

EMERGENCY COMMUNICATIONS SERVICE DELIVERY IN BRITISH COLUMBIA

Police Communication Centres and 911 PSAP

**STRATEGIC VISION
DISCUSSION PAPER**

MARCH 2015



Ministry of
Justice

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INTRODUCTION

The Ministry of Justice (the Ministry) is seeking input from key stakeholders in order to inform the future of emergency communications across the province. This Discussion Paper outlines the background, challenges, and strategic vision for emergency communications service delivery involving 911 PSAP (Public Safety Answering Point). Specifically, the vision includes a consolidated 911 PSAP and police communications service delivery model, with enhanced support from a provincial call answer levy on wireless devices.

911 PSAP is the initial service a caller, requiring immediate emergency services, reaches when dialling 911. The PSAP creates an immediate link between individuals in crisis and their local emergency response agencies (police, fire, ambulance). 911 operators function in a crisis environment where incoming calls must be handled promptly and information conveyed in an accurate and timely manner. In this context, 911 PSAP is an integral component of the overall emergency communications system, and plays a significant role in public safety.

911 PSAP is a local government responsibility in British Columbia and is optional. Local governments have worked to manage and improve service since the 911 system was implemented in the late 1980s, when the technology was predominantly wireline telephone services (landlines). Three decades later, the system faces new and distinct challenges related to:

- Migration of households from wireline services to mobile wireless service;
- Implementation of Next Generation 911 (NG911) technologies;
- Gaps in the provision of 911 service;
- Ensuring resiliency of the 911 system amid major catastrophic events.

Given these challenges, there is a need – indeed, an opportunity – to revisit and renew the overall approach to 911 service delivery in British Columbia. By modernizing the current approach to a more streamlined, equitable and resilient system, the emergency communications system will be better positioned to enhance service province-wide.

BACKGROUND

There are currently ten 911 PSAPs in British Columbia under local government authority, with a patchwork of different service providers. Local governments voluntarily contract with the RCMP Provincial Police Service, deliver the service through E-Comm (Emergency Communications for BC, Inc), or provide the 911 service themselves.

1. E-Comm
2. Nanaimo (RCMP)
3. West Shore (RCMP)
4. Chilliwack (RCMP)
5. Prince George (RCMP)
6. Victoria Police
7. Saanich Police
8. Nelson Police
9. Abbotsford Police
10. Prince Rupert Fire Rescue

E-Comm is governed by the *Emergency Communications Corporation Act*, and has integrated emergency communications in much of the Lower Mainland. E-Comm handles 80% of the 1.5 million 911 calls in the province each year.

Many PSAPs are co-located with police dispatch services. There are currently seventeen police communication centres across the province, and similar to 911 PSAPs, is a patchwork of RCMP, E-Comm and independent municipal police departments. Funding of the two functions (911 PSAP and police dispatch) is separate. There are two general funding sources available to local governments for 911 PSAP: a call answer levy (CAL) on wireline telephone services and a levy charged on residential property taxes.

In the past the Union of British Columbia Municipalities (UBCM) endorsed a number of resolutions calling for the Province to introduce legislation that would allow the implementation of a province-wide 911 CAL on wireless devices. In July 2013, UBCM released a report on the issue and requested that local governments provide further input on the provincial call answer levy issue. In May 2014, UBCM advised there was not sufficient support for the CAL among local governments.

The Ministry would like to acknowledge the work of UBCM on this issue and the July 12, 2013 report by Dave Mitchell and Associates Ltd. "911 Services in British Columbia: Background Review in Relation to a Province-Wide Call Answer Levy". The report is an invaluable resource on issues related to 911 PSAPs and can be found at:

<http://www.ubcm.ca/assets/Resolutions~and~Policy/Policy/Community~Safety/911%20Services%20in%20BC.pdf>

CHALLENGES

When the 911 system was implemented several decades ago it reflected the organizational and technical realities of the day. For example, in the 1980s physical landlines served as the primary means of telephone communication, and mobile/cellular devices with embedded functionality (e.g., global positioning systems) were merely nascent technologies. Moreover, our awareness and readiness for natural and human-based threats to public safety – earthquakes, tsunamis, and terrorism, for example – was comparatively unrefined.

Now, some 30 years later, the pace of technological change has placed increasing and inevitable pressure on 911 PSAPs – not only in terms of how services are delivered, but also how the system and its constituent parts interact and function. In this context, several distinct challenges to the 911 PSAP status quo have emerged.

Changing landscape – wirelines to wireless

The number of wireline (landline) telephones is declining as more people migrate from wireline to wireless services. This declining number means reduced revenue collected by local governments to support PSAPs in British Columbia. It also means that more and more calls to 911 are generated from cell phones – in fact 67% of 911 calls are from cell phones.

The wave of Next Generation 911 (NG911) technology

“NG911” broadly refers to ongoing efforts to improve the capacity of PSAPs to leverage increasingly powerful internet protocol (IP) based systems, sensors and devices in a manner that enhances 911 services and emergency response. Examples of NG911 functionality include text messaging, integrated photo/video, and Global Positioning Systems (GPS) to assist in conveying critical situational details from the location of an emergency directly to a 911 PSAP and first responders.

Despite the potential they offer, harnessing NG911 capacities remains a challenge as it involves considerable investments to upgrade and/or replace legacy infrastructure and associated business processes (e.g., staffing, training). Nonetheless, citizens are increasingly information-oriented and dependent on personal mobile devices, and with that transformation come reasonable expectations that public safety mechanisms such as 911 will be appropriately aligned to emergent technologies. As such, there is value in emphasizing the imperative to embrace and enable NG911.

Gaps in the provision of 911 service

In some areas of the province there are gaps in 911 services. These gaps include areas where no landline or wireless connectivity is available, however the focus of this discussion is on areas where 911 services are not provided (regardless of whether connectivity exists). These areas include the Stikine Region, Central Coast Regional District, Northern Rockies Regional Municipality, and the Skeena-Queen Charlotte Regional District (outside the City of Prince Rupert).

Although much of the territory within these jurisdictions is vast, isolated and inaccessible, it nonetheless encompasses numerous, long-standing communities with typical emergency service needs. Moreover, their local economies are increasingly premised on burgeoning industries such as energy and tourism, which not only elevate demands on existing services but also create unique service pressures.

Ensuring resiliency of the 911 system amid major catastrophic events

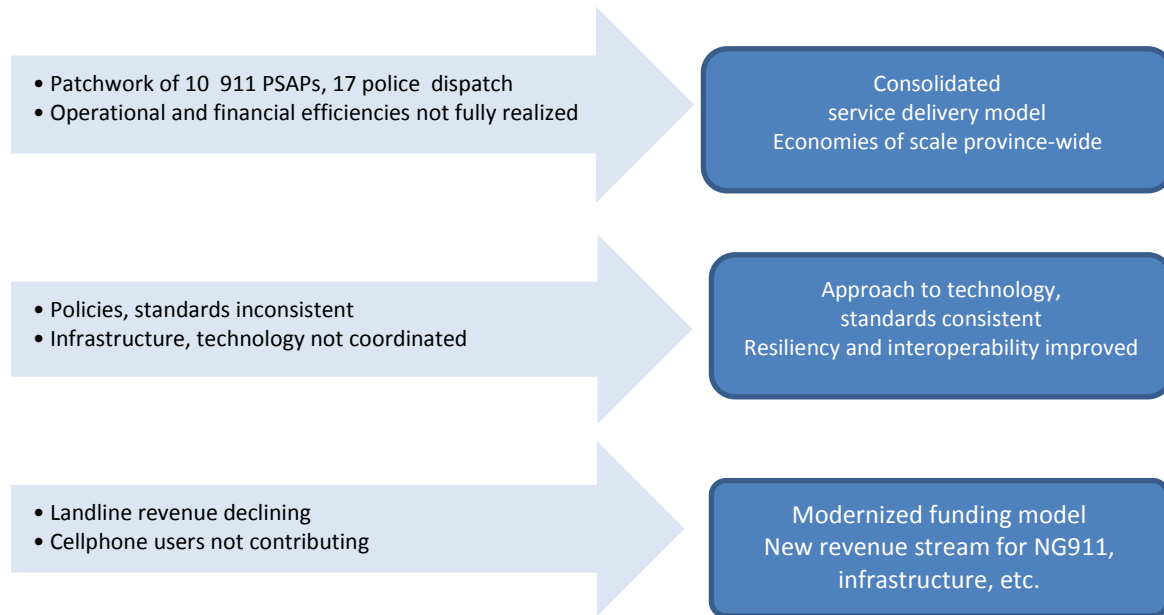
The inherent critical nature of emergency situations necessitate that the supporting 911 system must be robust and resilient across the entire service continuum, fully capable of functioning amid wide-scale and severe emergency events. A system that falls short of these fundamental business continuity requirements threatens public safety, jeopardizes the lives and safety of citizens and emergency responders, and endangers private property and strategic assets.

Achieving the required measure of resiliency for 911 services, however, is an ongoing and costly pressure, and involves a number of aspects including human resources (e.g., appropriate staffing levels, training); information technology (e.g., capacity, redundancy, back-up systems); physical infrastructure (e.g., structural integrity of buildings, communications systems, powers connections); organizational preparedness (e.g., procedural, planning and response functions); and business continuity (e.g., work-flow maintenance).

STRATEGIC VISION

The following sections outline what is needed on a provincial level to address the challenges described above. The proposed approach is for discussion, and represents the strategic vision that the Ministry of Justice is currently considering. The Ministry welcomes comments and input on the discussion questions provided in the following sections.

Strategic Vision



1. Consolidated 911 PSAP and police dispatch service delivery model

As described earlier, British Columbia has 10 PSAPs under local government authority, and 17 police communication centres across the province. From both a public interest and public safety perspective, the Ministry is interested in exploring options to develop a more streamlined service delivery model. Benefits of consolidation include economies of scale, and operational and financial efficiencies (for example, improved communication, reduced duplication, financial savings, volume purchasing, uniform policies and procedures, etc.).

There are a number of guiding principles to inform the vision:

- Enhanced public safety
- Improvements to resiliency, interoperability and capacity building
- Leverage existing efficiencies and economies of scale
- Equitable funding
- Cost-recovery for consolidation
- Consistency province-wide: approach to NG911, policies, standards etc.
- Accountability for performance

Discussion Questions:

Vision

- Is the current service delivery model as efficient as it could be?

Service Delivery

- What are the key factors to consider in consolidating 911 PSAP and police communications across the province?

Funding

- How does local government in your community currently fund 911 PSAP?
- Will local governments be able to fund these and enhanced services such as NG911 in the future?
- What funding model options exist and would be successful? Why or why not?
- With respect to existing funding for emergency communications, what works well, needs improvement, or could be done differently?

Next Generation 911

- What is the most appropriate response to infrastructure and technological pressures related to Next Generation 911?

Resiliency

- How can resiliency of emergency communications best be addressed (e.g., appropriate back-up, redundancies)?

Governance

- What is an appropriate method for emergency communications governance and regulation in British Columbia?
- Would standardization be of benefit to emergency communications? If so, in what areas (e.g., policies, procedures, standards, education, other)?

2. Modernized funding model

Local governments currently rely on a wireline call answer levy (CAL) and property taxes to fund 911 PSAP services. This varies by local government. With the proliferation of cell phones, and with 67% of 911 calls from cell phones, the Ministry is of the view that it would be reasonable for cell phone users to contribute to funding the emergency communications system. In fact, seven other provinces already have provincial CAL legislation in place.

As described earlier, UBCM had looked at a provincial CAL on all wireless devices that connect to 911 services, and the Ministry was part of a working group exploring the issue. Although UBCM withdrew the proposal, the Ministry considers there is still merit in considering a CAL on wireless devices.

Discussion Questions:

CAL Scope

- What scope of services would be appropriate to be funded by a provincial CAL? Emergency communications only or broader services? If broader services, what else should be included?

CAL Administration

- What would be the most effective process for administering the CAL?
- How should the revenue be managed?

CAL Amount

- What would be the most appropriate way to determine the amount of the CAL?

Thank you in advance for your time and consideration of these important issues. Please provide written feedback via email to the following email address: SGPSPB@gov.bc.ca

All input is requested by May 15, 2015.

NEXT STEPS

In addition to seeking feedback on this paper, the Ministry of Justice is meeting with select key stakeholders such as UBCM, local governments and police agencies. A summary of information received will be provided to those who submit feedback. The Ministry will consider the results of this targeted stakeholder engagement as part of the analysis of the strategic vision. Thank you for your feedback.