

CATAAlliance

A National First Responder Secretariat

Advancing Innovation, Health, and Safety
for Canada's First Responders and Citizens

2017 Pre-Budget Consultation Submission to

House of Commons Standing Committee on Finance

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Executive Summary

To enable the public safety and security of all Canadians, the need for a body that can create synergy among the diverse segments of the First Responder (FR) community has been identified as essential to enhance collaboration at a national and global level and to support innovative solutions in addressing key public safety priorities and programs. On behalf of its members, *CATAAlliance* and its public safety and security advisors have come to endorse the critical need for the creation of National FR Secretariat: a governing body comprised of FRs, acting on behalf of all FRs, to address operational and policy concerns common to sworn, volunteer, and civilian employees across the Country.

This call for the creation of a National FR Secretariat will provide increased benefits of a safer and a more secure environment for FRs. The new mandate will provide FRs with the tools and knowledge that will enable them to better serve their communities. Conversely, failure to create the necessary governance, standards, and leadership, will almost certainly, through eventual system and process failure, result in lost lives and reduced trust in the various level of government and agencies to provide a safe and more secure environment for all Canadians.

This Secretariat's deployment conceivably impacts on each area identified by the Standing Committee on Finance (the "Committee"). This federal measure will:

- Assist First Responders in providing a safer and more secure community for all Canadians regardless of race, gender or geographic location, which will thereby allow its citizens to confidently and securely live, work, play, volunteer, and subsequently build, grow and thrive within their communities.
- Create the foundation for better understanding through comprehensive labour and market research data, in-field research, testing and evaluation to make sound, evidence-based decisions on training, technology, and staffing investments. This in turn will result in a more effective and efficient workforce resulting in lower operational costs and demands on taxpayer dollars.
- Allow, through the outputs of this Secretariat, a clear conduit to and channel through which Canadian inventors can develop and market best of breed innovations locally, nationally, and ultimately globally.

This submission does not provide cost estimates for the Secretariat's creation, which we expect be a multi-year commitment. Time constraints and numerous variables/unknowns at this stage would make it difficult to quantify. However, our advisors are readily willing to work with the Committee to further explore the Secretariat concept and anticipated costs at any time pursuant to this submission.



Context

The FR community in Canada requires a centralized, coordinating body to help create a common understanding, develop appropriate strategies and tactics, and educate and advise them on the many common fronts they face in addressing the “new normal” of maintaining public safety and security in these modern times.

As a practical example of the need for a centralized body, simply attempting to define the FR population in Canada is all but impossible due to a lack of centralized, statistical data. With the exception of Policing, StatsCan has little-to-no information on Fire and Paramedic Service populations. What is known:

- In 2015, there were 68,777 police officers and 28,368 civilians employed by police services.
- According to the National Fire Protection Association, the total number of firefighters falls between 168,600 to 171,000; the number of actual career firefighters between 25,250 to 25,850 and the number of volunteer firefighters fall between 143,350 to 145,150.
- While there is data on the number of paramedics in Canada through the Canadian Institute for Health Information, its validity is considered quite weak. 2013 data indicates 37,330 employed.
- Year-end operating expenditures for police services in Canada in 2014/2015 totaled \$13.9 billion in current dollars. No national expenditure data exists for Fire or Paramedics.

Yet despite all that is not factually known, there are many common cultural and operational challenges facing them:

- Most FRs are municipally funded; most budgets are being cut-back forcing each to do more with less.
- Budgets are primarily spent on salaries and vehicles leaving token amounts for investment and training on new, innovative technologies.
- Historically, the prevalent culture among FRs has been to stand distinct from the other lines of service, and even among similar services, there is a hesitance to share information or be ‘taught’ by peers
- Complexity of FR structure makes it difficult to enact change without a centralized, collective driver to do so.
- Most work in silos (even among similar service lines) and are extremely protective of their data, infrastructure, etc.
- There is a lack of understanding of available research, technology, procurement options, and common challenges.
- FRs are risk-averse in the adoption of nascent, untested technologies: many of which could create a more effective, efficient and responsive organization.
- Canadian FRs are typically lagging their international peers in adopting new public safety models and practices.

Currently each of the FR silos have numerous Associations, Committees, Working Groups and “ad hoc” formations that contribute individually, or with limited collaboration, to the broader discussions and decisions needed to address the shared public safety issues/concerns in Canada that will affect the

safety of all Canadians. Given this, it is believed a national, unifying body can provide the nexus for overcoming these systemic challenges.

Creation of a National First Responder Secretariat

A dedicated, federally-funded Secretariat will offer the federal government a direct and open opportunity to access FR leadership, experts and opinion on national, regional and local issues. The direct and open access can help mitigate concerns and issues during times of crisis.

This Secretariat would:

- identify common issues of concern and sharing best practices impacting on mission critical needs;
- serve as a showcase housing and promoting leading Canadian product/service innovations;
- optimize business plans for national priorities and act as the focal point for Public Private Partnerships and other funding formulas to secure the funding for their national deployment;
- create a pool of FR subject matter experts that can be consulted to ensure their lens is applied in the development of emergency response frameworks throughout Canada;
- develop standards with respect to interoperability, information sharing, common language, cyber security, etc.;
- collaborate/learn from, other international partners towards the adoption of best practices, cross-border cooperation, research and training;
- work with Federal Agencies to explore, amass and share key statistics regarding Canada's FR communities;
- offer a single gateway to Canada's FR community and thereby enhance Canada's global standing and brand; and,
- act as a conduit to the general public sharing advice and direction to Canadians on emergency preparedness, cyber/fire safety, incident responses, etc.



The Federal Government is recognized and regarded for its leadership and investment in the International Forum to Advance First Responder Innovation¹, and we urge the creation of a Canadian equivalent as encompassing of the roles identified as possible.

We also believe the Right Honourable Justin Trudeau would support such an endeavour in light of his commitment to the FR community: “We ask public safety officers to stand in harm’s way to protect us and keep us safe. They deserve nothing less than the highest level of support and care from a grateful country, and that is exactly what they will get from a Liberal government.”²

As reflected in the graphic above, there are many challenges/opportunities that could be addressed by this Secretariat, noting these also require immediate federal support notwithstanding a Secretariat’s creation.

¹ <https://vimeo.com/169872796>

² <http://www.liberal.ca/liberals-pledge-greater-support-for-canadas-public-safety-officers/>

These priorities are critically under-supported and require immediate consideration:

- **700 MHz Public Safety Broadband Network** – the importance of this network cannot be understated and explored in greater detail on following page
- **Canadian Community Safety Information Management Strategy (CCSIMS)**
 - CCSIMS is a strategic document that sets goals and identifies key national priorities to enhance governance, planning, technology, data interoperability, training and exercises to promote information management in Canada.
- **Next Generation 9-1-1 (NG 9-1-1)**
 - NG 9-1-1 evolution intends to provide a feature-rich technical environment that will enable callers to communicate with 9-1-1 with *Any device, Anywhere, Anytime* to quickly connect to emergency services. Given the complexity related to the creation of the NG 9-1-1 platform, the establishment of a national governance body to guide and coordinate a consistent application of NG 9-1-1 systems and services across Canada is needed.
- **National Cyber Crime Coordinating Center**
 - The centre would be “neutral”, focusing on coordinating and enabling criminal investigations rather than leading investigations. It would act as a national coordination and deconfliction hub of multi-jurisdictional cybercrime investigations; offer technical advice and guidance for cybercrime specialists, frontline officers, and criminal intelligence analysts; and, gain a national understanding of cybercrime and digital forensics tools and techniques to leverage niche expertise.
- **Wireless public alerting**
 - Emergency Communications is a multi-faceted hotbed of activity including TV and Radio Broadcast Intrusive Alerts, Wireless Emergency Alerts, Amber Alerts, etc. Understanding, educating and synchronizing public alerting strategies are key to protecting Canadians during disasters. Comprehensive testing of the two technologies (location based SMS and Cellular Broadcast) before final decisions are made in Canada is needed.
- **Innovation Incubator and Showcase**
 - There is a wealth of innovative technology products/solutions available to Canadian FRs, but many fail to be adopted. The Secretariat could help fund, test, certify, and showcase cutting edge technologies in an effort to incubate innovation, promote Canadian capacity and drive Canadian exports to a global market.

Further, the Secretariat could also address:

- National Vendor Background Checks
- Product/service standards
- Procurement portal: sharing RFPs, vendor database, centralized tendering

700 Megahertz Public Safety Broadband Network (PSBN)

The allocation of 20 MHz of 700MHz spectrum represents a once-in-a-lifetime opportunity that ties directly to community and responder safety, innovation, and the health of Canada’s digital economy. As the main users of the eventual network, FRs need a strong voice in a collaborative process to create/operate a sustainable PSBN.

We applaud the Government of Canada’s commitment to designate a full 20 MHz of spectrum in the 700 MHz band for public safety broadband use. It is an important first step. But in order to implement a nationwide network that can support mission-critical communications for our FRs, a governance body that includes their expertise and influence is immediately required.

As envisioned in numerous consultations on possible governance models for this network, a national entity would be required to:

- acquire and hold a licence(s) issued for spectrum in the 700 Megahertz (MHz) band for a PSBN;
- jointly apply for subordinate licences with regional service delivery entities;
- represent the interests of all public safety entities to ensure that their needs are met;
- establish national standards for interoperability;
- offer training guidelines, education and outreach;
- enter into and administer agreements for the construction, maintenance, and operation of the national core components;
- enter into and administer roaming agreements with commercial/public safety owners/operators
- enter into and administer roaming agreements with the U.S., as well as promote crossborder harmonization;
- raise, invest and expend funds to finance the organization’s purposes and activities; and
- establish and administer a cost allocation and recovery model for services rendered

While it is believed the proposed Secretariat would provide a sound home for this governance body, it is also recognized that as the spectrum for the network has already been long-allocated to the public safety community, it currently sits unexploited with rare exception. A timely, concentrated effort is urgently required to advance the development of a governance body to help propel the PSBN to reality.

About the Canadian Advanced Technology Alliance

The Canadian Advanced Technology Alliance (*CATAAlliance*) is Canada's “One Voice for Innovation” non-profit lobby group, crowdsourcing ideas and guidance from thousands of opt in members in moderated social networks in Canada and key global markets. Established in 1979, *CATAAlliance* is the largest high-tech association in Canada.

This submission has been chiefly developed based on the guidance of public safety and security experts who comprise three distinct *CATAAlliance* advisory bodies: the Public Safety Advisory Board, the Cybercrime Advisory Council, and the Cybersecurity Advisory Council. More information on these distinguished bodies can be found at: <http://www.cata.ca/Communities/PSAB/>