

# Powell River Regional District

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## **Opinion re: the Operational Viability of the Electoral Area 'E' Emergency Dispatch Advisory Committee Report – Dispatch Option 'C'**

**Chris Kellett & Associates Ltd.**

June 6, 2017

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## 1. Introduction

### 1.1. Purpose of the Report

The Regional District Board has requested an independent expert opinion regarding the operational viability of the Dispatch Option 'C' detailed in the December 2016 report from the Electoral Area 'E' Emergency Dispatch Advisory Committee (E-DAC).

This Report will cover the following key questions regarding the operational viability of Dispatch Option 'C':

- a) Proposed Initial Call Answering Point / Transfer to Local Dispatcher (Section 2.1)
- b) Proposed Alerting of the Lasqueti Island Volunteer Fire Department (Section 2.2)
- c) Current 10-digit Number Access to BC Ambulance Dispatch Centre (Section 2.3)
- d) Impact on Local Residents versus Visitors (Section 2.4)

The following opinion information is provided to the Powell River Regional District to assist with a decision on next steps for Lasqueti emergency services contact and dispatch.

### 1.2. Disclaimer

*The independent consulting services of Chris Kellett, through Chris Kellett & Associates Ltd., have been sought due to his industry experience, in part, obtained through the following committees:*

*The Association of BC 9-1-1 Service Providers (ABC911) – Direct involvement with this provincial group of primary and secondary Public Safety Answering Point (PSAP) management teams who actively participate throughout British Columbia and Canada in all facets of 9-1-1 operational, technical and management matters (since the 2010 inception of this group).*

*Alberta E9-1-1 Advisory Association (AEAA) – Direct and indirect involvement with this provincial group of primary Public Safety Answering Point (PSAP) management teams who participate throughout Alberta and Canada in all facets of 9-1-1 operational, technical, & management matters (member since 1995).*

*Canadian Radio-television and Telecommunications Commission – Emergency Services [E9-1-1] Working Group (ESWG) – Direct and indirect involvement with this group who are responsible for leading and delivering on the direction provided by the CRTC in order to ensure the most reliable 9-1-1 system in the world; a leader in this group since 1997, including being the elected Chair for the past 8 1/2 years.*

*The information provided in this report is expressly provided by Chris Kellett & Associates Ltd. It is not intended or to be implied as being representative of the ABC911, AEAA, or the CRTC ESWG. It is provided based on access to 9-1-1 documentation, with proper attribution (as applicable), throughout the report. The opinions expressed in this report are based over 25+ years of operational, technical, administrative, and management experience with all aspects of the 9-1-1 system and emergency dispatch, as detailed in the Appendix 'B' – Curriculum Vitae.*

## 2. Discussion / Analysis

This section provides an operational analysis of the Electoral Area 'E' Emergency Dispatch Advisory Committee's (E-DAC) preferred/proposed Fire Dispatch Option 'C' (*per the referenced page numbers as applicable in the following sections*), with a breakdown in terms of the specific components and stakeholders.

### 2.1. Proposed Initial Call Answering Point / Transfer to a Local Dispatcher

As detailed at page 133 of the E-DAC report:

*"When a fire incident is identified by a person, that person calls in for help by dialing the 10-digit number for the LIVFD call centre (e.g. Four Star Communications) to talk with a call taker. The call taker will provide confirmation to the caller that their call has been received and that help is on the way, and obtains relevant details regarding the nature of the incident including location details and severity, according to LIVFD operating procedures."*

#### **Initial Call Answering Point**

From an emergency call processing perspective, the proposed use of Four Star Communications (*the report includes a preliminary quote for \$1600 annually*) to undertake the initial call answer and emergency determination is **not appropriate from a risk management perspective** because they lack the skills and tools required to properly process emergency calls (especially when the caller is unable to speak or provide location information).

**There is one major accredited agency in Canada that provides the described service;** that centre is called [Northern911](http://www.northern911.com/) (link: <http://www.northern911.com/>). They provide service for all types of emergency call processing across Canada, and would be the only viable alternative to carry out this critical initial call answer and transfer process.

*NOTE: The annual cost for Northern911 will be higher than the above noted quote, and will require a formal request for initial call answer and alerting.*

#### **Transfer to a Local Dispatcher**

As detailed at page 133 of the E-DAC report:

*"The local dispatcher will obtain details about the incident (e.g. type, name, telephone number, residential structure id) from the alerting call from the communications from the call centre, if available. Otherwise, the local dispatcher will contact the call centre (by text and/or telephone) to receive this information. In either case, they will notify the call centre that they have received the call."*

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Chris Kellett & Associates Ltd.

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**The use of a local dispatcher is innovative; however it must meet the following operational criteria in order to be viable from a risk management perspective:**

- High availability to receive the initial page and conduct the noted follow-up tasks;
- The Local Dispatcher must call back the Call Answer in a defined period of time i.e. 2 minutes (*NOTE: the proposed 'future' texting option is not an acceptable operational procedure between dispatch centres – it must be a phone call*);
- LIVFD must provide the emergency Call Answer Centre with a secondary contact e.g. Fire Chief and/or the on-call Duty Officer for situations where the local dispatcher does not confirm receipt within a defined period of time i.e. 2 minutes;
- Local Dispatchers must receive approved initial and annual refresher training<sup>1</sup>;
- The Local Dispatchers must have the Incident Locator and Resource Tool<sup>2</sup>;
- The Local Dispatcher must be proficient in the operation of the LIVFD alerting tools (*also see Section 2.2 for further details*).

**It is important to note the following key operational items – approved training, the Incident Locator and Resource Tool, as well several of the proposed Alerting options do not currently exist, so these items would need to be included (as agreed) from a costing and operational perspective.**

In addition, the E-DAC report suggests that training and the new Incident Locator and Resource Tool will be provided as an in-kind contribution, however given the above noted training requirements and the importance of the new Incident Locator and Resource Tool (*per footnote 2 below*), it is advisable they be included in the future capital and operating funds for emergency dispatch.

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<sup>1</sup> The Lasqueti Island Volunteer Fire Department must develop, document, and deliver a training program (approved by the Regional District) with the following minimum course curriculum: step by step emergency call handling and dispatch requirements; the proper use and operation of the telephone equipment, alerting/ notification tools, radio equipment, and local software tools e.g. Incident Locator and Resource Tool; and how to troubleshoot and resolve issues that arise with the process and/or equipment. In addition, at a minimum, the course designer and instructor(s) for this training must have taken and passed the [APCO Public Safety Telecommunicator 1, 7<sup>th</sup> Edition Canada](#) (or current edition) on-line training course.

<sup>2</sup> The E-DAC report details the purchase of a Mapping tool for the creation and ongoing upkeep of a new Incident Locator and Resource Tool. This tool is vital due to the local geography and lack of addressing.

### 2.2. Proposed Alerting of the Lasqueti Island Volunteer Fire Department

The E-DAC report provides extensive details in terms of the current challenges with telephone and radio coverage on the Island; these obviously impact the ability for the public to reach emergency services, as well as limit the ability to notify and communicate with emergency response services.

**Before considering moving forward with the proposed Option C, steps must be taken to conduct a cost/benefit analysis with TELUS and a Radio Consultant to determine what is required to mitigate these issues in a timely cost effective manner.**

*NOTE: The work already undertaken by the Electoral Area 'E' Emergency Dispatch Advisory Committee is a good starting point to move this process forward.*

### 2.3. Current 10-digit Number Access to BC Ambulance Dispatch Centre

The current method of contacting BC Ambulance directly through a local 10-digit number that is answered directly at the Victoria Dispatch Centre is a very unique arrangement that has obviously evolved from a historical perspective. From an emergency call processing perspective this is an informal arrangement which would likely end if you took the appropriate steps to formalize the process. Informal arrangements by their very nature can end at any time, so relying on this method moving forward is not advisable.

The proposed Option C includes a new advertised 10-digit emergency number to reach the Call Answer Centre (*see Section 2.1 for further details*); this would be the next best thing to 9-1-1. **With the understanding that the new Call Answer Centre must answer for all 3 emergency services i.e. Police, Fire, and Ambulance** and transfer the call to the appropriate emergency dispatch centre.

### 2.4. Impact on Local Residents versus Visitors

As detailed at page 163 of the E-DAC report:

*"The call centre + VHF system is relatively easily understood by visitors and residents alike. While not quite as easy as calling 9-1-1, the call centre + VHF system provides a single-number for all emergency calls. Further, as visitors with cell phones pay for the 9-1-1 service, 9-1-1 calls on their cell phones will be routed to the appropriate emergency response handler. As an alternative for medical calls, people may also call BC Ambulance directly as in areas with 911 service."*

As noted in Section 2.3, the proposed Option C includes a new advertised 10-digit emergency number to reach the Call Answer Centre (see Section 2.1 for further details); this would be the next best thing to 9-1-1. **With the understanding that the new Call Answer Centre must answer for all 3 emergency services i.e. Police, Fire, and Ambulance** and transfer the call to the appropriate emergency dispatch centre. **As well, the creation of Emergency Cards and a local advertising campaign would also be an important part of the implementation process.**

It is also important to clarify that the assumption (*underlined in the quote above*) – those visitors with cell phones (who pay for 9-1-1 service) will get proper routing of 9-1-1 calls is **not accurate**. Both locals or visitors that dial 9-1-1 on Lasqueti Island from a landline will not have their call processed; if either a local or visitor call 9-1-1 from a cell phone, then the call will go to TELUS Operator services who will transfer the call to the closest 9-1-1 centre who will then determine which emergency service provider (police, fire, ambulance) is required and transfer the call accordingly. This is a multi-step backup process for unserved areas and not an advisable or appropriate way to handle emergency calls.

Lastly, as noted in Section 2.3, the use of the local 10-digit number to reach Ambulance is not a viable long-term process and should be updated to a new single 10-digit emergency number (as detailed above).



### 3. Conclusion

Option C as it is currently proposed is not operationally viable and represents a significant risk.

If the Board wants to consider moving forward with a revised Option 'C', then the following additional steps would be required for it to be operationally viable:

- i. Request a quote, and subsequently allocate funds to contract the services of an accredited Emergency Call Answer Centre (per Section 2.1) for initial emergency call answer, fire alerting (when applicable), or transfer to police or ambulance;
- ii. Implement and follow the detailed Local Dispatcher operational criteria (per the bulleted list in Section 2.1);
- iii. Provide the capital and operating funds for Local Dispatcher Training, creation and maintenance of an Incident Locator and Resource Tool, and new Alerting Options (per Section 2.1);
- iv. Conduct a cost/benefit analysis with TELUS and a Radio Consultant to determine what is required to mitigate radio coverage issues in a timely cost effective manner; provide future capital and operating funds for the approved upgrades (per Section 2.2);
- v. Provide capital and operating funds to implement and advertise a new local 10-digit emergency number to reach the new Emergency Call Answer Centre (per Section 2.3 and 2.4);
- vi. Get an updated legal opinion with respect to risk assessment.

This informational document is provided for review and consideration by the Powell River Regional District Board.

## Appendix A – Curriculum Vitae for Chris Kellett

### OVERVIEW – Chris G. Kellett

Superintendent (Ret.) Chris Kellett completed a distinguished 32-year career as a police officer with the Edmonton Police Service in January 2013. He started as a constable, and quickly moved up the ranks to detective, sergeant, staff sergeant, inspector, and superintendent / chief information officer. Since retiring, he started and operates a successful consulting business.

Chris is a recognized national expert in the areas of 9-1-1 and emergency services dispatch, having spent over 20 years of his career working at the operational, technical, and management levels of these mission critical areas. This also includes all aspects of project management for computer aided dispatch, records management, fixed/mobile radio, mobile computer terminals, and enterprise wide telephony.

Chris was a member of the senior management team, leading the key areas of human resources, information technology, interim deputy chief in charge of corporate services (finance, informatics, human resources), and involvement in labour relations and mediation matters. In addition, he has 15 years of training and participation with audit and finance responsibilities as an elected member of several Alberta Credit Unions.

Chris is on the current executive of the Alberta E9-1-1 Advisory Association (AEAA), as well as serving his eighth term as the elected chair of the CRTC Emergency Services [E9-1-1] Working Group (ESWG) and is the current lead for next generation 9-1-1 in Canada.

### RELATED CAREER EXPERIENCE

#### SUPERINTENDENT / CHIEF INFORMATION OFFICER

2010 – 2012

**Informatics Division – Edmonton Police Service, Alberta, Canada.** A municipal police agency with 2200+ police and support staff responsible for public safety for over 1 million citizens in Edmonton and the surrounding areas.

- Responsible for information technology, information management, security management (both data integrity and CCTV physical security for 30+ facilities), telecommunications, and IT project portfolio management; 200 staff with a 40 million dollar operating / capital budget.
- Chief Information Officer providing direction and oversight for the ongoing development of leading edge business intelligence tools, national data standards for information exchange, transition to a province wide CAD/records management, and trunked mobile radio systems.
- Successfully coordinated and led the development and delivery of numerous business cases for upgrade software / hardware projects and additional staff for all these areas.
- Implementation of two factor authentication, and server/desktop virtualization.
- Implementation of a comprehensive Project Portfolio Management office and staff, including significant components of an enterprise architecture / change management.
- Built an industry leading management team with succession plans for key positions.
- Set 3 year financial and 5 year strategic plans for all facets of Informatics.
- Took a leadership role with key provincial and national committees and working groups to enhance information sharing and interoperability.

**INTERIM DEPUTY CHIEF 2011****Corporate Services Bureau – Edmonton Police Service**

- Appointed by the Edmonton Police Commission and Chief of Police as the interim deputy chief from January to June 2011.
- Responsible for human resources, informatics, finance, purchasing, and supply services.
- Organized and help deliver a successful 3 year Capital Budget Plan for over 100 million that included new buildings, IT infrastructure / software, and important projects to prepare us for future demands.
- Represented the organization as a speaker / presenter at numerous internal and external stakeholder events.

**SUPERINTENDENT****2007 – 2010****Operational Support Division – Edmonton Police Service**

- Responsible for Police Dispatch / 9-1-1, Traffic (including expert collision investigations), Tactical (SWAT), Flight Operations (fixed wing and helicopters), Disaster and Emergency Preparedness, and Canine response areas.
- Acquisition and implementation of the Priority Dispatch call evaluation / quality assurance program (first large police agency in Canada).
- Acquired a second helicopter and staffing to expand the real-time availability of this vital tool for rapid response and criminal pursuit prevention.
- Improved oversight and risk management for all Tactical and Canine deployments.
- Directly facilitated the deployment of 100+ police officers to the 2010 Winter Olympics in Vancouver.

**SUPERINTENDENT (Acting)****2002 – 2006****Human Resources – Edmonton Police Service**

- Responsible for all hiring, training, employee assistance, and payroll programs.
- Hired over 300 new police and 100 support staff during the largest growth period in the history of the police service.
- Coordinated and delivered a new police promotion process for 500+ candidates over a four year period which utilized an industry leading Assessment Centre methodology.
- Directly responsible for the expansion of the Employee Assistance program, including the implementation of an advanced early intervention system.

**CONSTABLE TO INSPECTOR****1981 – 2001****Various Operational Areas – Edmonton Police Service**

- Started in Patrol and Police Dispatch / 9-1-1 as a constable for 9 years; this included being the Project Manager for the first implementation of mobile data terminals in 1988/89.
- Promoted to detective / sergeant and worked in Criminal Investigation, Training, Telecoms, and Police Dispatch / 9-1-1; this included being the Project Manager for the 9-1-1 / PBX telephone system replacements, and on the team for the CAD/RMS upgrade, and the move to an 800 MHz trunked radio system.
- Promoted to staff sergeant and lead Police Dispatch / 9-1-1 and Domestic Violence.
- Promoted to inspector and helped lead the very busy Downtown Patrol area.

## PROJECT MANAGEMENT / COMMITTEE HIGHLIGHTS

**Mobile Data Terminal Deployment** – Project Manager for the first major installation of mobile data terminals in police vehicles in Canada.

**Operational Support and Communications System Replacement** – Working with Intergraph Canada (*now known as Hexagon*), we designed and built their first complete CAD and Records Management system that is deployed around the world today. Responsible for the business analysis / liaison for many of the key components of the system, liaison for all trouble tickets, and coordinator / designer for the delivery of all training for 1500 users and system support staff.

**Telephone System Replacement** – Project Manager for the acquisition and implementation of a new 9-1-1 system, one large and 4 smaller PBXs, Category 5 re-wiring in five buildings, and the logistics to move the telephone facility from the basement to the computer server room.

**EPS Informatics Committee** – a member (including chair) of the group responsible for all major IT and Telecommunications decisions over the past 20 years; Edmonton is regarded as one of the most advanced information management services in North America.

**Alberta Credit Union System** – volunteered / elected to 3 different credit union boards over a 15 year period (including the chair position for 3 terms); Helped lead the provincial transition from many small credit unions to a few large credit unions, including changing the governance model; Participated on the executive and audit / finance committees for 10+ years.

**Canadian Association of Chiefs of Police (various committees)** – A very active member of the Informatics, Traffic, and Aviation Security Committee's over the past 6 years.

**Canadian Interoperability Technology Interest Group (CITIG)** – Actively participated with this group since its creation in 2008; responsible for providing key personnel and leadership for the creation of the current Action Plan for radio and data Interoperability in Canada. Currently working on expanding the plan to include next generation 9-1-1 transition.

**The Association of BC 9-1-1 Service Providers (ABC911)** – Direct involvement with this provincial group of primary and secondary Public Safety Answering Point (PSAP) management teams who actively participate throughout British Columbia and Canada in all facets of 9-1-1 operational, technical and management matters (since the 2010 inception of this group).

**Alberta E9-1-1 Advisory Association (AEAA)** – Direct and indirect involvement with this provincial group of primary PSAP management teams who participate throughout Alberta and Canada in all facets of 9-1-1 operational, technical, & management matters (member since 1995). Submitted numerous contributions, as part of CRTC proceedings, on behalf of the AEAA.

**Canadian Radio-television and Telecommunications Commission – Emergency Services (E9-1-1) Working Group (CRTC ESWG)** – Direct and indirect involvement with this group who are responsible for leading and delivering on the direction provided by the CRTC in order to ensure the most reliable 9-1-1 system in the world; a leader in this group since 1997, including being the elected Chair for the past 4 years. Participated and/or lead dozens of CRTC proceedings.