial Signing Officer

Name:		Position/Title:	
Email:		Phone:	
Street Address:			

### Operational Contact

Name:		Position/Title:	
Email:		Phone:	
Street Address:			





## 1. EXECUTIVE SUMMARY (FOR PUBLIC RELEASE – 250 WORDS MAX)

Provide a brief overview of the Technology Development Site (TDS) (e.g., types of offerings, technology/sector focus, stage of companies supported, etc.). Summarize the key capabilities offered, services/activities proposed and the anticipated impact and benefits for SMEs and the Province on the adoption, integration, and commercialization of critical technologies in the four focus sectors (agrifood/advanced manufacturing/mining/construction).

(Type Here)

## 2. LEAD ORGANIZATION & PARTNERS'S ROLES, COMMITMENTS AND GOVERNANCE STRUCTURE

1. Describe the Lead Organization, its role, and its plan to commit and contribute to the overall success of the TDS and Critical Industrial Technologies initiative.
2. If applicable, describe all partners and their roles. Provide supporting documentation in the form of letters of support detailing contributions.
3. Describe the proposed governance structure of the TDS, including accountabilities, roles, and responsibilities.

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3. (Type Here)

## 3. DESCRIPTION OF THE TECHNOLOGY DEVELOPMENT SITE AND SME OFFERINGS

1. Describe the physical space, technology platforms, data and information, facilities, specialized equipment, hardware and software, other infrastructure and capabilities, services and activities that will be available and offered to Ontario SMEs by the TDS, for testing, validation, integration and demonstration/showcasing of critical technology products and services. Complete Appendix A for the main offerings.
2. Outline how these offerings and support provide a unique value proposition not otherwise available to SMEs. Articulate how, if other Government funding is currently supporting the TDS, the offerings and services are complimentary and not overlapping.

1. (Type Here)
2. (Type Here)



#### 4. SME ACCESS TO INFRASTRUCTURE, SERVICES AND ACTIVITES

1. Provide a description of how SMEs will access the TDS's capabilities services and offerings. Include:
  - An outline of the SME onboarding process noting any specific requirements that the SME will need to provide/complete before access is given.
  - An outline of the key parameters around SME usage and TDS access e.g SME capacity limits, project timing (seasonal, operational start date, open hours, down times etc.)
2. Tracking of SME utilization of the TDS capabilities and offerings will be required.
  - Indicate the expected range or average SME utilization rates of the TDS (# of hours per visit, # of visits, # of hours of technical support, based on historical data)
  - Outline the process the TDS will implement to track SME utilization of the TDS and how this data will be regularly shared with OCI.

**NOTE: Under the Critical Industrial Technologies initiative, each SME will be required to use the testbed for a minimum of 2 hours and receive a minimum of 1 hour of technical support (includes onboarding / troubleshooting / technical advice etc.)**

3. Outline the TDS data security plan and how SME IP and data will be managed and protected whilst utilizing the TDS. A Data Plan will be required to be maintained by the TDS that is reviewed and updated annually.

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3. (Type Here)

#### 5. EXPECTED OUTCOMES

1. Outline the number of SMEs that would be supported in developing/testing/validating/demonstrating technologies at the TDS through both the Open Access and Development and Commercialization Programs.

Note: For this initiative, an SME is defined as a for-profit privately owned business that is incorporated federally or provincially with a valid Business Number, has between 1 – 499 full-time equivalent employees and a permanent establishment in Ontario

2. Provide a description of the expected outcomes that will be generated by the TDS for the Critical Industrial Technologies initiative and Ontario. Consider:
  - incremental benefits to the Ontario economy;
  - creation and capacity of high-value quality jobs and wages;
  - sales and tax revenues;
  - social and/or environmental benefits;



- contribution to knowledge and experience for the four key sectors/critical technology areas
- benefit to Ontario SMEs
- broader, measurable benefits to for the four key sectors/critical technology areas.

1. (Type Here)  
 2. (Type Here)

### 6. OUTREACH AND MARKETING

Outline the TDS outreach and marketing strategy for the initiative and how it will integrate with OCI's and potentially other TDS's strategies. Specifically explain how the TDS plans to support the attraction and engagement of Ontario SMEs to the TDS and the initiative's SME programming.

(Type Here)

### 7. RISK MITIGATION

Identify and describe potential risks that may affect activities, milestones and objectives, listed in Appendix A, ultimately impacting the success of the TDS, and provide clear strategies to mitigate these risks. Consider technical, market, regulatory, environmental, human capital, financial/funding, strategic and other operational risks.

Risk	Likelihood (Low, Medium, High)	Impact (Low, Medium, High)	Mitigation Strategy

### 8. PROPOSED BUDGET

Complete the budget table in Appendix B, with a high-level breakdown of the proposed TDS costs. Include matching contributions that demonstrate a minimum of 1:1.5 required industry matching. Provide any additional notes or clarifications on the budget in the box below.

(Type here)



**APPENDIX A – TDS Offerings for SMEs**  
Timeframe: Approval Date – September 30, 2026.

Platform, Capability, service, Activity	Overview	Timeline (start & end date)	Milestones & Outcomes	Key Performance Indicators (Input/Output)

**APPENDIX B – Detailed TDS Budget Table**

Budget Item	Source (organization name)	OCI Cash (K\$)			Matching Contribution (K\$)		
		FY24/25	FY25/26	FY26/27*	FY24/25	FY25/26	FY26/27*
<b>TOTAL</b>							

\* FY26/27 includes the period of April 1 2026 – September 30<sup>th</sup> 2026 only



**Instructions:**

- Identify the source (organization name) and type of funding (cash/other) for each item. Use one line per type for a given item.
- All TDS contributions must achieve a minimum 1:1.5 required industry match.
- All tangible contributions to the TDS must be listed.

The TDS will work with two streams of SMEs; those from Development and Commercialization (DC) and those from the Technology Access Program (TAP). The expected breakdown is as follows:

Program stream	FY 24/25 Approval date – March 2025 Target Number of SME Projects	FY 25/26 April 2025– March 2026 Target Number of SME Projects	FY 26/27 (April 2026– September 2026) Target Number of SME Projects
TAP	##	##	##
DC	##	##	##
Total	##	##	##

**\*Distribution of TAP and DC projects may change throughout the course of the agreement based on real-time demand from CIT.**

## TDS Eligible Expense Guideline

### ELIGIBLE AND INELIGIBLE EXPENSES

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Eligible Expenses are costs directly attributable to, and necessary for carrying out the Project. To be eligible, the cost must be incurred and paid on or after the effective date of the Agreement and up to and including the Project Expiry Date. All procurement activities must conform to [Broader Public Sector Accountability Act](#) (BPSAA).

Eligible Expenses are actual cash outlays that must be documented through invoices, receipts, or records acceptable to OCI and are subject to verification by an independent auditor. Evidence of payment must be maintained for audit purposes. Acting reasonably, OCI's decisions as to the expenditure eligibility and valuation are final and determinative.

Costs incurred outside Ontario are ineligible unless otherwise approved by OCI

All costs not explicitly defined as Eligible Project Costs are not Eligible Project Costs.

Overhead:

This is an ineligible project cost unless otherwise stated.

Capital Costs:

Capital items (fixed assets) include equipment, testing tools, and instruments that have residual values as determined by Generally Accepted Accounting Principles (GAAP) at the end of the funding period. The eligible expense items allowed by OCI are the cost of utilization/depreciation of capital item (fixed assets) specifically required for the delivery of the eligible Project. The prorated cost should be entered under "Operating Costs" along with the justification.

Other Costs:

Other costs considered necessary by OCI for successful implementation of the program and have been approved in writing prior to being incurred shall be eligible.

Notes:

GAAP is a collection of commonly-followed accounting rules and standards for financial reporting. The purpose of GAAP is to ensure that financial reporting is transparent and consistent from one organization to another.

Residual Value of an asset, the estimated amount that it shall be worth at the end of funding period.

Depreciation is the systematic reduction in the recorded cost of a fixed asset.

Travel outside of the province of Ontario requires a request for pre-approval from OCI which shall include justification

## TRAVEL AND LIVING:

Eligible Costs Include	Eligible Costs Do Not Include
<ul style="list-style-type: none"> <li>Hospitality, travel and business expenses incurred and reimbursed in accordance with the Broader Public Sector Expenses Directive and directly related to the Project <b>only with pre-approval from OCI</b></li> </ul>	<ul style="list-style-type: none"> <li>Meals and incidentals</li> <li>Reimbursement for airfare purchased with personal frequent flyer points programs</li> <li>Commuting costs between residence and place of employment</li> <li>Passport and immigration fees</li> </ul>

## SALARIES AND BENEFITS:

Eligible Costs Include	Eligible Costs Do Not Include
<ul style="list-style-type: none"> <li>Incremental salary and benefits for company employees working exclusively on eligible Project activities as detailed in Schedules C and Appendix 1, to a maximum specified in Schedule E of the funding agreement with OCI</li> </ul> <p><b>Additional Limits &amp; Conditions:</b></p> <ul style="list-style-type: none"> <li>Salaries and benefits must only be claimed in proportion to the amount of time spent working directly on eligible Project activities</li> <li>The company shall be required to maintain timesheets or appropriate records for all employees working directly on the Project</li> </ul>	<ul style="list-style-type: none"> <li>Costs related to proposal development (including staff)</li> </ul>

**OPERATING COSTS:**

Eligible Costs Include	Eligible Costs Do Not Include
<ul style="list-style-type: none"> <li>• Sub-contractor and consultant fees if approved by OCI management prior to the start of the Project and if procured in accordance with the <a href="#">BPSAA Procurement Directive</a></li> <li>• Project related computer hardware and software, including specialized hardware and software.</li> <li>• Cost of usage of equipment</li> <li>• Cost of direct materials necessary for specifically identified activities and measured as having being used for, the completion of the Project</li> <li>• Cost of upgrade of Project related equipment. No more than 25% of the Budget detailed in Schedule “E” shall be used for repairs and/or technology upgrades.</li> <li>• Sales and marketing cost attributed to the Project</li> <li>• Cost of regulatory compliance (up to maximum specified by OCI)</li> <li>• Cost of professional services (legal, accounting, audit and insurance)</li> <li>• Cost related to the use of the TDS including utilities</li> <li>• Other costs that, in the opinion of OCI, are considered to be necessary for the successful implementation of the Project and have been approved in writing prior to being incurred</li> </ul>	<ul style="list-style-type: none"> <li>• Costs not directly associated with meeting the deliverables and milestones as specified in the funding agreement with OCI</li> <li>• Expenses of a personal nature</li> <li>• Ongoing cost of production</li> <li>• Interest cost on capital leases</li> <li>• General working capital requirement</li> <li>• Costs related to staff awards and recognition</li> <li>• Bonuses, dividends and cash incentives</li> <li>• Cost of merger and acquisition</li> <li>• Monthly parking fees</li> <li>• Entertainment expenses, gifts and alcoholic beverages</li> <li>• Expenses associated with lobbying or government relations activities</li> <li>• Tax expenses (including but not limited to sales taxes, tax filing, income taxes)</li> <li>• Allowance for interest on invested capital, bonds, debentures, bank or other loans together with related bond discounts and finance charges</li> </ul>





	<ul style="list-style-type: none"><li>• Infrastructure costs</li><li>• Tangible capital costs such as, but not limited to, land, buildings,</li><li>• Overhead</li></ul>
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