



Serving
GOVERNMENT,
serving
CANADIANS.

Au service du
GOUVERNEMENT,
au service des
CANADIENS.

The Canadian Safety and Security Program (CSSP). How this Innovative R&D Procurement Process Works, and how it Brings Industry and Government Together to Support Canadian Public Safety and Security Needs.

Defence Sciences Division – SV
Research and Development Procurement Directorate
June 2023

Canadian Safety and Security Program (CSSP)



Key Feature of CSSP:
Projects are driven by timely **Lead Government Department S&T needs** (based on mandate or operational authority).

- Funding mechanism that Supports Canadian Public Safety and Security “Challenges” by taking a collaborative approach (government and industry)
- Defence Research and Development Canada (DRDC) Center for Security Sciences (CSS)
- 3 Different funding mechanisms
 - Competitive CFP process – PSPC managed
 - Targeted Investments – PSPC supported
 - Technology Acquisition – CSS managed



Centre for Security Science (CSS)



HISTORY: In 2006, CSS was established as the coordinating body for federal public safety and security science and technology (S&T) by a MoU between the Department of National Defence (DND) and Public Safety Canada (PSC). CSS is also implemented through an interdepartmental MoU with 21 participating departments and agencies, signed in 2008.

VISION: A safe and secure Canada through S&T leadership.

MISSION: Strengthen Canada's ability to anticipate, prevent, mitigate, prepare for, respond to, and recover from acts of terrorism, crime, natural disasters, and serious accidents through the convergence of S&T with policy, operations, and intelligence.



Whole of Government Approach

CSS enhances the ability of government departments and agencies to address public safety and security requirements through three key steps:

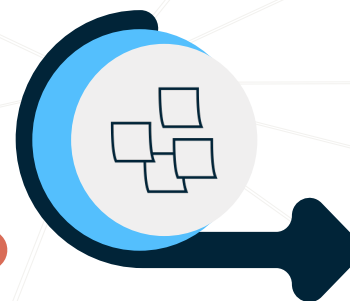
1. Identifying safety and security science and technology (S&T) needs and priorities of government partners,
2. Sourcing S&T solutions, including funding, to address those needs, and
3. Delivering those S&T solutions to government partners.



**Identify
Needs**



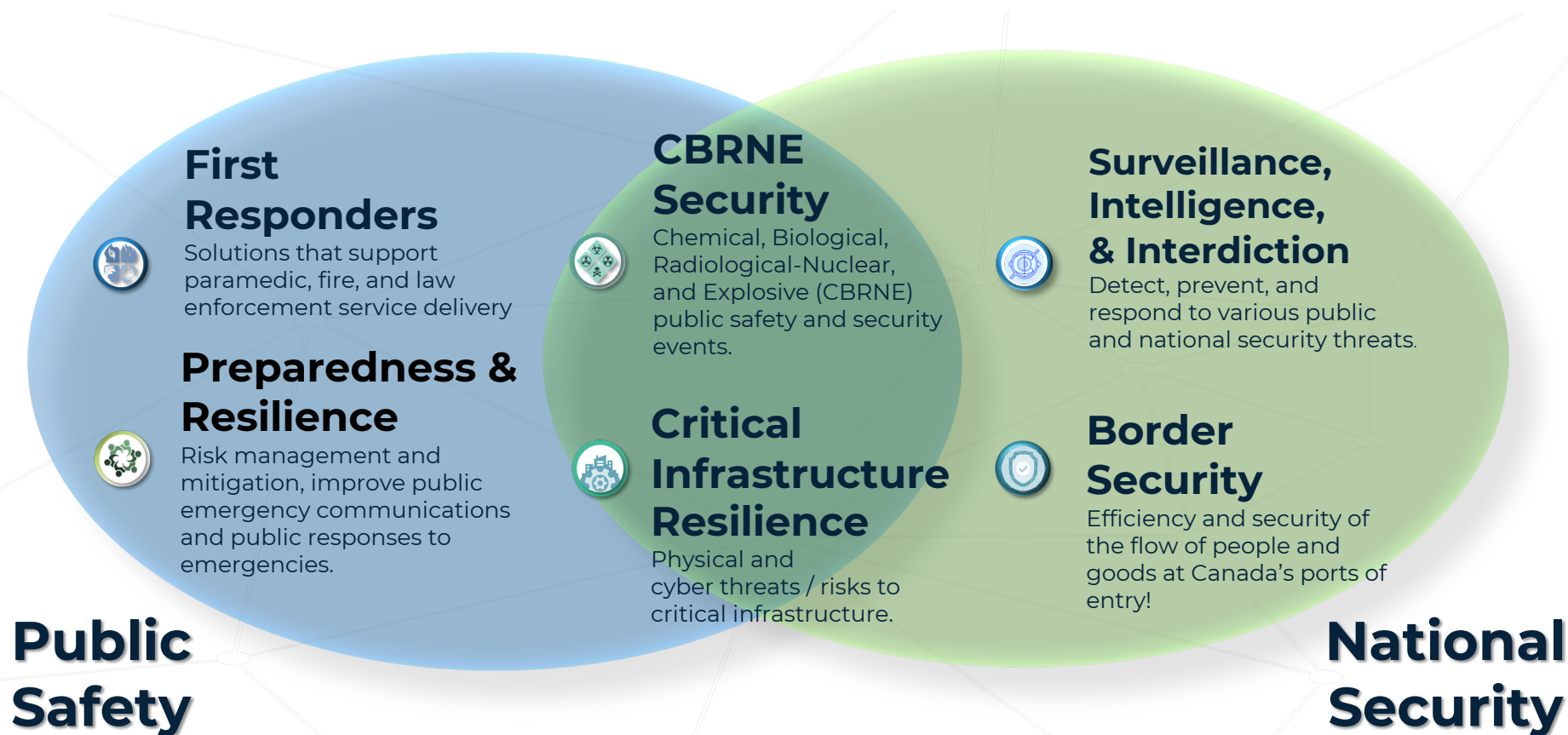
**Source
Solutions**



**Deliver
Solutions**



The Challenges Come From Priority Areas

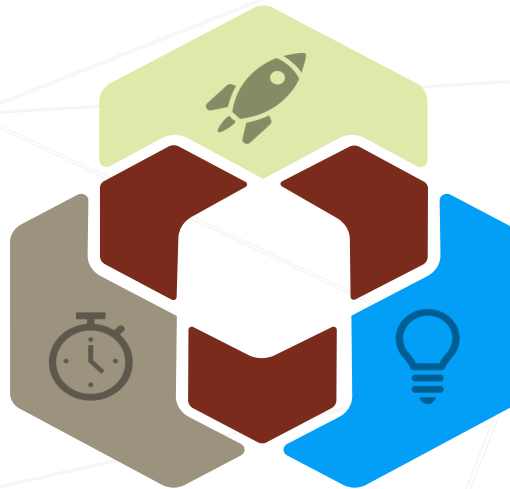


Project Team Structure

Collaboration in Support of Safety and Security

CENTRE FOR SECURITY SCIENCE (CSS)

- Identifies gaps and challenges requiring S&T solutions
- Manages CSSP funding



LEAD GOVERNMENT DEPARTMENT (LGD)

- Have the S&T safety and security requirement
- federal, provincial, territorial, or municipal
- Manage the project (Technical Authority / Service Provider)

INDUSTRY / ACADEMIC PARTNER(S)

- Partners with an LGD
- Owner / developer of the S&T Solution
- Contractor



4 Project Types

1 Research & Development

- NEW
- SRL 1-9
- IP

2 Technology Demonstrations Projects

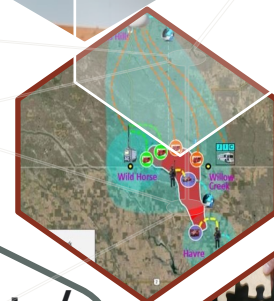
- Final stages
- SRL 7-9
- IP

3 Studies and Analysis Projects

- Gather information
- IP?
- Reports

4 Technology Pilots / Feasibility Studies Projects

- Test and demonstrate
- No IP
- Reports

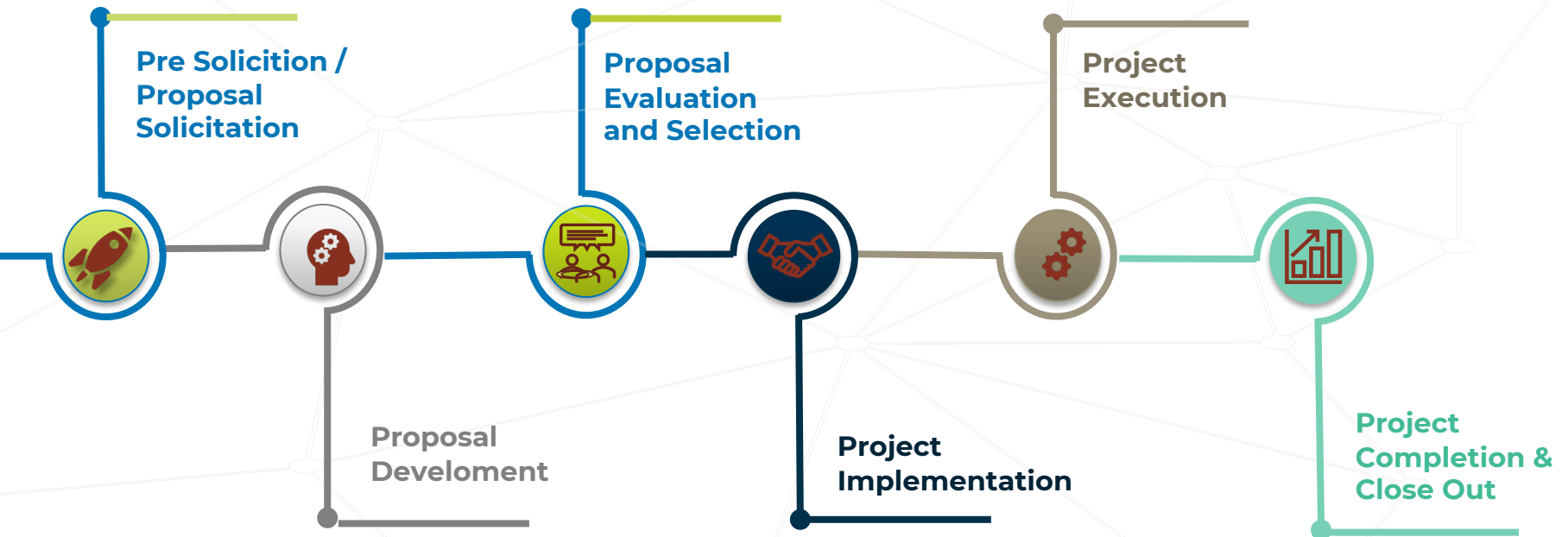


****Typically, 3 years or less and between \$250k-\$3m****



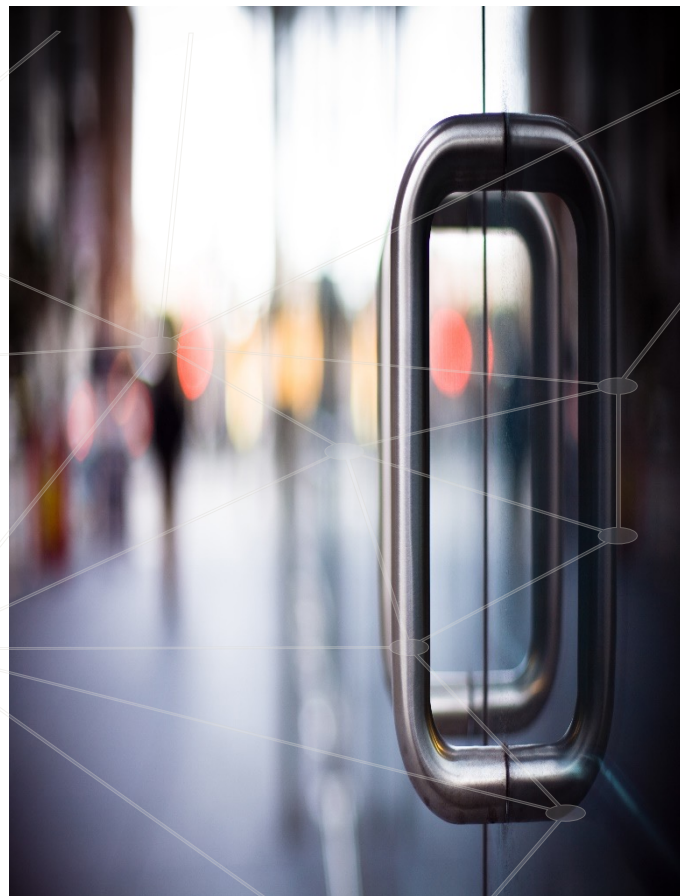
The Program Cycle

CSSP CFP Project Stages

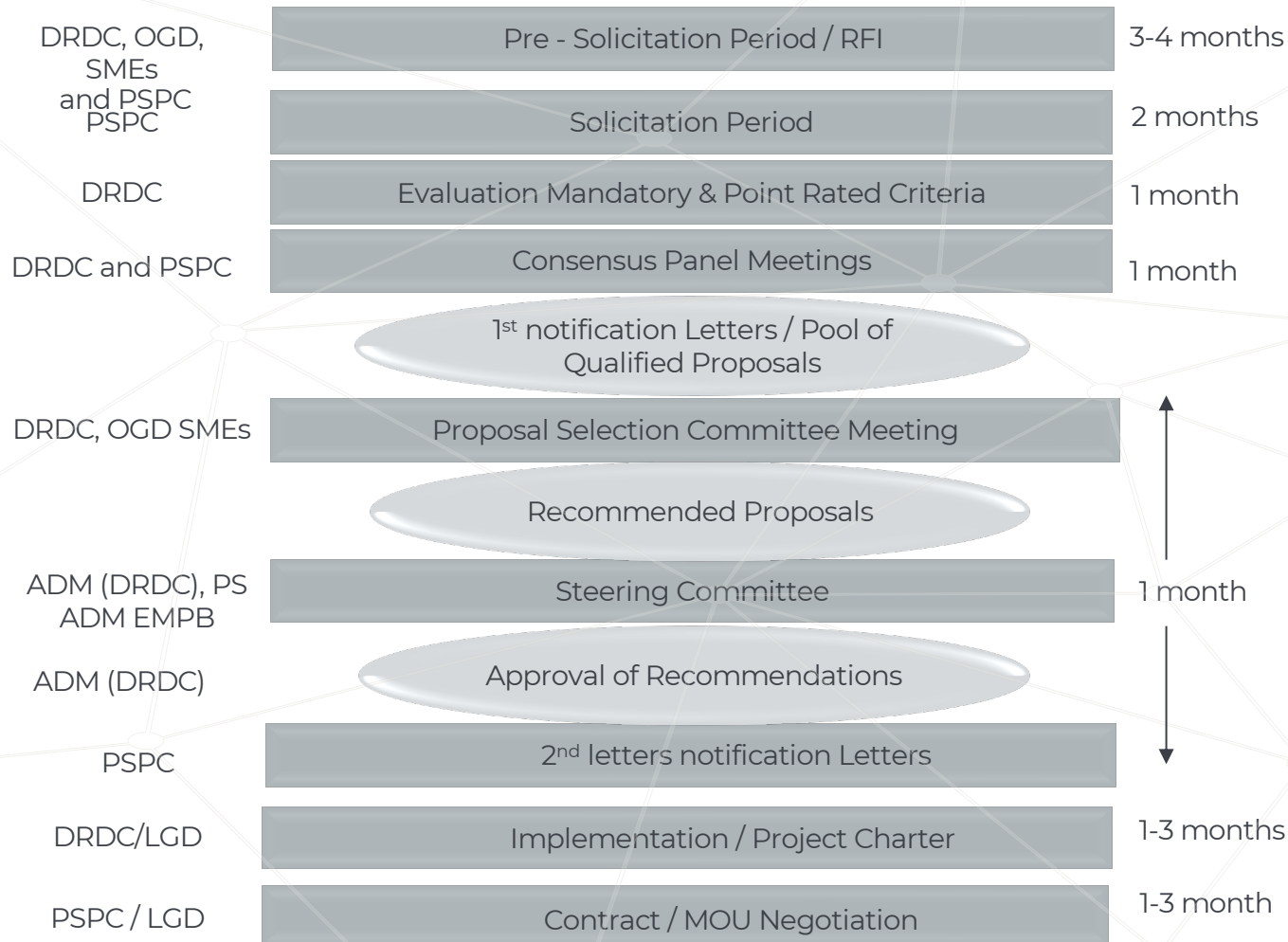


Baseline Eligibility Requirements

- Open to all - Public and Private Sector
- Bid Team
 - Federal, Provincial, or Municipal, Canadian Lead Government Department (LGD); and,
 - A different public or private sector partner organization.
- Challenge Alignment
- LGD Mandate
- 50% Canadian Content
- LGD Obligations



CFP Stages and Schedule



Pre-Solicitation

- By Far, the most important part of the process.
- Lessons from the past
- Challenge Development
- Draft and Review
- Industry Engagement
 - Alignment meeting
 - Ask questions
- Best time to influence and improve the CFP

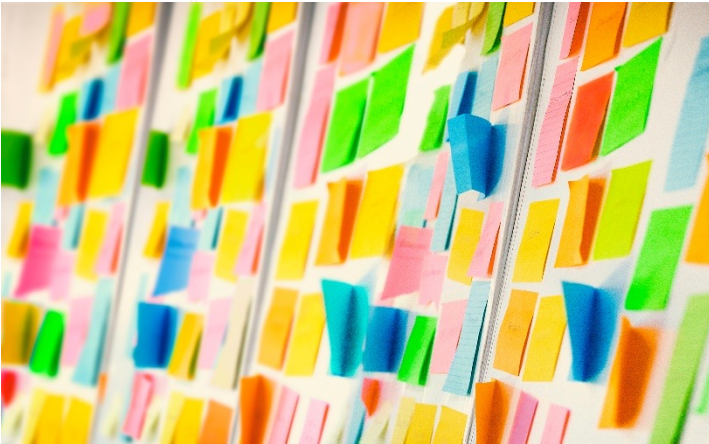


Solicitation

- R&D Procurement
- 40 days minimal
- Canadian Free Trade Agreement
- Questions and Answers
- SAP Ariba / [Canadabuys.gc.ca](https://canadabuys.gc.ca)



2 Stage Evaluation



- 2 technical and 1 lead evaluator
- Mandatory and Point Rated
- Consensus
- List of Qualified Bids
- 1st notification letters



Evaluation Criteria

- **A. Mandatory Criteria (MC):**

- MC1 - Synopsis and Alignment with Primary S&T Challenge
- MC2 - Partnerships
- MC3 - Government Department Mandate
- MC4 - Financial Proposal

- **B. Point Rated Criteria (PRC):**

Consensus Score	
Point Rated Criteria	Score
PRC-1 Feasibility and Approach of Proposed Solution	/15
PRC-2 Applicability in Canada	/4
PRC-3 Scientific and/or Technical Merit of the Proposal	/15
PRC-4 Novel and Innovative Solution	/15
PRC-5 Impact of Proposed Solution	/15
PRC-6 Gender-Based Analysis Plus (GBA+) Factors	/10
PRC-7 Work Plan – Milestone Breakdown	/12
PRC-8 Work Plan – Risks and Mitigation	/10
PRC-9 Project Management (PM) Plan Project Team	/12
PRC-10 Transition/Exploitation Plan	/10
Subtotal: (minimum pass score required = 77)	/118



Stage 2 – Proposal Selection Committee

- Collaborative with the Government Strategic Partners
 - LGD
 - SME's
 - Partners
- Strategic Consideration
- Open Discussion
- Review Qualified list and Provide a Recommendation



CSSP Distribution of Investment

Strategic Parameters for CFP 2022

- i. Program priorities;
- ii. Distribution of proposals across priorities;
- iii. Distribution of proposals across priorities and S&T Challenges;
- iv. Previous years' investments;
- v. Strength of individual Proposals;
- vi. **Changes to Government of Canada priorities;**
- vii. **Similar S&T initiatives being funded by DRDC's partners;**
- viii. Distribution across project types;
- ix. **Level of LGD involvement and support;**
- x. **Level of co-investment, particularly cash co-investment, as an indicator of shared risk; and**
- xi. Strength of overall alignment to the identified challenge.



*****Each project will indicate which 2 parameters were determined as justification*****



Final Approval – Notification letters

- Steering Committee – PS ADM (EMBP)
- Sign off - ADM (DRDC)
- 2nd Notification Letter
 - Recommend for funding
 - Recommend for funding if more funding becomes available
 - Recommend for funding if more funding becomes available and changes to strategic considerations



Contract / MOU

- Starts ASAP after notifications
- Project implementation meeting(s)
- Project Charter
- SOW
- Security? - SRCL
- Cost break-down
- Price Justification
- Signatures



Project Execution and Reporting

- Typical
- FY Projects Reports – DRDC
- Changes to Project Charter
- Contract / MOU Amendments



CSSP Results

CSSP-2020-TI-2494

- Airport Drone Mitigation, Integration, and Response Experiments (**ADMIRE**)
- Live experiments and protocol development
- Demonstrations, reports, protocol documents.
- New Canadian and NATO protocols



CSSP Results

CSSP-2018-CP-2341

- Enhancing Canada's Biothreat Operator Preparedness and Response Capability
- Reports, detection methods and diagnostic tools, Virtual research symposia, support.
- Coordination within Canada and global partners. Increased multi-lateral information exchange high consequence laboratories.
- **This Network led the way on early information exchange between 5 countries at the beginning of the COVID-19 pandemic.**



CSSP Results

CSSP-2017-CP-2309

- Exploitation of Data Analytics for Improved Targeting of Sea Containers
- Machine Learning algorithm to detect radiological/nuclear threat materials at ports
- Reports
- 90% false alarm reduction. Collaboration with Canadian industry and counterparts in US (Dept Homeland Security).



CSSP Results

CSSP-2019-CP-2455

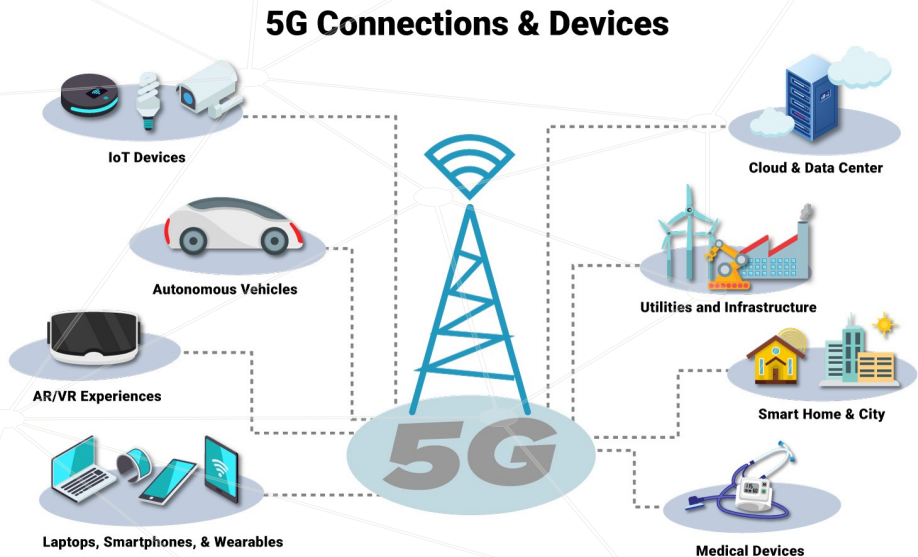
- Common access control solution Government of Canada
- Biometric recognition-enabled system at GCcoworking sites
- Requirements report
- Potential to transform the physical and logical access control systems



CSSP Results

CSSP-2020-TI-2482

- Emerging and Future Wireless Communications for Safety, Security and Defence
- 5G, WiFi IoT technologies, establishes AWIN R&D Project
- Reports
- Address gaps in commercial wireless technologies use in public safety and defence



Useful Information/links

- **CSSP Website:**
<https://science.gc.ca/site/science/en/canadian-safety-and-security-program>
- **Hyperlink Canadabuy.Canada.gc.ca past solicitation:** [DRDC Canadian Safety and Security Program \(CSSP\) Call For Proposal \(CFP\) W7714-238424 - Tender Notice | CanadaBuys](#)



Contact Information

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