700 MHZ – WHAT IT MEANS TO YOUR ORGANIZATION: DO YOU REALLY WANT TO SIGN THAT LONG-TERM WIRELESS CONTRACT?

The Basics...

• 700 MHz spectrum available now that analog broadcast (over-the-air) television services across Canada switched to the new digital broadcast standard in August 2011
• 700MHz spectrum is the “sweet spot” — radio waves can travel extended distances and penetrate buildings and other obstacles
• This is about wireless broadband, NOT land mobile radio
• Many entities are vying for this very valuable natural resource
• Public safety agencies in Canada are united in their call for a designation of 20 MHz of 700 MHz spectrum dedicated to public safety
• Public safety’s voice must be heard — responders need the right tools to protect and save lives!

Potential Uses...

• Law enforcement will access data and video networks (i.e., streaming video, surveillance networks, criminal records, automated license plate recognition, etc.) to prevent and respond to criminal activities
• Fire services will access to building blue prints, health-monitoring sensors and GPS tracking systems in order to save lives
• Emergency medical services will access telemedicine, high-resolution video and patient records to reduce the time it takes to deliver medical services at the scene of an incident such as a car crash on a highway

Breaking News...

On February 17, 2012, US Congress agreed to allocate the D Block to public safety and support the development of a mission-critical, nationwide public safety broadband network

In Canada — Work done to date...

• Delivered the written response for the IC consultation — broad-based public safety response
• Monitored and advised on the issue, inform stakeholders and identify responder spectrum needs and potential opportunities
• Engaged with industry, public safety providers and different levels of government to put forward a position that makes sense for Canadian public safety and Canadians in general
• Worked with CSS and PS to produce report entitled 700MHz Spectrum Requirements for Canadian Public Safety Interoperable Mobile Broadband Data Communications
• Conducted in partnership with CATA a report entitled Answering the Call: Survey report of Canadian Stakeholders
• Many presentations and awareness raising
Recent Workshop...

- February 6 to 9, 2012 in Montreal
- Participants: F/T/P, FCM, Emergency Responder Associations, RCMP, CITIG, with advisory participation by industry, Industry Canada and subject matter experts
- Goal: reach consensus on and develop a governance model and charter for the national public safety broadband licensee and define oversight mechanism to ensure network interoperability

Participants Agreed...

- Historic opportunity to improve the safety and security of Canada
- Aligns with CISC and stakeholder priorities
- Spectrum designated to public safety is the only viable option for a national interoperable public safety broadband network
- Commercial carriers will be integral partners in building reliable, robust, functional and resilient networks for public safety
- In the near term, wireless broadband will complement land mobile radio (LMR), not replace it [in the distant future, broadband may support mission-critical voice when technical requirements are met]

An investment in the safety and security of Canadians!

Public Safety Wireless Broadband Network

- End-goal is a public safety interoperable mobile broadband meets the following conditions:
  - Nation-wide interoperability
  - CAN-US public safety interoperability
  - Interoperable with commercial networks, when necessary
  - Supports applications designed to meet first responders’ requirements
  - Public safety requirements for:
    - Coverage, availability and restoration of broadband service
    - Network resiliency and reliability
    - Security and admission control
    - Priority, quality of service and congestion management
    - Sustainability and network management

Governance Model

- Respects jurisdictional responsibilities
- Provides the legal requirements required by Industry Canada to hold a primary and subordinate licenses
- Establishes national standards for an interoperable public safety broadband network
- National Entity representative of F/P/T, municipal and first responder interests
- Regional Service Delivery Entities used to deliver services regionally to end users

A Unique Canadian Network

- Federally incorporated not-for-profit organization created to apply for, acquire and hold a licence(s) for allocated 700 MHz band
- Provide stewardship over the public safety broadband spectrum
- Establish national standards for an interoperable public safety broadband network
- Enter into agreements for the construction, maintenance, and operation of the national core components of the network
- Administer roaming agreements with commercial/public safety owners/operators of 700 MHz broadband services and infrastructure
- Administer a cost allocation and recovery model for services

The National Entity

- Structure of national F/P/T regional entities will vary between provinces to reflect regional issues
- Help bring interoperating services...
Regional Service Delivery Entities

• Potential for varied service areas (municipal, regional, provincial, etc.) — flexible models to meet specific jurisdictional needs
• Hold subordinate licence to establish and operate a public safety broadband network in its respective region
• Adhere to national standards for an interoperable public safety broadband network

Business Model Assumptions

• National & Regional PS Entities will likely be registered as not-for-profit corporations
• Start up funding likely necessary for initial 5 year period with potential contribution from various sources (including private industry)
• Least cost solution — likely a service agreement with existing network operators rather than separate PS network build
• Annual contributions by users on cost recovery basis i.e. annual adjustments +/-
• Cost elements: operating costs of regional / national entities and provision for contingencies and capital replacement

Next Steps for Governance Model

• Stakeholder review and comments
• SOREM endorsement by March 31, 2012
• Finalize proposal for next round of IC consultations (governance and business model, charter of incorporation)
• Continue work for IC consultation; establish four 700 MHz PMT Work Groups:
  • Governance structure
  • Legal framework
  • Funding model
  • Technical requirements

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Resources

• Review this publication from DHS
• Some copies available here, but also available for download from www.citig.ca
Long-term transition toward a desired converged future

Use CITIG as your Resource!

- Your source for Interoperability information!
- Now led by first responder associations

- Meant to accelerate public safety agency interoperability
- A vehicle for the exchange of information and ideas
- Ultimate goal to improve the ability of public safety providers to do their job

Don’t forget...

Sixth Canadian Public Safety Workshop

Toronto Dec 2nd to 5th

Details available soon at www.cacp.ca and www.citig.ca

Questions...

- Why should I care?
- What does this mean for the future of my Land Mobile Radio system?
- What’s in this for small to medium size communities?
- What do I need to do in order to prepare for this new capability?
- How am I going to pay for this “new” technology when I can’t afford to upgrade my old equipment?

www.action700.ca

- Web site created by the Associations to provide a focal point for communications efforts:

  www.action700.ca
  (download basic information, including sample support letter, media release, presentations and sign up for e-mail updates)
- Inquiries — send e-mail to: action700broadband@gmail.com

Discussion

Questions?

www.action700.ca