

BeH



ESWG by #s

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Bell

Agenda

NG9-1-1 Stakeholder Impacts

CRTC and Emergency Service Working Group

ESWG Role

ESWG Website Overview

ESWG Work Summary

TIF 85 – NG9-1-1 Transition Considerations

Costs and Funding Models

Timelines

Q & A

NG9-1-1 Stakeholder Impacts

	Citizen/9-1-1 user	PSAP	9-1-1 Authority
Technology	<ul style="list-style-type: none"> • Text-to-9-1-1 • Telematics e.g. OnStar • Wearables • IP enabled devices 	<ul style="list-style-type: none"> • IP technology • Multimedia to 9-1-1 • Data sharing • National Interoperability • Cybersecurity 	<ul style="list-style-type: none"> • New GIS Requirements
Funding	<ul style="list-style-type: none"> • Efforts to standardize 9-1-1 Network Fee • Will there be changes to Provincial 9-1-1 Call Answer Levies ? 	<p>New Costs:</p> <ul style="list-style-type: none"> • training • equipment • staffing • technology • cybersecurity 	<ul style="list-style-type: none"> • PSAP funding • Provincial 9-1-1 Call Answer Levy (updated or new)
Additional Information	<ul style="list-style-type: none"> • User inputted data • Additional Data Repositories such as: Building plans, pets 	<ul style="list-style-type: none"> • Subscribers specific info • Building Plans • Telematics 	<ul style="list-style-type: none"> • Additional Information Sources managed by the 9-1-1 Authorities such as street/traffic cameras.

9-1-1 Industry in Canada



CRTC EMERGENCY SERVICES WORKING GROUP

Task Identification Form Summary

TIF #	Task Definition	Status
80	Umbrella Task to Track and Report on the Progress of the NENA i3 Design and Transition to NG9-1-1 in Canada	This task currently monitors activity on TIFs 81, 82, 83, 85, 86, 88, 89, 90, 91, and 92.
81	Originating Network Requirements	<ul style="list-style-type: none"> • Origination Networks Requirements and Origination Services requiring NG9 1-1 treatment • Interconnection, interface and demarcation point requirements • Report ESRE0078 approved by commission in June 2018
82	ESInet and Core Component Considerations	<ul style="list-style-type: none"> • Emergency Services Internet Protocol (IP) network (ESInet) and IP Addressing Requirements • NG9-1-1 Core Services • Policy-based Routing Rules, Inter-jurisdiction Call Routing and Transfer, and alternate and default Routing • Report ESRE0079 approved by commission in June 2018
83	PSAP-based Considerations	<ul style="list-style-type: none"> • NG9-1-1 PSAPs and PSAP Technical and Operational Considerations • Additional Data Requirements and Considerations • Report ESRE0080 approved by commission in June 2018

Task Identification Form Summary

TIF #	Task Definition	Status
85	Transition Considerations and Gateways	<ul style="list-style-type: none"> • Develop an overarching Roadmap of high level steps to transition from the current 9-1-1 platform to the future NG9-1-1 platform; • NG9-1-1 Transitions Consideration Communications sub-group • Work will also start early in 2019 on a Proposed Coordinated National Rollout Schedule from January 1, 2021 to June 30, 2022 (tentative dates subject to confirmation).
86	Delivering a Dispatchable Location from Originating Networks	<ul style="list-style-type: none"> • Definition of dispatchable location • Review and report on all the sources and options available to derive that location • New technologies and capabilities i.e. delivery of Z (elevation) co-ordinate
87	Feasibility of Implementing Wi-Fi 9-1-1 Location from IMS Core Networks	<ul style="list-style-type: none"> • Define the method and mechanisms required to locate Wi-Fi 9-1-1 callers and route them to the appropriate PSAP directly. • Early stages. • Carrier driven
88	NG9-1-1 Voice Trial Logistics	<ul style="list-style-type: none"> • NG9-1-1 Voice Trial to start no later than February 2019 • UNI and NNI available at end of September 2018 • Currently 21 PSAP participants in Bell territory

Task Identification Form Summary

TIF #	Task Definition	Status
89	RTT-based NG9-1-1 Text Messaging Technical Specifications	<ul style="list-style-type: none"> • Text TO 9-1-1 using Real Time Text • Report due on October 31st
90	NG9-1-1 Reliability, Resiliency, and Security	<ul style="list-style-type: none"> • Propose new or updated NG9-1-1 specific notification standards in addition to the recommendations detailed in ESRE0076 – Service Outage Notification Process • Collaborate on the development of performance standards and acceptable service levels leveraging current/future industry standards, service levels, and best practices to ensure NG9-1-1 reliability, resiliency, and security are implemented and maintained end to end • Trusted entities onboarding process
91	NG9-1-1 Additional Data Considerations	<ul style="list-style-type: none"> • Develop a list of Additional Data Sources and proposed criteria to designate them as trusted or untrusted; • Determine how to facilitate the end to end delivery from various types of ‘trusted’ sources to PSAPs • Currently in Pending status – No task owner assigned as of yet
92	Canadian NG9-1-1 Mapping (GIS) Data Model and Common Civic Addressing Format Considerations	<ul style="list-style-type: none"> • creation of an NG9 1-1 compliant Geographical Information System (GIS) Data Model for Canada; • creation of a NG9-1-1 compliant Common Canadian Civic Addressing Format and associated PIDF-LO Profile.

NG9-1-1 Transition Considerations



PSAP High Level
Action Plan

- Determine, assess, and plan for **business transformation needs**. *See Action Plan:*
- Develop a **technology plan** for the new call handling requirements; define best practices for presenting and managing the NG9-1-1 features and functions.
- Identify **new roles and responsibilities** for both technical and operations staff that considers initial and future-state NG9-1-1 environments.
- Develop a 5-year (minimum) **strategic roadmap** envisioning your Provincial/Territorial end-to-end 9-1-1 emergency response ecosystem that includes NG9-1-1 data and service capabilities.
- Develop an **NG9-1-1 governance and emergency services delivery model**.
- Work with PSAP partners to **update MOUs and coordinate training delivery** to ensure a coordinated, logical rollout of NG9-1-1 in your Province/Territory.
- PSAPs and their governing authorities should work with Provincial/Territorial governments to **create or amend 9-1-1 legislation** based on NG9-1-1 impacts.
- **Understand and action the information being provided by ESWG** (*Bell Portal*).

Who Pays For What

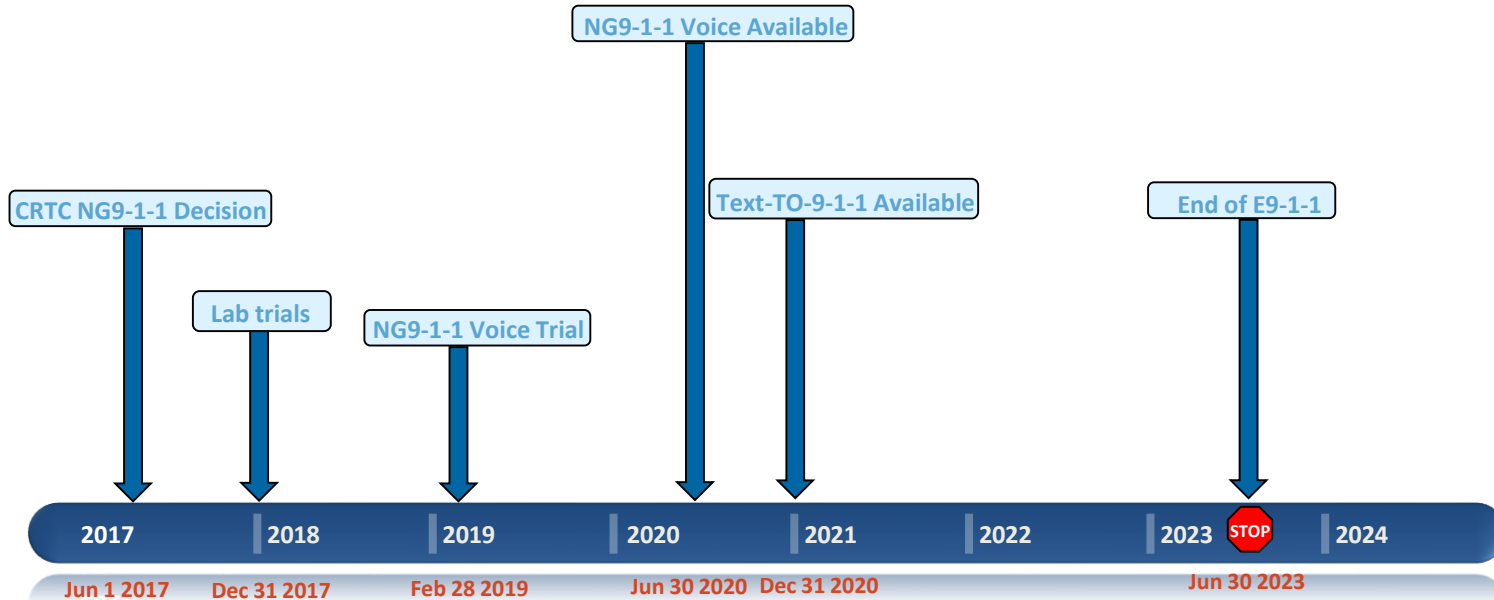
9-1-1 Tariff		Municipal or Provincial 9-1-1 Call Answer Levy	
E9-1-1 Network	NG9-1-1 Network	E9-1-1 PSAP	NG9-1-1 PSAP
Resilient, Redundant and Reliable Data and Voice E9-1-1 Network	Resilient, Redundant and Reliable IP Network for NG9-1-1	Phone System (dedicated) CAD Call Logging and Recording Radio	IP Phone upgrade
All 9-1-1 systems to manage the delivery of the 9-1-1 call and associated data to the PSAP	E9-1-1+ additional information about the call or the caller.	Call takers Supervisors Training	IT Staff New Skill set
24/7 Surveillance and maintenance of all 9-1-1 Network systems and database updates	Centralized 24/7 Control Center of new 9-1-1 Network, Systems and database updates Cybersecurity management to protect 9-1-1 networks and caller data	Reliability, resiliency, and redundancy Physical security	Cybersecurity (hackers, intrusion detection, cyber terrorism, data protection)

E9-1-1 Rates and Tariffs

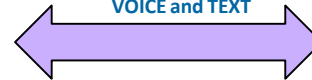
Province	E9-1-1 Wireline	E9-1-1 Wireless	9-1-1 Call Answer Levy	New NG9-1-1	ILEC
Alberta	0.0900	0.0768	0.4400	XX?	TELUS
British Columbia	0.0900	0.0768	\$0.44 - \$0.75		TELUS
Manitoba	0.1700	0.1748	none	XX?	Bell
New Brunswick	0.2100	0.1371	0.5300		Bell
Newfoundland	0.0000	N/A	0.7500		Bell
Nova Scotia	0.1900	0.1271	0.4300		Bell
Ontario	0.1300	0.1053	none		Bell
Prince Edward Island	0.3000	0.1821	0.7000		Bell
Quebec	0.1300	0.1053	0.4600		Bell
Saskatchewan	0.2100	0.2100	0.9400	XX?	SaskTel



Timelines



Coordinated Implementation of NG9-1-1
VOICE and TEXT



CRTC Mandated Timelines

ESWG Proposed Timelines

Summary

- NG9-1-1 will be a managed transition
- Progress is to be reported on regular basis to the commission
- Coordinated NG9-1-1 implementation by Province/ Territory is critical to ensure that public, stakeholder and CRTC expectations are met.
- Stakeholders need to envision, plan, and execute work to establish a NEW, world-class 9-1-1 emergency services ecosystem.

Thank You



Questions?