

# Towards next generation 9-1-1 in Canada

By David Farnes Cable & Telecom



TORONTO – Canadian 9-1-1 experts met at the end of May as the community continues to move forward towards the June 2020 deadline to transition to Next Generation 9-1-1 (NG9-1-1).

Hosted by Rogers in downtown Toronto, the three-day meeting of the Emergency Services Working Group (ESWG) featured highly technical discussions around standards and operational best practices. Approximately 80 experts from across the country attended the meeting in person, with more joining by phone. Coincidentally, the ESWG meeting followed on the heels of an important CRTC Decision.

In [Telecom Decision CRTC 2018-188](#), the Commission varied an earlier ruling (Telecom Regulatory Policy 2017-182) that would have excluded NG9-1-1 related connections of secondary Public Safety Answering Points (PSAPs) in future NG9-1-1 network access tariffs. The effect of this determination would have been to require the costs of such connections to be recovered from provincial, territorial, or municipal governments, and not through Commission-approved NG9-1-1 network access tariffs.

The Commission had stated that these governments are best positioned to determine what constitutes a secondary PSAP. However, [with the Commission's reversal](#), connections of both primary and secondary PSAPs will be include in the tariffs.

Primary PSAPs are those agencies that answer calls to 9-1-1, whereas secondary PSAPs are often the specialized dispatching agencies (police, fire or EMS) to which the primary PSAP transfers 9-1-1 calls.

The New Brunswick 9-1-1 Bureau filed the appeal on behalf of PSAP agencies. Diane Pelletier, director, NB 9-1-1 Bureau at Government of New Brunswick offered this

reaction to the CRTC's Decision: "We are pleased that the Commission understood and agreed with our request to review and vary their previous decision in 2017-182. This will facilitate and supports our vision for a standard and consistent NG9-1-1 service delivery for all of Canada."

At the ESWG meetings, there was agreement that the technical distinctions between primary and secondary PSAPs will disappear with NG9-1-1 as the agencies move to an IP-based network. According to Holly Barkwell, president and CEO of consultants BH Group and NENA Canadian Region Director, "the general consensus is that a PSAP can and does often fill the role of primary, secondary, and backup in some cases."

Pelletier is impressed with "the level of co-operation and collaboration at the ESWG table," noting that the recent ESWG meeting "highlighted the tremendous progress and inroads achieved" since June 2017, when the CRTC established the date for the transition to NG9-1-1. Barkwell agreed, adding "I believe Canada is now on track for a successful migration to a Next Generation 9-1-1 environment thanks in large part to the Commission's unprecedented solicitation of industry input prior to releasing Decision 2017-182".

There is a heavy focus at ESWG on preparing for trials which are to begin no later than the end of February next year, as prescribed by the CRTC. A successful test of the new 9-1-1 network would be a positive indicator that the 2020 deadline can be achieved from a technical standpoint. Many PSAPs, however, continue to struggle to identify what new equipment and services will be required, their costs and the potential funding sources for procurement. "Unfortunately many PSAPs missed the opportunity to contribute and did not pay attention to Commission decisions outlining timeframes or carrier requirements for provision of Next Gen 9-1-1 services," said Barkwell.

"In the absence of a national coordinating body to look at this issue in the global context of an emergency service response ecosystem, I worry that we will not achieve a consistent and standard level of NG9-1-1 systems and services across Canada." – Diane Pelletier, NB 9-1-1 Bureau

Funding models to pay for NG9-1-1 are top of mind for PSAPs. "Great strides are being made technically and operationally however, costs and funding sources to enable this paradigm shift for all PSAPs across Canada still remains a big unknown for PSAPs and their municipal and/or provincial authorities", according to Pelletier. "We have a focused and coordinated approach on technical and operational side through the ESWG, but the governance and funding elements still remain unclear."

"Funding will be a challenge for the migration process and careful planning and implementation are paramount to squeezing every ounce of functionality and productivity out of every dollar invested," added Barkwell.

The technical vision at ESWG is to develop a new national Emergency Services Internet (ESInet). This new network could enable calls 9-1-1 to be transferred to the appropriate

responding agency regardless of the agency's location in Canada (something that cannot be done today). All PSAPs could serve as back-ups to other PSAPs, by answering 9-1-1 calls for another PSAP that is, perhaps, overwhelmed by an emergency.

How to manage the interconnected 9-1-1 networks remains an open question. One that worries Pelletier, "In the absence of a national coordinating body to look at this issue in the global context of an emergency service response ecosystem, I worry that we will not achieve a consistent and standard level of NG9-1-1 systems and services across Canada."

Training and public education will also be key to a successful transition to NG9-1-1. "We cannot lose sight of the people that make the technology function, nor can we stop educating the public on the proper use of 9-1-1," said Barkwell.

The next meeting of ESWG will be hosted by the CRTC in Gatineau in October.

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