# Canadian SME Cybersecurity Initiatives & Programs

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# CANADIAN CENTRE FOR CYBER SECURITY

**Cybersecurity Partnerships Initiatives for Small and Medium Enterprises**

Communications
Security Establishment

Centre de la sécurité
des télécommunications

Canada

# SME Recent Trends

⊙ Improving SMEs cyber security posture is crucial for Canada because:

- SMEs make up the majority of the Canadian economy

- 98% of Canadian businesses are SMEs
  - As of December 2019, there were more than 1.2 million SMEs in Canada (Key Small Business Statistics, 2020)

- SMEs employ approximately half of Canadian workforce

- Cyber threat actors are increasingly targeting SMEs and are becoming more sophisticated (78% of Canadian businesses who were the victim of a cyber attack

According to Verizon's 2019 Data Breach Investigation Report, 43 percent of all data breaches target SMEs.

3 out of 4 businesses believe they don't have enough personnel to address their IT security.

54% of SMEs believe their companies are "too small" to be hacked.

# Proposed Logic Model: the National Cyber Security Strategy

## CRITICAL ENABLERS

Interdepartmental Steering Mechanism:
- Horizontal awareness
- Message alignment
- Engagement optimization
- Policy proposals

SME Community of Trust
- Connecting SMEs to GC services / programs
- Requirements & needs analysis
- SME consultations

## INTERMEDIATE GOVERNMENT

SMEs are more aware of cybersecurity risks and solutions and are more able to put cybersecurity measures in place **(EDUCATE)**

SMEs can implement best practices at a lower cost through available GC-created or supported tools **(EQUIP)**

SMEs benefit from a more secure ecosystem through GC-created or supported services **(SECURE)**

SMEs benefit from a more secure ecosystem through more tailored and expansive TSP services **(INFLUENCE)**

## NATIONAL OUTCOMES

Non-Federal Institutions are better secured

Cybercrime is reduced

State-sponsored activity is deterred

Leading edge consumer protection and workforce

Clear cyber focal point for GC

## GOALS

Secure and Resilient Canadian Systems

Innovative and Adaptive Cyber Ecosystem

Effective Leadership, Governance, Collaboration

## PURPOSE

Security and Prosperity in the Digital Age

# Small & Medium Businesses: Engagement Roadmap

| PHASE 1 | PHASE 2 | PHASE 3 | PHASE 4 |
|---|---|---|---|
| Research | Engage key stakeholders | Establish Community of Interest/Pilot | Ongoing Support |
| Research the Canadian SME landscape. | Identify initial key stakeholder community and begin/continue outreach | Collaborative efforts begin | Coordination of Onboarding and regular engagement |

Main activities for 2021-22:
- Educational focus:
  - Harmonized and aligned GC messaging
  - Dedicated platform
- Securing sales and payment platforms used by small businesses

## Cyber Security Certification Program

- Supports Canada's National Cyber Security Strategy

- Targets *small and medium sized enterprises (SME) and similar sized organizations*

- Based on **13 security control areas** developed by the *Canadian Centre for Cyber Security*

- **National Cyber Security Standard** for SMOs is being developed (Summer 2021)

- **Voluntary** Participation

# SECURITY CONTROLS

What SMOs must do to protect themselves from cyber threats.

**CYBERSECURE CANADA**

Develop an Incident Response Plan

Securely Configure Devices

Backup & Encrypt Data

Enable Security Software

Secure Portable Media

Use Strong User Authentication

Secure Websites

Secure Mobility

Secure Cloud and Outsourced IT Services

Implement Access Control & Authorization

Provide Employee Awareness Training

Establish Basic Perimeter Defences

Automatically Patch Operating Systems

# ACCREDITED CERTIFICATION BODIES

- **CyberSecure Canada** Accredited Certification Bodies include:

  - Bulletproof Solutions
  - WatSec
  - Cyber Security Canada
  - SourcetekIT

- Certification cost is set by the Certification Bodies (CBs) and each have different business models that impact their respective price point

- Cost also varies depending on the *complexity* of the SMO and the auditing required

# Program Status (Jan 2021)
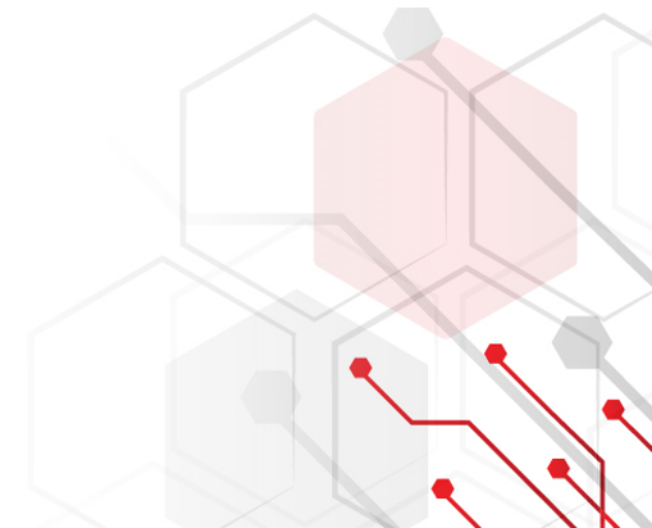
**CYBERSECURE CANADA**

- Pilot Phase until Summer/Fall 2021
  - Canadian National Standard dependency
- Ongoing Outreach and Engagement
  - Industry Associations
  - Academia reps
  - Businesses
  - International Govts(UK, Belgium(EU), US)
  - Insurance providers
  - Managed Service Providers
- Number of completed certifications – 4*
- Two pilot programs underway support ~175 SMEs in certification
- Digital advertising campaign launching shortly
- Intending to engage further with UK Cyber Essentials and US CMMC to further discussions on recognition and/or reciprocity

* Limited awareness and COVID-19 challenges

Key Challenges
- Awareness
- Perceived Value
- Creating a "Pull"

Government of Canada / Gouvernement du Canada

Canada

# CYBERSECURE CANADA

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