Information Day On Public Alerting

October 3, 2017
Co-Lab E-1, Bell Canada Campus
1 Carrefour Alexander-Graham-Bell
Nun’s Island, Montreal
National Public Alerting System (NPAS)
Role of the Federal/Provincial/Territorial Governments
Overview

• Situating government alerting authorities within NPAS
• FPT Emergency Management Governance Structure – SOREM and PAWG Roles and Responsibilities
• Key Milestones
• Upcoming Priorities
P/T Roles and Responsibilities

• Provinces and Territories are responsible for public alerting within their jurisdictions including:
  • Authorizing and training alert issuers;
  • Management of the use of NAADS; and
  • Ensuring quality of alerts
FPT Senior Officials Responsible for Emergency Management (SOREM): Overview

- Members are Provincial and Territorial heads of Emergency Management Organizations and the Assistant Deputy Minister (ADM) of the Emergency Management and Programs Branch (EMPB) of Public Safety Canada. PS and the Province of Newfoundland and Labrador currently co-chair SOREM. Other participants may, by invitation, participate in the activities of SOREM.

- The Standing Forum of FPT SOREM is responsible for coordinating a strategy for emergency management in Canada, and for providing guidance and advice on how to enhance emergency management in Canada. Its mandate includes:
  - overseeing various Working Groups and report up the governance structure on progress;
  - providing advice, support, guidance, and recommendations to a Standing Forum of FPT Deputy Ministers Responsible for EM; and through them to a Standing Forum of FPT Ministers Responsible for Em; and
  - providing direction, advice, and support to committees, working groups and non-governmental organizations dealing with crisis and consequence management issues at a national level.
  - a number of standing ad hoc working groups are in place to support SOREM on key priorities - such as the PAWG.
FPT Emergency Management Governance Structure and Public Alerting Working Group (PAWG)

F/P/T Ministers Responsible for Emergency Management Committee

F/P/T Deputy Ministers Responsible for Emergency Management Committee

F/P/T Senior Officials Responsible for Emergency Management Committee

Public Alerting Working Group

PAWG Roles & Responsibilities:
- works towards NPAS-level policy coordination and improved alerting techniques, which may benefit all jurisdictions
- works closely with Pelmorex, the owner of the NAADS
- SOREM is the decision-making body to which PAWG reports
F/P/T PAWG Advises SOREM on its Oversight and Decision Making Roles & Responsibilities for NPAS Including:

- SOREM Broadcast Immediate event list
- Common Alerting Protocol – Canadian Profile (CAP-CP) 1.0 (and future versions)
- Common Look and Feel (CLF) Guidance document
Key Milestones

- 2010 – Implementation of NAADS
- 2013 – FPT Expectations for Wireless Public Alerting Document
- 2014 – CRTC regulatory amendments requiring broadcasters to fully participate in NPAS
- 2016 – Submissions to the CRTC on the role of service providers in wireless public alerting
- 2017 – CRTC regulatory policy requiring wireless service providers to implement NPAS on their LTE systems by April 2018
Upcoming Priorities

• Address CRTC recommendations on wireless public alerting
  • Strengthen NPAS governance
  • Conduct public awareness campaign for wireless public alerting
  • Test policy
• Continued enhancements to NAADS
• Public alerting training standards
What is the CRTC?

• Administrative tribunal with quasi-judicial functions
  ▪ Regulates radio, television, distribution (cable, satellite and IPTV) and telecommunications (telephone and Internet services)
  ▪ Not responsible for spectrum allocation (ISED) and does not regulate print media

• The CRTC is an independent public authority and reports to Parliament through the Minister of Canadian Heritage

• The Government can only influence the CRTC’s communications work by:
  ▪ Requesting a report on a specific issue or subject
  ▪ Issuing binding policy directions, which require consultation and tabling in Parliament
  ▪ Reviewing and varying certain decisions, on its own initiative or upon application
Relevant Governing Legislation

Broadcasting Act (1991)

Telecommunications Act (1993)

Regulation & Monitoring
CRTC’s Role in Public Safety

• The CRTC regulates the broadcasting and telecommunications service providers who supply the networks through which emergency communications are distributed – whether it is emergency public alerts or 9-1-1 calls.

• Public Safety Canada was created to ensure coordination across all federal departments and agencies responsible for national security and the safety of Canadians.

• Public Safety Canada works with other levels of government, first responders, community groups, and the private sector in relation to emergency management, among other matters.

• Emergency management organizations, emergency responders, and 9-1-1 call centres fall within the jurisdictions of provincial, territorial and/or municipal governments.
The current National Public Alerting System (NPAS) consists of three main elements:

1. Federal, Provincial & Territorial (F/P/T) Emergency Management Organizations (EMOs)
   - Who issue alerts...

2. National Alert Aggregation and Dissemination (NAAD) System (operated by Pelmorex)
   - ...through a secure system...

3. Last-mile distributors (LMDs)
   - Broadcasters (Radio & TV)
   - Distributors (Cable & satellite)
   - ...to the public
Wireless Public Emergency Alerting

• In March 2016, the Commission issued Notice of Consultation 2016-115, on various aspects of a Wireless Public Alerting system in Canada

• Highlights from the proceeding record:
  ▪ Over 200 interventions, approximately half from individuals
  ▪ All parties generally support Wireless Public Alerting
  ▪ Providers would not object to mandatory participation

• In April 2017 the Commission published Telecom Regulatory Policy 2017-91, in which it:
  ▪ Directed wireless service providers to ensure their respective long-term evolution networks would be capable of distributing emergency alert messages by 6 April 2018
  ▪ Directed the CRTC Interconnection Steering Committee (CISC) to resolve a number of outstanding issues before the mandatory
Wireless Public Emergency Alerting (cont’d)

• CISC working groups have been assigned to the following categories of issues:
  ▪ Test Message Schedule and Parameters
  ▪ Awareness and Education Campaign
• Wireless service providers – as the owners and managers of the networks to be used to distribute wireless public emergency alerts – are active participants in the CISC working groups as these two categories of issues will have a direct impact on the delivery of the alerts and Canadians’ ability to benefit from the alerts.
• The CISC working groups will submit their final reports to the Commission in October 2017 for approval.
Appendix - Legislative power with respect to broadcasting

- Under the *Broadcasting Act*, the CRTC regulates *over 2,000 broadcasters*, including:
  - conventional television services;
  - pay and specialty television services;
  - cable and satellite companies;
  - AM and FM radio; and
  - satellite radio

**RELEVANT POLICY OBJECTIVE 3(1)(d)i**

*serve to safeguard, enrich and strengthen the cultural, political, social and economic fabric of Canada,*

**HOW DO WE REGULATE?**

- Broadcasting Licences
- Orders (i.e. distribution, exemption)
- Regulations
- Regulatory Policies
Appendix - Legislative power with respect to telecommunications

• Under the *Telecommunication Act*, the CRTC regulates over 1,000 telecommunications companies:
  ▪ resellers to large national companies;
  ▪ wired and wireless telephone services;
  ▪ internet services; and
  ▪ the National Do Not Call List (DNCL).

RELEVANT POLICY OBJECTIVE 7(a)
_to facilitate the orderly development throughout Canada of a telecommunications system that serves to safeguard, enrich and strengthen the social and economic fabric of Canada and its regions;

HOW DO WE REGULATE?

• Conditions of service
• Tariffs
• Orders

• Regulations
• Regulatory Policies (including wholesale regulatory policies)
Providing the Infrastructure for NPAS: National Alert Aggregation & Dissemination System

Public Safety Information Day
October 3, 2017
Who Are We?

• Pelmorex operates the National Alert Aggregation and Dissemination System, key component of the National Public Alerting System (NPAS)

• NAAD System overview:
  • Launched in 2010 in accordance with various CRTC decisions
  • Provides alert issuers with interface to create alerts to the public
  • Validates alert data files meet format and technical standards
  • Distributes all alerts to Last Mile Distributors through various Internet and satellite data feeds
**Roles & Responsibilities**

**Alert Originators**
- Government authorities decide when to issue an alert, the alert type, the message content, its duration and geographical areas covered by the alert.

**NAAD System**
- Provides secure access to authorities for alert message creation, ensures compliance with rules and standards, and distributes alerts on various data feeds.

**Last Mile Distributors**
- Access the message data from the NAAD System and format it for distribution over their network.

**Canadian Public**
- When an alert is issued, it is the responsibility of the public to stop, listen and respond as directed by the issuing authority.

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**Provinces/Territories**
- Federal Agencies
- Municipalities/Other

**Pelmorex Radio**
- Television
- Wireless
- Internet
# Public Alert Count (since Sept. 1<sup>st</sup>, 2016)

<table>
<thead>
<tr>
<th>PROVINCE/TERRITORY</th>
<th>TOTAL</th>
<th>EC</th>
<th>NAADS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>BI</td>
<td>Non BI</td>
</tr>
<tr>
<td>Alberta</td>
<td>4,858</td>
<td>4,858</td>
<td>9</td>
</tr>
<tr>
<td>British Columbia</td>
<td>5,832</td>
<td>5,826</td>
<td>5,826</td>
</tr>
<tr>
<td>Manitoba</td>
<td>3,436</td>
<td>3,164</td>
<td>9</td>
</tr>
<tr>
<td>New Brunswick</td>
<td>1,707</td>
<td>1,689</td>
<td>1</td>
</tr>
<tr>
<td>Newfoundland &amp; Labrador</td>
<td>5,705</td>
<td>5,700</td>
<td>5,700</td>
</tr>
<tr>
<td>Northwest Territories</td>
<td>906</td>
<td>903</td>
<td>903</td>
</tr>
<tr>
<td>Nova Scotia</td>
<td>2,071</td>
<td>2,059</td>
<td>2,059</td>
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<tr>
<td>Nunavut</td>
<td>2,227</td>
<td>2,227</td>
<td></td>
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<tr>
<td>Ontario</td>
<td>10,526</td>
<td>10,505</td>
<td>31</td>
</tr>
<tr>
<td>Prince Edward Island</td>
<td>625</td>
<td>620</td>
<td>620</td>
</tr>
<tr>
<td>Quebec</td>
<td>7,368</td>
<td>7,356</td>
<td>7</td>
</tr>
<tr>
<td>Saskatchewan</td>
<td>4,461</td>
<td>4,300</td>
<td>18</td>
</tr>
<tr>
<td>Yukon</td>
<td>349</td>
<td>346</td>
<td>346</td>
</tr>
<tr>
<td>TOTAL</td>
<td>50,071</td>
<td>49,553</td>
<td>75</td>
</tr>
</tbody>
</table>

155 BI alerts since September 1, 2016
NAAD System Is Fully Redundant

- Redundant Fibre Links
- Private Network
- Internet
- Bell MPLS
- Wireless Link

Multiple paths provided by different ISPs connect NAADS to Government users & Last Mile Distributors.

Private communications network provides communications & synchronization between two operations centres & NAAD System.
Recent NAAD System Upgrades & Features

• The addition of a “Broadcast Text” field allowing issuers to enter exactly the text they want made public by broadcasters and other Last Mile Distributors.

• The addition of a “Wireless Public Alerting Text” short text field to support the WPAS wireless alerting pilot project in Ontario.

• Text To Speech (TTS) allowing Authorized Government Agencies to generate and preview audio versions of their Broadcast Immediate alerts.
Recent NAAD System Upgrades & Features

• The addition of a Training Environment to allow Authorized Government Agencies to train and test without alerts reaching the public.

• Implemented CAP-CP multiple references, updated to SHA-256 certificates for digital signature of an alert, and improved system performance.

• Cloud Migration project is currently in progress to move the NAAD System from on-premises to a Cloud environment to leverage a modern technology infrastructure and benefit from greater scalability and flexibility.
Future Upgrades (2017-2018)

• Complete the migration of the NAAD System to a Cloud environment

• Implement the Wireless Public Alerting service by April 6, 2018

• Complete user requests:
  ▪ Implement user management improvements
  ▪ Offer the ability to store centrally alert message templates
  ▪ Store and access pre-scripted semi-automated alert message segments
  ▪ Integrate Alberta alerting feed into the NAAD System
The Canadian Association of Broadcasters (the “CAB”) is the national voice of Canada’s private broadcasters, representing the vast majority of Canadian programming services, including private radio and television stations, networks, specialty, pay and pay-per-view services.

Web site: www.cab-acr.ca

The broadcasting system plays a vital role in the provision of emergency alert messages to Canadians.
• Broadcasters fully participate in the National Public Alerting System to alert Canadians of imminent threats to life and property.

• Canadian broadcasters met the CRTC March 31, 2015 deadline for the distribution of emergency alert messages received from the national alert aggregation and dissemination system.
The CAB, on behalf of its members, actively monitors the implementation, progress and developments of the National Public Alerting System (“NPAS”).

CAB radio and television members sit on the Pelmorex Alerting Governance Council and have collaboratively worked, throughout the years, with the other participants to identify issues, voice legitimate concerns and find constructive solutions ensuring that last mile distributors deliver quality alerting messages to the public.

Kirk Nesbitt, on behalf of CAB members, participate in various forums and informs us on technical matters, including the NPAS common look and feel (“CFL”) guidelines, as modified from time to time.
• CAB further plays an important information role. In its Summer 2017 newsletter, CAB encouraged its members to actively participate in the second awareness campaign for AlertReady. Information was provided on how to retrieve the television and radio public service announcement spots.

• All CAB members also received an invitation to participate in the event held today.
Responsibilities

- Broadcasters take all reasonable measures to comply with the CLF guidelines:
  - Participate in NPAS test schedules.
  - Distribute Broadcast Intrusive alert messages to the public to warn of dangers to life and property.
  - Do not alter or modify the message.
  - Emergency alert messages may be issued in either official language.
- Alert messages may be distributed by either a crawl or a forced channel switch.

- Processes are adopted to maintain, test and update emergency alert distribution equipment.

- Broadcasters confirm, as part of annual CRTC returns, whether they are distributing alerts to Canadians, consistent with the Commission’s requirements.
• The initial emergency alert is just the beginning.
• Radio and television play a critical role in the local communities they serve.
• Inform the public of “What do I do next?”
  – “Where can I get help?” (shelter, water, food, clothing)
  – “How can I offer help to others in need?” (sandbagging during floods)
• Radio and television provide an essential link between local authorities and the public.
The Canadian Association of Broadcasters wishes to thank the Public Alerting Information Day Coordinating Committee.
Vision for NPAS

The NPAS will be a world-class, public alerting system delivering timely, targeted alerts of potential life-threatening situations to the public over multiple media, so that actions may be taken to preserve the health, safety and security of lives.
Mission for NPAS Governance

To set the framework for the management and administration of the NPAS by providing collaborative decision-making structures that clarify the responsibilities and tasks of contributing government and industry stakeholders, who collectively provide, and are accountable for, the structural components of the NPAS, and responsive to the public need to receive life-saving emergency warnings quickly.
Guiding Principles for NPAS:

Authoritative: alerts should only be issued by credible and easily identifiable and public safety authorities. Issuers should be able to confirm alerts sent and received to the extent supported by technology, and in alignment with legislation, including any privacy legislation.

Consistent: alerts that pertain to a single emergency event should have the same information content across all delivery modalities (e.g. television, radio, wireless/mobile device)
Guiding Principles for NPAS:

Accessible: alerts should be disseminated using a variety of message formats and distribution modalities to allow for maximum availability to the public (i.e. across languages, socio-economic status, disabilities, etc.)

Standards-based: alert messages and issuing/aggregating/distributing technologies should follow domestic and international specifications and standards.
Secure: the alert system should contain security measures to prevent intentional misuse.

Sustainable: the system should be able to respond to technological, economic, social and audience changes to ensure it remains relevant and effective.
• Are there any gaps or changes required regarding NPAS governance (authority, decision-making and accountability) as outlined in the roles and responsibilities presented this morning? What changes to governance should be considered in order to be as inclusive as possible of the entire NPAS community?

• From your / your organization’s perspective, what are the benefits and challenges of a public-private-partnership type arrangement that defines the current NPAS structure?
• As a key stakeholder in Canada’s NPAS, does your position, organization or group have an appropriate voice in the governance of the NPAS? If not, where or how do you believe your voice could be strengthened?

• Do you currently receive guidance (training, certification, manuals, guidelines, policy, and standard operating procedures) to be able to adequately perform your duties as they relate to NPAS? Please explain.

• From your / your organization’s perspective, what are the three most important governance-related challenges for ensuring the success and sustainability of NPAS?
National Public Alerting System: Governance Roundtable – Challenges and Opportunities

Paul Temple
Pelmorex Weather Networks (Television) Inc.
Oct 3, 2017
NAAD System Oversight & Governance

- The NAAD System is part of The Weather Network and MétéoMédia broadcast Conditions of Licence approved by the CRTC.

- Pelmorex is also subject to a Governance Council made up of federal officials (including Public Safety, and Environment and Climate Change Canada,) as well as all Provinces and Territories and members of the broadcasting industry.

- The CRTC has mandated that all radio and television broadcasters, as well as cable and satellite distributors in Canada connect to the NAAD System and broadcast threat-to-life messages to the public.

- The CRTC has also mandated that all television distributors [cable, satellite, fibre] must include he Weather Network and/or MétéoMédia in their basic television service offering.

- The CRTC has instructed wireless service providers to connect to the NAAD System and distribute wireless alerts to the public, effective April 6, 2018.
Governance Council Composition

Composed of “executive level” members, including:

- Four to be appointed by Federal government
- 13, being one from each province and territory
- Two seats* representing private TV and/or radio broadcasters
- Two seats* representing large cable distributors
- One seat representing public broadcasters
- One seat representing smaller, independent cable distributors [CCSA]
- One seat to the Canadian Association for Public Alerting and Notification (CAPAN)
- Two seats representing wireless carriers
- Four Pelmorex appointees

*One English language market operator & one French language market operator.
TWN/MM’s CRTC Conditions of Licence

• The licensee shall take direction from the Pelmorex Alerting Governance Council on matters identified in section 15 of the Governance Council’s Terms of Reference, including matters relating to Common Alerting Protocol compliance of alerts and equipment and to ongoing technical enhancements of the system. [Standards, support to gov’t users]

• The licensee shall seek advice from the Pelmorex Alerting Governance Council on matters identified in section 16 of the Governance Council’s Terms of Reference. [Technical, security, commercial matters]
No One Entity Oversees Public Alerting in Canada

- ECCC
- CRDC
- CCEMO
- TIF-33
- SOREM
- CISC
- CLF
- PAWG
- NAAD System Council
PUBLIC ALERTING INFORMATION DAY
October 3, 2017
Ken Macdonald
Executive Director, National Programs and Business Development
Meteorological Service of Canada
ECCC disseminates over 15,000 weather warnings per year...

- Environment and Climate Change Canada (ECCC) issues alerts for over 50 types of hazardous events:
  - Weather phenomenon, air quality, marine weather, hurricanes, aviation weather, sea ice, tsunamis
- Multiple dissemination channels are used:
  - NAADS (to Alert Ready and internet providers), web sites, email, WeatheRadio, MASAS, data services, social media (Twitter)
Volume of weather alerts vary greatly from year to year…

<table>
<thead>
<tr>
<th>Tornadic events</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avril-May-June</td>
<td>40</td>
<td>21</td>
<td>43</td>
</tr>
<tr>
<td>July-Aug-Sept</td>
<td>66</td>
<td>157</td>
<td>96</td>
</tr>
</tbody>
</table>

• As an issuer, ECCC is the most frequent user of the Alert ready.
• Since 2016 Alert Ready has demonstrated it is a powerful channel to reach Canadians
• ECCC activates Alert Ready for the initial Tornado warning only.
• SOREM identified 5 types of events that could lead to “broadcast immediate” ECCC alerts on Alert Ready:

<table>
<thead>
<tr>
<th>Tornado</th>
<th>Storm surge*</th>
<th>Tsunami</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thunderstorm*</td>
<td>Hurricane*</td>
<td>*if specific criteria are met</td>
</tr>
</tbody>
</table>
IN 2016 THERE WERE DOCUMENTED SUCCESS STORIES …
Aug 1st 2016, Melville, SK

• … She called her husband in from the field and they saw tornado warnings on the television.

Weather phenomena evolve with time…

- Tornados, as one of the most severe weather phenomenon, evolve very rapidly.
- Consequently a weather alert is not a simple issue-and-later-end undertaking.
- Meteorologists will update a typical tornado warning 5+ times as conditions unfold.
- This is compatible with many dissemination platforms (e.g. web sites, social media, Weatheradio) but problematic for the Alert Ready approach on TV and radio broadcasting – leads to unavoidable repetition of alerts.
ECCC mitigated repetition for the Broadcasters through automated procedures...

• A weather alerts message is created once by ECCC meteorologists and distributed to multiple dissemination channels – Alert Ready is one of the new additions

• System rules have been implemented to filter alerts for Alert Ready
  – BI flag is set to NO if an alert is a minor update of a previous alert
  – BI flag is set to NO if the alerted area changes but remains within a defined, broader parent area that was alerted

• Since July 2016 this significantly reduced the number of BI tornado alerts

• Meteorologists has been given discretion to set the BI flag based on the level of confidence
But complaints related to some elements of the system are still present...

<table>
<thead>
<tr>
<th>Type</th>
<th>Sample Message from Canadians</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pronunciation NAAD text-to-voice system</td>
<td>Problem reported with poor pronunciation, French voice accent.</td>
</tr>
<tr>
<td>Pronunciation backup text-to-voice system</td>
<td>Message: We were in a tornado alert or warning and your French version was atrocious. As a francophone there were spaces in words that shouldn't have them and the voice of the French person was inaudible. I am sure I am not the only person who feels this way. I'm a state of emergency you shouldn't wonder what one might be saying and comprising your safety because you can't understand what they are saying and the screens are going to fast. Please consider this in your next emergency and if you require someone to properly pronounce the French language I would be happy to help.</td>
</tr>
<tr>
<td>Missing audio files</td>
<td>Quebec (provincial authorities) reported 4 tornado warnings without audio files</td>
</tr>
<tr>
<td>Alert tone – too loud</td>
<td>Message: Why is it necessary to play an annoying sound and put a large red stripe in the middle of my television screen to let me know about the weather? Couldn't it be much smaller and without the annoying noise? Or somehow give us the option to dismiss it. It's horrible.</td>
</tr>
<tr>
<td>Alert plays or repeats for too long a period</td>
<td>Message: Please stop the tornado alert on my tv or update it. It is now 9.27pm and the alert is from 7.17pm.</td>
</tr>
<tr>
<td>Alert too intrusive on screen</td>
<td>Message: complaint: I am sick of having my TV program destroyed by your constant STUPID red screen (zombie sounding) weather warnings when there are absolutely NO weather warnings at the same time on local radio stations. Short burst Red letter warning running across the bottom of the screen are all that is necessary without destroying programing. Thank you</td>
</tr>
<tr>
<td>Unilingual message</td>
<td>Message: On June 18 many storm tornado warnings appeared on the TV and radio. The message was only in French and the clarity of the voice was poor. As these warnings are to protect us, and to warn us in case of an emergency they should be bilingual! We are supposed to be a bilingual country, the recording should be clearer</td>
</tr>
</tbody>
</table>
Summarizing ECCC’s experience with *Alert Ready*...

- A valuable addition to the suite of dissemination channels for alerting Canadians to life threatening weather
- The message has to be tailored to the medium
  - ECCC introduced the “broadcast layer” in 2015
  - A “wireless layer” for 2018
- Credibility suffers when information is not reliable or not relevant or not understandable
  - Alerts played long after event has ended or to an audience far from the event
- Power User = Power Feedback
  - Much of the audience assumed *Alert Ready* is an ECCC system
  - Complaints often relate to system elements not ECCC alerts
- Appetite for mobile alerting is strong
Consideration for the Future

• Improvement is still possible as all partners become more familiar with Alert Ready’s behavior.
• Feedback/complaints are received by all partners (issuers, broadcasters, cable companies, etc.)
  – in some cases, the analysis of the root cause of a problem is difficult
• Feedback/complaints need to be shared to eliminate problems
• There is a need to centralize the capture feedback & complaints
Looking forward – Introduction of WPAS

- Continuous improvement of ECCC’s CAP files
- Getting Ready for WPAS
- Path forward
THANK YOU
Example (2013): Line of thunderstorms over Southern Ontario
National Public Alerting in Canada: Best Practices, Lessons Learned and Use Cases

EVENT: New Brunswick January 2017 Ice Storm

Greg MacCallum, Director NBEMO
AIM:

• To provide an overview of the NB Ice Storm Event of January 2017, which prompted the use of the National Public Alerting System to preserve life.
ICE STORM JANUARY 2017
Warning

- On Monday, 23 January 2017, weather warning notices were posted on social media warning the NB population of freezing rain.

New Brunswick weather: a nasty Tuesday is on the way
Freezing rain warning in place for the southern half of New Brunswick on Tuesday as a storm hits the region
Freezing rain totals

10-15cm coating

snow/ice pellets
Impact
Ice Storm Overview

- 15-20 hrs of freezing rain
- 130K + without power
- 2 fatalities due to Carbon Monoxide poisoning
- 45 illnesses due to Carbon Monoxide poisoning reported
- States Of Local Emergency (SOLE) declared by 5 Municipalities
- 65 Warming Centres and 33 Shelters opened
- 7 broadcast intrusive Emergency Public Alerts specific to Carbon Monoxide hazards issued to the Acadian Peninsula and other affected NB regions
Ice Storm Overview

- Provincial Emergency Operation Centre (PEOC) activated from 24 January to 07 February, 2017 (338hrs activated)
- Regional Emergency Operation Centre (REOC) and Incident Command Post (ICP) activated
- 1000+ Officials and volunteers activated
- DND deployed military assistance to the Acadian Peninsula
- Largest restoration effort in NB Power history:
  - 380 crews
  - 614 broken power poles
  - 189 transformers replaced
  - 52 Km of powerlines replaced
Messaging sent throughout the Event

Carbon Monoxide (CO) Warning
CHEMICAL HAZARD
Location: Acadian Peninsula Kent & Northumberland Counties
Never Run Generators or Use BBQs Inside Your Home or Garage
CO is colourless, Odourless & Tasteless
Exposure Can Be Fatal

Prevent Carbon Monoxide Poisoning
- Never run generators or cook with an open flame, inside a home or the garage.
- Never use a barbecue or portable fuel-burning camping stove or lantern indoors.
- Test the batteries in your carbon monoxide detectors.

CARBON MONOXIDE WARNING
FROM NEW BRUNSWICK'S FIRE MARSHAL AND ACTING CHIEF MEDICAL OFFICER OF HEALTH
- Two people have died and over 30 others have been hospitalized in recent days because of carbon monoxide poisoning.
- Carbon monoxide has no smell, taste, or colour. Unless you have a detector in your house, you might never know it is present until it could be too late.
- Never run a generator in your home, garage, or near a window or air intake outside of your house.
- Never BBQ, use a camping stove or a propane heater inside of your house or garage.
- There is no safe way to run a generator or cook with a camping stove in your home or garage. Carbon monoxide poisoning can still occur if you have opened your window or garage door.
- If you think you or a loved one have been affected by carbon monoxide, you should:
  - Immediately go outside
  - Go to the nearest hospital or call 911
Illnesses reported due to Carbon Monoxide continued to climb until the NAAD alerts were issued.

**NOTE:**
Illnesses reported due to Carbon Monoxide continued to climb until the NAAD alerts were issued.
COMMUNICATING WITH NEW BRUNSWICKERS

• Communications Staff were active on social media before the storm hit the province, providing advice on preparedness and information on the track of the storm.

• As part of response and recovery operations, 14 news releases were published by the provincial government to provide detailed information to New Brunswickers.

• News conferences were held by New Brunswick Premier Brian Gallant almost daily, primarily in the Acadian Peninsula, the most critically impacted region of the province.
COMMUNICATING WITH NEW BRUNSWICKERS

• Communications staff were deployed in the affected regions to assist with any communications-related duties and liaise with media.

• Numerous interviews were conducted with provincial and national media daily.

• In addition to NAAD alerts and traditional media, social media played a major role during the power outages. Social media became one of the most effective communication tactics to reach affected residents.

• During the 13 days of the response operations, over 75 messages were posted on Facebook and Twitter in both official languages.
Ice Storm Review 2017

• On 18 August, 2017, the Government of NB released a report detailing 51 recommendations resulting from After Action Reviews conducted post event.
Recommendation 30

• NBEMO and the Department of Health should collaborate on the production and distribution of emergency-based messaging that is both simple to understand and in a form that will encourage the retention of the material in the home for reference as required. This information should include messaging associated with the safe use of fuel-based appliances during power outages.
Recommendation 38

• When communicating the locations of warming/reception centres and shelters, information should include details such as hours of operation, services to be offered, and even advice about securing one’s home if moving to a shelter.
Recommendation 50

• The Deputy Minister Security and Emergency Management committee should pursue, as a priority, the establishment of a recognizable and reliable emergency radio broadcast program for use as a primary source of information dissemination during emergencies.
Recommendation 51

- NBEMO should continue to promote the use of Sentinel and other such warning systems, in the emergency warning phases, and partner with municipalities which will choose to use such systems to encourage self-registry by citizens.
Conclusion

• All Provincial and Territorial Emergency Management Organizations shall maintain the authority to issue all types of alerts as they deem appropriate to preserve life.
Thank You

QUESTIONS?
Best Practices and Lessons Learned

Presented by Kirk Nesbitt, Technical Advisor of the Canadian Association of Broadcasters
Montreal
October 3, 2017
Best Practices

• The CAB Technical Coordinating Committee has been contributing to the Common Look and Feel Working Group since its inception.
  – Validated message length, text crawl speed and audio specs prior to approval of CLF Guideline V1.2
  – Participating in current activity re WPAS to ensure consistency
• Sharing experiences and examples between all stakeholders has encouraged continual improvement.
Best Practices (cont’d)

• Collaboration and cooperation between broadcasters has been positive.
  – Technique shared to insert announcements at start and end of alert messages.
  – Recent discussions to compare set up and coding of emergency alerting equipment so that alert coverage area is consistent.

• Communication to Broadcasters
  – Stressed importance of consistent audio levels
  – Minor updates with BI flag not required for broadcast
  – Gathered examples to illustrate challenges
Lessons Learned

• Listener/viewer complaints dropped dramatically since last year
  – Reduced repetition of ECC alerts (ignore minor updates)
  – the introduction of Broadcast Text Parameter and
  – centralized Text to Speech (TTS) audio.
• Consistent processes and timing across all provinces and territories is essential.
  – Many stakeholders, all with different responsibilities, understanding and expertise.
  – Ongoing communication, education and training required.
  – Work closely with equipment manufacturers.
  – Poorly constructed alerts, issued quickly, do not inform or protect the public.
• EXAMPLES
Durham Region WPAS Pilot

Tony Hui – Bell Canada
Public Alerting Info Day
2017 10 03
Overview

Objectives
validate **End-to-End** WPA architecture for national deployment
evaluate performance & usability, collect feedback & comments

Sponsors & Partners

Trial Participants (85 Bell subscribers work or live in Durham)
Diversity in age, occupation, gender, management, students, etc.

Handsets (entry level, smartphone, ruggedized and accessibility)
Test Alerts and Results

Geo-targeted bilingual test Alerts
- 3 NPAS Public Awareness
- 17 WPAS Pilot
May to Sep at various times
region wide, town/city and smaller areas within
survey after each test alerts

Performance
- alert latency less than 10 seconds during orientation
- majority alerts received within 60 seconds during pilot
duplication suppression proven
- minor overspills of target areas (design intent)
some non trial participants also received alerts

Participants are UNANIMOUS in WPA support
Alert Ready Campaign - Update

Public Safety Information Day
October 3, 2017
Agenda

• Alert Ready Campaign Background

• Campaign objectives

• Results
Alert Ready – Background

Pelmorex Corp. and its provincial partners launched a media campaign for Alert Ready, April – July 2015

Campaign Elements

- National Ad Campaign (French and English) TV & Radio
- Alert Ready / En Alerte website
- Digital Banner Ads on TWN and MeteoMedia
- Social Media on TWN and MeteoMedia
- PR

• Campaign relied on PSA’s and had no paid components
• Cable, satellite, radio, and telco providers aired the PSA
  • Received millions of dollars in media exposure
  • Received millions of impressions
• Post campaign survey indicated that while a national emergency alert system has high value, the recall of the ad and a common understanding of the system were both low
Alert Ready Campaign - 2017

✓ Establish clear objectives
  • Educate the consumer
    “When there is an emergency, authorities will send alerts that will be broadcast on tv, cable, satellite, and radio. When you hear an alert: Stop. Listen. Respond”

✓ PSA’s alone will not be effective
  • Combination of PSAs and paid television and radio ads

✓ Utilize a variety of Digital tactics
  • Reach the millions of consumers who are utilizing digital
  • Monitor and adjust to continually improve results and coverage

✓ Website – Alertready.ca and enalerte.ca
  • Improve navigation and user experience
  • Improve content
  • Feedback form for questions and comments

✓ Create awareness survey pre and post campaign to measure effectiveness of some components
Alert Ready Campaign Objectives

• **Objective:**
  o Build awareness of national alerts, specifically the alert sound
  o Develop creative that will elicit an emotional response and educate Canadians to **STOP, LISTEN, RESPOND**

• **Target Audience:**
  o 18+ decision-makers in an emergency situation

• **Tone and Manner:**
  o Clear, Authoritative, Direct, Emotional

National exposure on tv, radio, and digital that is representative of Canada’s demographics including language and geography
**Campaign Tactics**

**Television**
- Drives **mass reach** across the country
- PSA airtime across all broadcasters
- Provides impact through strength of visual creative

**Radio**
- PSA airtime across all broadcasters
- Drives **frequency** and reminders to keep Alert Ready Top of Mind

**Digital/Social Video**
- Run spots to **CAPTIVE** audiences on multiple personal devices
- Include **disruptive** tactics such as mid-content video and full-screen interstitials to grab the attention of Canadians
- Run across Social Media platforms to create **organic reach** through likes and engagement
- Run across major broadcasters, news and weather sites

**Digital Display**
- **Support** video campaign with display banners for **stronger campaign association**
- Drives **efficient reach** across various digital channels
Alert Ready Campaign TV/Video and Radio Spots

May – June: Paid Media across all platforms; PSA’s
July – August: PSA’s wherever possible, digital

TV Spot 1: Anniversary
TV Spot 2: Graduation
TV Spot 3: Birthday
TV Spot 4: Anniversaire
More than 151 million impressions across multiple platforms covering entire country
## Results - Summary

<table>
<thead>
<tr>
<th>Platform</th>
<th>Estimated Impressions</th>
<th>Actual Impressions</th>
<th>Index</th>
</tr>
</thead>
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<tr>
<td>Digital</td>
<td>14,110,000</td>
<td>25,620,618</td>
<td>182%</td>
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<td>Television</td>
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<td>91,220,900</td>
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<tr>
<td>Radio</td>
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<td>34,430,200</td>
<td>396%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>66,510,000</strong></td>
<td><strong>151,271,718</strong></td>
<td><strong>227%</strong></td>
</tr>
</tbody>
</table>

110,000 clicks to Alertready and EnAlerte websites from ads
Consumer Feedback

• Majority of the feedback focused on two areas:
  • Alert Sound – annoying, loud, scary
  • Questions about wireless alerts

• Questions from small radio stations, municipalities, other organizations, asking how they can receive alerts
Next Steps

Next phase of Alert Ready campaign ~ March 2018

• Build on existing brand awareness and exposure
• Combination of paid and free PSA placements
  • Identify stakeholders who will help within their own company
• Use learnings from this campaign to help create the media plan
• Determine objectives and goals for this stage
• Coordinate with any campaigns supporting wireless alerting

Pelmorex Alert Ready Campaign will finish by August 2018