Canadian Telecom Resiliency Working Group

Presentation to Regional Adaptation
Workshop Telecom Breakout Session
May 11, 2017

Agenda

- **History**

- **CTRWG Membership**

- **CTRWG Objectives**

- **Extreme Weather Challenges for Telecom Sectors**

- **Issues and Challenges**

- **https://www.ic.gc.ca/eic/site/et-tdu.nsf/eng/h_wj00316.html**

History

CTEPA

- **Association formed in 2000**
- **Formerly the Stentor Alliance Emergency Preparedness Working Group**
  - **Emergency Planners from Stentor Alliance Members**
  - **Y2K CTIF (Canadian Telecommunications Industry Forum)**
- **Competitor Companies Invited to Participate**

CTRWG

- **Formed in July 2016**
- **Finalized our Terms of Reference in August 2016**
- **Officially assumed Incident Respond April 2017**

Major Differences

- **Not an association**
- **Report to Canadian Security Telecom Advisory Council (CSTAC)**

CTRWG Objective

- Shares **information** on infrastructure interdependencies

- Develops proactive **strategies** to promote the resiliency of the critical infrastructure

- Develops **policies/procedures** to implement during incidents affecting Canadian critical telecommunications infrastructure;

- Leads and participate in industry/government emergency preparedness **exercises**; and

- Coordinate and **act** against threats that impact the Canadian telecommunications critical infrastructure.

CTRWG Membership

- **Bell**
- **Bell Aliant**
- **Cogeco**
- **EastLink**
- **MTS**
- **Rogers**
- **SaskTel**
- **Shaw**
- **TbayTel**
- **Telesat**
- **TELUS**
- **Videotron**
- **Freedom Mobile (Formerly WIND)**
- **Zayo Canada (Formerly Allstream)**
- **Innovation Science & Economic Development (Formerly Industry Canada)**

How can Telecommunications fail during disasters?

Three key categories:

1. **Physical destruction of network components**
2. **Disruption in supporting network infrastructure**
3. **Network congestion**
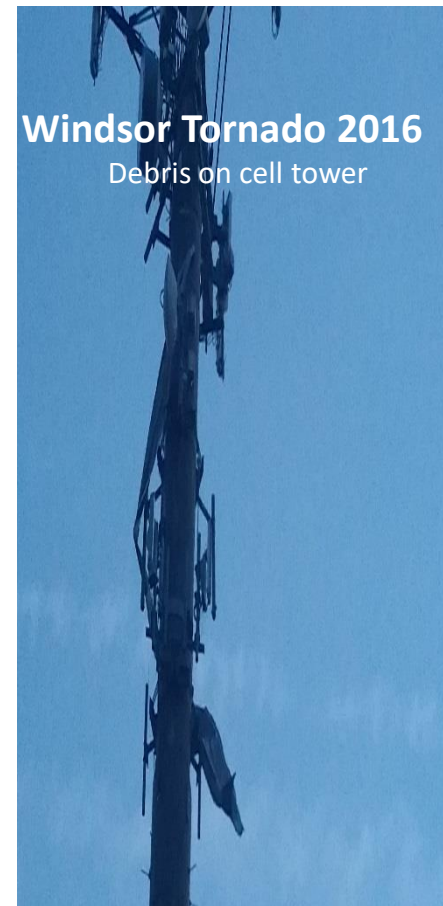

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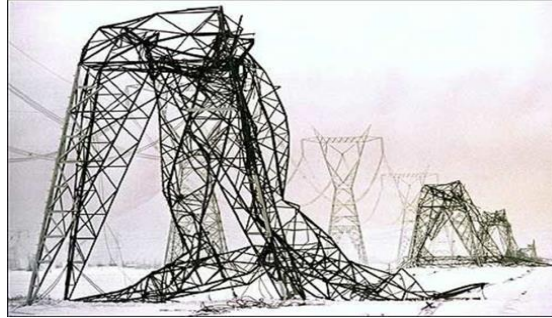
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Weather Impact on Telecommunication

Calgary Floods 2013

Fort McMurray Wildfires 2016

Windsor Tornado 2016
Debris on cell tower

Fort McMurray Wildfires 2016

Newfoundland Ice Storm 2017

Weather Impact on Telecommunication

Photo credit: The Canadian Press /J.P. Moczulski

Toronto 2013

Weather Impact on Telecommunication

Exposed utilities and Telecom at Finch Ave. wash out

Independencies

Dependent on Telecom:

- General Public
- Government
- Hospital, Police, Fire and Emergency Medical Service
- Business
- Utilities
- Educational facilities

Telecom Sector Dependent on:

- Fuel
- Electricity
- HVAC
- Water
- Regional Emergency Management Office

Major Concerns:

- Access to energy supplies (Fuel and Power)
- Critical information sharing with Utilities and EMO

Mitigation Strategies during a disaster

1. Understand the role Telecom plays in a disaster (support of both the response and recovery phases), the need for expedited services and/or repair, and the logistics surrounding that support in order to designate and/or appoint Telecom service personnel first responder designations for such things as road access, etc.

2. Standardize across all provinces/territories a number of policies and processes which will aid in the Telecom industry's ability to respond to a disaster, such as;

   - Access to fuel and refuelling
   - Vehicle Access to the roadways
   - Access to security personnel (police/military)

3. Standardize the definition of "essential services" across federal, provincial, and local levels

4. Standardize critical infrastructure prioritization across all levels of government

5. Develop common and agreed to protocols for the sharing of critical infrastructure information at the appropriate times during a disaster

Telecom Sector – Issues and Challenges

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Telecom Sector – Issues and Challenges

6. **Understand under what circumstances the government would intervene to prioritize service or service levels during an emergency**

7. **Understand if the CRTC will consider making concessions proactively versus following regular procedures for extraordinary circumstances, such as a pandemic, if metrics are not met during any emergency**

8. **Understand what level of support is expected at the Federal Government EOC during a National Disaster from CTEPA or its membership**

9. **Help to facilitate the positioning of Industry Canada to act as a Telecom Sector liaison within provincial EMO operations**