

August 25, 2017

To: Ms. Danielle May-Cuconato
Secretary General
Canadian Radio-television and
Telecommunications Commission
Ottawa, Ontario
K1A 0N2

Subject: **Part 1 application to review and vary certain determinations made in Telecom Order CRTC 2017-182, Definition of a Primary PSAP and Exclusion of Secondary PSAPs from future NG9-1-1 tariffs**

Dear Ms. May-Cuconato,

- 1) This Application is filed¹ by the list of Public Safety Answering Points (PSAPs) and authorities detailed in the attached Appendix 'A' to review and vary certain determinations in Telecom Regulatory Policy 2017-182².

Introduction and Summary

- 2) Telecom Regulatory Policy 2017-182 is a comprehensive forward thinking policy to guide the implementation of next-generation (NG) 9-1-1 in Canada. The PSAPs believe that the policy is substantially correct; however we are requesting a review and vary with respect to the incorrect definition of a primary PSAP which fails to properly recognize the intertwined and co-dependent role of secondary PSAPs, and a reversal of the Commission's determination to exclude NG9-1-1 related connections of secondary PSAPs from future NG9-1-1 network access tariffs.
- 3) PSAPs believe that failure to address these issues will give rise to the following unintended risks:
 - a. Canadians paying a much higher cost for the future NG9-1-1 system;
 - b. A system that may well be fragmented, insecure, unmanageable, and unreliable compared to today's reliable and resilient end-to-end 9-1-1 system³;
 - c. The inability to deliver the end-to-end functionality which is the stated outcome of this transition process;

¹ Pursuant to the *Canadian Radio-television and Telecommunications Commission – Telecom Information Bulletin CRTC 2011-214 at paragraphs 5(iii), 5(iv), and section 62 of the Telecommunications Act.*

² Telecom Regulatory Policy CRTC 2017-182, *Next-generation 9 1-1 – Modernizing 9-1-1 networks to meet the public safety needs of Canadians*, issued June 1, 2017.

³ At a minimum, there will be an inability between the E9-1-1 and secondary PSAPs at the provisioning level, for real-time monitoring, alarming, maintenance, and repair in comparison to today's redundant and reliable E9-1-1 system.

- d. The inability to meet the stated timelines regardless of the core systems readiness, primary PSAPs may be unable to move forward due to the exclusion of secondary PSAPs;
- e. The introduction of potentially lengthy delays for Canadian 9-1-1 callers as a result of increased call handling times.

We also anticipate that further risks will be identified as the work of the ESWG continues to develop the NG9-1-1 technical and operational landscape for Canada.

Substantial Doubt

- 4) In any request to the Commission to review and vary one of its decisions, an applicant must demonstrate that there is "substantial doubt as to the correctness of the original decision", due to:
 - (i) an error in law or in fact;
 - (ii) a fundamental change in circumstances or facts since the decision;
 - (iii) a failure to consider a basic principle which had been raised in the original proceeding; or
 - (iv) a new principle which has arisen as a result of the decision.⁴
- 5) We submit that there is substantial doubt as to the correctness of Telecom Regulatory Policy 2017-182, for three reasons:
 - a. There was an error of fact and failure to properly consider a basic principle i.e. definition of a "primary PSAP"; and
 - b. There was a failure to properly consider a basic principle i.e. the intertwined and co-dependent role of secondary PSAPs; and
 - c. There was a new principle which has arisen as result of the decision without sufficient consultation with stakeholders i.e. to exclude NG9-1-1 related connections of secondary PSAPs from future NG9-1-1 network access tariffs.

Definition of a "Primary" PSAP

- 6) In paragraph 9 at footnote 7 the following definition is provided: *A primary PSAP is a PSAP to which 9-1-1 calls are routed directly as the first point of contact. In most cases, the primary PSAP then contacts the appropriate agency to dispatch emergency responders.* The assumption noted in this footnote, specifically the underlined sentence above, does not accurately reflect the different local protocols for emergency call handling between PSAPs in most of Canada.
- 7) It is unclear from the Commission analysis in this policy or in the record of the proceeding where the definition of primary PSAP was obtained. This is a basic principle of the policy which was not sufficiently explored during CRTC Notice of Consultation 2016-116 proceeding.

⁴ Telecom Information Bulletin CRTC 2011-214, *Revised guidelines for review and vary applications*, issued 25 March 2011.

- 8) We submit that the appropriate Canadian definition for a PSAP is as follows: *A primary PSAP receives the 9-1-1 call and determines which emergency service is needed first. Once the emergency service is identified, in many cases the primary PSAP transfers⁵ the call and associated data to the downstream secondary PSAP i.e. Police, Emergency Medical Services, or Fire. The secondary PSAP then collects further information and, if required, dispatches the appropriate emergency service. In the case of hang-up and open line calls, the majority of non-police primary PSAPs in Canada transfer the call with very little information to a secondary PSAP (Police) that must determine if there is an emergency and take appropriate action.*
- 9) PSAPs are requesting the policy be updated at paragraph 9, footnote 7 and replaced with the definition shown above in paragraph 8 of this application. The updated definition more appropriately demonstrates the intertwined and co-dependent nature of primary and secondary PSAPs (*as detailed in paragraphs 10-13, next*). Both primary and secondary PSAPs are integral to the future NG9-1-1 service in Canada.

Intertwined and Co-dependent Role of Secondary PSAPs

- 10) The record of the proceeding shows very strong support for the fundamental interconnection of both primary and secondary PSAPs to NG9-1-1 networks, which was acknowledged in the Commission's analysis at paragraph 78 of the policy. However, there was a failure to sufficiently explore the impact of **not** including secondary PSAPs in the mandated NG9-1-1 related connections in future NG9-1-1 network access tariffs.
- 11) The Commission policy points to the lack of jurisdiction for secondary PSAPs as the reason for not including their interconnection (paragraph 79). However, at paragraph 9 the policy correctly states that the *provincial, territorial, and municipal governments are responsible for emergency responders and for the establishment and operation of the primary or secondary PSAPs that dispatch them*. All three entities (i.e. primary, secondary, and emergency responder(s)) fall outside of the direct jurisdiction of the CRTC, however it's important to note that this same limitation did not impact the timing, costs, or completeness of the rollout of the Wireless Phase II E9-1-1 service across Canada, which was delivered in just six months to ALL primary and secondary E9-1-1 PSAPs in Canada (as directed in CRTC Regulatory Policy 2009-40). The same end-to-end rationale and processes used for Wireless Phase II E9-1-1 service need to be applied to the future NG9-1-1 network implementation in order to deliver the same success for this very complex undertaking.
- 12) At paragraph 77 of the policy, the statement is made: *connecting all secondary PSAPs to Emergency Services IP-Enabled Networks (ESInets) would be a very large project, especially given how frequently the architecture might change*. We believe there was a failure to sufficiently explore this matter; especially given the Commission's determination that cited it as one of the reasons for excluding secondary PSAPs from the even more intertwined and co-dependent future NG9-1-1 related connections and essential location, routing and display determination functions. Had this matter been fully explored we would have made the following observations and comments:

⁵ In some provinces, based on applicable regulations and procedures, matters related to medical emergencies must be transferred immediately to the applicable EMS secondary PSAP without any further delay.

- a. All secondary PSAPs connected to E9-1-1 today have the basic IP connections required for NG9-1-1. Therefore, connecting all secondary PSAPs to the ESInet(s) is not a large project, since it is already in place.
 - b. Every secondary PSAP may not need full-featured NG9-1-1 functionality.
 - c. ESWG can provide the technical and operational requirements for future secondary PSAP NG9-1-1 connections, including basic, standard, and enhanced functionality.
 - d. Future architecture changes will be much easier to manage with a standard end-to-end voice and enriched data-capable network for all NG9-1-1 connected PSAPs (primary and secondary).
- 13) PSAPs are requesting the policy be updated at the appropriate places to remove this new and non-consulted distinction between primary and secondary PSAPs due to the overall and genuinely intertwined requirements to manage and handle call setup, call evaluation, and call transfer functions leading to emergency dispatch. It is important to note that many secondary PSAPs are de facto backup primary PSAPs, which will be even more prevalent with NG9-1-1 real-time call overflow capabilities.

Exclusion of Secondary PSAPs from future NG9-1-1 Tariffs

- 14) The Commission's determination that the cost of interconnecting secondary PSAPs would be the responsibility of the applicable provincial, territorial, and municipal governments and not included in future NG9-1-1 network access tariffs creates a new principle that must be taken into account.
- 15) During the proceeding, PSAPs and applicable governing authorities provided substantial information regarding secondary PSAPs being the beneficiaries of NG9-1-1 and were very surprised by this policy determination. Had the Commission expressed that the exclusion of secondary PSAPs was an option that was being considered, PSAPs would have made submissions that include the points raised in paragraph 16 below.
- 16) Currently, the existing E9-1-1 Service Provider tariffs and the underlying municipal agreements include tariffed interconnection to all primary and secondary PSAPs. The unintended consequences of unbundling secondary PSAPs from future NG9-1-1 network access tariffs introduces the following risks:
- a. **Increased Cost for Canadians** – Today, interconnection to secondary PSAPs is covered within the existing E9-1-1 tariffs. The Commission's determination will mean that secondary PSAPs will move from a regulated "public good" service to an unregulated commercial interconnection service. This could mean a move from rates that represent costs plus a 15% markup to paying commercial rates that will likely include much higher markups. The result will be that Canadian consumers will be paying more for 9-1-1 services. Canadians will be justifiably upset and confused in terms of the reasoning behind this increase in costs, especially given the record from the NG9-1-1 proceeding where many parties commented that NG9-1-1 should not be significantly more costly than the current 9-1-1 services are today.

There was a failure to explore this during the proceeding; however one 9-1-1 Service Provider i.e. Bell, has already provided detailed IP interconnection, surveillance, and maintenance costs which included primary, secondary, backup PSAPs throughout their 9-1-1 serving territory (PEI, NS, NB, QC, and ON) as part of the Bell Tariff Notice 7480⁶. This proceeding should be informative for estimating the future NG9-1-1 network access tariffs costs for all primary and secondary PSAPs.

- b. **Reliability, Resiliency, and Security will be Unnecessarily Complex and Very Hard to Secure, Monitor, Troubleshoot, and Maintain** – Requiring secondary PSAPs to source their own interconnection to NG9-1-1 networks will likely eliminate or at least reduce the end-to-end security provided by future ESInet providers. Since secondary PSAPs will have a pick of numerous commercial interconnection providers, it will be very difficult, if at all possible, to control and maintain resiliency, security, and privacy for Canadians. This open market approach will likely also eliminate the opportunity for comprehensive end-to-end network monitoring and management which means Canadians may be faced with a significant and complex number of outages (*impacts that have already been experienced in the U.S., per the record of the proceeding*) and an increase in service restoration time. Relegating secondary PSAPs to commercial IP interconnection i.e. internet, will introduce additional delays as coordination between multiple parties during troubleshooting and repairs is required. This leads to slower time to resolution, and the inevitable finger pointing i.e. more delays, in the absence of the ‘one throat to choke’ approach highlighted during the proceeding.
- c. **Failure to Reach the End-to-End Functionality Envisioned for NG9-1-1** – The ability to seamlessly deliver voice, text, video, pictures and other data that promise new emergency call taking opportunities and improvements to call handling and communications with and provision of data to responder partners will be at risk based on the Commission’s current determinations. Even though secondary PSAPs and emergency response agencies will be the primary recipients and potential beneficiaries of multimedia content and data provided through NG9-1-1 capabilities, secondary PSAPs will have no incentive to implement the bandwidth, hardware, and software required for the NG9-1-1 functionality because they have been excluded from the future public safety broadband network which was planned to link in emergency responders for an end-to-end ecosystem. For example, retrieval and transfer of medical information may not be allowed because the system is not secured end-to-end.

Recent history clearly shows that rather than seeing the success we realized with the transition to XML ANI/ALI and IP interconnection in a short 24-month period, we are introducing the same issue seen with the Text with 9-1-1 implementation over the past four years (i.e. lack of an end-to-end platform delivery) that has resulted in frustrations and delays. For NG9-1-1, this could result in never realizing a complete implementation of NG9-1-1 across Canada. This also means that future scalability

⁶ This tariff notice process resulted in CRTC Telecom Order 2016-363 which notes the total proposed cost (*supported by a cost study filed with the Commission*) was less than one cent for IP interconnection, surveillance, and ongoing maintenance costs for the 5 listed provinces.

and provisioning of new functional elements e.g. video calling, etc., may be impeded, delayed, or difficult to realize in the manner envisioned for NG9-1-1.

- d. **Inability to Meet the Timelines Set out in the Policy and Future 9-1-1 Evolution** – It is clear that we are in very good shape in terms of meeting the NG9-1-1 IP Voice and RTT provider implementations by the end of 2020. However the exclusion of secondary PSAPs means that even highly motivated primary PSAPs will find themselves in a potentially lengthy holding pattern due to the uncertain, fragmented, politically sensitive nature of secondary PSAPs and their NG9-1-1 interconnection (which also carries the enriched NG9-1-1 data). PSAPs believe we will never realize the envisioned NG9-1-1 outcome as a direct result of the determination to exclude NG9-1-1 related connections of secondary PSAPs from future NG9-1-1 network access tariffs.
- e. **Potential Delayed Call Processing Times for NG9-1-1 Users in Canada** – Primary PSAPs that decide to move ahead with NG9-1-1 functionality, without waiting for their downstream secondary PSAPs to be ready, will be forced to verbally provide the additional information to the secondary PSAPs, which will be time consuming, confusing, and frustrating for Canadian callers and PSAPs, with an unnecessary increased risk of errors and liability. Given the significant volume of calls transferred from primary to secondary PSAPs, it is highly probable that primary PSAPs will be unable to sustain the additional workload for calls that cannot be downstreamed to unequipped secondary PSAPs, which could unintentionally impact the health and safety of Canadian 9-1-1 callers.

17) For the reasons listed above, PSAPs are requesting the Commission review and vary the policy, and reverse the determination to exclude secondary PSAPs from future NG9-1-1 network access tariffs.

Conclusion

- 18) PSAPs note the following unintended outcomes if points raised in this review and vary application are not addressed:
- a) Under the Commission's new and non-consulted definition, Canadians are highly likely to pay more to get less.
 - b) The policy differentiates between PSAPs in a way that undermines the ability to achieve the intended NG9-1-1 outcomes by substantively changing the 9-1-1 model in Canada. The implications of changing the 9-1-1 model in Canada were not explored during the proceeding but the costs, timelines, policy and procedure, human resource, technology, political and legislative implications would be significant.
 - c) This policy will reinforce a fractured and varied provisioning of emergency services from one jurisdiction to another; and put the Commission's stated outcome of *"increasing the safety of Canadians by giving them the best access to emergency services through world-class telecommunications network"* in jeopardy.

PSAPs strongly urge the Commission to take the steps necessary to review and vary Telecom Regulatory Policy 2017-182, as suggested in this application, to mitigate and/or avoid risks to the future of NG9-1-1 implementation and the unintended consequences for Canadians and for visitors to Canada.

Yours truly,



Diane Pelletier
NB 911 Director
on behalf of the Appendix 'A' list of PSAPs and Authorities

Cc: List of PSAPs and Authorities – Appendix 'A'
Phil Kent, CRTC (Philippe.kent@crtc.gc.ca)
NOC 2016-116 Intervener distribution list – Appendix 'B'

*Attachment: Appendix 'A' – List of PSAPs and Authorities - Signatories to this Application
Appendix 'B' – List of Interveners to NOC 2016-116*

Appendix 'A'

List of PSAPs and Authorities - Signatories to this Application

Alberta E9-1-1 Advisory Association
Barrie Police PSAP
Belleville Police PSAP
Brockville Police PSAP
Calgary 9-1-1
Chatham-Kent Police PSAP
Coalition pour le service 9-1-1 au Québec
Cornwall Police PSAP
County of Hastings (Ontario) PSAP
Durham Regional Police PSAP
E-Comm 9-1-1 (BC)
Edmonton Police PSAP
Espanola Police PSAP
Gananoque Police PSAP
Greater Sudbury Police PSAP
Grande Prairie Fire PSAP
Hamilton Police PSAP
Kawartha Lakes Police PSAP
Kingston Police PSAP
Lethbridge Police PSAP
London Police PSAP
Manitoba Provincial 911
New Brunswick 911
Niagara Regional Police PSAP
North Bay Police PSAP
Nova Scotia 911
Ontario Ministry of Health and Long Term Care PSAPs
Ontario Provincial Police PSAPs
Orangeville Police PSAP
Owen Sound Police PSAP
Peel Regional Police PSAP
Peterborough Police PSAP
Prince Edward Island 911
RCMP 'E' Division Operational Communications Centres (BC)
Red Deer Fire PSAP
Sault St Marie Police PSAP
Sarnia Police PSAP
Sask911 (Saskatchewan) PSAPs
Service de police de la Ville de Montréal
Smith Falls Police PSAP

Strathroy-Caradoc Police PSAP
St Thomas Police PSAP
Timmins Police PSAP
Toronto Police PSAP
Thunder Bay Police PSAP
Victoria Police PSAP
Waterloo Police PSAP
West Nippissing Police PSAP
Winnipeg Police PSAP
Windsor Police PSAP
Woodstock Police PSAP
York Regional Police PSAP

Appendix 'B'

List of Interveners to the CRTC Notice of Consultation 1011-NOC2016-116

Organization	Name	Email or Phone
Ontario Provincial Police	Philbin, R. A. (Rick)	richard.philbin@opp.ca
Canadian Hearing Society	Malkowski, Gary	gmalkowski@chs.ca
Office of the Privacy Commissioner of Canada	Therrien, Daniel	No email provided
Canada Wireless Telecommunications Association	Kurt, Eby	keby@cwta.ca
Saskatchewan Telecommunications	Beckman, W.N. (Bill)	document.control@sasktel.com
Coalition pour le service 9-1-1 au Québec	Allen, Serge	sallen@agence911.org
Toronto Police Service	Finn, Tracy	Tracy.Finn@torontopolice.on.ca
CNIB	Greco, Lui	lui.greco@cnib.ca
WIND Mobile Corp.	Antecol, Edward	eantecol@windmobile.ca
Rogers Communications Canada Inc.	Olivier, Simon-Pierre	simon-pierre.olivier@rci.rogers.com
NG9-1-1 Coalition of the Willing	Pelletier, Diane	Diane.b.pelletier@gnb.ca
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Bell Canada	Gauvin, Philippe	bell.regulatory@bell.ca
Shaw Telecom G.P.	Cowling, Paul	Regulatory@sjrb.ca
National Pensioners Federation, Council of Senior Citizens' Organizations of B.C. & Public Interest Advocacy Centre	Lau, Alysia	alau@piac.ca
Media Access Canada	Tibbs, Anthony	anthony@tibbs.ca
Conseil provincial du secteur municipal du SFCP-Québec	Gloutney, Patrick	mlorch@scfp.qc.ca
Zayo Canada Inc., formally known as Allstream Inc.	Peaker, David	regulatory@allstream.com
Canadian Association of the Deaf-Association des Sourds du Canada and Deaf Wireless Canada Committee	Folino, Frank	ffolino@cad.ca ; lisa@deafwireless.ca
E-Comm 9-1-1	Webb, Michael	Mike.Webb@ecomm911.ca

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The City of Calgary	Magnason, Magni	magni.magnason@calgary.ca
Alberta Urban Municipalities Association	Holmes, Lisa	ksantarossa@auma.ca
Public Safety Division, Ministry of Community Safety and Correctional Services	DeSantos, Anthea	anthea.desantos@ontario.ca
Canadian Interoperability Technology Interest Group (CITIG) et al	Torunski, Eric	eric.torunski@citig.ca
Ministry of Community Safety and Correctional Services for the Province of Ontario	Beckett, Stephen	Anthea.DeSantos@ontario.ca

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