



CITIG



CATA*Alliance*

Canadian Community Safety Information Management Strategy

November 27th, 2016 (Final Draft)



**Centre for Security Science
Centre des sciences pour la sécurité**

Record of Amendments

| Version | Date | Pages | Amended By | Changes |
|-------------|------------------------------|-------|---------------------|--|
| Original | Jan 12/2015 | | | |
| Ver2 | Jan 31/2015 | All | C. Davis | Based on CCSIMS Working Group feedback |
| Ver 3 | Feb 13/2015 | All | C. Davis | Based on CCSIMS Working Group feedback |
| Ver 4 | Feb 25/2015 | 1-4 | L. Valcour/C. Davis | Updated Background Section |
| Ver 5 | June 25 th , 2015 | iv | L. Valcour | Updated Executive Summary |
| Ver 6 | Oct 9 th , 2015 | All | S. Hunter/C. Davis | Correction regarding LEIP and updates from CCSIMS Workshop #2. Create a standalone Action Plan and supporting documents. |
| Ver 7 | Mar 31 st , 2016 | All | C. Davis | Updates from February 2016 ICT Committee |
| Final Draft | Nov 27 th , 2016 | All | C. Davis | Updates from August and November 2016 ICT Committee |

Table of Contents

| | |
|--|---|
| 1. Background..... | 1 |
| 2. Purpose | 4 |
| 3. Scope/Strategic Context | 4 |
| 4. Strategic Objectives | 6 |
| 5. Case for Change..... | 7 |
| 6. Guiding Principles | 7 |
| 7. Key References | 8 |
| 8. Implementation..... | 8 |
| 9. Review and Capability Improvement Process | 9 |

Executive Summary

The Canadian Community Safety Information Management Strategy (CCSIMS) is a strategic document that sets goals and identifies key national priorities to enhance governance, planning, technology, training and exercises to promote information management in Canada. The CCSIMS, through its Action Plans, provides a series of action items, including milestones, to help emergency responders and relevant government officials make measurable improvements in day-to-day operations, as well as emergency communications, on an annual basis.

The CCSIM Strategy aligns with the Communications Interoperability Strategy for Canada and will be enabled by the following key elements:

- Effective Governance;
- A Responsible Sharing Culture;
- Supporting and Balanced Legislation;
- Established and Implemented National Data Standards and Supporting standards-based approaches, Procedures and Processes; and
- Technology Enablers for Responsible Information Management for Community Safety.

The CCSIMS therefore, promotes the vision for a comprehensive and integrated information sharing capability as part of a broader communications interoperability strategy for Canada and coordinated with United States (U.S.) partners as required. The overarching intention of this document is to assist key community safety stakeholders to work in a coordinated manner while respecting federal, provincial and territorial laws, regulations, and existing plans. The extent of participation by any jurisdiction is encouraged, but remains voluntary.

VISION

**Responsible Information Management for
Community Safety**

Canadian Community Safety Information Management Strategy

1. Background

Canada has a very long and proud history of law enforcement information sharing. In 1972, the Canadian Police Information Centre, or CPIC, began operating nationally. Managed on behalf of all Canadian law enforcement agencies by the Royal Canadian Mounted Police, at the time this system was state of the art. Allowing police officers from coast to coast access to a wide range of mission critical data in seconds, CPIC has been the lifeblood of operational policing in Canada for over 40 years.

In the years that followed a wide range of specialized computer systems, almost all proprietary and siloed in nature, emerged. As a result, the information management landscape in Canada became more complex and often less interoperable.

The CACP Informatics Committee (now ICT Committee) hosted its first ever national conference in 1998 in Cornwall. The focus of this event was police information sharing, interoperability and interconnectivity.

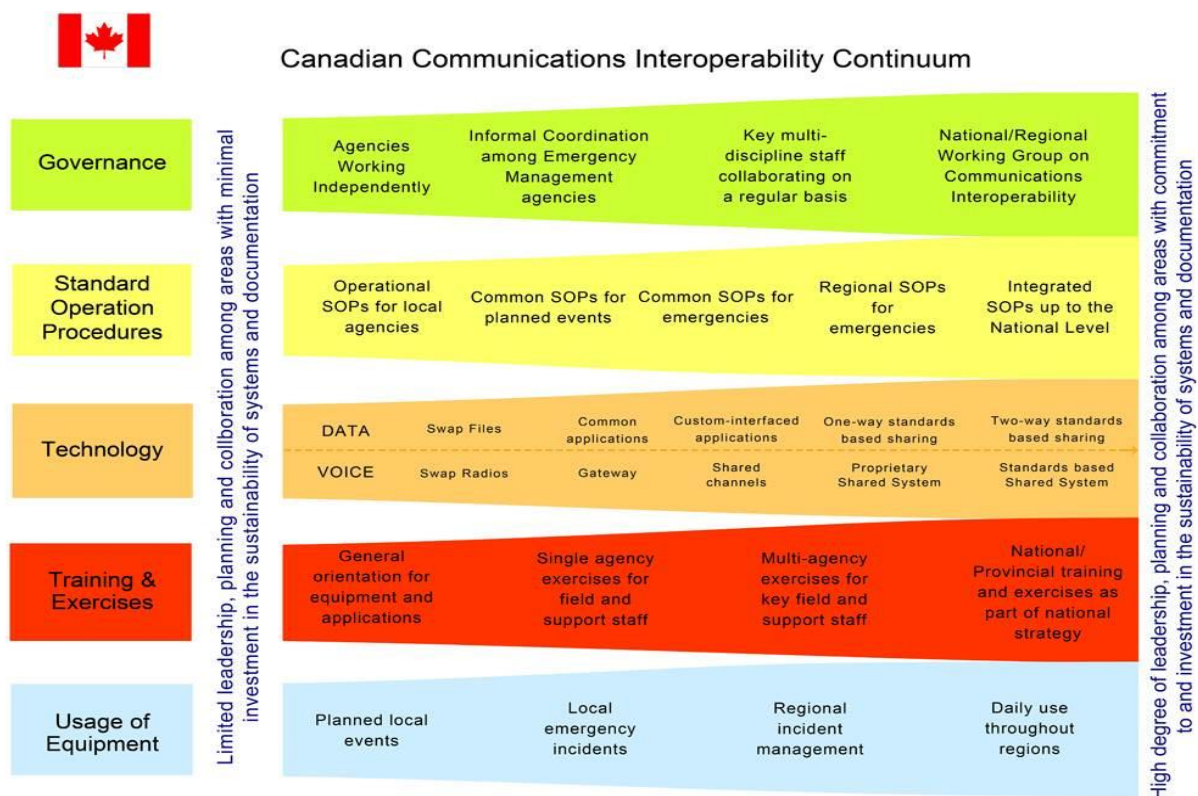
Police leaders from London, Ottawa, Toronto, Windsor and Vancouver, commenced working on an information sharing initiative known as the Law Enforcement Information Portal system, or LEIP. This tool initially allowed Ottawa, London, Windsor and Vancouver police to instantly share a wide range of data including occurrence reports and street checks.

The system, now known as the Police Information Portal, or PIP, is an integral component of law enforcement information management in Canada and is managed by the RCMP's National Police Services. While it served as a critical step in the evolution of information sharing, it too is limited in scope and is in the process of being reviewed with a view to enhancing its capabilities.

In 2007, the Canadian Association of Chiefs of Police (CACP), Canadian Association of Fire Chiefs (CAFC), and Emergency Medical Services Chiefs of Canada (EMSCC) joined forces with the Canadian Police Research Centre (CPRC) to create the Canadian Interoperability Technology Interest Group (CITIG). This initiative brought together representatives from public safety, industry, academia, government, and non-governmental organizations to work collectively on the future of Canadian public safety interoperability.

This initiative also led to the development of the Communications Interoperability Strategy for Canada (CISC), which set out a strategy to improve local and regional capacity to interoperate using the Interoperability Continuum as a means of pointing the way forward, suggested action items, and criteria for measuring success along the way. Emergency communications is defined as the ability of emergency responders to exchange information via data, voice, and video as authorized, to complete their missions.

The Canadian version of the Interoperability Continuum is depicted below.



At its second annual national interoperability conference in December 2008, CITIG partnered with the Canadian Associations of Chiefs of Police, Fire and Paramedics and the Senior Officials Responsible for Emergency Management (SOREM is a Federal Provincial and Territorial partnership with Public Safety Canada (PS) acting as the secretariat).

A number of key “Action Plans” were developed on a wide range of interoperability issues that needed to be improved. One of the issues identified was that of a lack of data standards available to enhance information sharing. For example, a 2007 report on cross-border data exchange concluded that Canadian and U.S. law enforcement agencies would benefit from the adoption of a common standard of information exchange. As a result, an action plan titled “Support the adoption of data exchange standards/ models” was developed and approved.

PS has worked with federal, provincial, territorial and municipal agencies to improve data interoperability as these agencies acknowledge that the lack of common standards for the exchange and use of data is a serious impediment to effective interoperability.

In 2009, the CACP Informatics Committee established a sub-Committee to deal specifically with information exchange and data standards. Subsequently, PS, in partnership with CACP, developed a draft *National Data Quality Standards Strategy* (NDQS). As part of its role in that Strategy, PS and the Centre for Security Science (CSS) jointly sponsored a study to establish a standards-based approach to exchanging information" for police agencies. The report, issued in August 2010, recommended the adoption of the National Information Exchange Model (NIEM).

Since this time, the CACP has created an operational committee "Law Enforcement Information Data Standards" (LEIDS) to drive data exchange interoperability based upon NIEM. This committee is responsible to establish standard data exchanges for law enforcement and partners across Canada.

In 2011, the Canadian Interoperability Technology Interest Group, or CITIG (www.citig.ca), submitted a proposal to the ICT Committee. This proposal recommended, as a first step in a multi-year, multi-phase approach, the commencement of a "National Law Enforcement Information Management Strategy Study."

The study was designed to provide a detailed analysis of the current major investigative and operational databases in the policing community across Canada at the local, regional, provincial and federal levels. It was based on a series of in person interviews and a structured questionnaire to be developed by CACP ICT professionals, led by the CACP Informatics Committee.

The study was completed by IDC Canada and funded by the Canadian government's Centre for Security Science. It clearly outlines the lack of interoperability between information management systems, sometimes because the "systems" are actually paper based.

The study provides, in a quantitative, qualitative and evidence-based fashion, an outstanding analysis of exactly what operational systems are in place and any interoperability between them. It also outlines why the systems are not interoperable bases on criteria such as policy, privacy, technology, etc..

The next phase of the development of a national strategy was for the CACP ICT Committee to host, as part of the series of events going back to Cornwall in 1998, a National ICT Workshop in February 2014 in Vancouver. The number one recommendation flowing from the workshop, accepted unanimously by delegates, was:

That the Board of the CACP be asked to assign the ICT Committee to develop a National Law Enforcement Information Management (NLEIM) Strategic Plan for consideration and possible adoption by the CACP.

This recommendation was subsequently approved by the CACP Board of Directors and has led to ongoing efforts associated with the development and implementation of this

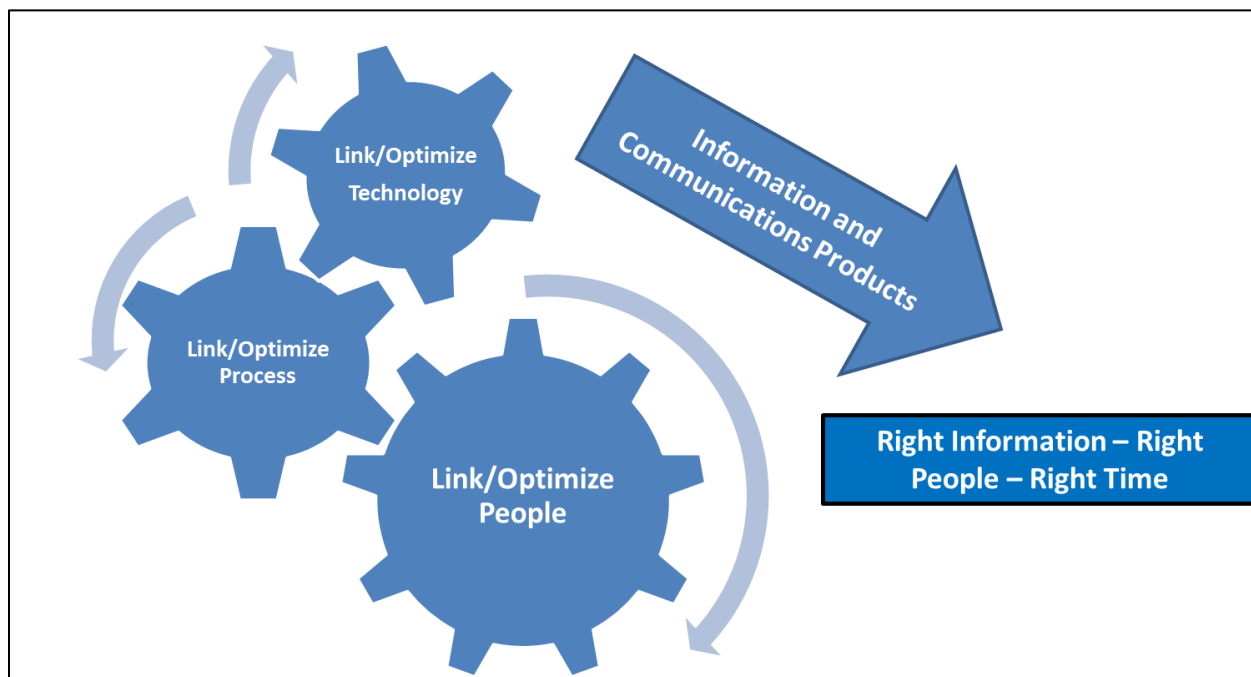
ever greening strategy now known as the Canadian Community Safety Information Management Strategy.

2. Purpose

The purpose of the CCSIMS is to establish the framework required to achieve the CCSIM Vision: **“Responsible Information Management for Community Safety”**.

3. Scope/Strategic Context

Police and other community safety services across Canada are constantly attempting to improve their effectiveness and efficiency. This means looking at what they need to do differently and what they need to do better. This is about turning challenges into opportunities while the sustainability of the cost of policing is being debated and crime continues to evolve. In the evolution of policing and community safety strategies, information management is a key component. An enhanced Canadian Community Safety Information Management Strategy will allow all key community safety partners and services to work smarter and safer.



In simple terms the CCSIM Strategy is designed to leverage people, processes and technology to get the right information to the right people at the right time in support of a broad community safety information sharing environment.

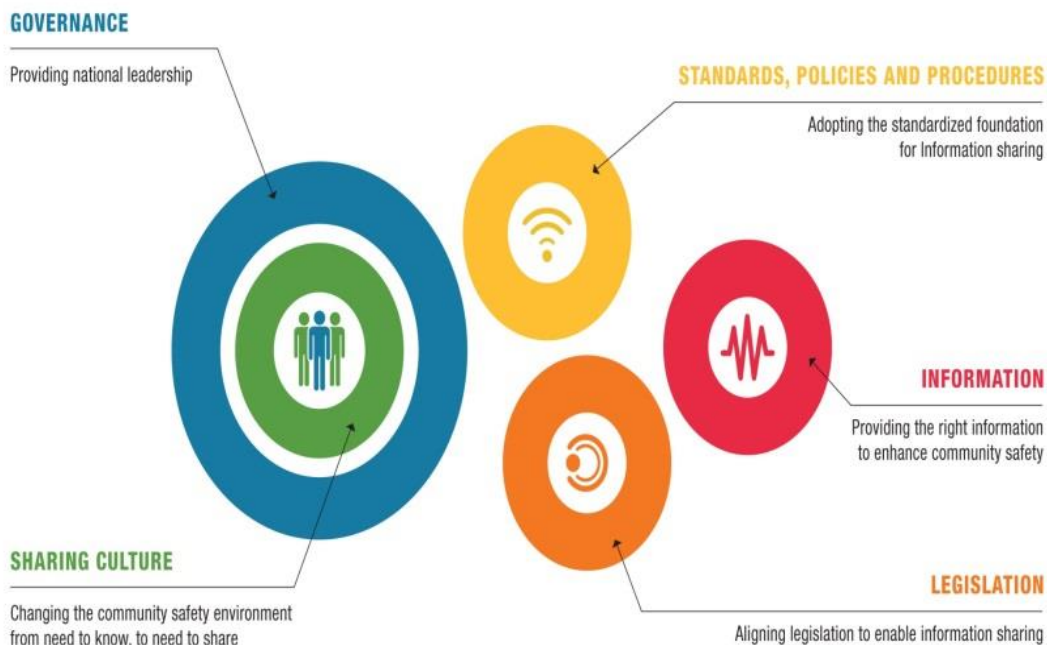
Demands on already finite resources are significantly impacted by: requests for a police response to non-criminal issues; cutbacks and changes in government and social services and programs; requirements of legislation, case law and the judiciary; borderless criminal activities; along with emergent events requiring law enforcement intervention or support. If police services do not manage their information effectively at a national level, individual organizational resources and information are limited.

All modern policing organizations collect a vast amount of data at an increasing velocity. This presents both a challenge to manage, but an opportunity to transform this data into a valuable asset. Compound this ability to share information between services, and the opportunities are exponential. Benefiting from information requires creating governance, processes, enabling legislation while creating a working environment with the willingness to understand the importance of information management and sharing for a public safety advantage.

By connecting the dots, as illustrated in the graphic, the CCSIMS will lead to the development of the required components to support greater collaboration between services which contribute to community safety. Together the components will allow for greater information management and sharing which in turn will enhance police service delivery in Canada. The result will be greater localized public safety knowledge and broader community partnerships.

Canadian Community Safety Information Management Strategy

Responsible Information Management for Community Safety



Information Management is the means through which the organization ensures that the value of its information resources is identified so that these resources may be utilized to their fullest potential. The primary objective of IM is to ensure that the right information is available to the right person, in the right format at the right time. IM is the way in which an organization plans, identifies, captures, manages, preserves and disposes of its information across all formats, (physical and digital), and includes the management of all functions associated with information, such as security, metadata management, quality management.

Managing and maximizing our information and the resulting actionable intelligence can assist in advancing prioritization and the deployment of resources. By working more efficiently we will be able to redirect resources to address new and emerging threats to community safety. Together, these five areas which support information management will propel police services, working alongside their partners, into the next era of community safety.

4. Strategic Objectives

The CCSIMS will be guided by the following strategic objectives:

- **Governance.** CCSIMS governance will be representative and reflect a national approach with appropriate Federal, Provincial, Territorial and Municipal membership within a formal national governance model. The CCSIMS governance model will enjoy a high degree of leadership and buy-in. Establishing and maintaining a sustainable funding model for CCSIM Strategy related efforts is also central to the success of the CCSIM Strategy.
- **Sharing Culture.** Community Safety stakeholders and partners will work collaboratively and practices will reflect Responsible Information Management for Community Safety. The sharing culture will be evident in practice and balance the need to share with due regard for operational and legislative constraints.
- **Legislation.** Privacy and related Community Safety related legislation (development, implementation, application and interpretation) supports secure and responsible Information Management for Community Safety.
- **Standards, Policies and Processes.** Data and information related open standards and supporting policies, standards-based approaches (e.g. NIEM) and processes contribute to collecting, receiving, sharing, using and archiving data. Training and exercises reinforce established standards, policies and processes.
- **Information and Enabling Technologies.** All source information (text, audio, video, GIS, etc.) and the supporting technology enablers (software, applications, systems, networks) are guided by a formal Technology Roadmap that aligns future investments to include those for the Public Safety Broadband Network and NG911.

5. Case for Change

Police and Law Enforcement, Emergency Services, and other Community Safety partners face an increasingly complex and ever-changing information management environment compounded by increased information requirements and sources to manage as well as increasingly stringent demands from the Justice system (R vs Jordan). Notwithstanding lessons learned from past investigations and reports, the development and implementation of the CCSIM Strategy is driven by a critical operational requirement to develop the tools and processes to facilitate information sharing to fight crime more effectively, to support the justice system and to meet the demands and expectations of the public we collectively serve.

Notwithstanding current capabilities and ongoing initiatives, available information is frequently not being accessed, shared and optimized as the enabling framework (Governance, legislation, and enabling technologies) is not in place to get the right information to the right people (law enforcement and community safety partners) at the right time leading to:

- Delays in response
- Inaccurate information being shared
- Incomplete information being shared
- Delays in the sharing information
- Missed opportunities for optimized community safety and well-being outcomes
- An erosion in public confidence and trust

The current situation presents unnecessary and avoidable risks to both public and responder safety. This is an operational requirement and the status quo is not a viable option as the current approach to Community Safety Information Management is not sustainable and is further complicated by a lack of aligned open standards, funding challenges and staff demands. Implementation of the CCSIM Strategy will ultimately lead to operational, economic, and technical efficiencies that will contribute directly to enhanced community safety.

6. Guiding Principles

The development and Implementation of the CCSIMS and associated action plans will be reflected by the following guiding principles:

- The strategy and Action Plans will be national in Scope (FPT Supported and engagement with Municipalities).

- Aligns with the Communications Interoperability Strategy for Canada and the Canadian Interoperability Continuum.
- The strategy and action plans will be needs and operationally driven.
- Citizen/Community Safety Centric
- Resonates with operational leaders, stakeholders and community members
- Reflects and Respects Legislation, Jurisdictions, Privacy, Security, etc.
- Information is inputted once and optimized for authorized use
- Standards Based
- Creates end to end efficiencies to include a single data entry model
- Reflects national and international best practices
- Reuse existing investments and governance bodies where possible (e.g. LEIDS)
- Optimizing current investments and activities (fiscal responsibility)
- Futureproof new investment activities
- Sustainable and scalable

7. Key References

- Communications Interoperability Strategy for Canada/
<https://www.publicsafety.gc.ca/cnt/rsracs/pblctns/ntrprblt-strtg/index-eng.aspx>
- Communications Interoperability Action Plan/
<https://www.publicsafety.gc.ca/cnt/rsracs/pblctns/ntrprblt-ctn-pln/index-eng.aspx>
- National Data Quality Standards Strategy (NDQS).
- Law Enforcement Information Data Standards (LEIDS)
- Campbell Report
- Pickering Report

8. Implementation

The CCSIMS is designed to provide a framework for the use by all jurisdictions within Canada at any level and all key stakeholders to assist in identifying and strengthening information management and sharing capabilities. The implementation of the CCSIMS is achieved through the associated Action Plan maintained by the CCSIMS Working Group that documents specific responsibilities and the basis for resource allocation by respective organizations. The Action Plan is based on the strategic objectives identified in the CCSIMS which are core to developing action items and timelines for CCSIMS activities over the next three to five-year period.

To be effective, the CCSIMS must be backed by appropriate commitment and adequate plans and developed in collaboration with all jurisdictions and key stakeholders. The success of the CCSIMS will be measured by the deliverables and timelines described in the associated CCSIMS Action Plan currently managed by the CCSIMS Working Group

An ongoing and coordinated communications plan will convey achievements on the CCSIMS.

In addition to the action items associated with the CCSIMS, jurisdictions and key stakeholders are encouraged to initiate CCSIMS guided plans that support their specific or unique needs, in a manner consistent with the CCSIMS.

9. Review and Capability Improvement Process

Established governance bodies and Community Safety Stakeholders will work together to monitor the implementation of the CCSIMS and support the assessment of programs and activities against the Interoperability Continuum. It is expected that the collaborative approach established in the CCSIMS and the associated CISC will remain current and strengthen coherency of action among all levels of government and contributors.

The success of the CCSIMS will be measured by deliverables and timelines provided in the CCSIMS Action Plan and will be considered successful when the performance indicators set out in the Action Plan are met.

The CCSIMS will be reviewed and revised, in consultation with key stakeholders, every three years, or more frequently, if necessary. Pending the creation of a formal CCSIM Governance model, the Action Plan will be reviewed and updated at least annually and approved by the CACP.