

# Breaking Down Barriers: Information Sharing During Pandemics and Emergencies

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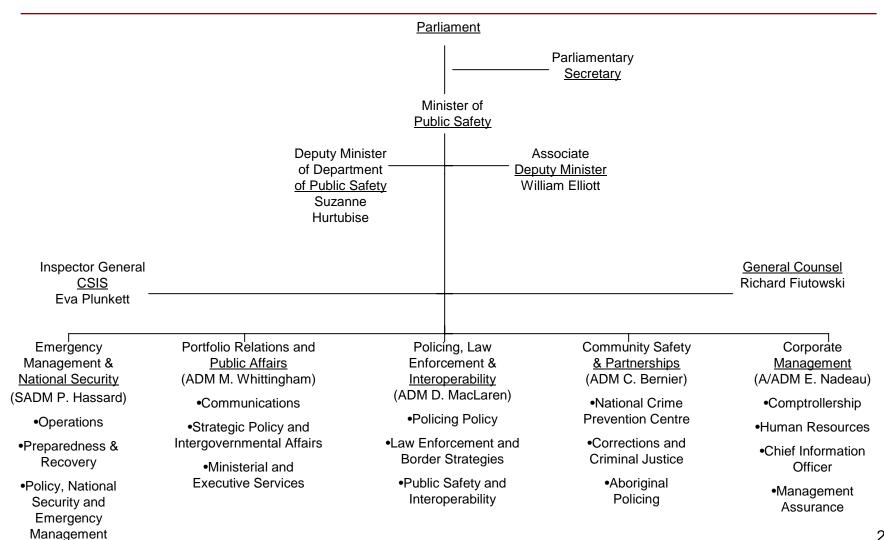




#### **Presentation Overview**

- Defining interoperability
- Department of Public Safety
- Interoperability initiatives outside the department
- Barriers to interoperability
- Overcoming barriers
- Success stories
- Gaps analysis
- Looking ahead

# Departmental Organizational Chart



# Interoperability

#### Why interoperability matters

- Saving lives
- Minimizing risk
- Creating opportunities for first responders to do their jobs to the best of their abilities
- Accountability Value Management

#### A large and complex task

- Much more than technology
- Governance
- Cultural change: "need to know" to "need to share"

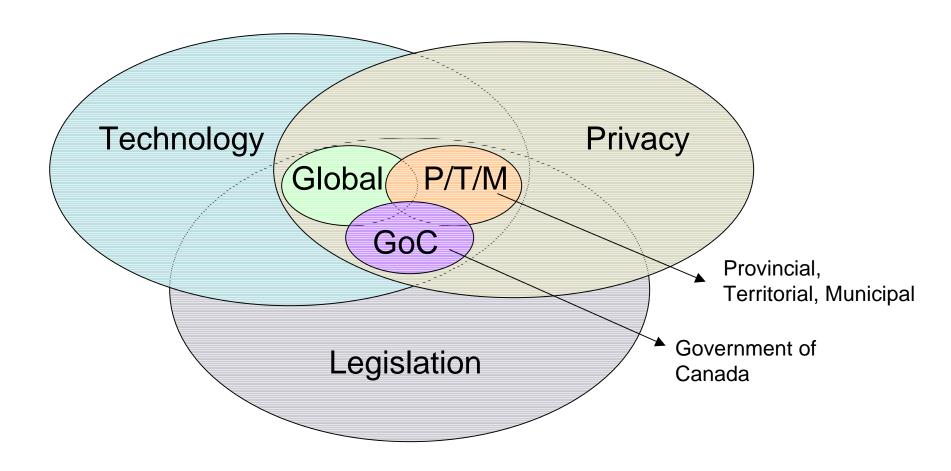
# **Defining Interoperability**

- Interoperability the capacity for, and effective management of, information sharing among organizations having public security responsibilities.
- Interoperability perspectives:
  - Interoperability of information sharing / management and information technology systems
  - Interoperability of and between programs and activities
  - Interoperability of management structures / mechanisms and processes
- Ultimately, it is an environment where organizations can and do share such information with the right people at the right time.
- There are multiple dimensions to interoperability, including: technical, communication, human, organizational and legal.

# Public Safety Interoperability

- Within the federal domain alone, public safety interoperability involves no fewer than 26 departments and agencies.
- Public safety interoperability crosses many business lines, jurisdictions and domains including:
  - Provincial / Territorial / Municipal emergency preparedness functions
  - First responder radio communications
  - Public health emergencies
  - National security issues
  - Policing, courts and corrections
  - Privacy and security of information
  - Transborder data-flows
  - Transportation security

# The Landscape



# Lack of Interoperability and its Consequences

- Unavailable, incomplete, untimely or poor quality information has had a negative impact on public safety:
  - 9/11 demonstrated the tragic consequences that can unfold when public safety and security agencies find themselves unable to share critical information.
  - SARS outbreak exposed the absence of protocols for data and information sharing among levels of government and a lack of coordination across institutions and jurisdictions for outbreak management and emergency response, among others.
- Poor information sharing capabilities impact Canadians' confidence in their governments

#### Lessons Learned Since 9/11

- Interoperability only about technology "last"
- "Culture" the biggest impediment to achieving interoperability
- Collaboration is critical
- How to measure and evaluate Interoperability initiatives is difficult, but necessary
- Need to structure Interoperability (i.e. overarching framework) to manage its different dimensions

# Barriers to Interoperability

# There are significant barriers in accessing or disseminating critical information across the PS&S sector including:

- Managing interoperability as a single entity or "enterprise"
- Articulating a single or common purpose and objectives
- Harmonizing responsibilities, regulations and operating procedures
- Collecting, analysing and disseminating information across organization and/or national boundaries

#### How? - BTEP

Business Transformation Enablement Program (BTEP). BTEP provides:

- 1. Consistent outcomes and standardized design for common business processes across the Government of Canada (GoC)
- More intelligent data definition and management (interoperability, privacy, security, sharing, expiry, etc.)
- 3. Shared governance of information stewardship across the GoC

### **Programs and Services**

#### Service Integration and Accountability Model (SIAM):

- A technique that portrays a view of the design of one or more programs and their associated services in a simple and consistent form
- The primary purpose of this model is to define horizontal accountability relationships between services for the production of service outputs

#### Program Service Alignment Model (PSAM):

- Brings together and aligns target groups; needs; services; service outputs; and programs around value statements
- The PSAM is used to:
  - Align multiple programs and services by analyzing their overlaps and gaps in terms of target groups and needs
  - Identify direct outcomes to make explicit the links from direct outcomes attributed to service outputs through to strategic outcomes

# **Possible Strategies**

- Establish PS&S interoperability governance
- Modernize legislative and policy framework
- PS&S interoperability business infrastructure
- Supportive information-sharing environment
- Improve delivery of PS&S services

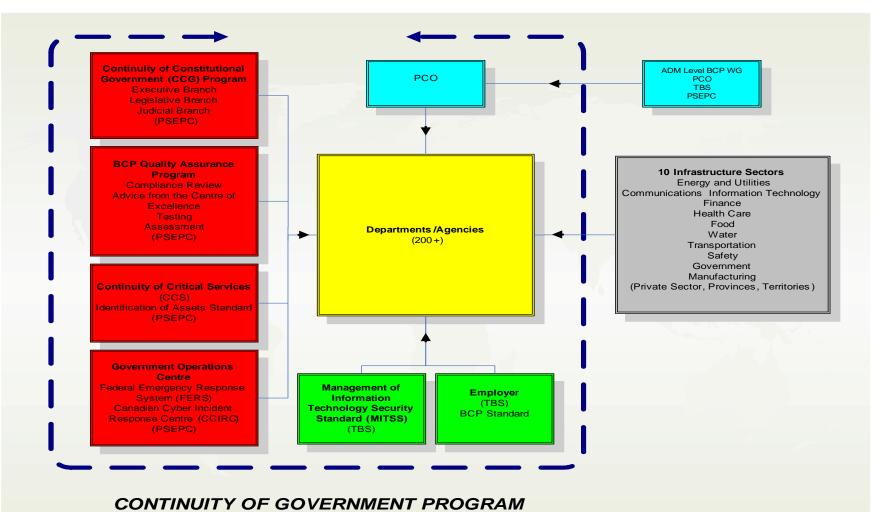
# Interoperability Domains

We have broken down the public safety sector into four "domains":

- Border Security
- Criminal Justice and Law Enforcement
- National Security
- Public Health and First Responders

The **Public Health and First Responders** is a domain in which we are focusing our interoperability efforts, as we have identified it as being a critical area of concern within the public safety sector

# **Continuity of Government Program**



# Interoperability – Success Stories

CBRN - Research and Technology Initiative (CRTI) / Health Canada projects:

- Mobile real-time radiation surveillance network
- National biological dosimetry response plan
- Nuclear detection web
- Deployable CBRN monitoring network
- Real-time determination of the area of influence of chemical, biological, radiological and nuclear releases
- Stand-off detection of radiation and in new technologies for rapid assessment of radioactive contamination
- Accident Reporting and Guidance Operational System (ARGOS)

# Examples of Interoperability in the Public Health Area

The Public Health Agency of Canada (PHAC) along with other federal government departments and provincial and territorial governments have taken and continue to take action to protect Canadians.

#### **Activities include:**

- Real-time alert system for serious respiratory illnesses
- FluWatch system
- Hospital-based surveillance system
- Global Public Health Information Network (GPHIN)

# Looking Ahead / Next Steps

In order to increase our preparedness efforts in the event of a pandemic or national emergency, we need to improve interoperability among members of the public safety and security community – to achieve better public safety and national security outcomes.

This means improving integrated emergency planning to:

- Avoid confusion
- Avoid duplication of efforts
- Ensure timely flow of essential information and advice between levels of government



# Canada