

Preparing for a National Interoperable Emergency Broadband Network



Presentation at the FCM 2013 Annual Conference and Trade Show

3:30 to 5:00 p.m., Friday, May 31, 2013



Welcome...

Deputy Chief Bill Moore, O.O.M.

Halifax Regional Police Service and CITIG Chair









CITIG's Mission

To improve Canadian public safety interoperability at home and abroad through collaborative efforts, innovation and leadership





Two Hot Button Issues

- 700 MHz broadband for mission critical public safety broadband
- Next Generation (NG)9-1-1









700 MHz & NG9-1-1

- Enhanced Public Safety
- Increased Responder Safety
- Improved Resource Allocation
- Support for Decision-Making
- Improved Cross-Discipline Communication
- Improved Response Times
- Improved Patient/Customer Care









Why is 700 MHz for DATA so important?

- Today, Canadian public safety entities use existing commercial networks for their data needs
- Some 700 MHz narrow and wide band spectrum is already dedicated to public safety in Canada for voice and some low speed data use
- However, securing dedicated spectrum for broadband DATA applications for public safety will ensure wireless broadband networks can be built with the needs of public safety in mind
- Take advantage of World standard LTE 4G for DATA
- DOES NOT replace need for Land Mobile Radio





Why is 700 MHz so important?

- With advances in technology, Canadian agencies will have an increasing need to access data and video networks during all emergency incidents
- Availability of such networks responds directly to the Canadian tri-services identified priorities of improved interoperability and integrated emergency management -- spectrum allocations are a key enabler for the creation of such a network
- Above all, Canadians will be safer if responders have the ability to provide services with the most up-to-date technology enabled by spectrum dedicated for public safety







Present State of Broadband in Canada

- Different technologies in use
- Different systems in use
- Not seamless ability for wireless broadband nationwide
- No Canada-U.S. harmonization
- Thirst for public safety bandwidth increasing exponentially
- If done correctly will enable mission critical data communications for public safety for years to come
- Having this ability directly impacts community and responder safety, innovation and the health of Canada's digital economy





Call to Action!

Web site created by CITIG to provide a focal point for communications efforts:

www.action700.ca

(download basic information, including recent media release, and sign up for e-mail updates) Questions? Send emails to:

action700broadband@gmail.com





It's Official: Canada has 10 MHz!

(But we still need the full 20 MHz...)

- Industry Canada (FCC) Minister Paradis announced on March 14, 2012 that 10 MHz will be allocated in Canada for "public safety use"
- Second round of consultation for the additional 10 MHz of spectrum (D Block) completed. Awaiting announcements.
- Working with Senior Officials Responsible for Emergency Management (SOREM – all Provinces & Territories), Public Safety Canada & FCM on an almost daily basis
- Ties directly to US efforts to leverage the same spectrum for a nationwide "FirstNet" effort by Municipalities, States & responders









Thoughts on how to pay

- Public safety agencies will continue to pay user fees to access the network – but now to new entity
- LTE Infrastructure/operations with P3 partnerships
- Amend the Building Canada Fund to include communications networks to help F/T/P/M agencies (letters to Minister Label & Flaherty, cc Toews)
- Reduce or eliminate Industry Canada spectrum licence(s) fees
- Seek federal funding to help set up administrative body (eventually self sustaining)
- TBA governance/business model work continues





Innovation, Jobs & Economic Development

- 700 MHz issue ties directly to Canada's history of innovation
- Communities that take a leadership role in implementing broadband, including 700 MHz, and supporting R&D activities can benefit via jobs & economic development
- CITIG working with communities & industry wishing to understand/exploit these opportunities.

Multiple meetings between CITIG and Government of Canada, including Ministers, regarding 700 MHz & opportunity to see it not only as a public safety capability but an innovation & economic development driver



Next Generation 9-1-1 (NG9-1-1)











Next Generation 9-1-1: A Game Changer

- According to CWTA: 26,874,569 Cell Subscribers in Canada in 2013
- More than 50% of the adult population has mobile smartphone devices
 - Smartphones generate 35 times more data traffic than basic cell phones, while tablets generate 121 times more traffic
- By 2014, most internet traffic will be via mobile devices
- Voice communications are on the decline, and account for less than 1/3 of mobile usage







How NG9-1-1 is Different

- Technology (IP Packet Based vs Circuit Switched)
- Interoperability
 - No longer a "local" service only
 - Interoperates at city, region, province and national levels
- Functionality
 - Replicates E9-1-1 capabilities
 - Adds new capabilities
 - Wide ranging additional data options
 - GIS-based instead of tabular data for location validation and routing control









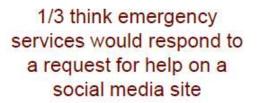
What's Driving NG9-1-1?

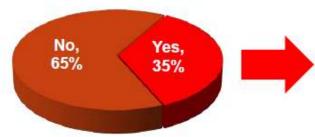
- Newer technologies/services
 - Text, image, video, telematics, sensors, subscriber info, emergency location info
- Need to "mainstream" 9-1-1 technology
- Improve survivability
 - Network resilience, virtual PSAPs
- Improve interoperability and information sharing

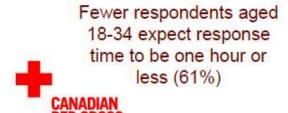


Canadian Red Cross Survey

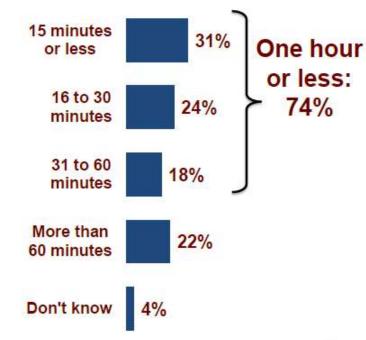
RESPONDING TO CALLS FOR HELP







Amount of time it would take for emergency services to respond to a posted request for help



http://bit.ly/ZkKYaX



Current Work in Canada

- Dec. 17, 2012, CRTC issues a Notice of Consultation regarding the appointment of an Inquiry Officer to review matters related to 9-1-1
- CITIG & Tri-Services coordinated responses from across Canada to ensure a consistent message delivered
- Research shows that NG9-1-1 will require significant increases in resourcing (up to 30%) to implement.
- While 9-1-1 developed slowly over many years, NG9-1-1 requires a high degree of coordination
- CITIG & Tri-Services working with F/P/T/M partners to develop a five year strategy & action plans





CRTC Consultation

- Need to make understanding impacts of Next Generation (NG) 9-1-1 a priority
- Disconnect in what public perceives current 9-1-1 can do (need to raise awareness – ex. Canadian Red Cross Social Media study)
- Two key issues are Governance/Coordination & funding!
- Other issues include liability, capacity, change management
- CRTC Consultation was an excellent impetus for new national dialogue on NG9-1-1





CITIG's response to CRTC informed by many...









NG9-1-1 National Governance and Coordination Workshop





In Portnership with:





Sponsored in part by:









With special thanks to:



he Canadian Interoperability Technology Interest Group (CITIG) is proud to announce a two-day workshop designed to chart the future of Next Generation 9-1-1 (NG9-1-1) governance and coordination in Canada. This event strives to gather participants from a cross section of disciplines, industry, government and academia to work collaboratively on;

- recommending an appropriate governance and/or coordination structure to advance the NG9-1-1 agenda in Canada in an efficient, effective and objective manner;
- exploring potential funding mechanisms; and
- prioritizing the work needed to implement NG9-1-1 in Canada.

Who should attend:

- Public Safety Answering Point (PSAP) providers;
- Tri-service responders, communicators and leaders;
- Emergency management and government officials from all levels of government;
- Industry members including, but not limited to, telecommunications providers; and,
- · Academia and other interested researchers including S&T and R&D

Dates: June 10 and 11, 2013

Location: Marriott Ottawa, 100 Kent Street, Ottawa, ON K1P 5R7. CTTIG Conference Rate of

\$149 plus taxes per night (Room block held until May 17, 2013), Direct Hotel Reservations: (613) 238-1122 , Toll Free: 1-800-853-8463 or visit www.citig.ca

for the link to on-line registrations at the discounted rate.

Cost: \$150 for Public Officials and \$250 for Industry.



For more information and towerister, visit ways, citigate Space is limited, register oday Please note that space at this Workshop is highly limited, so register early. Registration includes access to the Workshop on June 10 and 11, 2013, all



Additional CITIG Recommendations

- That every Province and Territory that currently does NOT have PSAP funding legislation create it
- 100% of fee funding received be set aside for the sole use of improving such public safety communications systems
- That a National PSAP Registry be created
- Public Safety community research Cloud Computing & other ways to leverage new technologies & reduce overall costs





The Seventh Canadian Public Safety Interoperability Workshop

November 24-27, 2013 | Vancouver, BC



CITIG SEVEN "BEYOND TECHNOLOGY: BUILDING A CULTURE OF INTEROPERABULIT"

Join us for Candala premiere communications interoperability west from November 24 to 27, 200 in Venorouse. The Seweth Candalan fublic Safety for expenditly. Workshop, widely known as CRTG Sever, will again focus on information as CRTG Sever and Information and Internation and the severage and the severage and the development of a more unified approach to public safety interoperability across the country, between methors and internationally.

From early adopters leading the effort to those still in discovery mode, you will be put it would OTING Seven in the only comprehensive, highly interactive event in Canada dedicated to addressing key voice and data interspeciality issues facing today's public safety sector.



TARGET AUDIENCE

Interoperability leaders and practitioners from:

- First responder agencies (is wenforcement, fire, paramedic, erner gency management)
- . Other public safety providers (federal, provincial, territorial, municipal)
- Military and Coast Guard
- Government agencies and utilities
- Non-governmental organizations in the emergency response and
- homanitarian aid sphere
- Academic and research institutions
 Industry professionals

LOCATION OF WORKSHOP/ACCOMM OD ATIONS

The fix mucht Hotel Vancouver, 900 W Georg as St, Vancouver, BC CITIG W orlishop Rate: \$159 plus tieses per night

Call: 604-684-533 or 1-800-441-1414

Room Block: Held until October 16, 2013 (prices are not guaranteed after this damp

REGISTRATION FEE

\$495.00 • GST [includes all plenary seasons, Monday evening exhibition reception; three is existent, two bunches and five refine hmeet break it.

For more inflamation regarding programming, registration or accommodations please visit the Canadian Association of Chiefs of Police websits at www.scap.cs. For those without internet access, pleased of 60% 50% following accessors.

Flees note workshop sessions will only be differed in English







CITIG 7 right here in Vancouver November 24th to 27th!



CACP ICT Workshop in Vancouver February 23rd to 26th!



How Can You Help?

- Join CITIG it's free!
- See interoperability as a "strategic risk management" issue and one that requires high level "buy-in" and support – not just "technology" issue.
- Ensure your jurisdiction actively participates in Provincial & Territorial efforts in support of public safety broadband & NG911.
- Support Public Safety Call for additional 10 MHz!
- Attend CITIG & Tri-Service interoperability events.





Thank You!

For more information:

info@citig.ca www.citig.ca www.action700.ca





