

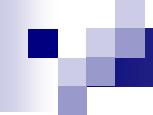
# Canada Voice Communications Plan *(The Way Forward)*



Public Safety  
Canada

Sécurité publique  
Canada

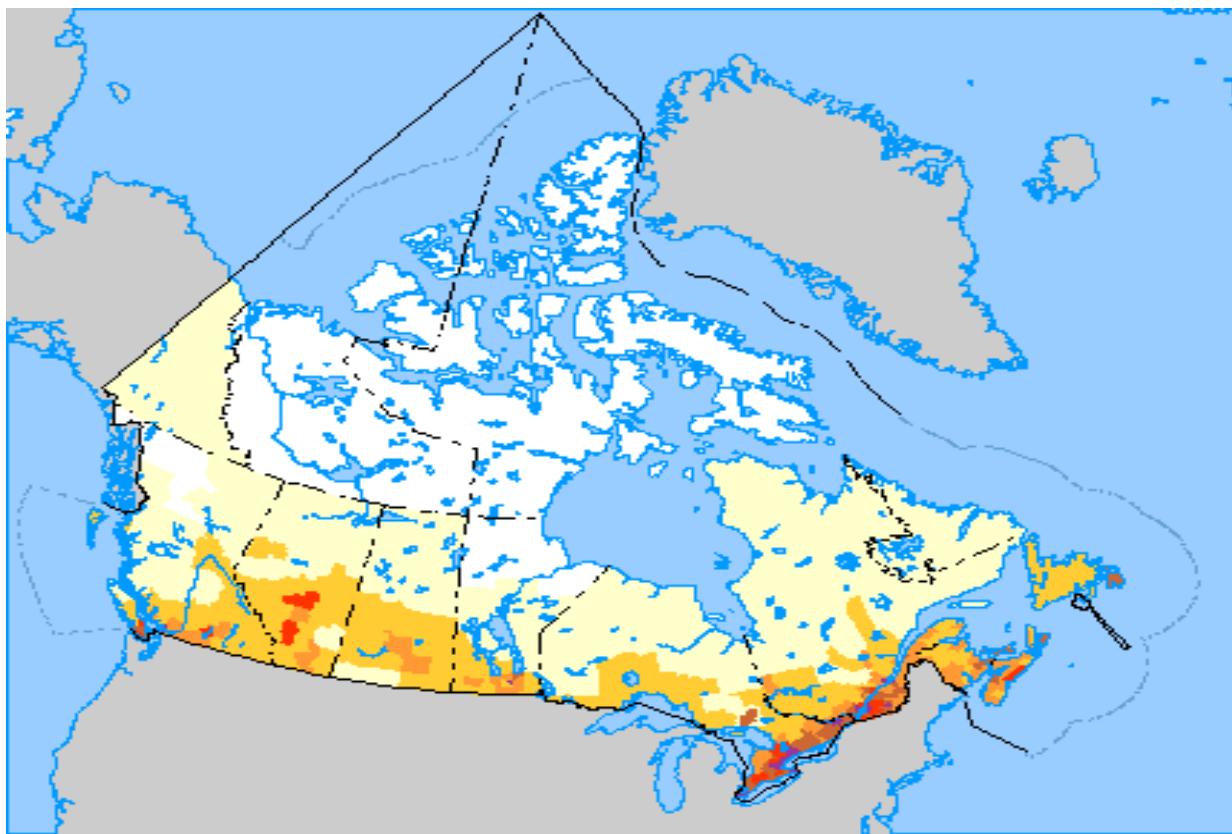
September 15, 2008



# Agenda

- Overview
- Voice Interoperability
- 2003 L'Abbe/Poirier Report
- Voice Communications Plan
- Voice Wireless Trends
- Canadian Public Safety Spectrum (2011)
- Our Partners
- The Way Forward

# Overview



# Voice Interoperability

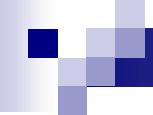
- Within the first responder community, voice Interoperability is widely accepted as “the” single most important capability required by first responders and emergency response teams.
- Voice interoperability is a major strategic / operational challenge for emergency response teams in all stages of emergency management.
- Departments and agencies responsible for Public Safety and Security (PS&S) in Canada:
  - are required to communicate with each other, and with their American counterparts in their daily operations (e.g. domestic and border integrity),
  - and during major events, both planned (e.g. G8, Olympics etc.) and unplanned (e.g. natural disaster, human-induced).

# Voice Interoperability

- **It is essential that the voice communications equipment used by the PS&S community,**
  - is fully interoperable, (uses open standards)
  - and that dedicated public safety spectrum is available for use by this community.
    - Urban areas need the National Public Safety 700-800 UHF spectrum proposed by Industry Canada (fully available in 2011).
    - Rural areas have an equal need for National Public Safety spectrum in the VHF allocation, (not yet identified).

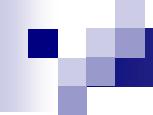
# 2003 L'Abbé / Poirier Report

- The 2003 Public Safety Radio Communications Project report, known as the L'Abbé / Poirier report commissioned by Industry Canada; describes key interoperability issues facing Canadian public safety officials with respect to voice communications.
  - lack of cohesive strategic planning and policy development in relation to spectrum resource requirements, standards and funding;
  - lack of liaison and coordination (federal leadership);
  - lack of a single voice representing the public safety community and
  - incompatible standards and technologies.



# Voice Communications Plan

- **Purpose** - Create a Voice Communications Plan that addresses voice and data communication interoperability issues, within the public safety community at large.
- **Vision** - Emergency Response Personnel can communicate as needed, on demand and as authorized at all levels of government across all disciplines.



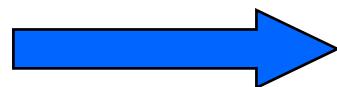
# Linkages

- **PS's mandate :**
  - The Department of Public Safety and Emergency Preparedness Canada (PSEPC), now Public Safety Canada (PS) was created in December 2003 and is responsible for ensuring the safety and security of Canadians.
- The implementation of the voice communications plan would support PS mandate of enhancing public safety and security.

# Voice Wireless Trends

## In the Past

Proprietary Protocols



## Going Forward

Open Standards Based Protocols

Security Optional



Security is a Key Issue

Single Network



Multiple Networks with  
Seamless Mobility  
(system of systems)

Limited Spectrum



Dedicated Public Safety  
Voice & Data Spectrum

Text Based  
Data Applications

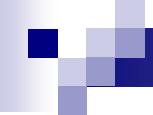


Graphics/Images/Video

# Voice Interoperability Technology

- **Possible Technological Solutions**

- Force a common frequency band (spectrum).
  - International Telecommunication Union (ITU), a United Nations agency recommends regional harmonized bands.
  - Industry Canada proposes a common Public Safety UHF spectrum supported by Public Safety Canada.
- Define a common protocol using open standards, allowing a move away from stand alone proprietary systems to a interoperable “**system of systems**” concept.
  - Open standards currently being developed: APCO P-25 (North America), TETRA (Europe).
- Use a reconfigurable radio, Software Defined Radio (SDR).



# Partners

- Federal
  - 26 identified departments including:
    - Canadian Interoperable Technology Interest Group under Canadian Police Research Center
    - Department of National Defence, Defence Research and Development Canada, Center for Security Sciences
    - RCMP
    - Integrated Border Enforcement Team (Canada and U.S.)
    - Industry Canada – spectrum and infrastructure
    - Canada Border Services Agency

# Partners

- Provincial / Territorial partners
- National Associations
  - Canadian Association Chiefs Police
  - Canadian Association Fire Chiefs
  - Emergency Management Services Chiefs of Canada
- International
  - U.S. Department of Homeland Security
    - SafeCom Program
  - National Public Safety Telecommunications Council (NPSTC)

# The Way Forward

**Public Safety Canada** acknowledges the potential of building on the substantial work accomplished through the SafeCom initiative.

SafeCom pillars:

- **Governance** – A formal governance structure is critical to interoperability planning.
- **Standard Operating Procedures** – formal written guidelines or instructions for incident response.
- **Technology** – although a critical tool for improving interoperability, it is not the sole driver of an optimal solution.
- **Training and Exercises** – critical to the implementation and maintenance of an interoperability solution.
- **Usage** – how often interoperable communications technologies are used (day to day operations).

# The Way Forward

- PS will work with CITIG to create a forum/working group to create consultation papers on a strategy.
- Workshop will be held this October with participants from across Canada and across the first responder community, the resulting draft will be presented for further consultation at the Second National CITIG conference this December.
- Develop a governance strategy for consideration that would involve the appropriate Federal, Provincial, and Territorial representatives.

# **Success Factors**

- The creation of the plan is a significant strategic horizontal initiative for which the following success factors are identified:
  - Establishment of a consultation process promoting open and transparent communication with users and stakeholders;
  - Stakeholders participation in the working groups responsible for the development of a national strategy;
  - An effective and efficient governance structure.

# Public Safety Canada

Contact information

Tom Black

Senior Technical Policy Analyst

Interoperability Programs Division

269 Laurier Avenue West

Ottawa, Ontario, Canada K1A 0P8

Tel: 613 949-3995

Fax: 613 991-3306

E-mail: [tom.black@ps.gc.ca](mailto:tom.black@ps.gc.ca)