2010 Canada – U.S. Cross Border Interoperable Communications Workshop

September 13-15, 2010

Workshop Proceedings

Windsor, Ontario
Report Date: October 20th, 2010

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Workshop Executive Summary

Ensuring security and safety along the Canada-U.S border is a shared challenge for both Canada and the United States that requires collaboration and coordination between the two nations. To be successful, personnel from both countries require the ability to exchange voice and data communications in real-time and across disciplines and jurisdictions in an effective and timely manner. Achieving interoperability at an agency and local-level is a challenge in and of itself, which is compounded with the presence of an international border for many regions in both countries.

From September 13-15, 2010, Public Safety Canada and the United States Department of Homeland Security Office of Emergency Communications co-hosted the Second Canada – U.S. Cross Border Interoperable Communications Workshop at the Ceasar's Windsor in Windsor Ontario. Over 130 government officials from all levels of government and first / emergency responders from both Canada and the United States met to work collaboratively to answer the following question:

> **"What do we need to do to formally address communications interoperability challenges in support of cross-border operations?"**

Three functional areas were identified as requiring a coordinated effort between policy makers and emergency responders from both Canada and the U.S. in order to improve cross border communications interoperability were considered, including:

- Planning: Developing near and long term cross border interoperable communications goals and strategic objectives and collaborating to achieve common objectives through achievable action plans.

- Policy Development: Developing policies that contribute to overcoming challenges and support coordination between nations to enhance communications interoperability at the border and during joint operations.

- Operations: Identifying opportunities to enhance communications interoperability through joint activities such as: developing joint SOPs; reviewing technology compatibilities; and conducting joint training and exercises.

The first day of the workshop focused on setting the context through key note addresses and the current state of cross-border communications interoperability through the presentation of several case studies. Day-2 centred on developing a shared vision, identifying the issues and
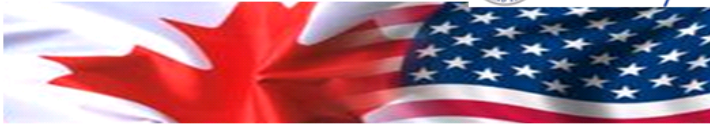
topics in response to the intention question and engaging in four rounds of concurrent discussions on 104 topics. The day concluded with the posting of over 80 recommendations. A table of proceedings was produced overnight and presented to the participants at the opening of the third day. The group was provided time to read the proceedings and use dot voting to identify their top 6 priority recommendations. Attendees were then asked to move from vision to action and engage in a detailed opportunity analysis to clarify priorities and identify next steps.

The following ten (10) priority areas were identified and further analyzed, as follows:

1. Creation of a Canadian/American communications interoperability coordinating body;

2. Creation of a cross-border communications working group;

3. Development of an interoperability mandate within both governments (Public Safety Canada and the Department of Homeland Security);

4. Formal identification of cross-border interoperability channels available border-wide through the creation of a working group;

5. Address legal hindrances that prohibit sharing of radio frequencies, personnel, and resources from working across state, province, and national borders;

6. Creation of a stakeholder map and service inventory;

7. Appointment of a cross-border communications interoperability coordinator from each province and at the federal level equivalent to the Statewide Interoperability Coordinators (SWIC) in the U.S.;

8. Identification and engagement of cross-border champions;

9. Development of an information-sharing inventory; and

10. Draft model MOU for routine cross-border use of licensed spectrum (in progress)

In closing, representatives from each priority area discussion group presented their key findings and received feedback from a Core Agency Canada – U.S. Panel. As the workshop concluded, closing remarks were offered by Mr. Daniel Lavoie, Associate Assistant deputy Minister at Public Safety Canada.

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Purpose of this Report

These workshop proceedings contain summaries of the presentations and the discussions held during the 2010 Canada-U.S. Cross Border Interoperable Communications Workshop and are intended to serve as a reference and working document for Workshop participants. The views expressed herein are those raised by the participants and do not necessarily reflect those of the Department of Public Safety Canada or the Government of Canada.

1   Workshop Overview

From September 13-15, 2010, Public Safety Canada and the United States Department of Homeland Security Office of Emergency Communications co-hosted the Second Canada – U.S. Cross Border Interoperable Communications Workshop at the Ceasar's Windsor in Windsor Ontario. Over 130 government officials from all levels of government and first / emergency responders from both Canada and the United States met to work collaboratively to answer the following question:

> **"What do we need to do to formally address communications interoperability challenges in support of cross-border operations?"**

Copies of the workshop invitation, agenda and the list of participants are provided in Appendices A to C, respectively.

2   Day 1 – The Current State

2.1   Opening Plenary Session – Welcome

The workshop began with welcoming remarks by Mr. Mark Williamson, Deputy Director General, Centre for Security Science, Defence Research and Development Canada (DRDC), and Mr. Chris Essid, Director, Office of Emergency Communications (OEC), Department of Homeland Security. Mr. Williamson welcomed participants stating that the relationship between national defence and public safety is a joint construct with the principle of providing science and technology expertise to enable safety and security policy. This relationship has seen optimization over the past six months. Mr. Williamson noted that it is important to understand that science and technology services are not necessarily about the technology alone. The complex domain in which they operate is how

to optimally insert government and use technology. He described several examples of improvements in interoperability including the Canadian Police Research Centre, the promotion of multi-agency awareness, efforts to understand the interoperability exchange model, the initiative between British Columbia and the State of Washington, the assessment of coverage gaps across border regions, and a preliminary survey that was conducted to explore options to fill those coverage gaps. Mr. Williamson closed by explaining that the emphasis for this workshop is to build off of work conducted last year and to carry out results oriented dialogue between the delegates.

Mr. Essid welcomed participants and explained that OEC is responsible for coordinating the efforts of the emergency response community at all levels of government to improve interoperable and operable communications. They have developed a close partnership with Public Safety Canada (PS Canada) over the past few years in order to collaborate on interoperability issues and share information.

Mr. Essid emphasized that having interoperability across the border is vital to safety and security. When public safety cannot communicate, they cannot respond to disasters. He explained that his hope for the day is for the delegates to find ways to improve interoperable communications between our two great countries. The delegates' knowledge and experience is instrumental in achieving the goal of interoperability across the border. It is important to share best practices and lessons learned. He stated that the success for the workshop will be determined by the development of action plans and completing them in the future. Mr. Essid stressed that everyone is working as a team and he thanked participants for their efforts and dedication to the issue.

2.2   Key Note Address - Public Safety Canada

Mr. Lavoie, Associate Assistant Deputy Minister, PS Canada began by welcoming participants and thanking them for their attendance to this important workshop. He noted that Canada-U.S. cross border interoperability is one of his many files. This issue shares common borders, values, infrastructure, and it will likely have a common and shared solution. Forums like this meeting allow for the discussion of those problems as well as the strides made in improving interoperability in both the U.S. and Canada. Mr. Lavoie expressed that PS Canada believes in the importance of first responder interoperable communications. This is an issue that affects government's ability to protect lives of all people, both for day-to-day operations and for major incidences. Interoperability is a tool to achieve the objective of saving lives. Day-to-day, public safety responders are faced with the inability to communicate and this inability affects the safety of our citizens.

Mr. Lavoie explained how PS Canada was officially created in 2003, with activities focused on keeping Canada safe and secure. Today, they are working with all levels of government, community groups, practitioners, private sector, U.S. colleagues, and other foreign governments in achieving that focus. Through the development of integrated policies and programs, the result has been the strategic outcome to build a safe and resilient Canada. For both sides of the border, a smart and secure border is achieved by well-placed infrastructure, policies, procedures, and seamless cooperative security.

The President and Prime Minister tasked the Secretary of Homeland Security and the Minister of Public Safety to pursue measures to facilitate the safe and secure movement of travelers across borders, specifically, to "improve and expand existing radio communications available to law enforcement agencies working on border safety and cross border law enforcement." Mr. Lavoie stated that the exchange of information across common borders in the event of an emergency is critical. The Department is aware that budget funds to pursue national priorities are under tremendous strain and the Canadian government has made the budget a high priority.

Mr. Lavoie expressed that Canada must continue their quest to pursue interoperable communications and it is important to have commitment from the people. Currently, there is a convergence of interest across the border and progress is speeding up. Progress can be seen in the work with the Canadian Chiefs of Police, Fire, and Emergency Medical Services. Governance has also progressed through connections across all levels of government. Other successes include the creation of the Canadian Interoperability Technology Interest Group (CITIG), the 2010 Olympics coordination between British Columbia and the State of Washington, and the Canadian Communications Interoperability Plan (CCIP). The CCIP was created with a similar scope to the DHS National Emergency Communications Plan (NECP). It addresses the need for real time sharing of information and drives forward the collective approach to achieve interoperability. At the national level, PS Canada is taking a leadership role to explore the sharing of information. In addition, a number of events, forums, and research in security science are taking place to address the issues.

Canada and the U.S. governments are seeking common results and will find workable solutions. Funding for voice interoperability will continue to be an issue and they are moving forward in efforts to address the changes in voice and data communications. Other areas to be addressed are command and control, memorandums of understanding (MOUs), Standard operating procedures (SOPs), best practices, and training. There needs to be a holistic approach to interoperability where technology is just as important as the relationships. If there are no predefined agreements, we may not be able to take care of our citizens.

By the end of the workshop, Mr. Lavoie expressed the desire to see the establishment of working groups for cross border interoperable communications. Thanks were given to the U.S. for willingly agreeing to support the issue and enhancing interoperability across the border. More and more governments are becoming involved and the importance of interoperability is starting to be raised on a conscious level for politicians. There is value if more politicians get involved and understand the risks of not having interoperable systems.

Mr. Lavoie closed by saying that PS Canada will continue to work with all stakeholders to advance the national strategy for interoperable communications for the public safety community. His hope is that a year from now, we will have built on the good work that has been done and will have made significant progress.

2.3   Key Note Address – U.S. Department of Homeland Security

Assistant Secretary Schaffer began by thanking participants for attending the workshop and dedicating their time to the interoperability effort. Mr. Schaffer stated that he has spent as much time on the issue of interoperability as he has on cyber security, which demonstrates the importance of the issue. Interoperability is critically important both domestically and internationally. He explained that DHS is delighted to devote energy to the cross border issue and has been working with their partners at PS Canada. Mr. Schaffer appreciates that these conversations are occurring and that emergency response practitioners have been engaged since 2009. Dedication is critically important as we move forward on this issue. There is no

better testament to the importance of issues as the day-to-day operations that each of the delegates have in saving lives. The primary responsibility is to ensure that the capabilities are available to effectively operate and interoperate.

Mr. Schaffer thanked PS Canada, OEC, and Emergency Management for their dedication and for holding this workshop. DHS is focused on making changes in the risk that citizens face on a daily basis. Mr. Schaffer expressed that the goal for the workshop is to leave with not just a renewed resolve to improve interoperability but also an action plan to improve it. That action plan takes significant effort but is necessary in making risk reductions possible.

Mr. Schaffer highlighted progress that has been made toward cross border interoperability, including the joint border threat risk assessment between PS Canada and DHS, the Integrated Border Enforcement Teams, the 2010 Olympics security committee, as well as efforts on the southern between the U.S. and Mexico. DHS is committed to working on both borders to reduce risk across the Nation.

Mr. Schaffer concluded by thanking participants for their presence. He stated that their efforts are critically important in improving interoperability and reducing risks across the Nation. DHS is working to ensure that effective and efficient cross border solutions are developed.

2.4   First Canada – U.S. Cross-Border Interoperable Communications Workshop in Review

Mr. Chris Davis of Lansdowne Technologies Inc. (Lansdowne) presented a recap of the first Canada U.S. Cross-Border Interoperable Communications Workshop which aimed to *document best practices and formulate action plans to drive improvements in cross border communications interoperability.* The three themes for the workshop included:

- Lack of adequate governance structures
- Outdated legal frameworks and regulatory processes
- Cultural barriers to collaboration

The opportunities recognized by the participants at the workshop were:

- Desire to expand and formalize cross border partnerships;
- Public recognition and demand that information sharing is required; and
- Cultural gradually shifting from hoarding information to "duty to share".

2.5   Cross-Border Success: The Integrated Border Enforcement Teams and Successes in Cross-Border Communications

Mr. Mike Doucet, Chief Technology Officer at the Royal Canadian Mounted Police (RCMP), spoke on the success of IBET. He started by noting that the industry has turned around in the world of interoperability and it is beginning to get more exposure. He stated that public safety

officers rely on cutting edge technologies. As a result of the Summit in 2007, the RCMP was tasked with developing pilot projects to find efficient solutions to interconnect Canadian and U.S. radios. RCMP is fully engaged in cross border interoperability improvements as well as supporting U.S. Programs and PS Canada workshops. The also work with Industry Canada to ensure new systems take advantage of the 800 MHz frequency band. In addition, the organization has and continues to contribute to the CCIP, share lessons learned from IBET, and promote standard technology plans.

Sergeant Chris McBryan, Program Reviewer, RCMP, provided a brief background on IBET, explaining how radio interoperability within IBET provides the ability for U.S. and Canadian law enforcement along the border to speak using their respective radio systems. Over the past three years, IBET funding invested in pilots such as the Alberta IBET Radio Interoperability Project. Successes from that pilot include expanded coverage and the ability to talk with the U.S. As a result, there was an improvement in understanding of operator and IBET membership requirements as well as the development of corporate knowledge on strategic interoperability technology. Relationships were developed providing a solid basis for governance. It was also discovered that the system of systems approach was the best approach to achieve interoperability as each party needed maintain sovereign independence of their own networks.

From the work with IBET, Sergeant McBryan stated that they have developed a solution for bi-national radio interoperability for all law enforcement and emergency services. He proposed that, if given the right support, they can deliver this capability across the entire border within three months. They can design a dedicated, secure IP network system and roll it out between the border as well as across Canada. The radio over internet protocol (ROIP) solution can be connected Ultra High Frequency (UHF) to Very High Frequency (VHF) encrypted radio. The solution can be implemented given funding and support.

2.6   Cross Border Success: The 2010 Winter Olympics and Communications Interoperability Planning

Mr. Mike Webb, Emergency Management British Columbia (EMBC), spoke on the success that resulted from the 2010 Olympics from a Canadian perspective. The mandate was to ensure the safety and security of athletes, team officials, and attendees. The three pillars involved in planning for the Olympics included the Games, led by the Vancouver Olympic Committee (VANOC); the Integrated Security Unit (ISU), led by RCMP; and Integrated Public Safety (IPS), led by EMBC. It was imperative to ensure that interoperability existed between these three pillars.

The coordination that resulted from the 2010 Olympics demonstrated the importance of relationships; they were strengthened throughout the process and were recognized as vital to continue building. The event also validated the emergency management system that is in place for EMBC. It was discovered that the willingness to share information continues to be a challenge. Players are accustomed to operating in response mode and the business process is not a daily practice. In addition, the event gave them much greater knowledge of regional, provincial, federal, and international resource capacities.

Cross-border cooperation was renewed and strengthened as a result of the Olympics. The 1986 US-Canada Federal Emergency Management Cooperation Agreement was updated in December 2008, the Pacific Northwest Emergency Management Arrangement (PNEMA) was developed, and health planning occurred between cross border EMS resources. In addition, an agreement between Washington State and British Columbia was established for the interoperability of public safety radio communications systems.

Mr. Alan Komenski, the Washington Statewide Interoperability Coordinator (SWIC), described the success and results of the 2010 Olympics from the U.S. perspective. He explained the policies and coordination that were in place before the Olympics, which supported success. These included a longstanding waiver with the Federal Communications Commission (FCC), which established an interoperability channel linking Washington and Vancouver regional law enforcement agencies, PNEMA, and the agreement that was signed in early 2008, between the Governor of Washington and the Premier in British Columbia regarding improved transportation.

There were several planning efforts conduced in preparation for the 2010 Olympics. One such effort was the development of the 2010 Olympics Integrated Interoperability Communications Plan. This was a long term planning effort that came out of the Olympics and it was distributed to 175 stakeholders. In planning for the games, training and exercises were conducted for scenarios such as supporting a chemical incident or an event on the water that requires response from both Federal and State. Additional planning efforts included 26 region-specific workshops, the establishment of secure operational protocols, Communications Unit Leader (COML) Training, and the creation of the Olympics Coordination Center.

Mr. Komenski concluded by describing the legacy and success that was derived from the effort. The coordination cemented relationships between Federal and State partnerships across the border. It also established the ground work for interoperability communications training methodology that will continue to be used across the States. Long-term interagency relationships were established, which are the stepping stones for governance, joint system planning, and ongoing regional training and exercises. Tactical interoperability planning documents were also created. Remaining gaps were identified that need to be address for cross border communications between Washington and British Columbia. A final success was that it was beneficial to Amateur Radio Emergency Service (ARES) and Radio Amateur Civil Emergency Services (RACES) to have the opportunity to participate in planning activities and to present their capabilities to stakeholders, which serve as a model for the rest of the Nation.

2.7   Case Study: Security Logistics for the Detroit Cross Border Marathon

Mr. Rich Harshbarger, Race Director, Detroit Free Press Marathon, provided an overview of the marathon and the communications required between the U.S. and Canada. He explained that the marathon is a three day event and the role of communications in operational, medical, and promotional areas. For operational communications, there were more than 50 HAM radio

operators involved in the event – there were 150 radios with 10 channels, 3 repeaters, 1 dispatch centre, as well as a command post, mobile phones, and 911. The barrier of communications through the tunnel was an important aspect to mitigate throughout the race. As such, the tunnel was monitored through television capabilities.

Other communications assets during the event include public safety certified dispatchers, a self-contained risk control group with the capability for setting up site and full communications, as well as a Special Events Resources Team (SERT) that dealt with the roads, bus routes, and noise exemptions. There were three fixed medical facilities set up during the marathon and a patient tracking system was in place for bridge distress, which was under the responsibility of Canada, and tunnel distress, which was under the responsibility of the U.S. Communications and response capabilities were successful in that the team was able to respond to both nonfatal and fatal incidences that occurred during the marathon.

3   Day 2 – Developing a Shared Vision and Setting Priorities

Building on the overview of the current state from Day-1, participants were invited to consider the following workshop intention question:

> **"What do we need to do to formally address communications interoperability challenges in support of cross-border operations?"**

After receiving a set of instructions and workshop principles, participants were invited to post topics that needed to be discussed in order to answer the question. A total of 104 topics were posted as follows (presented in alphabetical order):

- Administrative process (FCC/IC: for cross-border/jurisdictional spectrum authorizations, licensing reciprocity
- Awareness Eh!
- Canada NIFOG, National interoperability field operations guide
- Canada TICPs: border, community, regional – exchange TIPCS
- Capability Assessment
- CASM for Canada and US border – provides information sharing for response
- CCIS/CCIP and NECP alignment
- Command and control – common understanding of ICS
- Common language requirements
- Communication personnel exchange
- Coordination of cross-border governance
- Create a time limit that the FCC and IC have to approve/deny requests!
- Create Listing of existing frequency/resources/ assets agreements
- Critical Infrastructure
- Cross-border authorizations sharable to be handled administrative agencies
- Cross-border connectivity and certification and accreditation
- Cross-border governing body (bi-lateral)
- Cross-border infrastructure, fixed site and fixed link licensing
- Cross-border mutual aid agreements, dual responders, Canada and US certification for response
- Cross-border working group
- Cross-border working group with SWIC rep attendance
- Dedicated funding: capital, O&M, salary
- Develop comprehensive exercise programs – build up
- Develop cross-border (N)I FOG
- Development of formal (personal) relationships
- Direct accountability
- Do the obvious – e.g. Chris' ROIP
- Document interoperability requirements specific to users and agencies
- Empowerment, accountability, tasks vs levels, ground level tactics, support
- Encryption key sharing (i.e. AFCS/OTAR)

- Equipment ownership, lifecycle, etc.
- Exchange of prisoners (know your allies)
- Existing compacts (education)
- Fiscal restraints (or administrative) on being able to get/talk/meet together
- Formal cross-border adoption of standards – e.g. IP, P25, encryption for interoperability
- Formal inventory of 1: existing practices, 2: real or perceived needs
- Formalizing radio operating authority when operating in "other" country!
- Frequencies, shared channels (air and marine)
- Frequency coordination
- Frequency use agreement - GMF vs TAFL
- Functional interoperability (ICS/NIMS)
- Functional/Technical capability matrix / ownership
- Funding
- Governance cross-border planning e.g. PNEMA, federal involvement, regional linkages, funding coordination
- Governance/FCC Waiver (policy) for shared frequencies between U.S. and Canada
- Government on each side of the border should require the FCC and IC to work thru the line A issues and fix them!
- Growing complexity of emerging radio equipment/technology
- Harmonizing spectrum US and Canada
- Have FCC/Industry Canada Indentify legalities of mutual talk groups, common channels (operational border zone)
- How do you ensure all cross-border initiatives speak (CI, Interop, health, EMS)
- How is communication interoperability interfacing with operational and functional interoperability
- How to overcome cultural challenges
- How wide (North-South) should the border be for interoperability – suggestion: 20km each side
- Identify Champions
- Identify champions for agencies requiring cross-border: core agencies; core issues; SOPs – common across the border
- Inability to use national interoperability frequencies (wide area) along border (treaty restrictions)

- Information classification i.e. information to share with provincial municipal, etc.
- Information sharing such as MOUs
- Interoperability parallels (700 MHz, 800 MHz)
- Joint-training
- Language barriers during emergency incidents – English and French especially Quebec, NY, VT, NH, ME
- Law enforcement – relinquishing weapons US to Canada to US (no formalized agreement)
- Leadership
- Legal/Regulations – legal authorization to share
- Look for training opportunities, job of the working group
- Many small exercises across the border
- MERGED with 3-1
- Mutual aid response – coverage/distance for communications and personnel response
- Narrow banding coordination between US and Canada
- National legal/policy framework for Canada and U.S.
- Not who can do what but who needs to do what.
- Operational interoperability (agreements, training)
- P25 compliance for US and Canada systems
- Phased approach for interoperability: swap radios, radio gateways, system to system connection
- Plain language dos and don'ts – data sharing in cross-border legal/regulatory
- Political support Eh!
- Priority movement of people and goods cross border during emergency incident
- Procurement – equipment, services
- Provide a border radio coverage and frequency map – identify and fill gaps
- Purchasing – Systems and equipment – RFPs, RFIs, Sole Sourcing
- Raise Awareness
- Regular cross-border management meetings
- Revisit/distribute 2009 conference topics/ objectives still not met
- Security Policies - Information Management
- Security Policies - Information Management
- Shared Interoperability channels to be established across the entire border region, same channels across entire border
- Shared Spectrum
- Situational awareness and common operating picture
- Skin in the game (vested interest)
- Social Media
- SOPs for shared channels
- Standard operating language and lexicon
- Standards-based (open) data feeds for situational awareness and alerting. E.g. MASAS, IPAWS, 'cop' tools; how to develop/define interface standards for cross-border information sharing; security / privacy issues

- System of system solution – data link between US and Canada agencies, security requirements
- Technology "accessibility" (plain language explanations of systems and capabilities)
- Understanding agency inter-relationships
- Understanding each other's SOPs
- Update all treaties and communication act to reflect new technologies and their use in border areas
- Update or rewrite of existing cross-border communication treaty
- Updated treaty/agreement – SOPs
- Usage of information – such as information obtained by other participating parties
- Who is the national champion – formal consensus required
- Whole of government approach "get our own house in order"
- Wide spread availability of comm.-l training across Canada

In an effort to eliminate duplication and create clusters of topics that should be discussed as one, the group was engaged in a grouping exercise. The following table summarizes the results of this activity and includes the theme and the discussion identifier. Topics with identifiers "n/a" were not discussed.

Table 1: List of topics sorted by theme

Discussion Identifier (Round #-Group #)	Theme	Topic Clusters
1-1	Governance	Regular cross-border management meetings / Cross-border working group with SWIC rep attendance / Cross-border working group / Governance cross-border planning e.g. PNEMA, federal involvement, regional linkages, funding coordination
1-2	Governance	Identify Champions / Who is the national champion – formal consensus required / Identify champions for agencies requiring cross-border: core agencies; core issues; SOPs – common across the border
1-4	Governance	Understanding agency inter-relationships
2-1	Governance	Coordination of cross-border governance / Cross-border governing body (bi-lateral) / Canada TICPs: border, community, regional – exchange TIPCS
2-10	Governance	How do you ensure all cross-border initiatives speak (CI, Interop, health, EMS)
2-12	Governance	Functional/Technical capability matrix / ownership
4-6	Governance	CCIS/CCIP and NECP alignment / Whole of government approach "get our own house in order"

Discussion Identifier (Round #-Group #)	Theme	Topic Clusters
4-5	Governance	How wide (North-South) should the border be for interoperability – suggestion: 20km each side
N/A	Governance	Governance/FCC Waiver (policy) for shared frequencies between U.S. and Canada / Update or rewrite of existing cross-border communication treaty
4-10	Governance	Create Listing of existing frequency/resources/ assets agreements
1-12	Other Topic	Critical Infrastructure
1-9	Other Topics	Fiscal restraints (or administrative) on being able to get/talk/meet together / Funding / Dedicated funding: capital, O&M, salary
1-10	Other Topics	Social Media
2-7	Other Topics	Cross-border connectivity and certification and accreditation
2-8	Other Topics	Information sharing such as MOUs / Usage of information – such as information obtained by other participating parties / Plain language dos and don'ts – data sharing in cross-border legal/regulatory / Information classification i.e. information to share with provincial municipal, etc. / National legal/policy framework for Canada and U.S. / Legal/Regulations – legal authorization to share
2-11	Other Topics	How to overcome cultural challenges
3-3	Other Topics	Awareness Eh! / Raise Awareness / Leadership / "exchange of prisoners" (know your allies) / Existing compacts (education) / Political support Eh! / Skin in the game (vested interest)
n/a	Other Topics	Revisit/distribute 2009 conference topics/ objectives still not met
3-7	Other Topics	Formal inventory of 1: existing practices, 2: real or perceived needs
3-8	Other Topics	Development of formal (personal) relationships

Discussion Identifier (Round #-Group #)	Theme	Topic Clusters
4-7	Other Topics	How is communication interoperability interfacing with operational and functional interoperability
4-12	Other Topics	Update all treaties and communication act to reflect new technologies and their use in border areas
1-8	Standard Operating Procedures	Command and control – common understanding of ICS / Common language requirements / Functional interoperability (ICS/NIMS)
2-4	Standard Operating Procedures	Standard operating language and lexicon / Understanding each other's SOPs
3-4	Standard Operating Procedures	SOPs for shared channels
3-9	Standard Operating Procedures	Updated treaty/agreement – SOPs
4-3	Standard Operating Procedures	Priority movement of people and goods cross border during emergency incident
4-4	Standard Operating Procedures	Document interoperability requirements specific to users and agencies / Operational interoperability (agreements, training)
4-8	Standard Operating Procedures	Develop cross-border (N)I FOG / Canada NIFOG, National interoperability field operations guide
1-3	Technology	Narrow banding coordination between US and Canada
1-11	Technology	Interoperability parallels (700 MHz, 800 MHz) / Frequency use agreement - GMF vs TAFL / Inability to use national interoperability frequencies (wide area) along border (treaty restrictions) / Frequencies, shared channels (air and marine) / Shared Spectrum / Shared Interoperability channels to be established across the entire border region, same channels across entire border / Administrative process (FCC/IC: for cross-border/jurisdictional spectrum authorizations, licensing reciprocity / Cross-border authorizations sharable to be handled administrative agencies / Harmonizing spectrum US and Canada / Frequency coordination

Discussion Identifier (Round #-Group #)	Theme	Topic Clusters
2-2	Technology	Capability Assessment
2-6	Technology	Provide a border radio coverage and frequency map – identify and fill gaps / CASM for Canada and US border – provides information sharing for response
2-9	Technology	Government on each side of the border should require the FCC and IC to work thru the line A issues and fix them! / Have FCC/Industry Canada Indentify legalities of mutual talk groups, common channels (operational border zone)
3-1	Technology	Encryption key sharing (i.e. AFCS/OTAR) / Security Policies - Information Management
3-2	Technology	Technology "accessibility" (plain language explanations of systems and capabilities) / Growing complexity of emerging radio equipment/technology
3-10	Technology	Mutual aid response – coverage/distance for communications and personnel response / Cross-border mutual aid agreements, dual responders, Canada and US certification for response
3-11	Technology	Purchasing – Systems and equipment – RFPs, RFIs, Sole Sourcing / Equipment ownership, lifecycle, etc. / Procurement – equipment, services / Phased approach for interoperability: swap radios, radio gateways, system to system connection / System of system solution – data link between US and Canada agencies, security requirements
4-1	Technology	Cross-border infrastructure, fixed site and fixed link licensing
4-9	Technology	Standards-based (open) data feeds for situational awareness and alerting. E.g. MASAS, IPAWS, 'cop' tools; how to develop/define interface standards for cross-border information sharing; security / privacy issues / P25 compliance for US and Canada systems / Formal cross-border adoption of standards – e.g. IP, P25, encryption for interoperability
1-5	Training and exercise	Joint-training
1-6	Training and exercise	Many small exercises across the border / Look for training opportunities, job of the working group
2-3	Training and exercise	Develop comprehensive exercise programs – build up / Wide spread availability of comm.-l training across Canada

Discussion Identifier (Round #-Group #)	Theme	Topic Clusters
4-2	Training and exercise	Communication personnel exchange
2-5	Usage	MERGED with 3-1 / Security Policies - Information Management
3-12	Usage	Situational awareness and common operating picture
4-11	Usage	Formalizing radio operating authority when operating in "other" country!
n/a	n/a	Create a time limit that the FCC and IC have to approve/deny requests!
n/a	n/a	Law enforcement – relinquishing weapons US to Canada to US (no formalized agreement)
n/a	n/a	Do the obvious – e.g. Chris' ROIP
n/a	n/a	Direct accountability
n/a	n/a	Language barriers during emergency incidents – English and French especially Quebec, NY, VT, NH, ME
n/a	n/a	Empowerment, accountability, tasks vs levels, ground level tactics, support / Not who can do what but who needs to do what.

3.1   Breakout Sessions - Rounds of Discussion

Following the posting and grouping of topics, participants received instructions on the discussion template and the reporting and facilitation process for each discussion. They were then invited to self-organize by topic of interest for four rounds of discussions with up to twelve discussions taking place concurrently.

At the conclusion of each round, each breakout group was instructed to post their priority recommendations. The following table provides the list of the 87 recommendations as posted by the group.

Table 2: List of recommendations

Identifier	Theme	Recommendation
1-1	Governance / Alignment	Map out stakeholder groups across border and their goals (Inventory) PSC/DHS/Provinces/State
1-1	Governance / Alignment	Continued commitment to cross border working group
1-1	Governance / Alignment	Legitimize authority – connect working groups to existing agreements
1-2	Other	Canada-US CI Action Plan (July 2010) should address interoperability
1-3	Technology / Spectrum	Improve / need coordination between DHS & Public Safety Canada
1-3	Technology / Spectrum	Improve spectrum efficiency through mutual narrowbanding
1-3	Technology / Spectrum	FCC & IC work to reduce impact of interoperability impairment due to mix of cross-border bandwidth incompatibility
1-4	Governance / Alignment	Champion 1) cross border crime forum, 2) CACP, IACP and fire chiefs, 3) communications strategy to reach champions
1-5	Training / Exercise	Use exercises to document interoperability & distribute the results to everyone
1-5	Training / Exercise	Develop framework to facilitate regional training working groups
1-5	Training / Exercise	Think Bi-nationally; act regionally.
1-5	Training / Exercise	Combined/joint training: bi-national "seed" money to enable exercise planning
1-5	Training / Exercise	Emphasize new technology – SharePoint, virtual libraries, video conference
1-6	Usage	Educate senior leadership on actual processes in place that work (tell the truth)
1-6	Governance / Alignment	Get interoperability mandated by government (PSC & DHS) (Lobbied by Associations)
1-6	Training / Exercise	Build a catalogue of both large & small scale exercises. Identify and share best practices.
1-6	Other	Assign focused, primary responsibility (all levels of government)

Identifier	Theme	Recommendation
1-6	Usage	Educate/get involved all levels of government and public safety associations/unions
1-7, 1-8	Standard Operating Procedures	In the interim, remove legal hindrances that prohibit the sharing of radio frequencies, personnel, and resources from working across state, provincial and national borders
1-7 1-8	SOPs	Top levels of government must establish and agree upon a universal incident command system with common language
1-9	Governance / Alignment	National prioritization to drive funding from the top
1-10	Other	Situational awareness and COP – Build "Virtual Canada"
1-10	Other	Keep public safe by establishing policies and guides (establish a working group to develop) to leverage situational awareness tools (e.g. Facebook) in planning events (e.g. g8) and responding to incidents…and coordinating and sharing information across the border
1-11	Technology / Spectrum	FCC & IC to improve coordination process
1-11	Standard Operating Procedures	Draft model MOU for routine cross-border use of spectrum licensed on 1 side or the other
1-11	Technology	Formally identify interoperability channels (physical and or logical) available border-wide
1-11	Technology / Spectrum	Establish legal framework for siting towers or fixed stations on the "foreign" side of the border.
1-11	Technology / Spectrum	Decrease frequency – coordination cycle – time (goal 60-90 days)
1-11	Governance / Alignment	Create regional and thematic working groups on both sides, linked by a small, joint body.
1-12	Other	Canadian Interoperability plans w/ cross-border connectivity process must include CI considerations
2-1	Governance / Alignment	Need regional EM assistance COMPACs in every region
2-1	Governance / Alignment	Create national (not federal) interoperability governing/coordinating bodies for both countries (possibly formalize the CITIG/SOREM relationship)
2-2	Governance / Alignment	Enhanced leadership for capability development (assessment)
2-2	Other	Identify lessons learned for best practices. Develop a best practices check list to capture best practices
2-3	Training / Exercise	More joint inter-agency training
2-3	Training / Exercise	Appoint point people who will champion joint exercises and joint communication
2-3	Training / Exercise	Common exercise program. Get past governmental red tape.
2-4	Training / Exercise	Adopt NIMS & COML training
2-4	Technology /	Common naming of radio channels

Identifier	Theme	Recommendation
	Spectrum	
2-6	Technology / Spectrum	Consider NIFOG (agency interoperability capability) as a tool for Canada and Canada/US agency operation
2-6	Technology / Spectrum	Support CRC contract to identify fixed sites plus or minus 120 km/75 miles (to be determined) from border. All bands. Build on existing CASM database)
2-6	Technology / Spectrum	Canada develop a CSM database – intention to integrate/share with US CASM along the border
2-7	Governance / Alignment	Create border working groups that link Canada/us at least twice a year. Working group should be formulated at the international level
2-7	Training / Exercise	Establish share agreements on accreditation and certification internationally
2-7	Governance / Alignment	Continue expansion of interoperability forums that highlight the accreditation and certification process.
2-8	Other Topics	Determine, at the local level, who needs to share information with who, what are the roper contacts (actual phone numbers, radio channels, email addresses, etc.)
2-8	Other	Develop international agreements for establishing who should receive what information when (levels of information sharing). What information is needed to deal with the emergency or significant event
2-8	Other	Develop a mechanism for sharing the information, automatically filtered for the established levels of information access, in real time.
2-9	Technology / Spectrum	Develop a guide or manual that describes the necessary steps to obtain licenses for cross-border operations.
2-9	Technology / Spectrum	The licensing process for mobile units within the service contour of foreign base stations for purposes for cross-border communications (simplify)
2-10	Governance / Alignment	Sharing cross-border initiatives. Create a clearinghouse (such as LLIS.gov). Connect and engage members. Calendar of events for training/awareness. Professional development. Share best Practices. Create a clearinghouse / repository of interoperable documentation.
2-11	SOPs	Endorse and participate in the movement towards plain language
2-11	Training / Exercise	Regional table-top exercises to identify cultural differences. Assign a person to assess/report on any cultural issues that appear during any exercises.
2-12	SOPs	Develop a template and toolkit to allow each region to compile a functional/technical capabilities matrix
1-7, 1-8, 2-12	SOPs	Establish a common shared communication system, such as the ROIP (IP/Internet) system, and provide the funding for this from a federal level. Canada government and industry to investigate US National Communications System. Continue development and collaboration of databases that identify systems on both sides of the border.
2-12	SOPs	Communicate broadly about existing collaborations (mutual aid, IBET, etc.) to see the value
3-9, 3-1	Governance / Alignment	Update 1952 Treaty. Sign agreement between US and Canada that will permit interoperable environment along the Border. IC and FCC continue discussions until a resolution is achieved. Cross border Infrastructure: amend existing treaty or legislation procedures to allow foreign public safety agencies to hold a foreign radio station license. Append the 1952 treaty to include the ability to share/use encryption keys when in the other country.

Identifier	Theme	Recommendation
3-1	Governance / Alignment	Organizations need to draft and have approved their own key sharing policies / security policies approved. This will be required for MOUs.
3-1	Governance / Alignment	The federal level on both sides of the border should develop a framework (template) for key sharing for local agencies to use.
3-2	Technology / Spectrum	Provide easy to understand whitepapers on new technologies to assist smaller agencies with evaluation and purchasing decisions.
3-2	Technology / Spectrum	Draft model RFI/RFP language designed to mandate disclosure of features/functions/deviations from standard that might impede interoperation with foreseeable counterparts (neighbouring state/provinces/counties).
3-3	Governance / Alignment	Appoint a coordinator (Federal/provincial)
3-4	SOPs	Establish Interoperability SOP with coordination zone.
3-4	SOPs	Continue to pursue with vigour the Interoperability Centre of Excellence
3-7	SOPs	A formal interview process (either one on one or focus group) with emergency services (both sides of the border) to identify real needs and establish best practices.
3-8	Governance / Alignment	Create provincial equivalent of US SWIC
3-8	SOPs	Identify and form an cross-border interoperability group at local/state/provincial levels
3-8	Governance / Alignment	Publish cross border stakeholder contact list (improve relationships). Create a list of contacts and meeting on local basis.
3-10	SOPs	Day to day regulations that work for us in the creation of mutual aid response
3-11	Technology / Spectrum	Establish harmonized federal purchasing schedules for equipment that is standards-based or non-proprietary and allow provincial/state/local government to buy from those schedules.
3-11	Other Topics	Monitor and consider expanding IBET project.
3-11	Other	Consider CPRC call #2 submission for a state/provincial local/local IBET style project (ROIP)
3-12	Governance / Alignment	Establish work group (US-Canada) for data discovery and to engage stakeholder community
4-5	Technology / Spectrum	How wide should the border be for interoperability. Need to establish policy to define limitations of interoperability channels
4-6	Governance / Alignment	Add new action plan to CCIP to reflect cross border
4-6	Governance / Alignment	Add new action plan to NECP to reflect cross border
4-6	Governance / Alignment	Create joint CCIP/NECP working group
4-7	Technology / Spectrum	RECC Working Group / SWIC WGs invite provincial reps to meetings – FEMA/DHS/PSC. Establish International SWIC/PIC (PICs need to be established)
4-7	Training / Exercise	How does Canada support a US Type 1 Command team at a large incident? EMO/CDN EM College? Online communications leader course – OEC has it – Canada should borrow it and Canadianize it.
4-7	Governance /	Clear simple accountability framework (SOREM – CDA)

Identifier	Theme	Recommendation
	Alignment	
4-8	SOPs	Canada/US to develop an interoperability centre to coordinate & collect MOU & agreements in 1 place
4-8	SOPs	Print an IIFOG (International Interoperability Field Operations Guide)
4-8	Technology / Spectrum	Canada to access Public Safety frequency to find commonality
4-9	Governance / Alignment	Have SOREM create a working group to investigate the adoption/creation of an appropriate open standard in concert with the appropriate groups from each side of the border.
4-9	Governance / Alignment	Identify a group to determine which data or systems currently exist and can be shared.
4-10	SOPs	Determine lead to house cross-border agreements as resource in future development (Justice Canada). Awareness too.
4-10	Governance / Alignment	Strike federal task force to develop a national asset database to support mutual aid in emergency and crisis response.

Following four rounds of discussions and the posting of key recommendations, participants were invited back into plenary and were instructed that a summary table of the day's proceedings would be available to them for review by 7am the next morning. The group was asked to read the proceedings and be prepared to ask clarification questions and identify their top 6 priority recommendations. A copy of the discussion summary table is provided in Appendix D.

3.2   Plenary Presentation: Emerging Technologies and Border Communication
       Interoperability

Following four rounds of discussions, the day was concluded with a plenary presentation by Mr.
Marc Dupuis from Industry Canada on emerging technologies and border communication
interoperability. He discussed the issues related to communications interoperability in Canada
noting that the Canadian radio frequency spectrum is more congested in the border area. He
engaged participants to be engaged in ongoing consultations, to tell Industry Canada their
spectrum needs and radio interoperability requirements. Mr. Dupuis stated that Industry
Canada will continue to examine ways to improve access to spectrum in the border areas and
work with the FCC on bilateral issues noting the following challenges:

- FCFS bands are like a hotel
- Where frequency bands are congested, there are limitations (e.g. no clear national VHF
  frequencies available)
- Changes to current Arrangements would likely require licensees to be relocated or
  displaced
    o Lengthy process
    o Dependant on available replacement frequencies

Mr. Brian Marenco of the Public Safety and Homeland Security Bureau, Federal
Communications Commission spoke on Emerging Technologies and Border Communications
Interoperability. He reviewed the U.S. domestic rules and international agreements that enable
cross border communications. He discussed short term solutions such as:

- allow hand-held units, in addition to mobile units, to roam across the border under the
  conditions established in the Convention
- permit cross-border communications between any type of public safety entity (not just
  police) under the Radio Agreement, and
- interpret the Radio Agreement to allow licensees on one side of the border to
  communicate through a base station repeater on the other side of the border assuming
  permission has been obtained from the licensee of the base station repeater.

He felt the appropriate long-term solution was to add language to an existing agreement or sign
a new agreement which specifically permits the three cross-border scenarios described above
along the U.S. – Canada border. Mr. Marenco closed with a discussion the National Broadband
Plan and its potential for interoperability.

4   Day 3 – From Vision to Action, Setting and Defining Priorities and Next Steps

After receiving instructions to pick up and read the table of proceedings at the end of Day-2, participants engaged in the review of the table and were invited to invest a total of 12 dots, as follows:
- Six (6) red dots for what should be done first (low hanging fruit or foundational activities)
- Six (6) blue dots for what would provide the most value and have the greatest impact on achieving cross-border interoperable communications (longer term)

Participants were instructed that they could weigh their vote by posting more than one (1) dot to one recommendation. The results of the prioritization exercise are provided in the table below.

Table 3:   Results of Prioritization Vote

Identifier	Theme	Recommendation	Do First (red dots)	Most Value (blue dots)
1-1	Governance / Alignment	(5) Map out stakeholder groups across border and their goals (Inventory) PSC/DHS/Provinces/State	30	33
1-1	Governance / Alignment	Continued commitment to cross border working group	17	8
1-1	Governance / Alignment	Legitimize authority – connect working groups to existing agreements	4	3
1-2	Other	Canada-US CI Action Plan (July 2010) should address interoperability	3	1
1-3	Technology / Spectrum	Improve / need coordination between DHS & Public Safety Canada	3	2
1-3	Technology / Spectrum	Improve spectrum efficiency through mutual narrowbanding	2	1
1-3	Technology / Spectrum	FCC & IC work to reduce impact of interoperability impairment due to mix of cross-border bandwidth incompatibility	1	0
1-4	Governance / Alignment	(3) Champion 1) cross border crime forum, 2) CACP, IACP and fire chiefs, 3) communications strategy to reach champions	27	29
1-5	Training / Exercise	Use exercises to document interoperability & distribute the results to everyone	0	3
1-5	Training / Exercise	Develop framework to facilitate regional training working groups	3	17
1-5	Training / Exercise	Think Bi-nationally; act regionally.	1	1
1-5	Training / Exercise	Combined/joint training: bi-national "seed" money to enable exercise planning	1	1
1-5	Training / Exercise	Emphasize new technology – SharePoint, virtual libraries, video conference	0	5
1-6	Usage	Educate senior leadership on actual processes in place that work (tell the truth)	0	1
1-6	Governance / Alignment	(7) Get interoperability mandated by government (PSC & DHS) (Lobbied by Associations)	38	32
1-6	Training / Exercise	Build a catalogue of both large & small scale exercises. Identify and share best practices.	11	11
1-6	Other	Assign focused, primary responsibility (all levels of government)	4	1
1-6	Usage	Educate/get involved all levels of government and public safety associations/unions	3	3
1-7, 1-8	Standard Operating Procedures	(6) In the interim, remove legal hindrances that prohibit the sharing of radio frequencies, personnel, and resources from working across state, provincial and national borders	32	29
1-7, 1-8	SOPs	Top levels of government must establish and agree upon a universal incident command system with common language	12	16
1-9	Governance / Alignment	National prioritization to drive funding from the top	5	4
1-10	Other	Situational awareness and COP – Build "Virtual Canada"	1	11
1-10	Other	Keep public safe by establishing policies and guides (establish a working group to develop) to leverage situational awareness tools (e.g. Facebook) in planning events (e.g. g8) and responding to incidents…and coordinating and sharing information across the border	0	0
1-11	Technology / Spectrum	FCC & IC to improve coordination process	10	1

Identifier	Theme	Recommendation	Do First (red dots)	Most Value (blue dots)
1-11	Standard Operating Procedures	(1) Draft model MOU for routine cross-border use of spectrum licensed on 1 side or the other	26	6
1-11	Technology	(8) Formally identify interoperability channels (physical and or logical) available border-wide	12	66
1-11	Technology / Spectrum	Establish legal framework for siting towers or fixed stations on the "foreign" side of the border.	4	6
1-11	Technology / Spectrum	Decrease frequency – coordination cycle – time (goal 60-90 days)	2	0
1-11	Governance / Alignment	Create regional and thematic working groups on both sides, linked by a small, joint body.	0	0
1-12	Other	Canadian Interoperability plans w/ cross-border connectivity process must include CI considerations	0	0
2-1	Governance / Alignment	Need regional EM assistance COMPACs in every region	2	1
2-1	Governance / Alignment	(10) Create national (not federal) interoperability governing/coordinating bodies for both countries (possibly formalize the CITIG/SOREM relationship)	59	53
2-2	Governance / Alignment	Enhanced leadership for capability development (assessment)	1	1
2-2	Other	Identify lessons learned for best practices. Develop a best practices check list to capture best practices	0	1
2-3	Training / Exercise	More joint inter-agency training	9	2
2-3	Training / Exercise	Appoint point people who will champion joint exercises and joint communication	1	1
2-3	Training / Exercise	Common exercise program. Get past governmental red tape.	0	0
2-4	Training / Exercise	Adopt NIMS & COML training	8	10
2-4	Technology / Spectrum	Common naming of radio channels	0	7
2-6	Technology / Spectrum	Consider NIFOG (agency interoperability capability) as a tool for Canada and Canada/US agency operation	7	11
2-6	Technology / Spectrum	Support CRC contract to identify fixed sites plus or minus 120 km/75 miles (to be determined) from border. All bands. Build on existing CASM database)	4	5
2-6	Technology / Spectrum	Canada develop a CSM database – intention to integrate/share with US CASM along the border	3	10
2-7	Governance / Alignment	(9) Create border working groups that link Canada/us at least twice a year. Working group should be formulated at the international level	46	38
2-7	Training / Exercise	Establish share agreements on accreditation and certification internationally	0	0
2-7	Governance / Alignment	Continue expansion of interoperability forums that highlight the accreditation and certification process.	0	0
2-8	Other Topics	(2) Determine, at the local level, who needs to share information with who, what are the roper contacts (actual phone numbers, radio channels, email addresses, etc.)	20	4
2-8	Other	Develop international agreements for establishing who should receive what information when (levels of information sharing). What information is needed to deal with the emergency or significant event	1	2

Identifier	Theme	Recommendation	Do First (red dots)	Most Value (blue dots)
2-8	Other	Develop a mechanism for sharing the information, automatically filtered for the established levels of information access, in real time.	0	1
2-9	Technology / Spectrum	Develop a guide or manual that describes the necessary steps to obtain licenses for cross-border operations.	11	2
2-9	Technology / Spectrum	The licensing process for mobile units within the service contour of foreign base stations for purposes for cross-border communications (simplify)	1	4
2-10	Governance / Alignment	Sharing cross-border initiatives. Create a clearinghouse (such as LLIS.gov). Connect and engage members. Calendar of events for training/awareness. Professional development. Share best Practices. Create a clearinghouse / repository of interoperable documentation.	0	2
2-11	SOPs	Endorse and participate in the movement towards plain language	4	4
2-11	Training / Exercise	Regional table-top exercises to identify cultural differences. Assign a person to assess/report on any cultural issues that appear during any exercises.	1	1
2-12	SOPs	Develop a template and toolkit to allow each region to compile a functional/technical capabilities matrix	11	6
1-7, 1-8, 2-12	SOPs	Establish a common shared communication system, such as the ROIP (IP/Internet) system, and provide the funding for this from a federal level. Canada government and industry to investigate US National Communications System. Continue development and collaboration of databases that identify systems on both sides of the border.	2	2
2-12	SOPs	Communicate broadly about existing collaborations (mutual aid, IBET, etc.) to see the value	1	0
3-9, 3-1	Governance / Alignment	Update 1952 Treaty. Sign agreement between US and Canada that will permit interoperable environment along the Border. IC and FCC continue discussions until a resolution is achieved. Cross border Infrastructure: amend existing treaty or legislation procedures to allow foreign public safety agencies to hold a foreign radio station license. Append the 1952 treaty to include the ability to share/use encryption keys when in the other country.	20	2
3-1	Governance / Alignment	Organizations need to draft and have approved their own key sharing policies / security policies approved. This will be required for MOUs.	0	0
3-1	Governance / Alignment	The federal level on both sides of the border should develop a framework (template) for key sharing for local agencies to use.	0	0
3-2	Technology / Spectrum	Provide easy to understand whitepapers on new technologies to assist smaller agencies with evaluation and purchasing decisions.	5	13
3-2	Technology / Spectrum	Draft model RFI/RFP language designed to mandate disclosure of features/functions/deviations from standard that might impede interoperation with foreseeable counterparts (neighbouring state/provinces/counties).	1	1
3-3	Governance / Alignment	(4) Appoint a coordinator (Federal/provincial)	30	10
3-4	SOPs	Establish Interoperability SOP with coordination zone.	1	2
3-4	SOPs	Continue to pursue with vigour the Interoperability Centre of Excellence	0	7
3-7	SOPs	A formal interview process (either one on one or focus group) with emergency services (both sides of the border) to identify real needs and establish best practices.	0	1
3-8	Governance / Alignment	Create provincial equivalent of US SWIC	19	21
3-8	SOPs	Identify and form an cross-border interoperability group at	3	1

Identifier	Theme	Recommendation	Do First (red dots)	Most Value (blue dots)
		local/state/provincial levels		
3-8	Governance / Alignment	Publish cross border stakeholder contact list (improve relationships). Create a list of contacts and meeting on local basis.	1	1
3-10	SOPs	Day to day regulations that work for us in the creation of mutual aid response	0	0
3-11	Technology / Spectrum	Establish harmonized federal purchasing schedules for equipment that is standards-based or non-proprietary and allow provincial/state/local government to buy from those schedules.	15	1
3-11	Other Topics	Monitor and consider expanding IBET project.	13	16
3-11	Other	Consider CPRC call #2 submission for a state/provincial local/local IBET style project (ROIP)	0	0
3-12	Governance / Alignment	Establish work group (US-Canada) for data discovery and to engage stakeholder community	1	4
4-5	Technology / Spectrum	How wide should the border be for interoperability. Need to establish policy to define limitations of interoperability channels	0	1
4-6	Governance / Alignment	Add new action plan to CCIP to reflect cross border	6	0
4-6	Governance / Alignment	Add new action plan to NECP to reflect cross border	3	1
4-6	Governance / Alignment	Create joint CCIP/NECP working group	1	0
4-7	Technology / Spectrum	RECC Working Group / SWIC WGs invite provincial reps to meetings – FEMA/DHS/PSC. Establish International SWIC/PIC (PICs need to be established)	6	9
4-7	Training / Exercise	How does Canada support a US Type 1 Command team at a large incident? EMO/CDN EM College? Online communications leader course – OEC has it – Canada should borrow it and Canadianize it.	3	3
4-7	Governance / Alignment	Clear simple accountability framework (SOREM – CDA)	0	0
4-8	SOPs	Canada/US to develop an interoperability centre to coordinate & collect MOU & agreements in 1 place	7	8
4-8	SOPs	Print an IIFOG (International Interoperability Field Operations Guide)	5	7
4-8	Technology / Spectrum	Canada to access Public Safety frequency to find commonality	1	0
4-9	Governance / Alignment	Have SOREM create a working group to investigate the adoption/creation of an appropriate open standard in concert with the appropriate groups from each side of the border.	0	0
4-9	Governance / Alignment	Identify a group to determine which data or systems currently exist and can be shared.	0	0
4-10	SOPs	Determine lead to house cross-border agreements as resource in future development (Justice Canada). Awareness too.	1	0
4-10	Governance / Alignment	Strike federal task force to develop a national asset database to support mutual aid in emergency and crisis response.	0	0

4.1   Summary of Top Priorities

As a result of the prioritization vote, the following 10 priority areas were identified and were brought forward for further analysis.

1. Draft model MOU for routine cross-border use of spectrum licensed on one side or the other

2. Determine, at the local level, who needs to share information with who, what are the proper contacts (actual phone numbers, radio channels, email addresses, etc.)

3. Champion 1) cross border crime forum, 2) CACP, IACP and fire chiefs, 3) communications strategy to reach champions

4. Appoint a coordinator (Federal/provincial)

5. Map out stakeholder groups across border and their goals (Inventory) Public Safety Canada/DHS/Provinces/State

6. In the interim, remove legal hindrances that prohibit the sharing of radio frequencies, personnel, and resources from working across state, provincial and national borders

7. Get interoperability mandated by government (Public Safety Canada & DHS) (Lobbied by Associations)

8. Formally identify interoperability channels (physical and or logical) available border-wide

9. Create border working groups that link Canada/U.S. at least twice a year. Working group should be formulated at the international level

10. Create national (not federal) interoperability governing/coordinating bodies for both countries (possibly formalize the CITIG/SOREM relationship)

4.2   Detailed Assessment: Priority Definition and Next Steps

After reviewing the top 10 priorities, attendees agreed that no further planning was required for priority 1 as this was underway (as per Day-2 presentation). The group therefore received instructions and self-organized into nine (9) breakout groups to conduct a detailed opportunity analysis.   The outputs from each analysis are provided in Appendix E.

4.3   Plenary Presentations on Priorities and Immediate Next Steps

Following a round of 9 concurrent breakouts to further define the recommendations and identify next steps, a spokesperson from each group presented the results to a Canada – U.S. Agency Panel for questions and comments. The following table highlights the comments from the panel in response to the presentations.

Priority	Comments
1. Creation of a Canadian/American communications interoperability coordinating body;	- This will be helpful and in the coming months and Public Safety Canada will discuss the effort with OEC.
2. Creation of a cross-border communications working group;	- This is a helpful, important effort and there will be a third Cross Border meeting next year, hosted by OEC.
3. Development of an interoperability mandate within both governments (Public Safety Canada and the Department of Homeland Security);	- Agreed that this would be helpful.
4. Formal identification of cross-border interoperability channels available border-wide through the creation of a working group;	Industry Canada Comments Thank you for comments and for recognizing the study that IC is undertaking to find frequencies. As a starting point look at frequencies that are designated interoperability channels in the U.S. It is important to note that it is difficult to get all channels approved in Canada. Working groups should determine: - How many channels are necessary? - Is it more important for one frequency across the entire border or sets of frequencies in different parts of Canada? - If there are sets of frequencies are there geographical break points to utilize when establishing the frequencies? - Is it important that channels are designated as specific bandwidth? It is important to let the powers know of this requirement and the importance of cross border interoperability channels. It was suggested that there be a strong push by a community to get this issue noticed, for example, the creation of a public safety campaign to write a letter to IC (Marc Dupuis) with the purpose of formally informing them of how important this issue is. FCC Comments

Priority	Comments
	- The FCC is doing what they can to ensure that interoperability through 800 MHz is maintained after narrow banding - Although the FCC cannot formally approve the sharing of frequencies between licensees across the border, the FCC will support such arrangements.
5. Address legal hindrances that prohibit sharing of radio frequencies, personnel, and resources from working across state, province, and national borders;	- It was suggested that a document/letter be created to determine what scenarios are allowable and permissions for collaboration/sharing.
6. Creation of a stakeholder map and service inventory;	CRC Comments - The effort of CITIG has recognized the breadth of stakeholders out there working on this issue - This effort is doable and the one month deadline is good - Recommend that everyone register as a member of CITIC - There are ways for the site to be used to share and move information - Sharing of documents is different in Canada than it is in the US
7. Appointment of a cross-border communications interoperability coordinator from each province and at the federal level equivalent to the Statewide Interoperability Coordinators (SWIC) in the U.S.;	- Agreed that this would be helpful.
8. Identification and engagement of cross-border champions;	Public Safety Canada Comments • Public Safety Canada will pass on the report of the Cross Border Workshop to Ministry in order to highlight this recommendation for high-level champions • Canada probably does not need a separate office for emergency communications o We are doing well managing and moving things forward but we understand the suggestion for higher-level champions at the political level • This effort goes along with the money and today there is not much extra • It would be great to have those high-level champions present at next year's meeting
9. Development of an information-sharing inventory; and	CRC Comments • This is a valuable effort

Priority	Comments
	• There are tools out there and it is important to determine what those tools are and how to get them • There is an opportunity to raise this issue at the Canadian Public Safety Interoperability Workshop- 4th CITIG workshop • We should possibly have someone attend the meeting to create discussion on the issue from both sides of the border

As part of the presentations, each spokesperson identified a more descriptive name for the opportunity to provide clarity on what it is, as follows. In addition, copies of the Opportunity Analysis Reports generated from each breakout are provided as Appendix F in the same order presented below.

1. Creation of a Canadian/American communications interoperability coordinating body;
2. Creation of a cross-border communications working group;
3. Development of an interoperability mandate within both governments (Public Safety Canada and the Department of Homeland Security);
4. Formal identification of cross-border interoperability channels available border-wide through the creation of a working group;
5. Address legal hindrances that prohibit sharing of radio frequencies, personnel, and resources from working across state, province, and national borders;
6. Creation of a stakeholder map and service inventory;
7. Appointment of a cross-border communications interoperability coordinator from each province and at the federal level equivalent to the Statewide Interoperability Coordinators (SWIC) in the U.S.;
8. Identification and engagement of cross-border champions;
9. Development of an information-sharing inventory; and
10. Draft model MOU for routine cross-border use of licensed spectrum (in progress – not further discussed)

5   Workshop Closing Remarks

Mr. Daniel Lavoie, Associate Assistant deputy Minister at Public Safety Canada provided closing remarks and thanked participants for their hard work and engagement throughout the workshop which demonstrated the strong effort to improve interoperability between the Canada-U.S. border. He stated that, for him, being present at this workshop was useful to determine how he can engage on this issue and be constructive moving forward. He commented that the user-driven work that was done is useful in assigning resources and ensuring that the focus is on topics that are important to stakeholders.

Mr. Lavoie stated that the information gathered at this meeting will guide discussions in the future and PS Canada will work on creating a national environment that will facilitate the agreement of a standard way of operating as public safety. Mr. Lavoie closed by stating PS Canada's upcoming goals that were derived from the workshop. The medium-term goal for him is to be able to present the Federal and Provincial Ministers with a strategy in January 2010 that has been looked at by a number of partners. The short-term goal is to finalize the Canadian strategy for communications interoperability to build national commitment on this issue.

Appendix A – Invitation

Second Canada - U.S. Cross Border Interoperable Communications Workshop
September 13-15, 2010
Caesar's Windsor, Windsor, Ontario

AGENDA

The three days have been designed to answer the following intention question:

"What do we need to do to formally address communications interoperability challenges
in support of cross-border operations?"

Three functional areas that require a coordinated effort between policy makers and emergency responders from both Canada and the U.S in order to improve cross border communications interoperability will be considered, including:

- **Planning**: Developing near- and long-term cross border interoperable communications goals and strategic objectives and collaborating to achieve common objectives through achievable action plans.

- **Policy Development:** Developing policies that contribute to overcoming challenges and support coordination between nations to enhance communications interoperability at the border and during joint operations.

- **Operations**: Identifying opportunities to enhance communications int:eroperability through joint activities such as: developing joint SOPs; reviewing technology compatibilities; and conducting joint training and exercises.

Target Audience: The target audience for the workshop includes both U.S. and Canadian interoperability leaders and users from the following groups: (1) emergency response agencies (law enforcement, fire, paramedics, emergency managers); (2) other public safety providers from all levels of government along the Canada – U.S. border; and (3) other key government agencies (e.g. Public Safety Canada, Department of State, Department of Homeland Security, Industry Canada, National Telecommunications and Information Administration, Federal Communications Commission). Industry will not be invited to participate in this event.

Day 1 (Monday, September 13, 2010) – The Current State

12:00 - 1:00 p.m.	**Registration**
1:00 - 5:00 p.m.	**Opening Plenary Session - Welcome/Introduction**

- Mr. Chris Essid, Director of the Office of Emergency Communications, U.S. Department of Homeland Security
- Mr. Daniel Lavoie, Associate Assistant Deputy Minister
  Public Safety Canada, Emergency Management and National Security Branch

1:15 - 1:35 p.m.	Public Safety Canada Key Note Address by Graham Flack, Associate Deputy Minister, Public Safety Canada

1:35 - 1:55 p.m.	U.S. Department of Homeland Security Key Note Address by Greg Schaffer, Assistant Secretary for CyberSecurity and Communications

1:55 - 2:15 p.m.   The First Canada – U.S. Cross-Border Interoperability Communications Workshop in Review

2:15 - 2:45 p.m.   **Cross Border Success:** The Integrated Border Enforcement Team (IBET) and Successes in Cross Border Communications Interoperability

2:45 - 3:15 p.m.   Health Break and Networking

3:15 - 3:45 p.m.   **Cross Border Success:** The 2010 Winter Olympics and Communications Interoperability Planning

3:45 - 4:45 p.m.   **Case Study – Cross Border Communications Interoperability** – Security Logistics for the Detroit Cross Border Marathon – a presentation on the planning of the Detroit Free Press Marathon including communication interoperability challenges and lessons learned. The presentation will address past incidences, lessons learned, and planning considerations for this year's event.

4:45 - 5:00 p.m.   Day 1 Recap and Day 2 Overview

Day 2 (Tuesday, September 14, 2010) – Developing a Shared Vision and Setting Priorities

08:30 - 9:00 a.m.   **Morning Plenary Session**

Recap of Day 1

Posting of New Topics and Instructions for Breakout Sessions

**Note: Topics for discussion will be gathered using an online consultation of all registered participants and validated by the participants**. Examples of topics include governance, policy gaps, joint planning, alignment of national strategies to reflect cross border issues, information sharing, technology, spectrum regulations, broadband developments, and cross border training and exercises. Participants will be given an opportunity to post new topics prior to the breakout sessions.

9:15 - 10:30 a.m.   **Breakout Sessions – Round 1** – Concurrent Breakouts on Priority Topics

10:30 - 10:45 a.m.   Health Break

10:45 - 12:00 p.m.   **Breakout Sessions – Round 2** – Concurrent Breakouts on Priority Topics

12:00 - 1:00 p.m.   Lunch Break (lunch service is not included as part of the workshop)

01:15 - 2:30 p.m.   **Breakout Sessions – Round 3** – Concurrent Breakouts on Priority Topics

2:45 - 4:00 p.m.   **Breakout Sessions – Round 4** – Concurrent Breakouts on Priority Topics

4:00 - 4:55 p.m.   **Emerging Technologies and Border Communication Interoperability** – A joint Industry Canada and Federal Communications Commission presentation on Canada – U.S. Treaties, Spectrum Licensing, and Cross Border Implications.

4:55 - 5:00 p.m.   Day 2 Recap and Day 3 Overview

*Short health breaks have been included between each round of breakout sessions.**

Day 3 (Wednesday, September 15, 2010) – From Vision to Action, Setting and Defining Priorities

08:30 - 9:15 a.m.   **Morning Plenary Session**

                          Read-in and Priority Vote

9:15 - 10:00 a.m.   Prioritization
                          Instructions for Clarifying Priorities and Identifying Next Steps

10:00 - 10:15 a.m.   Health Break

10:15 - 11:30 a.m.   Detailed Assessment of Priorities Definition and Next Steps – Concurrent Breakout Sessions

11:30 - 11:45 a.m.   Plenary Presentations on Priorities and Immediate Next Steps to Canada – U.S. Core Agency Panel

11:45 a.m.   Closing Remarks by Canada – U.S. Core Agency Panel

12:00 p.m.   End of Workshop

Appendix B – Agenda

Invitation to Participate in the
Second Canada – U.S. Cross Border Interoperable Communications Workshop
September 13-15, 2010
Caesar's Windsor, Windsor, Ontario

Ensuring security and safety along the Canada-U.S border is a shared challenge for both Canada and the United States that requires collaboration and coordination between the two nations. To be successful, personnel from both countries require the ability to exchange voice and data communications in real-time and across disciplines and jurisdictions in an effective and timely manner. Achieving interoperability at an agency and local-level is a challenge in and of itself, which is compounded with the presence of an international border for many regions in both countries.

It is therefore our pleasure to invite you to the Second Canada – U.S. Cross Border Interoperable Communications Workshop co-hosted by the United States Department of Homeland Security Office of Emergency Communications and Public Safety Canada. This important event will take place from September 13 to 15, 2010, in Windsor, Ontario at Caesar's Windsor. As this event will focus primarily on cross border planning and policy development, registration is open exclusively to government officials, and first / emergency responders. Industry will not be invited to participate in this event.

The workshop is being held over three days this year and will include interactive breakout sessions, cross-border priority setting and action planning exercises along with engaging presentations and panel discussions on recent and upcoming cross-border developments and events.

The objective of this workshop is to work collaboratively to answer the following question:

"What do we need to do to formally address communications interoperability challenges in support of cross-border operations?"

Three functional areas require a coordinated effort between policy makers and emergency responders from both Canada and the U.S in order to improve cross border communications interoperability:

o **Planning**: Developing near- and long-term cross border interoperable communications goals and strategic objectives and collaborating to achieve common objectives through achievable action plans.

o **Policy Development:** Developing policies that contribute to overcoming challenges and support coordination between nations to enhance communications interoperability at the border and during joint operations.

- o **Operations**: Identifying opportunities to enhance communications interoperability through joint activities such as: developing joint SOPs; reviewing technology compatibilities; and conducting joint training and exercises.

As last year, the target audience for the workshop includes both U.S. and Canadian interoperability leaders and users from the following groups: (1) emergency response agencies (law enforcement, fire, paramedics, emergency managers); (2) other public safety providers from all levels of government along the Canada – U.S. border; and (3) other key government agencies (e.g. Public Safety Canada, Department of State, Department of Homeland Security, Industry Canada, National Telecommunications and Information Administration, Federal Communications Commission).

With the current review of the U.S. National Emergency Communications Plan and the drafting of the Canadian Communication Interoperability Strategy, the second edition of this workshop is both timely and necessary to continue to advance solutions and overcome challenges that impede our ability to exchange voice and data communications along our shared border.

We sincerely hope that you will be able to join us.

The Organizing Committee for the Second Canada – U.S. Cross Border Interoperable Communications Workshop

Registration Information
Invited attendees can register online via the workshop website at
http://www.cacp.ca/index/eventscontent?contentId=940.

Accommodations
A block of rooms has been reserved at Caesar's Windsor and will be held until August 13, 2010 at the special rate of $150 plus tax per night. Any rooms reserved after that date will be on a first-come first-serve basis. Note that space is limited and rooms may not be available after the registration deadline passes. Visit:
http://www.harrahs.com/CheckGroupAvailability.do?propCode=WCL&groupCode=ABO0913

Dress
The dress for this event is Business Casual.

Appendix C – List of Participants

2010 Canada - U.S. Cross Border Interoperable Communications Workshop

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Windsor, ON

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Appendix D – Discussion Summary Table

Round - Group	Theme	Topic	Description	Current Situation	Desired Future State	Recommendations / Opportunities / Actions
1-1	Governance	Regular cross-border management meetings - Cross-border working group with SWIC rep attendance - Cross-border working group - Governance cross-border planning e.g. PNEMA, federal involvement, regional linkages, funding coordination	- Who meets and under what authority. - What groups are currently meeting and what are their agendas; cross border communication issues. - Are there any gaps in information that is not being discussed? - Who would you report to? What authority do they have?	**General** - How do you legitimize the existing groups or governance structures ; there has to be some commitment/action to follow through - Myriad of groups working across the border and not communicating with each other; Homeland Security, RCMP/Border patrol has a working group for radio interoperability. These groups do not seem to be communicating with each other. - What are the gaps/issues not covered. **What is going well?** - Cross border communications plan BC/Wash. Agreement defines that meetings shall take place regarding interoperability. They do have direction. - When authority is given by AHJ, agreements work well, i.e. Superbowl in Detroit. 2000 people were fast tracked through customs from Windsor to Detroit. However, authority recognized at upper levels, not local. There are other successes with operability (with authority), however not with radio communications. - SWIC - US has, Canada does not. State Wide Interoperability Coordinator - SWIC - SWIC – federal legislation **What is not working well?** - No out of state SWIC authority, not working in Canada - No terms of reference, the " waters are muddied" - NO LEADERSHIP ROLE – then comes funding - BC/Wash – Attendance of meetings, legitimacy – now that the Olympics are over momentum has diminished somewhat.	- SWIC Canadian counterpart - Common strategy on dealing with the 49th parallel (Canada) at his time only regional fractions. - End state delineation though Emergency Management Canada? CEMC SWIC counterpart	1. Map out stakeholders/groups across borders and their goals – one inventory - Provinces, DHS, Public Safety Canada/State - Web based Questionnaire distributed though known agencies, possibly through newly appointed provincial SWICS, or CITIG 2. Provide an international SW IC/PWIC (provincial counterpart) and define their roles Canadianize SWIC model - Public Safety Canada, Provinces, DHS, States - Human resources, funding, logistics, etc 3. Legitimize authority, connect existing international agreements to working group - International SWIC - SWIC/PWIC, DHS, PS Canada, Provinces, States - Human resources, legal input, ???
1-2	Governance	Identify Champions - Who is the national champion – formal consensus required -	- Who are the champions? - What is the appropriate level? – high enough to push the agenda and make things happen / overcome obstacles (i.e.: regulations) - We can't move forward until	**General** **What is going well?** - Great ideas and lots of will across the industry. - Solutions exist.	- One national solution that is adaptable to fit regional / local needs. - Solution has to be multi-disciplinary (police, fire, medical, etc) so champions must be aware and	1. Cross Border Crime Forum Agenda Who should lead? Chris McBryan Who should be involved?

Round - Group	Theme	Topic	Description	Current Situation	Desired Future State	Recommendations / Opportunities / Actions
		Identify champions for agencies requiring cross-border: core agencies; core issues; SOPs – common across the border	someone takes charge / ownership. - Sustained champion. - When something serious happens – who "wears" it? They should probably be the champion… - Doesn't have to be one champion- can be shared… at minimum – needs two champions (each side of the border), but even nationally, there could be shared responsibility. - The important thing is to pick the agency that can make things happen – and then they take it on to make things happen. What messages will work to bring the appropriate champions on board (What's in it for them)? - Embarrassment if something happened; economic impact of border closure - U.S. appropriate champion: DHS delegate (OEC) - Cdn appropriate champion: Public Safety (includes RCMP; CBSA, CSC; etc.)	- Local agencies are getting things done "informally" **What is not working well?** - We don't have a champion. - Cause has no traction.	capable of influencing entire portfolio.	- Michael Doucet - Public Safety - DHS 2. CACP leveraging Who should lead? CTIG Who should be involved? - Emergency Management Committee - Informatics Committee 3. Communications Strategy Who should lead? - OEC - CACP
1-4	Governance	Understanding agency inter-relationships	- Get a handle around agency interrelationships – Understanding other agencies. - -Roundtable introductions and brief overview of each persons interest in the topic: - Issues appear to be more difficult within the same country - Cross border interoperability if often easier to make contacts? - What is an agency relationship? - Vertical (amongst grass roots across agencies) - Horizontal (chain of command within an organization) - Awareness that the organization is different top to bottom. - An awareness that internal planning is very different than planning across agencies.	**General** - Difficulties taking grass roots agreements, processes, and policies and having them formalized and approved at the national / senior / policy centre level. * Relationships are key * **What is going well?** - Grass roots agreements across agencies. - Relationship based planning (rather than resource based) – particularly for projects. Resolving areas of dispute for operational / jurisdictional issues. Facilitated by regular meetings / planning to build processes to build relationships and knowledge. Morphs / adaptable depending on need. - Unified Command Structure – works to bring	We need a process to deal with changes - processes need to survive individuals because relationships are between people / departments / agencies. Everybody understands (vertically / horizontally) people / roles / resources / capacities and limits of their own and their partner agencies.	- We need to recognize who we are, and what are limitations are first – seek to remove obstacles within our organization. - Grant the authority consistent with responsibility. - Build relationships at different levels. This includes champions at all levels (of authorities). 1. Return to your home agency and champion / communicate within. - Who should lead? Everyone (7 agreed) - Who should be involved? Everyone 2. Find a grass root agreement that works and move it forward as a best practice and formal agreement. -i.e.:

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			- Matrix relationships between agencies and different levels.	people together. Designed around resource not relationships. Relationships can't solve legal or governance issues. **What is not working well?** - Geographical indifference – works at local level, but not supported as needed at the senior level. - Jurisdictional issues / accountability issues. - Time & $$ issues. - Getting approvals at the national / senior / policy centre level for inter-agency support / agreements. - Federal challenges – complexity / revolving door of people.		DHS / PSC agreement? - Who should lead? Grass roots agency that has the working agreement. - Who should be involved? Public Safety Canada 3. Publish a contact list to improve relationships? - Who should lead? CITIG? - Who should be involved? Homeland Security / Public Safety Canada?
2-1	Governance	Coordination of cross-border governance - Cross-border governing body (bi-lateral) - Canada TICPs: border, community, regional – exchange TIPCS	Develop a cross border governance structure that respects jurisdictions yet empowers local and provincial accountabilities and operational realities.	**General** - In general we are doing ok. Have some governance but not an integrated, coordinated governance structure that allows for moving issues forward. Typically local/state led. Local is in place in many jurisdictions. - No way to move things "up" to broader provincial, federal. - In the US have some coordination in place, again at the local/provincial level. - Have some mutual aid agreements (NB/Maine, BC/Washington). **What is going well?** - Adopting EMAC – Emergency Management Assistance Compac. - Mutual aid agreements - International Joint Commission – (joint waterways) - Four COMPAC's that exist across Canada/US. Going to standardize all the COMPACs. - Some Provinces are meeting now - SWIC's meet twice a year. **What is not working well?** - No federal strategic empowerment that would allow this to take place better. - Local perspective is that there is no opportunity into provincial/state processes or national/federal discussions. - No joint planning. No regional x-border strategic	A coordinated set of governing bodies, practitioner driven, government led, at the local, regional, State/Provincial, National and international levels that respects jurisdictions yet empowers local and provincial accountabilities and operational realities.	- Need for a white paper on the issue of governance at all levels with solid recommendations. – or, (should we just have a WG get to work) - Need to have first responders, through their Associations, involved. - Has to be a "shared governance model." - Emergency Management Consultative Group. – DHS, PS Canada Co-Chair , CIP, Cyber, Fed to Fed, Training and Exercises – Need to add the issue of Interoperability - Need folks to join/participate in CITIG/NPSTC. - Create Local, regional, provincial, national and international interoperability strategic plans (SCIP). - Emergency Responder Interoperability Committee 1. Create national (not federal) Interoperability Governing/Coordination Bodies for both Countries (possibly formalize the CITIG/SOREM relationship). - Who should lead? o PS Canada/DHS, SOREM, CITIG, SWIC's - Who should be involved?

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				plans (in Canada, other than NB, no Province wide Interop Plans).
				- Not enough information about what is, and is not, allowable under current legislations/treaties.
				- Locals not involved in the COMPAC group discussions.
						o Practitioner Driven – government let.
						
						- Resources required (estimate – e.g. people days, skill set, funding, equipment)
						  o Secretariat funding and resourcing
						
						2.Create Border Working Groups that link Canada/US at least twice a year.
						- Who should lead?
						  o PS Canada/ DHS
						
						- Who should be involved?
						  o SWIC's on Northern Border and Provincial Counterparts.
						  o
						3. Need Regional EM Assistance Compacs in every region.

2-10	Governance	How do you ensure all cross-border initiatives speak (CI, Interop, health, EMS)	There are a lot of initiatives for x border but a lot of common issues: info sharing, interoperability, CI, EMS, MOUs… there seems to be a disconnect between existing plans or agreements. Seeking an awareness of what is going on.	**General** - Valid initiatives with a lot of duplication… are they as effective given the use of federal monies? - Beyond this workshop, identify groups with similar goals & connect them. - Regional models seem to work, people are connected at the regional level. **What is going well?** - The work is being done, but separately by each agency or group, per their specific sector. Strong local and even regional groups exist **What is not working well?** - A lack of awareness of the initiatives of others (some even funded by the same vehicle) cause work to be duplicated and progress to stall. . Numerous workshops & meeting times conflict or their duplication doesn't encourage (or budgets allow) decision makers to attend everything. Lack of marketing plan leaves out critical players.	Creating a central technical "clearinghouse" to track progress, offer opportunities for professional development and training, and be a secure place for information sharing. Based on Responder Knowledge Base (Canada) which shares info on equipment, personnel, membership roster… Initiatives must be supported by the stakeholders or leaders responsible for them.	Good relationships build strong partnerships so that the broad vision of leadership and government is attainable at the local and regional level by starting from the bottom up. How are priorities set when all things are important? Security classification must be done with all pieces of information, and explore sharing this information when necessary 1. Clearing house for critical information sharing on the idea of LLIS.gov is a great example of where to start. (is public involved? YES! Owners/operators) - Resources for R&D, O&M required 2. Meetings and exercises of working group (to be created) based on the existing best practices such as Windsor Emergency Management Working Group should be marketed

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						on the clearing house as well as the membership. Reach out to stakeholders relevant but uninformed or inactive. 3. State Department & Foreign Affairs are the true "border" agencies for Canada and the United States to possibly use as a platform (neutral) to LEAD or "own" the clearinghouse and the main players are the Provinces, States & Regions as the workhorses

2-12	Governance	Functional/Technical capability matrix / ownership	CASM (put in coordinates, etc.) – what band, who do I need to talk to, etc.
			
			Olympic/G8-G20 – many players have capacity, but no clear view of who doing what.
			Develop matrix that –
			
			Planning for national and bi-national fine, but need to be local as well. Capability there, but no willingness
			
			Need to be local to create efficiencies.
			
			Easier to work across jurisdictions than across agencies.
				General
				None in us, Virginia maybe - Olympic/g8-g20. Some have knowledge, but simple matrix would be very helpful.
				
				What is going well?
				Local examples.
				
				What is not working well?
				Very handy planning tool.
					On regional and local basis – firm understanding of functional and tech capabilities.
					
					Overlay of technical solutions available to facilitate integrations – on a regional local level.
						1. Template and Toolkit to allow each region to develop functional/Technical capabilities Matrix
						
						Who should lead?
						
						  - IC and FCC – make it easier for regions to do.
						  - Perhaps tie to funding.
						  - Start with most populous areas – Detroit-Windsor, i.e., and then use in others
						
						Who should be involved?
						  - IC Regions, FCC Regional Committees
						
						Resources required (estimate – e.g. people days, skill set, funding, equipment)
						
						  - Some dedicated resources. Face-to-Face meetings, may be some legislative and policy changes required
						
						  - Need better understanding of proprietary issues
						
						2. Continue development and collaboration of databases that

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						identify systems on both sides of the border – Line A Who should lead? - Once initiated by IC and FCC, push maintenance to regional entities. Who should be involved? - All regional stakeholders Resources required (estimate – e.g. people days, skill set, funding, equipment) - Part of regional committee mandates 3. Communicate broadly about existing collaborations (mutual aid, IBET, etc.) to see the value. Who should lead? - SWICs in US and PS in Canada Who should be involved? - Responders Assoc, DHS, anyone with a story. Resources required (estimate – e.g. people days, skill set, funding, equipment) - Dedicated communications efforts on success stories.
4-10	Governance	Create Listing of existing frequency/resources/ assets agreements	Assets – maintenance of a database of assets is resource intensive because it is required at the organizational level Need to define the purpose of the asset databases (mutual aid!) - In the US, when developing a mutual aid plan, database of assets is required.\	**General** When cross border operations require the development of agreements (legal, operational, operating, information sharing, etc.) it would be useful to have a resource centre where previously developed and approved agreements can be referenced.	Database system that is funded and maintained including a repository in both Canada and US. 1. Ideally, maintained at state and provincial level for local use 2. At a minimum accessible to senior management in times of	What is needed: 1) Mandate and authority of an organization to collect and hold the information; and 2) The actual collection and holding of the information - Briefing of issues to federal authorities - Recommendations presented with support of community (local, provincial,

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			- International Association of Fire Chiefs has already developed and tested this type of database. (IAFC currently helps Fire organizations develop these plans) - What is being done in Canada at this level? Problem: ability to assess availability of resources in real time (what is not in use or out of service Problem: ability to maintain accuracy on day to day due to resource implications (need people and this is labour intensive) Agreements – maintenance or contribution is easier to manage from a central location Define the purpose of the agreements database: - research and resource to develop personalized	**What is going well?** Unknown **What is not working well?** Assets: Some regions don't have agreements and need to develop them. The resource implications are intimidating when agreements need to be developed from scratch. Agreements: Lack of awareness of current "compact" agreements in place between provinces and the states they border Who is the lead on these agreements? This is a provincial / state managed agreement with federal authority. The actual mutual aid agreements are individually developed and governed.	crisis	state, federal law enforcement, Fire and EMS community) - Determination of lead (federal mandate to collect and hold, provincial mandate to have mutual aid agreement?) 1. Lead: PS, DHS (FEMA) With provincial and state input, as well as associations (Fire, EMS, Police) Resources: federal task force of 5 people to initiate and within one year to move forward to implementation of the maintenance of the databases.
4-5	Governance	How wide (North-South) should the border be for interoperability – suggestion: 20km each side	The border region needs to have a finite parameters to deal effectively with the variety of logistical, radio spectrum/licensing issues recognizing the differences between coordination and interoperability.	**What is going well?** The coordination process works well. Some agreements and authorizations are in place to allow agencies to use neighboring frequencies when necessary. **What is not working well?** Most agencies on either side of the border respond to deal with public safety emergencies while choosing to ignore legislation	Bi-lateral agreements allow first responders/agencies on either side to operate on standardized/shared/pre-programmed channels within the 120 kilometre coordination zone across the border.	1. Industry Canada/FCC The agencies within the coordination zone. Need enabling policy, need people to do the planning, need to pre-program radios
4-6	Governance	CCIS/CCIP and NECP alignment - Whole of government approach "get our own house in order"	To link the NECP and CCIP via some kind of a Matrix.	**General** There is a well established NECP and "virtual" CCIP (not net approved). Small number of x-border related statements in NECP 1 – should be more in #2.	NECP and CCIP need linked goals, objectives and action plans A US Northern Border Working Group made up of the Northern State SWIC's, supported by DHD OEC, NGA, etc.	Create, in the short term, a small NECP/CCIP Joint Working Group (4-6 people total) to work together over the coming weeks/months. Needs to be strategic in nature. Add a new AP for CCIP for Cross Border.

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				No x-border links to ccip. Recommendations from B. Moore after a CPRC funded research trip to SWIC Meeting in Salt Lake City that there be a working group created. **What is going well?** On the US Side very strong support by DHS OEC for SCIP's, SWIC's, etc. Not the same in Canada. SWIC's meet twice a year with support of DHS OEC. They are supported by DHS OEC Regional coordinators (10 by FEMA Region) In Canada, the CCIP WG, with travel funded by CPRC and Project Support funded by PS Canada, helps to fulfill this role. **What is not working well?** Not a formal system in Canada and beginning to go off on different directions – NBERIC vs POINT in Ontario – need to use similar names, processes to be consistent.	A Canadian Border (can't say Southern as Alaska is West of Yukon) Working Group made up yet to be named Provincial Interoperability Coordinators with local and national representation. These PIC's. These two groups need to meet every year to coordinate the linkage between the NECP and CCIP. Need joint exercises along the border at the State and Local levels – to create a baseline using the Self Assessment tool currently in place in the States. We have linked CCIP with SWIC's by sending Bill Moore to last meeting. DHS has allowed CITIG to participate in EC/ERC for past few years. Good regional cooperation now, needs to be formalized and expanded. Waiting for the FPT folks to sign off on CCIP. Some good exchanges at the Canadian Forces and DOD levels. IACP LEIM meeting	Add to NECP Cross border Goals. Pick two border communities who are doing good things and then have them report back at next year's event. 1. Create, in the short term, a small NECP/CCIP Joint Working Group (4-6 people total) to work together over the coming weeks/months. Needs to be strategic in nature. Who should lead? DHS OEC and PS Who should be involved? from CCIP WG/SWIC's, NGA, SOREM Resources required (estimate – e.g. people days, skill set, funding, equipment) Already exists 2. Add a new AP for CCIP for Cross Border Who should lead? PS Canada Who should be involved? CCIP WG/SOREM/CITIG Resources required (estimate – e.g. people days, skill set, funding, equipment) 3. Add to NECP Cross border Goals. Who should lead? DHS OEC Who should be involved? SWIC/NGA/NPSTC Resources required (estimate – e.g. people days, skill set, funding,

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						equipment) Existing
1-9	Other Topics	Fiscal restraints (or administrative) on being able to get/talk/meet together - Funding - Dedicated funding: capital, O&M, salary	Dedicated Interoperability Funding – How to find new funds?	**General** Need to find continued funding for O &M, Capital, Salary **What is going well?** Finding money for initial capital investments and pilots **What is not working well?** - Finding money to keep programs/systems up and running - Defining needs for interoperability in order to create priority status - Existing models need to be changed, common standards need to be created for all agencies at all levels of government. - Limited	- Drivers for interoperability needs to come from the top – House of Commons? - Creating value in Interoperability so decisions makers can approve new funding. - Funding needed to upgraded existing infrastructure to meet interoperability needs need to be addressed	1. National Prioritization to drive funding from the top. Who should lead? Public Safety Canada, Homeland Security Who should be involved? IBET Agencies, ACCP, IAFC/CAFC Resources required (estimate – e.g. people days, skill set, funding, equipment) Lead contacts from each agency communicating with one another 2. Creating Business Cases 3. Using Interoperability funding to address operability needs.
1-10	Other Topics	Social Media	- Use of Web 2.0 Technologies - Federal Government Policies/Regulations – does Canada have any policies addressing this issue? The U.S. - Privacy impacts - Canadian inability to access the information (nothing to receive the information), questions of authenticity, - Security impacts - U.S. – Canada coordination on social media policies - Language issues when communication issues across the border (i.e., Quebec)	**General** There is a current overarching lack in policy in U.S. and Canada. Canada lacks the tools to access information sent via social media (i.e., security issues, questions of authenticity). **The lack of policy guiding the usage of social media.** There remains the question of who leads the issue. Data standards: How do we share information that is not validated, how do we ensure the data received is reliable/unreliable. Legalities surrounding information sent/received. Pre-planning - Who has access to the information, who has the authority to receive/send the information. **What is going well?** Independent organizations are attempting to use IP networks to share information (i.e., Net Motion) rather than radios.	- We want to be able to use web technology and social media to keep Canadians safe - Establish a system structure that guides/regulates the use of social media across the border - Harness social media to keep Canadians safe	Keep the public safe by establishing policies and guides to leverage situational awareness tools (e.g., Facebook) in planning evens (e.g. G8) and responding to incidents and coordinating and sharing information across the border. 1) Determine who's mandate social media falls under, get senior management support to move forward 2) Establish a way forward (i.e. strategy) , formalize the issue , brief senior management 3) Form cross border a working group to form situational awareness tools, investigate best practices/lessons learned. Engage first responder stakeholders

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				U.S. has developed policies relating to the use of Social Media Example: G8 Summit – significant violence breakouts, police brought in. Police asked anyone to send any photos, information, videos recording the violence. Photographs were recorded of the violators to enable police to make the appropriate arrests. **What is not working well?** 1) Technology for receiving information 2) Security surrounding using social media 3) Formal governance		
1-12	Other Topic	Critical Infrastructure	Definition – asset system, processes, human health, security safety, keep gov. Running. Risks, natural, technological, intentional – all hazards. What impact does interop have on CI protect, resiliency – broader audience. Affecting . Part of goal – move interop Allows for sensitizing large initiatives that are talking to each other – cross-pollination. Very much about sensitizing the issue for efficiencies. Increase awareness. Find ways to bridge the gap to become more efficient. Can't get understanding without risk assessment. Current state not clear – situational awareness. One about reactive (radio) and other proactive (Sit Awareness). Voice, data critical – focus on end-user perspective. Focus on day-to-day.	**General** - All aware you need to share, but tech and culture presenting barriers. Building partnerships key. Information is starting to be shared, but early. Still in silo state... Need to build trust. Protecting piece of the pie. - No idea what happens across border at times. Don't know what CI exists on other side. - In many cases it's a case of "I don't know". Agencies don't know each others CI. Some private sector might, but not sharing. - Is it permissible to have **Canada reps on National Communications System**? **What is going well?** - GM runs – calling open source info that affects plants, suppliers, employees. Intelligence report shared with law enforcement. - Plan for the movement of people and goods during and after an emergency – Helps expedite the movement of people and goods. Only comes into place under the FERP. Success of plan dependant on IntOp. PS and CBSA co-lead DG level working group on border management – Plan exercised three times. US doing a similar plan. **What is not working well?** - Silos, culture, trust, hard to build relationships. - Legislative restrictions. - In many cases it's a case of "I don't know". Agencies don't know each others CI.	2-way info sharing between CI owners and operators with responders to make response easier during CI incidents to threat or destructions to CI Build trust and partnerships. Canadian IntOp plans with x-border connectivity.	1. Canadian IntOp plans and strategies (provincial, regional, etc.) must have x-border connectivity – planning process must include CI considerations. Who should lead? - Multi-Jurisdictional Issues – Needs to be collaboration with leadership partners. Shared governance. PS, Provinces/Territories, and DDHS/FEMA - FEMA regions have CI offices and DHS has Technical resources. RECWIGs - North East called International Emergency Management Group - Operational Directors need to make this work and need connectivity. Who should be involved? - RECWIG with Canadian participation - Awareness on IntOp side to CI 2. Investigate if Canada Government and Industry can Join US on National Communications System Who should lead?

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				- Is it permissible to have **Canada reps on National Communications System?** - No federally controlled information blast ability. - At times, lack of awareness about what's going on across the border. - Need for more information sharing.		- Under DHS – Check with legal, but be as simple as a request from PS 3. Group tasked with Cdn-US CI Action Plan needs to have intOp component (In reverse, IntOp group must be forced to take CI into consideration) Who should lead? - PS and DHS Who should be involved? - Interop Stakeholders.
2-7	Other Topics	Cross-border connectivity and certification and accreditation	There is no process for certification for cross border IP connected network infrastructure.	**General** There is no formal process in affect; all of the certification is done locally. The primary concern is Voice networks. **What is going well?** There is a current modernization process in effect; P25 is a current example that is being established. SPP pilot have examined current cross border inoperability, which has address the sharing of encryption bi-nationally. **What is not working well?** P25 standards are taking too long based on the P25 ISSI integrations. Cross border standard; no forum for multi-national working groups. Lack of developed certifications standards that linked together bi-nationally.	An established and agreed upon certification and accreditations process approved between Canada and the US.	**What do we need to do to achieve the desired future vision?** Establish a working group or piggyback off any existing working groups and highlight the need for ISSI accreditation issues bi-nationally. **What do we need to do to "fix" what is not working well?** Since the process is so new, there isn't a standard of when the process is not working properly. 1. Working groups should be formulated at the internationally level. Expand on the IT presence at the interoperability level workshops and conferences that identifies new technologies. Continuous funding, hosting, and facilitation between the two countries for current pilot and experimental projects. 2. Continued talks from the two countries at the national level 3. Established shared accreditation and

Round - Group	Theme	Topic	Description	Current Situation	Desired Future State	Recommendations / Opportunities / Actions
						certification that are agreed upon by both nations.
2-8	Other Topics	Information sharing such as MOUs - Usage of information – such as information obtained by other participating parties – Plain language dos and don'ts – data sharing in cross-border legal/regulatory - Information classification i.e. information to share with provincial municipal, etc. - National legal/policy framework for Canada and U.S. - Legal/Regulations – legal authorization to share	Information sharing within agencies, between agencies and across borders as authorized and when needed. Method of sharing.	**General** **What is going well?** -IBET -established local information sharing groups **What is not working well?** -Various levels of understanding with respect to laws, regulations, and policies that prohibit the sharing of information. Lack of understanding. Misinterpretation. -Lack of contacts. We need common established links for information sharing -Mechanism for information sharing / No established Information sharing infrastructure -no common and consistent ranking of protected levels of information	An established pre-existing matrix of contacts that establishes who can receive various levels of information. A method of sharing information in real time with those people / agencies that need to know it.	- establish a common mutually agreeable method of classifying information - establish who (position not person), in what agencies, can receive the various levels of information and ensure that the contacts are maintained and constantly updated and agreed upon by all involved - establish the physical mechanism for sharing the information to the right people in real time - establish working group to determine agreed upon levels of security - Establish method of clearance for groups and individuals - establish and finance the mechanism for transferring information - 1. Determine, at the local level, who needs to share information with who. What are the proper contacts (Actual phone numbers, Radio Channels, emails addresses, etc) Who should lead? - Local agency leaders in law enforcement, emergency response, and local government leadership positions Who should be involved? - Same 2. Develop international agreements for establishing who should receive what information when (levels of information sharing). What information is NEEDED to deal with the emergency or significant incident being dealt with. Who should lead?

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						- Federal Governments – Public Safety and Office of the Director of Intelligence / DHS Who should be involved? - Leaders of agencies and groups that have experience working in the field who can determine if the agreements are feasible in reality 3. Develop a mechanism for sharing the information, automatically filtered for the established levels of information access, in real time. Who should lead? - Federal Governments - Public Safety and Office of the Director of Intelligence / DHS Who should be involved? - Leaders of agencies and groups that have experience working in the field who can determine if the agreements are feasible in reality

2-11	Other Topics	How to overcome cultural challenges	- How do we intend on working together?
			- Identify the various cultural challenges that exist between the differing nationalities. Police, Fire and EMS have their own cultures and working interoperability will bring into play national/international cultures.
			- metric v standard
			- Police is paramilitary, Fire is somewhat and EMS is operator dependant (anyone can be an incident commander (more independence for EMS which may lead to personnel issues). Police and Fire, only one is in charge and you go through that person only.
			- Language/regional dialect
				General
				-Some Cultural and regional differences exist
				
				What is going well?
				-Bringing cross border agencies together during test exercises allowing for cultural issues to be identified and worked on.
				-Cross border workshops
				
				What is not working well?
				-Technological people are more aware of these types of workshops and the word isn't getting out to all of the end users.
				-Interlinking between agencies.
					- Desired outcome is to improve the understanding of cultural differences and address any cultural differences that will interfere with operations.	1. Regional/Cross border tabletop exercises to identify cultural issues.
						  - Leaders should be identified by the individual agencies.
						  - One day meeting.
						2. Assign a person to focus on the cultural issues that arise during any (annual) cross-border training exercises.
						  - Leaders should be identified by the individual agencies.
						  - Training exercise.
						3. Endorse and participate in a movement toward plain language.
						  - Leaders should be identified by the individual agencies.
						  - On-going meetings required.

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3-3	Other Topics	Awareness Eh!
		-
		Raise Awareness
		-
		Leadership
		-
		"exchange of prisoners" (know your allies)
		-
		Existing compacts (education)
		-
		Political support Eh!
		-
		Skin in the game (vested interest)
			- Get the message out
			  - International
			  - Federal
			  - Provincial
			  - Municipal
			  - Grassroots
			- Different interpretation based on position
			- IAFC/CAFC/DHS; aware?
			- What currently exists; was doesn't exist that should
			- Systems must be in place (agreements)
			- Increase awareness/inclusion/knowledge may give more traction to initiative
				General
				• Depends on target groups regarding level of awareness
				• Missed awareness
				• Initiatives under way in various jurisdictions
				• People are innovative
				• Standardization
				
				What is going well?
				• DHS doing a better job (best practice)?
				• Message is getting out
				• CITIG/CCIP
				• Consistent message exists (CCIP)
				• Opportunity exists with participants
				
				What is not working well?
				• Maybe internalized
				• Message needs to hit target
				• Message not being reinforced at various critical points/agencies
					• Not just "aware;" but implemented and used
					• Ensure issue of moving "resources" back and forth across border is addressed; agreements in place; resources, apparatus, and generic (nurses, food, etc.)
					• Peripheral plans (i.e. Federal) need to be meshed with CCIP
					• Consensus of exactly what needs to be communicated and what parties need to be made aware of
					
					• Workshops/website (yet to be identified)
					  o Reports that are generated from the workshops
					• Associations and their messaging (CACP, CAFC, IAFC, EMSCA)
					• CCIP
					• DHS (SAFECOM)
					• Current formal/informal agreements
						To achieve desired vision:
						• Ensuring contracts and information sharing to align similar/supporting/same
						• Identify all initiatives that are currently related to this
						• Sell the importance of "need" to all stakeholders (ongoing process)
						To fix what's not working well:
						• Just do it
						• Enhance sharing efforts with external stakeholders
						  o Who are they
						  o What is message
						  o Applied/shared consistently
						  o What will be requested of the stakeholders
						  o Commitment of stakeholders to enhance/reinforce messages to various critical points and agencies.
						- - - - -
						
						1. Appoint coordinator (Federal/Provincial?)
						Who should lead?
						• Minister to champion based on above
						Working group to share further

3-7	Other Topics	Formal inventory of 1: existing practices, 2: real or perceived needs	The vast majority of emergency services in North America are small ones but they are also the ones with the least amount of resources so that the needs and practices are usually driven by large departments or services.	**General** Because of inadequate funding, most small departments do not have direct representation at meetings like this one so there is a possibility that we will not properly prioritize their needs or properly identify their practices. **What is going well?** Some of our members have a general knowledge of the challenges faced by smaller services on both sides of the border. The interview process (Next	That a formal interview process through either one-on-one meetings or by organizing focus groups be conducted so that we can paint an accurate picture of regional or municipal needs and establish best practices.	None written.

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				Generation Radio Project) done in the Province of Ontario, as an example, goes a long way towards this end. **What is not working well?** In many parts of Canada, this has not been formally done, or it has not been done for both sides of the border.		

3-8	Other Topics	Development of formal (personal) relationships	- Recognizing the importance of relationships, is there a mechanism by which we can foster or develop personal relationships?
			- determining at what level relationship building needs to occur
			   - Three key levels of relationships and how to tie them together
			1) Operational- "boots on the ground"
			2) Regulatory – IC/ FCC
			3) Technology
				General
				- Relationships are sometimes built by the individual at different levels
				- Miscommunications across the border between regulatory bodies
				- some established working groups address the cross-border issues
				- Sometimes the needs on the ground are lost in the formal communication process and therefore there is a delay in application
				
				What is going well?
				- Contacts formed within and across departments who one can call and address issues on a personal basis
				
				What is not working well?
				- when communications have to go through a more formal process due to legal ramifications
				- when one does not have a contact and does not know who to call
				- when people change positions and contacts are lost
					- Established local groups that meet regularly , helps to establish face to face relationships
					- Meetings and forums to meet counterparts from the other country to enable development of personal relationships
						General approach:
						   - A process to ensure that everyone has contacts in the right department with the appropriate person
						   - A gathering of these contacts on a regular basis to develop these relationships i.e. Working groups
						Need to achieve:
						   - Alignment of priorities
						   - Determine what relationships need to be formed
						   - Share resources
						   - Information Sharing
						Building trust
						
						1. Identify and form a Cross Border Interoperability Group at the state/ prov (local) level
						
						(Structured and accountable)
						
						Who should lead?
						PSEPC and DHS
						
						Who should be involved?
						- Border Services, Police, Fire, EMS, municipalities, 911 etc ,
						- Determined by the locals
						
						Resources required (estimate – e.g. people days, skill set, funding, equipment)
						
						2. Create a list of contacts – disseminate

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						- helps to develop the informal and personal relationship - Disseminate a list of meetings Who should lead? PSEPC and DHS (state-wide interoperability coordinators) Who should be involved? Resources required (estimate – e.g. people days, skill set, funding, equipment) 3. Create a Provincial Rep to liaise with State Interoperability Reps - horizontal integration so that all provincial reps have a common understanding of what Canada wants (meetings between Prov reps at a federal level) - - A champion structure within Canada - comparable to US State-wide Interoperability Coordinator Program Who should lead? PSEPC Who should be involved? Resources required (estimate – e.g. people days, skill set, funding, equipment)
4-7	Other Topics	How is communication interoperability interfacing with operational and functional interoperability	Dimension of working together; comms interop enables folks to work together What's the user interface to interoperability? Who do you need to talk to and when do you talk to them? Every person in the continuum understands what kind of information they need and when they need it; their authority to access/ request the information; what layer do you need?	**General** Some orgs have a current system – i.e. military – logistics have a net that they use and when necessary they engage the command net; the command tem has their own net and they interact with other nets as necessary; There are SOPs established to support this process – need to understand them and use best practice; There are many examples of agencies needing to connect to each other quickly without having to go from one dispatch centre to another;	Parties that don't normally work together can seamlessly operate on multiple levels. IMS training within Ontario Fire Training Other training in US as noted above – especially IBET Regional coordination working groups and SWICs Solutions must follow KISS principle	1. More training and exercises with cross border agencies at all levels. 2. Agenda items on working groups 3. Policy cover for this or we're not going anywhere 4. Body like CITIG to provide training, surveys, best practices, lessons learned etc avail to all parties (NIIX site?) 1. RECCWG and SWIC, invite prov reps to meetings

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			Agencies don't want anyone else on their frequencies when an incident is happening; when do you speak on the net – SOPs; How do we avoid interop convergence?	Consider IMS/ ICS – 1:7 relationship should be maintained for simplicity **What is going well?** US – OEC – ICS form 205 – Communications leader training (Dennis Fisher) Alberta-Montana interface & SOPs lessons learned (Jackson Hamilton RCMP) Western Interop Comms Working Group (Dennis Fisher) Fire mutual aid process – they know how it can work (key is radio discipline) CRTI initiative (Tom St Onge) Military lessons learned from using multiple nets – tap into that and let it influence our thinking on this! **What is not working well?** No consensus (even within one organization) on who talks to who and when do they do it; Ad Hoc solutions don't work without proper SOPs; Lack of training in voice procedure and radio discipline Major disasters will result in many agencies trying to get on the net, or create their own net Many vendors flaunting their wares and everyone bought into various technologies, but that ended up causing a larger functional problem because they couldn't talk Current investments in jurisdictions; trying to interpret the want of functional interop, may be counter productive to for us to tell them to hold off on their initiatives. We generally lack multi agency/ discipline desire to go to an overarching interop solution. Agencies are generally only concerned with their own comms and safety/ situational awareness and don't want others on their net. They're focused on their own teams. Lack of synchronicity between agencies and even within agencies regarding drills, training exercises;		Who should lead? FEMA/ DHS/ PSC? 2. Liaison/ cross training in Canada to support and interact with a US Type 1 command team for a large incident. Training and exercise Who should lead? EMO? CCEP? Who should be involved? Fire/ Police Chief's Assns; EMO; First responders; OFM; Fire schools 3. Clear, simple accountability framework Who should lead? SOREM 4. Develop online communications unit leader course OEC – Canada can borrow it 5. Review Target Capability List US and CDN version All **Other:** Is there a basic knowledge or level of understanding for participants in future working groups? As part of registration process, identify what your role/ responsibility is with regards to interop; identify what skill sets are required at the conference in order to draw the right folks in
4-12	Other Topics	Update all treaties and communication act to reflect new technologies and their use in border areas	No report – group did not meet.			

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1-8	Standard Operating Procedures	Command and control – common understanding of ICS - Common language requirements - Functional interoperability (ICS/NIMS)	Lack of common formal incident command structure with common language and inability for leaders of incident command structures on both sides of the border to communicate with each other. Who has the lead authority.	**General** -lack of common language -inability to communicate between local agencies and across border -unclear who has lead authority -different Incident Command Models **What is going well?** -local agencies work well together -functional written or unwritten agreements for across border and between agency cooperation **What is not working well?** -radios that are incompatible -reliance on land lines or cell phones -incompatible language -legal inhibitors for the sharing of radio signals -exchange of information from one side of the border to the other	-Ability for emergency and legal authorities to operate in the opposite country -ability to share radios OR have a common radio / communication system between agencies and across the border -ensuring that all agencies in both countries share a standard incident command system with common language -ability to enforce the use of new universal system	-we need leaders of both countries to agree with all state provincial and municipal leaders, on a common incident command system -there needs to be a method in place to enforce the roll over to this new system -there needs to be the finances and training provided for this system -there needs to be a method established, with funding, for a secure system of communication between agencies with and between countries 1. Top levels of government must establish and agree upon a universal incident command system with common language. Who should lead? Federal Governments Who should be involved? Leaders of Emergency Personnel from both countries 2. Establish a common shared communication system such as the ROIP system. Provide the funding for this from a Federal level. Who should lead? Federal Who should be involved? Leaders of Emergency Personnel from both countries 3. In the interim, remove legal hindrances that prohibit the sharing of radio frequencies, personnel, and resources from working across state, provincial, and national borders. Who should lead?

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						Federal Who should be involved? Leaders of Emergency Personnel from both countries
2-4	Standard Operating Procedures	Standard operating language and lexicon - Understanding each other's SOPs	Developing a common method of communicating (voice and data) that is easily understood not only at an interagency level, but at a cross-border level as well.	**General** The variety of cultures across both countries and their spoken languages make communicating difficult if not impossible, and this is compounded by each agency's particular needs and the jargon and/or ten-codes they have developed for that purpose. Operationally, the federally mandated adoption of the National Incident Management System (NIMS) leaves Canada at a clear disadvantage since the same has not been standardized across Canada. **What is going well?** In the US, more and more agencies are adopting plain talk in their daily operations as mentioned above NIMS is now a standard. **What is not working well?** The Ten-Code culture is deeply anchored in many an agency and it is difficult to initiate change. The KISS principal needs to be applied.	That all agencies adopt a standardized incident Management system common to both countries and that all agencies move to a plain language mode of communications so that they understand each other's need when the situation requires it the most. The NIMS mandate and the COM-L initiative are both examples of programs which need to be adopted in Canada. The common naming of Radio Channels is also critical to our success.	
3-4	Standard Operating Procedures	SOPs for shared channels	Common practice exists and local needs get solved but Standardized Operating Procedures are now only being thought of.	**General** There are radio systems with shared channels but SOPs are few and far between **What is going well?** Future systems are being built or installed recently and SOPs are in development after installation planned for expansion, rely on field command to make happen **What is not working well?** Slow to develop, practice may precede documents, we are getting radio systems in place then after they are established we think about how we are going to us them. Technical solutions exist in various places	IP solutions / gateways / will soon be the norm and Voice Over IP will likely be the technical solution so decisions around encryption, use and information need to be made so they can be replicated and distributed as SOPs Having templates/best practices readily available for free distribution from CITIG for any member to acquire and use is key to the end state.	Inform members of what is there, educated people about the tools they already have access to, use vendors where possible to augment information. Find a way to survey / poll and "borrow with pride" from those that have SOPs and solutions. Make sure that funding is tied to delivery and sharing of information 1. Continue to pursue with vigour the Interoperability Center of Excellence Who should lead? Public Safety Canada / CPRC Who should be involved?

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				but are rarely used. Turnover of personnel is a problem as this isn't the core function and doesn't get passed on when people change roles. Training in local services may not have captured all the benefits of the technology so the power of the purchased system is not fully realized. Vendor support at the beginning is crucial to maximize use of the system. It is incumbent to capture the vendors information within the PS agency and then take responsibility for the maintenance and sustainability of the knowledge and procedures.		CITIG / Resources required (estimate – e.g. people days, skill set, funding, equipment) Creating a virtual center of excellence with staff that don't duplicate existing centers (ie Boulder Col) but rather create solutions to fill the gaps, i.e. interoperability implementation labs and "experts" who can test SOPS / solutions and then distribute validated proven freely available SOPs to agencies and organizations (Similar to armed forces battle labs or joint forces testing of battle plans) There should be a star type rating for SOPS 1 Theory only 2 Tested only 3 Used locally 4 Used Regionally 5 used Provincially 6 Used Nationally 7 Used Internationally
3-9	Standard Operating Procedures	Updated treaty/agreement – SOPs	Discussion is focused on updating relevant portions of the treaty as it pertains to cross border communications, specifically mobiles and portables for public safety and federal users.	**General** Treaty covers mobiles for public safety vehicles however it does not include the use of hand held portable units and is not representative of today's operations and technologies. Also treaty does not cover licensing of other county assignments to support operations in each countries **What is going well?** Vehicle coverage is available and provides coverage were applicable. Portions of the treaty are still valid today. **What is not working well?** Treaty does not cover licensing of other county	A treaty that allows RF communication across the border in all bands to support public safety and federal interoperability. Discussions at the RTLC are addressing this issue in depth.	Sign agreement between US and Canada that with will permit interoperable environment along the border. IC and FCC continue discussions until a resolution is achieved. 1. Sign agreement between US and Canada that with will permit interoperable environment along the border Who should lead? FAA and IA Who should be involved? Resources required (estimate – e.g.

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				assignments at a station in the other country to support cross border operations. Portable radios are not covered under the current treaty		people days, skill set, funding, equipment) 2. IC and FCC continue discussions until a resolution is achieved. Who should lead? IC FCC Who should be involved? Resources required (estimate – e.g. people days, skill set, funding, equipment) Requirements are gathered and elevated from all level from local to national.
4-3	Standard Operating Procedures	Priority movement of people and goods cross border during emergency incident	The coordination and communication necessary for the priority movement of persons and goods across the border during a significant event.	**What is going well?** -Draft version of the Plan for the Movement of People and Goods During and After an Emergency completed - mandated and supported by high levels of government. -Agreed upon by all involved that the initiative is a high priority -Local / regional cross border protocols, where established **What is not working well?** -Allowing vehicles to move onto border crossings and fill them to capacity prohibiting the movement of emergency vehicles across the border -Lack of agreements for various regional and local players to assist in the traffic management of the movement of goods -Our ability to communicate with all other agencies needed for coordinating the movement of goods / persons	Written established collaborative agreements at the local and regional levels. Roles and responsibilities. - Plan for the movement of people and goods during and after and emergency in place - Will be beginning discussions at Regional and Local levels to establish protocols	National: roll out the new plan Beginning discussions at local Regional level Agreements in place so that vehicles do not congest on / in borders Bylaws in place to ensure that all access to crossings are not blocked Established marshalling zones and exit roads away from border crossings Agreements with responsible entities to put up messaging on major roads and highway signs We have to get all of the local players together to agree on the roles that each entity will be responsible for. Draft written agreements outlining these responsibilities. Ensure that a method is in place that allows for the communication of all agencies involved during an event. (All agencies in an agreed upon location (local Emergency Operating Center). 1. Begin to engage local / Regional agencies to establish the various players

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						necessary to ensure that priority goods and persons can get to the border (Traffic Management Plan) Other: Ensuring that we have backup communications plans in place.
4-4	Standard Operating Procedures	Document interoperability requirements specific to users and agencies - Operational interoperability (agreements, training)	What is systems are out there for interoperability across the various agencies and what documents are out there in relation to them\. How do we bring them together	**General** Current documentation is vague.. Actual solutions and practices are operator level but are not known to command. There is no clearing house for information\. No broad reaching agreements that will allow the sharing of information and documentation. **What is going well?** Local solutions to problems in specific area Boots on the ground make it work despite lack of funding **What is not working well?** Lack of funding. Lack of buy in by politician or cross agencies to a system Agency sharing of information Difference between federal priority and local priority	The federal buy in from both governments that define interoperability and give a plan as to how to implement. (FCC & IC) An agreement be put in place that any agency could create a legitimate interoperable system. Create a framework for interoperability implementation and governance. Create a clearinghouse of documentation (FCC-IC) for legalized effective systems to provide example of framework priorities. Office of inter-operability in Ontario	Documentations describing what you are legal permissible should be created. Clear and plain language agreements and make them available for all agencies to make use. Create the clearinghouse for documentation. Ensure web site links are in place for member organizations. Public safety would validate the links to ensure they are correct and then forward to CITIG 1. Create web access page that would contain information regarding CITIG. Use the resource to communicate to member agencies information regarding interoperability. Suggest the CITIG group be the lead with the ability for member agencies to submit information 2. Educate senior management with the actual processes being followed. Document the processes being followed during exercises and ensure management understands the processes actually being done. Should be up to the individual agencies to document. 3. Use exercises to test the interoperability cross border to ensure the system is working as well as the related procedures. Border communities such as Windsor should exercise and report results.
4-8	Standard Operating Procedures	Develop cross-border (N)I FOG - Canada NIFOG, National interoperability field operations guide	IIFOG International Interoperability Field Operators Guide US has developed a field guide for Government and Local	General There exists no convenient guide to international interoperability frequencies for field use. What is going well? US and Canada have developed informal agreements	An IIFOG document. At the present time, Canada has no designated IO channels. Therefore, a document that mirrors the US NIFOG will have no utility. Future events may change this, especially with the completion of the	Compile the data that will populate the IIFOG. Come up with a more responsive treaty process or codify existing informal agreements. IC and US must develop a common IO

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			frequency/channel resources that is easily accessible to field personnel. There exists no such document/database for cross border communications.	for communications. Local cooperation through informal MOUs works well. What is not working well? How do we extend this throughout the entire US/Canada border? Treaty process seems unwieldy and non-responsive.	common communications database. Industry Canada is creating a database that will compile communications resource data along the border in the US and Canada.	picture. 1. The Canadians will look to the Provinces to assess the current public safety frequency allocations to find commonality. The CAN US radio study may be utilized to provide this information. Who should lead? IC Who should be involved? OEC 2. The Canadians propose to develop a Public Safety IO Center to provide a means to collect IO agreements and coordinate these activities in Canada. This group should lead the development of the International Interoperability Field Operators Guide. Who should lead? IC Who should be involved? OEC 3. Print the IIFOG document. Who should lead? IC/OEC Who should be involved? OEC Resources required (estimate – e.g. people days, skill set, funding, equipment) 6mo/2 bodies/$500000 for printing. Link to internet $10000 Other: Ron Zuber – FEMA Paul Brouwer – Clinton Township, MI Keith Bradshaw – Mcomb County, MI Mike Garland – MSP Christine Hsu – IC Marilyn Ward - NPSTC

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1-11	Technology	Interoperability parallels (700 MHz, 800 MHz) - Frequency use agreement - GMF vs TAFL - Inability to use national interoperability frequencies (wide area) along border (treaty restrictions) - Frequencies, shared channels (air and marine) - Shared Spectrum - Shared Interoperability channels to be established across the entire border region, same channels across entire border - Administrative process (FCC/IC: for cross-border/jurisdictional spectrum authorizations, licensing reciprocity - Cross-border authorizations sharable to be handled administrative agencies -harmonizing spectrum US and Canada Frequency coordination	Assigned frequencies across all the US. That type of situation needs to happen across the Canada – US Border. Formally identify channels across the entire border. Shared talk groups also for trunked systems. Need similar for data only. Common Channel naming channels – See NPSTC /NIFOG	**General** - Current situation is fragmented. - We all do it now but it needs to be formalized interop channels. - Examples in US are ITAC, ICALL. - In Maine they have CONOPS – 6 channels – not available in Canada. **What is going well?** - Shiprider Project – RCMP – Coast Guard – do it but not really allowed to it, - Fed to Fed works ok - New project PSTP project will help – see Jack Pagotto. - Swap Radios works well - Some cross border dispatching is working well – but again may be illegal. **What is not working well?** - Shiprider Project – RCMP – Coast Guard – do it but not really allowed to it, Need to formalize the process to allow them to do it. - State and Local to State and Local not as easy. - Swapping radios is not the way. Concerned that they are breaking the law so no one wants to tell anyone.	See interop definition – talk anywhere, anytime, as authorized. - - - Region 2 USAI – put in a grant project to do radio over IP to connect existing systems. - Radio over IP - Minnesota has quarterly meetings with Canadian Counterparts. - Maine has created x-border working groups, as has BC/Washington	Formally identify interop channels across the entire border. Allow Need legal framework to all this to happen Establish formal and legal process for sharing currently licence Need formalize nation-wide governance between Canada/US. Answering to this governance need X-border WG's established both on specific themes (such as spectrum) and regional that come together on a regular basis. DHS, PS Canada, FCC, IC all need to participate as do state and local – SWIC's Cross border sites licencing – requires a legal framework Need to have easy access to spectrum allocations (possibly on line) Need an expedited coordination process - - - - - - - - - - - - - 1. Formally identify interop channels across the entire border Who should lead? RTLC – Radio Technical Liaison Committee Who should be involved? (IC/FCC) - Need to do public consultation – The New X-Border Governing Body Resources required (estimate – e.g. people days, skill set, funding, equipment) Some funding for couple meetings a year. No exparte required. No formal legal changes required. 2. Create cross border governing bodies on both sides of the border with one linking body/council. As part of this X-Border working group2 answering to #2 Who should lead? DHS OEC /PS Canada supported by FCC/IC

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						Who should be involved? SWIC's NGA, and their counterparts in Canada, NPSTC, CITIG Resources required (estimate – e.g. people days, skill set, funding, equipment) Secretariat funding, travel support, telecom support. 3. Use of existing licenced channels – one template for use across Canada. Who should lead? - DHS OEC / PS Canada State/Province Local Who should be involved? - State/Province Local 4. Share towers and put each others repeaters on each others towers. Led by IC/FCC. 5. Faster coordination
1-3	Technology	Narrow banding coordination between US and Canada	Twofold problem: Cross border coordination with Canada of the move to narrow banding in the US Compatibility of Narrowband FM and Wideband FM equipment for existing emergency services working both sides of the border.	**General** US licensees are directed to move to Narrowband by December 2012 and there is concern that there will be delays and or outright interruption of radio communications for those services operating along the Canada-US border. **What is going well?** Industry Canada and the FCC have formally agreed that the FCC not send licence applications for existing stations who are simply switching from wide band to narrow band when all other parameters remain the same. **What is not working well?** Inadvertently, some applications are still slipping through and are making their way to IC and they are sometimes rejected.	Industry Canada and FCC develop a more efficient exchange of information so that licence applications are not needlessly rejected. Canada move to narrow banding to improve spectrum efficiency. Reduce the impact of "Interoperability Impairment" due to the mix of cross-border bandwidth incompatibility. - - - Industry Canada and the FCC have permanent work groups and established venues coordinating the move to narrowband. The Radio Advisory Board of Canada	

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					(RABC) has an active "VHF-UHF Narrow banding" work group in progress.	
2-2	Technology	Capability Assessment	Requirements definition? (technology/standards, who must talk with whom, what levels) Gap assessments? Assessment between agencies? Operability, interoperability, continuity (redundancy)? Governance, SOPs, Technology, Training & Ex, Usage? Capability assessment is a portion of capability development. We need a comprehensive system in place that goes from identification of the requirement, through selection of an option, assessment/evaluation of that option meeting the requirement, and implementation. SAFECOM's interoperability continuum can from a basis for proving a capability is in place.	**General** We don't have a group system to identify needs through to proving that a needed capability is met. We must have a shared system to prove that we work together. **What is going well?** Some agencies and areas (BC ECOM as example) are holding working groups to perform these functions already. DRDC CSS, DISA, SAFECOM, DND, etc are capable to develop and test technologies. **What is not working well?** Not all areas (province, state, etc) are working together in a comprehensive manner to identify, assess and implement solutions. There is no national or bi-national system to do this. We haven't identified who can assist with the technical problems. Some areas lack leadership to direct these interactions and that makes coordination more difficult at the worker level.	All areas at all levels have implemented a comprehensive capability development process that includes requirements definition, gap analysis, selection of best potential solution, assessment of that solution across the gamut of operations, and implementation of proven capabilities. Empowering based governance vice limiting – embrace the need to work together vice the need to block ("need to share" vice "need to know").	1. Enhance leadership for capability development (assessment). Who should lead? PSC & Homeland Defence Who should be involved? Leading WGs & Associations Resources required (estimate – e.g. people days, skill set, funding, equipment) Political buy-in/commitment & funding 2. Identify lessons learned for best practice Who should lead? PSC, Homeland Defence, State & Provincial EMOs Who should be involved? Key Stakeholders Resources required (estimate – e.g. people days, skill set, funding, equipment) Leadership, Funding, venue to release 3. Develop a best practice checklist for capability assessment Who should lead? CRTI Who should be involved? Leading WGs Resources required (estimate – e.g. people days, skill set, funding, equipment) Direction, Funding & venue to release
2-6	Technology	Provide a border radio coverage and frequency map – identify and fill gaps	CASM – similar to CASM? Communications Asset Survey and Mapping Tool (asset locations and type of radios frequency of operations Public	**General** No common US/Canadian database of sites, radio technologies and frequency band etc.	Have access to radio system information regardless of the border to understand site locations, frequency bands, etc.	1. Create Canadian equivalent to CASM and NIFOG (agency interoperability capabilities) to include Canadian information and ideally integrated or part

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		- CASM for Canada and US border – provides information sharing for response	Safety Canada has awarded a project to CANUS Border Coverage Project to build a database of sites along the border including predicted coverage.	**What is going well?** CASM but only on US side of border Project awarded CANUS Border Coverage Project **What is not working well?** No common database today Canadian TAFL does not list many public safety records (classified)		of US database. Who should lead? PS Canada / CITIG Who should be involved? Public Safety Agencies, Rich Reed of CASM 2. Continue with CANUS Border Radio Coverage database development. Challenge will be to identify the actual Public Safety Users on both sides of border.
2-9	Technology	Government on each side of the border should require the FCC and IC to work thru the line A issues and fix them! - Have FCC/Industry Canada Indentify legalities of mutual talk groups, common channels (operational border zone)	Legal limitations for IC/FCC; identify legalities of mutual talkgroups/common channels in the operational border zone From a national perspective, what process exists (or needs to exist) to enable or authorize joint use of spectrum? (IC/FCC/NTIA)	**General** Informal agreements between US/Canada counterparts enable ad hoc (and possibly illegal) joint use of spectrum on a local basis in VHF/UHF (e.g., 150/450 MHz) "first-come, first-served" bands. **What is going well?** Unlicensed mobiles are operating on "foreign" frequencies within the service contours of foreign base stations. **What is not working well?** Inability to coordinate b/c users on other side of the border cannot monitor & communicate on a routine basis due to lack of counterparty licensing. Administrative process for obtaining the necessary license on the non-primary side of the border is cumbersome and prohibitive.	Interoperation across the US/Canada border should work just as it does across provincial or state borders in the respective nations. There should exist a coordinated process to enable use of a US-Primary channel by a Canadian user, in Canada, and vice-versa, if signals from the primary side of the border routinely encroach upon the secondary side without causing interference. Processes should not be legally intensive; no lawyer (preferred) or no specialist lawyer should be needed to complete the process. FCC & IC are coordinating. Users are swapping or programming radios (occasionally in contravention of law or regulation).	Education on currently-available processes (licensing, etc.). Streamline process for licensing mobile units for operation with foreign base stations with service contours that encroach upon domestic territory. Publish explicit instructions & guidelines for handling this issue & distribute along the border. Nationalize processes for consistency. 1. Develop a Guide or Manual that describes the necessary steps to obtain licenses for cross-border operations. Who should lead? DHS/OEC & PSC Who should be involved? FCC, IC Resources required (estimate – e.g. people days, skill set, funding, equipment) 2. The licensing process should be simplified for mobile units within the service contour of foreign base stations for purposes of cross-border communications.

Round - Group	Theme	Topic	Description	Current Situation	Desired Future State	Recommendations / Opportunities / Actions
						Who should lead? RTLC (including NTIA) Who should be involved? Federal, State, and Local governance groups. Resources required (estimate – e.g. people days, skill set, funding, equipment) Engineering and legal analysis, regulatory staff time.
3-1	Technology	Encryption key sharing (i.e. AFCS/OTAR) - Security Policies - Information Management	Defined as sharing encryption and system keys (for system to system keys). For example, a situation where one agency needs to depend on another agency's sites and requires encryption keys to be supplied. Similar situation exists for system keys. A manual 2 person integrity process has been used in the past.	**General** Unique methods have been developed to allow system sharing such as generating a unique project key, using 2 person integrity for programming, and shared passwords for the radio. **What is going well?** Unique local trust based procedures. OTAR allows radios to be remotely keyed, shut off, etc. **What is not working well?** Trust is not enough to formalize MOU's. MOU's that are created are can lack teeth and it's a challenge to get external agencies be accountable for the host agencies policies (such as lost / stolen radios, service / support, etc.) – in most cases, the only recourse is to retract the MOU / system access. Difficult manually provision project keys ad-hoc on a non-planned emergency basis. Controlling distribution of system keys can be a much bigger challenge and have a much higher risk. Sensitivity to providing keying material from one country to another.	The agency that supplies the channel (simplex frequency, conventional repeater, trunking system, etc.) should supply the project key? Draft a proposed key sharing policy and procedures document for sharing project keys with external / international agencies. Local process, MOU's, and projects have found ways to make this work on an ad-hoc basis and a fair bit of experience has been gained. The vision is to formalize best practices through an enabling document.	Sharing project keys isn't generally an issue, but we need to move towards a template for standard wording (for MOU's). Such factors include: Only putting in a project key to limit the risk when dealing with other agencies radios, etc. The agency that provides the channel or system, should provide the key, and therefore that agency should also provide the key management policy (ie: Lost / stolen reporting, service / support, etc.). 1. Respective organizations need to draft and have their own key sharing policies / security policies approved. This will be required for future MOU's. Who should lead? All agencies. Who should be involved? All cross border agencies. Resources required (estimate – e.g. people days, skill set, funding, and equipment). Internal process. 2. Federal level on both sides of the border develop a framework for other agencies to use. Who should lead? Industry Canada and DHS?

Round - Group	Theme	Topic	Description	Current Situation	Desired Future State	Recommendations / Opportunities / Actions
						Who should be involved? Lead agencies. Resources required (estimate – e.g. people days, skill set, funding, equipment) 3. Append the 1952 treaty to include the basic ability to share / use encryption keys when in the other country. Who should lead? Industry Canada / DHS? Who should be involved? RCMP? Resources required (estimate – e.g. people days, skill set, funding, equipment) - TBD?
3-10	Technology	Mutual aid response – coverage/distance for communications and personnel response - Cross-border mutual aid agreements, dual responders, Canada and US certification for response	Mutual aid response seems to be at a low level (local – local and county to county). There needs to be mutual aid agreements at higher levels (i.e.,MOUs).	**General** There needs to be a recognition about the day to day operations among first responders (ie., the tasks they need to complete that may not be regulated). Pacific North West Agreement- overarching agreement that allows for the western provinces and states to mutually agree to assist emergency situations across the border. For the most part, mutual aid agreements are at the lower levels, these agreements need to expand to higher levels **What is going well?** Pre-clearance between the Port Heron and the Sarnia border NIIX network – common database in which individuals can share relevant information Port Heron and Sarnia agreement – local level agreement regarding mutual aid Local entity agreements across the border Emergency Management system (Ontario) **What is not working well?** In emergency situations, the potential issue with phone coordination if towers go down	National communication regarding pre-planning in cases of natural disasters (between U.S. and Canada) Have a clear list of credentials Have a comprehensive list of contacts in instances of national emergencies Mutual aid agreement between Port Heron and Sarnia Pacific North West Agreement Canada can leverage the U.S. EMAC – Emergency Mutual Aid Compact	Create and org chart/contacts for both sides of the border (i.e., list of names and who is responsible for certain issues). Pre-planning – meetings to organize mutual aid ahead of time when anticipating emergencies Standardize credentialing 1. DHS, State Departments, PS, Emergency Management Ontario 2. Emergency Response agencies, federal, provincial, municipal stakeholders 3. Representation from each relevant organization (i.e., DHS, PS, EMO...) – agreement on recourses via meetings Recommendation: Legal and regulatory challenges that need

Round - Group	Theme	Topic	Description	Current Situation	Desired Future State	Recommendations / Opportunities / Actions
				Uncertainty of U.S. structure when Canada needs to gather information U.S. has multiple layers – uncertainty of appropriate contacts and roles		to change – there needs to be a recognition that these hinder emergency responders Day to day legal and regulatory regulations that work for us in the creation of mutual aid response
3-11	Technology	Purchasing – Systems and equipment – RFPs, RFIs, Sole Sourcing - Equipment ownership, lifecycle, etc. - Procurement – equipment, services - Phased approach for interoperability: swap radios, radio gateways, system to system connection - System of system solution – data link between US and Canada agencies, security requirements	Desire to leverage existing systems of systems so that current equipment does not need to be replaced. If you develop a system of systems current owners can use their own and not have to procure new equipment. Each agency retails ownership. I.E. IBET ROIP Project. Independent of: • Frequencies • Encryption Keys • Hand Sets • Infrastructure, • Etc.	**General** System of Systems approach has not been adopted. Is a current push to build new systems, find common frequencies, etc. Many province/states building new major systems. Current state is fractured, proprietary, vender specific. Stove pipes. **What is going well?** Technology is going well, IBET project is going well. Proved that the two countries can talk to each other. Voice and data worked. Existing technology is not the problem – it's the politics. Is using Open standards (SIP & H323) – non proprietary **What is not working well?** Fact that there are a desperate number of systems that don't talk, frequency issue – when maybe it is no longer the case. Organizations have not been able to get the funding. Procurement has been a challenge on both sides of the border.	The ability to connect systems on either side of the border via a transparent communications leveraging all the existing networks, ownership, procurement etc. Everyone that runs their own network continues to do so. US and Canadian communications hubs (centres) that are connected. Agencies on each other's side connect into their respective centres. Within a reasonable timeframe, to open this system of systems, m to local, regional and provincial agencies in a simple, timely and affordable fashion. IBET has created governance, sops, technology, training and exercises and usage models and templates to facilitate this process. This has been done in a lab environment and needs to be moved to the next phase.	Continuation of the IBET Project with a view to proving that the north south pipe built. Prove the project was successful. Then expand to the State and Local officials, again in a pilot project as a "proof of concept." Once proven, explore expanding across entire Canada – US Border. Coverage and capacity is an operability issue. System to systems is the interoperability issue. 1. Monitor and consider expanding the IBET Project Who should lead? RCMP in partnership with IBET Who should be involved? CITIG/NPSTC with a view to understanding the project Resources required (estimate – e.g. people days, skill set, funding, equipment) $10 Million. 2. CPRC Project Submission to do a local/provincial project based on the good work done by RCMP/IBET NEED SOMEONE TO TAKE THE LEAD. Who should lead? RCMP at the Divisional level with local and provincial partners.

Round - Group	Theme	Topic	Description	Current Situation	Desired Future State	Recommendations / Opportunities / Actions
						Who should be involved? RCMP/Corresponding State Police, local officials on both sides, etc. Resources required (estimate – e.g. people days, skill set, funding, equipment) Maximum allowed - $150,000
3-2	Technology	Technology "accessibility" (plain language explanations of systems and capabilities) - Growing complexity of emerging radio equipment/technology	When evaluating marketed technologies and making purchasing decisions, some agencies have difficulty understanding the concepts and features on offer. As a result, non-interoperable "features" may hinder operations down the line.	**General** In some areas a serious knowledge asymmetry exists between vendors, practitioners, and appropriators. Exploiting this asymmetry, vendors are often able to sell proprietary, non-standards-based solutions that render interoperation more difficult. No resource exists for local agencies to obtain assistance in understanding and evaluating novel technologies and features. Even for existing technologies the lack of information on operation in multi-vendor environments impedes the acquisition process and, ultimately, operations. **What is going well?** Well-understood "legacy" technologies can generally be evaluated on the basis of established standards or well-written criteria. **What is not working well?** Both for newer LMR technology and cutting-edge broadband technology, differences in terminology, operational concepts, and level-of-sophistication make it extremely difficult for non-specialists to effectively evaluate offered features and systems.	Non-specialist public safety practitioners should be able to consult a bank of authoritative technology whitepapers that explain simply the terminology, features, and concepts-of-operations they are likely to encounter when evaluating a proposed solution. In addition, there should exist a national (or international) registry of equipment that is known to interoperate either based on established standards, or, where no standard exists, operates using non-proprietary principles. (E.g., no intellectual property protections impede the construction of compatible equipment.) Where applicable, standards-based or non-proprietary government purchasing schedules should be established and offered for use by public safety agencies at all levels of government. Non-compliant equipment should be excluded from these schedules. During the sales process, vendors should be required to explicitly disclose all proprietary features, functions, and deviations from established standards. Where no established standard exists, vendors should be required to describe in detail how their proposed solution will interoperate with established or planned systems in adjoining	Government working groups should be established in both nations to evaluate technologies on offer to public safety entities and prepare plain-language whitepapers for to be made available to state, provincial, and local governments via an online portal. To ensure cross-border interoperability, a Canadian version of the DHS-led schedule process should be created and an intergovernmental harmonization committee established to review submitted equipment and certify it for inclusion. Both Federal governments should deny grant funding for the purchase of non-scheduled equipment unless the vendor of such equipment can certify that no proprietary or non-standards-based feature or function of that equipment will impede or prevent interoperation with the systems of foreseeable counterparties. Model RFI/RFP language should be developed and made available to public safety agencies in order to require disclosure of proprietary or non-standards-based features in offered equipment that might impede or prevent interoperation with foreseeable counterparties. 1. Government working groups should be

Round - Group	Theme	Topic	Description	Current Situation	Desired Future State	Recommendations / Opportunities / Actions
					jurisdictions DHS and the Emergency Communications Preparedness Centre are pursuing a Federal purchasing schedule for interoperable communications equipment that is open to state, local, and tribal purchasers.	established in both nations to evaluate technologies on offer to public safety entities and prepare plain-language whitepapers for to be made available to state, provincial, and local governments via an online portal. Who should lead? DHS & PSC Who should be involved? Vendors, carriers, stakeholders, & standards experts. Resources required (estimate – e.g. people days, skill set, funding, equipment) Travel funding and staff time will be needed. Engineering expertise, along with the ability to translate complex abstract concepts into simple concrete terms, will be required. 2. A Canadian version of the DHS-led schedule process should be created and an intergovernmental harmonization committee established to review submitted equipment and certify it for inclusion. State, provincial, and local governments should be authorized to purchase from the schedule. Who should lead? DHS/GSA & PSC/IC Who should be involved? Appropriators in both nations should authorize use of the schedule at all levels of government. Resources required (estimate – e.g. people days, skill set, funding, equipment) 3. Model RFI/RFP language should be developed and made available to public

Round - Group	Theme	Topic	Description	Current Situation	Desired Future State	Recommendations / Opportunities / Actions
						safety agencies in order to require disclosure of proprietary or non-standards-based features in offered equipment that might impede or prevent interoperation with foreseeable counterparties.

Who should lead?
DHS/oec & PSC

Who should be involved?
Local-agency purchasing agents.

Resources required (estimate – e.g. people days, skill set, funding, equipment)
Program funding to cover development of the language and socialization with practitioners.

Other:
Both Federal governments should deny grant funding for the purchase of non-scheduled equipment unless the vendor of such equipment can certify that no proprietary or non-standards-based feature or function of that equipment will impede or prevent interoperation with the systems of foreseeable counterparties. |
| **4-1** | Technology | Cross-border infrastructure, fixed site and fixed link licensing | Installing and operating fixed radio equipment in "other" countries territory. Licensing is a problem as a Canadian entity cannot hold a radio license in the USA and maybe visa versa. No legal framework based on trust, waivers etc. Typically to provide coverage into areas to difficult to cover from "home" turf – cliff edge against water. Examples in BC/Washington, requirement in Eastern Ontario that may not have been implemented?

Other user example is sharing a common repeater by Canadian as well as American | **General**

Stations are being installed today but a sponsor must be found in the "other" country.

What is going well?
Systems are being in the "others" country so functionally these system are going in – limited examples.

What is not working well?

Risk from lack of control as no formal of ownership of license, requires a 3rd party to maintain this hardware | A Defined International Repeatable Process.

Have examples in place that need formal approval. MOU's exist. Meeting here today to help drive the vision | Recommend that the 1952 Treaty be amended to allow a foreign Public Safety agency to hold a Foreign radio license.

1. Amend existing Treaties and/or Legislation to allow to allow a foreign Public Safety agency to hold a Foreign radio license.

Who should lead?
Industry Canada / FCC

Who should be involved?
And Public Safety agencies with vested interest. |

Round - Group	Theme	Topic	Description	Current Situation	Desired Future State	Recommendations / Opportunities / Actions
			users (CANAM repeater in BC).	(border issue re working in foreign country). Existing arrangements may not be repeatable. Ad hock – not formal.		
4-9	Technology	Standards-based (open) data feeds for situational awareness and alerting. E.g. MASAS, IPAWS, 'cop' tools; how to develop/define interface standards for cross-border information sharing; security / privacy issues - P25 compliance for US and Canada systems - Formal cross-border adoption of standards – e.g. IP, P25, encryption for interoperability	There are currently several data exchange standards in existence. One either needs to be adopted for intra & inter-agency, cross-border data exchange, or a new one developed. It would be preferable to find a suitable existing solution. This would include such things as logs, real-time data, sensors, video, etc.	**General** Our current technology is not able to 'talk' to each other and many inefficiencies result. There are very few agreements existing for data sharing, partially due to lack of a formally adopted open standard, and partially due to the lack of formal/legal agreements and frameworks in place to allow sharing. **What is going well?** There are several diverse initiatives that are working toward the sharing of data. (e.g. DND's FUSION) **What is not working well?** The current initiatives are diverse and are not utilizing a single, formally adopted open standard	Universal adoption of a single open standard. • Existing standards: NIEM, EXDL - CITIG is gathering information on data standards	To move towards the adoption/creation of a common open standard. 1. Have SOREM create a working group to investigate the adoption/creation of an appropriate open standard in concert with the appropriate groups from each side of the border. 2. Identify a group of cross-border experts to determine any data or systems that currently exist that can be shared immediately.
1-5	Training and exercise	Joint-training	Defining the common focus and/or purpose for training and exercising in an effort to identify communications gaps, and to test solutions. Find the portals, locations, facilities to create common training possibilities. • Breakdown barriers WRT to lessons learned • Shared internet access to training venues, schedules; with the intent of combining training opportunities	**General** • Training and exercise information is not being shared • Significant duplication of effort and lost opportunities for training/EX • Lack of awareness WRT to training/EX opportunities • No training/EX templates • No repository/archive (Lessons Learned) for Training/EX **What is going well?** • Strong will on both sides of border to participate with training/EX • Common operating picture • Growing SME base **What is not working well?** • Lack of funding (Lack of bi-national funding with an effort to not duplicate efforts— problems often the same) • No identified champions/combined joint	1. Bi-nationally administered regionally executed, - Training exercise "portal" - Two to three years training exercise cycle - Virtual library of lessons learned and training and exercise templates • Regional working groups to annually push (local/regional/federal) solutions • Maintain cross border dialogue	• Bi-national seed money available to enable exercise planning • THINK bi-nationally; ACT regionally • Develop framework to facilitate regional training and exercise WGs • Emphasize some of the new technology CoP, internet portals, virtual libraries, video teleconference, MS share point, etc. 1. Bi-national seed money available to enable exercise planning PSC/DHS All stakeholders, A pot of money to prevent duplication of efforts

Round - Group	Theme	Topic	Description	Current Situation	Desired Future State	Recommendations / Opportunities / Actions
				training/EX • No coordination/education of stakeholders		2. THINK bi-nationally; ACT regionally PSC/DHS--DND/DOD—state provincial governments, local municipal governments bi-national training/exercises every two to three Healthy funding 3. Develop framework to facilitate regional training and exercise WGs
1-6	Training and exercise	Many small exercises across the border - Look for training opportunities, job of the working group	-Common structures btwn bridge and tunnel allow us to do exercises, however, some of the lessons learned have been lost after the exercise. How do we capture lessons learned so that information may be shared with people who weren't present for the exercise. We need documentation to be captured and shared. Useful to keep a library of exercises, i.e. sporting event, disaster. Get a list of best practices. Debriefing exercises and sharing information would be beneficial. - Leadership commitment to debrief the exercises and make recommendations - Find current communication resources, practice using equipment - Talk to each other and build on the findings from the exercises - Test different questions you may have during the exercises, i.e. can you use different frequencies a/c the border?' - Define current common resources and start processes to use asap eg. Masas - Use smaller exercises to involve more ngo's - Use unplanned exercises for test	**General** -no cross-border agreements – we just make it work. This works well until people leave the organization. We need mou's/sop's. -we need a tabletop each year where we sit together and discuss what we will do -We need more practice of the procedures for dispatchers in U.S. and Canada and include the amateur radio operators. -We all have daily resources and need to know what everyone's daily resources are. -We also have resources we use in emergencies only -Amateau radio users should be tested with to help prepare in event of emergency. -A structure is required, such as an mou or sop, to ensure the front line personnel are familiar with the policy. **What is going well?** It works. **What is not working well?** People leave and the agreements leave with them.	-Sharing of a process that works - A frequency of testing this process with front line people. It's important to practice this and make mistakes. -Develop a system to find problems you may not have thought of, i.e. ems unable to cross border without passport which they wouldn't normally bring to work. -We need someone to take primary responsibility for this. -Test using small scale events and make recommendations. Create a book of events that could be tested. Design a template that is transferable for these events so that information can be shared regarding best practices. -Currently doing large scale exercises -BC/Washington cross border amateur radio group coordinating voice and data on UHF/VHF -Central/Eastern Canada same -CMC's and any other EOC related personnel meet quarterly to discuss issues (puts faces with names and builds relationships) Prepare a list of discussion items. -Ship rider operations with U.S. Coast guard and Border	What do we need to do to achieve the desired future vision? -Awareness/Education – get people out of their silos and get an awareness of government at all levels to know why this is important and how to achieve it. People need to know what we're trying to do and why we're trying to do it. Every report from every disaster discusses communications and how it needs to improve. We need endorsement from Chiefs of Police, Associations, etc. We need to take a grassroots approach. Get the right leaders to the table. Would benefit from the government saying we must take this approach to force a move to action. - We need a joint solution. -Primary responsibility – We need someone to take primary responsibility. -Network with people who have had successful events, find out where the funding is etc. Glean little nuggets of information regarding best practices. Show successes and how it has benefited, i.e. responder safety. What do we need to do to "fix" what is not working well? -Get the right leaders to the table -Assigning primary responsibility. Have it

Round - Group	Theme	Topic	Description	Current Situation	Desired Future State	Recommendations / Opportunities / Actions
			purposes as well		Patrol…Cross training between U.S. and Canada marine. One U.S. member goes with a Canadian member and vice versa. They also do live training exercises as well.	sanctioned at all levels of government. -SOP's and MOU's -Legislated/mandated. 1. Build catalogue of exercises and start testing. Federal lead. Provinces should be involved. Involve anyone who practices the exercise and have them identify and share best practices. 2.Get interoperability mandated by the government. Public Safety Canada, DHS. Lobbied by Associations. 3.Educate/get involved all levels of government and public safety associations/unions. - Assign focused primary responsibility .
2-3	Training and exercise	Develop comprehensive exercise programs – build up - Wide spread availability of comm.-l training across Canada	In training in use of equipment, resource, plans-exercise as training	**General** Operate outside of law in regards to frequency and radio share. Will do it just to do the job and protect lives. Current no common training and accreditation issue making exercises difficult Duties and responsibilities of those with knowledge is usually so high they are not able to participate in exercises \no designated point person to address the need for inter-national exercises Lack of training due to lack of time for education **What is going well?** Bi-national cooperation based on personal relationships **What is not working well?** No formal agreement in place for joint exercise \limited communication resources for the operation of the comm. Equip No identified person to ensure common training and recognition of qualification cross border\\ Equipment to satisfy dead zone issues such as in tunnel or lack of repeaters to communication	Formal agreements in place that legal the sharing of radio system. Training of the use of the communication systems to the person involving through common exercise. Awareness Reviewing of communications systems to determine what is a suitable system Boots on ground have good relationship to keep the goal of safety and security in place Training is in place in silos but not common and rolled out across full regions. NIMS training in place and in support of training. CDN does not have similar	Need governments to agree on the common system-need a champion to ensure it gets done and the work being done at conferences in lost.\ Review and amend legislation to allow for sharing of radios Create a working group of stakeholder-needs to be international regional reporting to a national committee 1Determine the legal requirements for inter-border exercises to operate under proper sovereignty and air use Who should lead? Who should be involved? DHS, public safety, FCC, Industry Canada, Justice Resources required (estimate – e.g. people days, skill set, funding, equipment) Resources difficult to estimate but a department should be identified and lead to address the issue

Round - Group	Theme	Topic	Description	Current Situation	Desired Future State	Recommendations / Opportunities / Actions
						2. Appoint training staff to champion Joint Exercises with joint communications assessments 3. Offer additional joint and interagency training
4-2	Training and exercise	Communication personnel exchange	No report – group did not meet			
2-5	Usage	MERGED with 3-1 Security Policies - Information Management	No report			
3-12	Usage	Situational awareness and common operating picture	Sometimes literal – geospatial. Common understanding – knowing everyone's jobs in Real time awareness of events incidents along with resources involved/vicinity and capabilities. Tactically, strategic, to support decision making. Real time – who, what, where, how, etc. Multi-agency. How do you roll that up. Layers. Virtual USA (from virtual Alabama). Need something for emergency planning. Built by gov and used by all levels. Held custodial from diff levels. Share layer to those who need. COP – like Google earth. SA -	**General** Good examples from the US – Virtual USA. **What is going well?** Weather data to view calculate plumes. Floor plans of schools. SA piece – what's going on. COP – who and what's there. Certain players well equipped. EOCs. Tech starting to show up. As part of MESAS – geospatial system. Provide a feed that can be consumed in a national feed. GOC has info **What is not working well?** Awareness, not fully established or disseminated. Not inter-agency yet. Need the linkages.	Agreements to share info. Ask those responsible for send operations – what do you want to know. Cross-border – who will put data on server. Fusion centres in states. Need to have complete and accurate info- need middleware and agreements to bring info in ton central location. MESAS focused on sharing dynamic info. Responders care about immediate vicinity. Filter any data set. FEMA built ERUPT – trying to raise awareness. Behind firewall, so not shared at the moment. Need real-time data – ability to respond. **Commonly available data sets – shared and accessible where authorized. Two way communication - ability for end user to publish.** **Need overarching structure – governance for getting it done.**	Commonly available data sets – shared and accessible where authorized. Two way communication - ability for end user to publish. Need overarching structure – governance for getting it done. Canvas responders to see what info they need Indentify who can contribute, who can collate and how it can be used. WG to look at what data is needed. IBET developed data matrix 1. Build "Virtual Canada" Who should lead? PS through the GOC. Need to have it shared to the responder level. DHS working toward. FEMA has ERUPT (presented last month) Who should be involved? Inventory what is available – and then agree on what can be seen by who.

Round - Group	Theme	Topic	Description	Current Situation	Desired Future State	Recommendations / Opportunities / Actions
					Social media – validation. Understanding reliability of any source. Requirement is data needs to be reliable...	Resources required (estimate – e.g. people days, skill set, funding, equipment) Mandate PS to do it. 2. Set up a WG for DATA discovery and to engage stakeholder community • Get common awareness of what data is out there (see IBETexample). • Majority of info already available. • Doesn't need to be expensive. • Done without giving data away custodianship of data). Who should lead? Federally supported WG – DHS and PS Who should be involved? Responders, Gov., CI, Industry, etc. Resources required (estimate – e.g. people days, skill set, funding, equipment) Ron Zuber (region 10 from Washington, 425-487-4665 Ronald.zuber@dhs.gov) volunteers to set up working group. Creation of a working group and – engage stakeholder community.
4-11	Usage	Formalizing radio operating authority when operating in "other" country!	No report – group did not meet.			
n/a	Governance	Governance/FCC Waiver (policy) for shared frequencies between U.S. and Canada --	Not discussed			

Round - Group	Theme	Topic	Description	Current Situation	Desired Future State	Recommendations / Opportunities / Actions
		Update or rewrite of existing cross-border communication treaty				
n/a	n/a	Create a time limit that the FCC and IC have to approve/deny requests!	Not discussed			
n/a	n/a	Law enforcement – relinquishing weapons US to Canada to US (no formalized agreement)	Not discussed			
n/a	n/a	Do the obvious – e.g. Chris' ROIP	Not discussed			
n/a	n/a	Direct accountability	Not discussed			
n/a	n/a	Language barriers during emergency incidents – English and French especially Quebec, NY, VT, NH, ME	Not discussed			
n/a	n/a	Empowerment, accountability, tasks vs levels, ground level tactics, support - Not who can do what but who needs to do what.	Not discussed			
n/a	Other Topics	Revisit/distribute 2009 conference topics/ objectives still not met	No report.			

Appendix E – Detailed Assessments of Priorities – Opportunity Analysis Reports

List of Reports (presented as documented by the participants)

1. Creation of a Canadian/American communications interoperability coordinating body;

2. Creation of a cross-border communications working group;

3. Development of an interoperability mandate within both governments (Public Safety Canada and the Department of Homeland Security);

4. Formal identification of cross-border interoperability channels available border-wide through the creation of a working group;

5. Address legal hindrances that prohibit sharing of radio frequencies, personnel, and resources from working across state, province, and national borders;

6. Creation of a stakeholder map and service inventory;

7. Appointment of a cross-border communications interoperability coordinator from each province and at the federal level equivalent to the Statewide Interoperability Coordinators (SWIC) in the U.S.;

8. Identification and engagement of cross-border champions;

9. Development of an information-sharing inventory; and

10. Draft model MOU for routine cross-border use of licensed spectrum (in progress – not further discussed)

Opportunity Analysis

"Opportunity is missed by most people because it is dressed in overalls and looks like work"

~ Thomas A. Edison

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1. **Creation of a Canadian/American communications interoperability coordinating body**

Detailed Opportunity Description

What name can we give this opportunity so that everyone understands what it is?

OA1. Can-Am Interoperability Coordinating Body (CAICB)

What are some of the key elements that make up this opportunity?
If you were going to "tell someone the story", what are the certain facts, events, dates, people, etc. that you would have to include in order to "give them the picture"?

Great need to get Canadian indentified Interoperability representatives for each province to interact with U.S counterparts.

Need advisory body to help advise, share information and channel requests to the right owners. Focused on communications – not operations. If you can communicate you can figure out operations. I.e., Fires in Detroit – every last truck was used with Windsor sitting idle at the border.

Biggest issue: Who speaks on provincial behalf when it comes to interoperability.

Borders have separate interest – Responders separate too – sometimes common interest. (Fed-Local interests). A national approach would balances border issues and responder issues.

East – cross-border agreement. – meeting 2 times a year. Have work plan. Good examples on east and west coast – need to translate into national.

Ideal Future State

What is the ideal future state? When we seize the opportunity, what will be different?

Develop an International cross-border coordinating structure that respects jurisdictions yet empowers local and provincial accountabilities and operational realities.

- Use SWIC and RECWIGS Process in the U.S.
- Creation of a SWIC-like entity in Canada.
- Include both with federal representation (DHS, FCC, IC PS).
- Includes Chiefs Assoc's representation in group
- Advisory/coordination role

Identification of who speaks on behalf of all levels of government when it comes to interoperability. Needs federal representation because it is international (x-border).

Share a common view and know who to speak to and where to go to take topic to a higher level.

Mechanism to feed to PS, IC, DHS, FCC, etc.

Try to bring solutions to common problems and share information.

System of systems – US has it with SWICs.

How will we know that we are successful? How will we measure success?

When U.S. can talk to Canadian Counterparts on common issues.

What will make achieving the ideal future outcome difficult? (challenges)

Lots of nice chit-chats, but need bite. More Oomph.

Funding availability key to getting SWIC traction. SWICs around for three years. EOC doesn't tell SWICs what to do – get buy in first. Two meetings a year for SWICs.

Balancing federal and provincial mandates

Can we identify a single point of contact for each province?

Urgency / Priority

Why should this be a priority?

Significant identified gap – comes from operations.

Number 1 priority indentified during X-Border Conference!

Existing Tools/Infrastructure/Information and Best Practices

Are there existing tools/infrastructure/information, current initiatives/projects or best practices that might inform or support this initiative?

What?	*Who "owns" it?*	*Where can we get more information?*

SWIC, RECSWIC, etc. – Canada lacking, but could look at CICS model (criminal intelligence)

Call for Leadership

Who might lead this initiative? Is there an organization that might seem better suited to work in the leadership role?

PS Needs to support the creation of the Canadian side of the group. US side already exists.

Who might want to be involved? e.g. individual(s) or organization(s)

Need that network of networks –
Board composed of: 1 rep from each border prov. and states, three associations., DHS, FCC, PS and IC.

Describe a general approach to getting this done. Think of a "to-do" list.

What might be some of the potential deliverables?

- Canadians need to get issue solved to interact with SWICs
- At the very least, immediately identify Canadian Representative (not discipline specific – interoperability specific) for each Canadian Province to start interacting with SWIC counterparts
- Once Canadian SWIC structure in place can more formally interact with U.S.
- Define reporting structure. Stand alone with no reporting – individual report back to their own jurisdictions.
- Indentify secretariat structures in each country (perhaps EOC in the U.S. and proposed PSIC in Canada) to support coordinating body's work.

Coordination and Further Detailed Planning First Step
If we decided to move forward and address this opportunity, what does your group believe is the necessary FIRST STEP towards the ideal future state? Everyone wants and international working group. - Identify provincial representatives ASAP. - Put request to mandate coordinating body trough PS.
What are the objectives of the First Step? Start the communication – void for many states as to who to contact (East Coast and West Coast more advanced)
Who might want to inform or take an active role in this First Step? PS Canada
What are any of the particular activities that might be part of the First Step?
Are there any time restrictions or opportunities that might inform the timeline for taking this First Step?

Opportunity Analysis

"Opportunity is missed by most people because it is dressed in overalls and looks like work"

~ Thomas A. Edison

2. Creation of a cross-border communications working group

Detailed Opportunity Description

What name can we give this opportunity so that everyone understands what it is?

OA 2. Create Border working groups that meet twice a year, should be formulated at the International Level.

What are some of the key elements that make up this opportunity?
If you were going to "tell someone the story", what are the certain facts, events, dates, people, etc. that you would have to include in order to "give them the picture"?

1.Should include all disciplines, public safety
2.Must be linked to existing formal groups
3.Groups should be Geographically oriented
4.Create new or utilize existing multi-discipline forums for meetings in the Province / Region
5.Should include all volunteer supporters and responders

Ideal Future State

What is the ideal future state? When we seize the opportunity, what will be different?

A Working Group that acts as the "Go To" point for further work and discussion that is inclusive, dynamic and linked to other key and critical functional groups.

How will we know that we are successful? How will we measure success?
1.We are holding productive meetings at least twice annually
2.Meetings include joint and functional agendas
3.Issues are forwarded and worked to resolution
4.Progress is being made and is effectively linked to national and international groups

What will make achieving the ideal future outcome difficult? (challenges)

1. Participation in the working groups
    a. Resource and Funding limitations
    b. Synchronization and use of existing "Meet Technology" resources

Urgency / Priority

Why should this be a priority?

1. To maintain continuity
2. To Insure adequate preparation
3. To Insure better response
4. To Insure better coordination of existing and future initiatives
5. To Insure momentum is sustained

Urgency / Priority
Existing Tools/Infrastructure/Information and Best Practices
Are there existing tools/infrastructure/information, current initiatives/projects or best practices that might inform or support this initiative?

What?	*Who "owns" it?*	*Where can we get more information?*
EMS Responder Agreement	BC WA	
BC WA Agreement COM/TRAN	BC WA	Komenski / Webb
PNEMA	PS CAN / FEMA	
CAN AM LE Channel Sharing	RCMP WSP	Bob Schwent / Al Suckling
CBCG	Can AM	Amateur Operators Doyle Bennick

Call for Leadership
Who might lead this initiative? Is there an organization that might seem better suited to work in the leadership role?

Public Safety Canada
DHS

Who might want to be involved? e.g. individual(s) or organization(s)

Local Government, Province EM, State EMO, Federal Emergency Management, First Responders

Opportunity Analysis

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~ Thomas A. Edison

4. Formal identification of cross-border interoperability channels available border-wide through the creation of a working group

Detailed Opportunity Description
What name can we give this opportunity so that everyone understands what it is?
OA4. VHF/UHF (not 700/800) Interoperability Channels

What are some of the key elements that make up this opportunity? **If you were going to "tell someone the story", what are the certain facts, events, dates, people, etc. that you would have to include in order to "give them the picture"?**
Spectrum has been in use for a long time – a lot of incumbent licensees of all types. Not needs based, first come first serve. Long existing treaty
Does not have to be a complete set from border to border – can be segmented. Regions and transition points must be clear and well defined and known.
Frequencies can be changed – most radios can be reprogrammed. No technical reason to "give a frequency for life".
US has already defined a set of interoperability for nationwide use (see NIFOG) – Canada has not done the same. Canada is looking at the possibility of using at least some of the US defined channels.

Ideal Future State
What is the ideal future state? When we seize the opportunity, what will be different?
A complete set of interoperability channels across both countries, border to border, sea to sea, that are clear and available to public safety.
Spectrum aware radios – radios that find a compatible clear frequency under a common channel name.
Look at prioritization of public safety…consider them only as a victim to interference.
How will we know that we are successful? How will we measure success?
Full cross border interoperability. E.g. When we publish an international interoperability guide and they are used for border incidents.
What will make achieving the ideal future outcome difficult? (challenges)
Spectrum availability, incumbent licenses, funding, commercial lobbying, command and control (agreements).

Urgency / Priority

Why should this be a priority?

Safety of first responders and the public - to ensure public safety assets on both sides of the border can communicate within and across the international border. This must be done in a way that is defined and supported on a national level.

Existing Tools/Infrastructure/Information and Best Practices

Are there existing tools/infrastructure/information, current initiatives/projects or best practices that might inform or support this initiative?

What?	*Who "owns" it?*	*Where can we get more information?*
NIFOG	US DHS OEC	US DHS OEC and the internet
Local agreements	states/prov/local govts	Border public safety agencies
IC's study of border	channel availability	IC – Mobile Engineering Group
Spectrum Direct	IC	IC, internet
ULS	FCC	FCC, internet

Call for Leadership

Who might lead this initiative? Is there an organization that might seem better suited to work in the leadership role?

RTLC

Who might want to be involved? e.g. individual(s) or organization(s)

DHS, CTIG, NPSTC, SWICs, NGA, Public Safety Canada, local public safety users, professional organizations (fire chiefs, police organizations)

Describe a general approach to getting this done. Think of a "to-do" list.
Canada – consultation, moratorium (formalized process of moving incumbents), analysis
Both sides – agreement and publishing of frequencies and regions.
What might be some of the potential deliverables?
Available common channels

Coordination and Further Detailed Planning **First Step**
If we decided to move forward and address this opportunity, what does your group believe is the necessary FIRST STEP towards the ideal future state? Borderwide survey of what is in use (hard conflicts) and where.
What are the objectives of the First Step? Determine availability (find low hanging fruit – channels already or easy to clear). And in congested areas, attempt short term workarounds/gateways/RoIP.
Who might want to inform or take an active role in this First Step? IC and FCC, DHS, Public Safety Canada.
What are any of the particular activities that might be part of the First Step? Survey, spectrum mapping.
Are there any time restrictions or opportunities that might inform the timeline for taking this First Step? Need channels as soon as possible. Process is not trivial.

Opportunity Analysis

"Opportunity is missed by most people because it is dressed in overalls and looks like work"

~ Thomas A. Edison

5. **Address legal hindrances that prohibit sharing of radio frequencies, personnel, and resources from working across state, province, and national borders**

Detailed Opportunity Description

What name can we give this opportunity so that everyone understands what it is?

OA5. Interim Solution for Enabling Cross Border Radio Communication

What are some of the key elements that make up this opportunity?
If you were going to "tell someone the story", what are the certain facts, events, dates, people, etc. that you would have to include in order to "give them the picture"?

There are currently treaties and regulation which do not fully support the current needs of public safety agencies operating across the Canada / US border.
This responsibility falls under the FCC and IC.

Treaties of 1952 Convention between Canada and U.S.
1949 Inter-American Radio Agreement

Governance is via FCC Rules and IC Regulations

Key Elements
1. Regulations - outdated
2. Ongoing relationships between IC and FCC
3. Identified need for regulatory improvement.

Ideal Future State

What is the ideal future state? When we seize the opportunity, what will be different?

The end user is enabled to communicate across the border under clear direction and authorization of both regulatory agencies.

Enable creation of MOU's by the users including SOP's.

Will create other opportunities for interoperability improvements.

How will we know that we are successful? How will we measure success?

End user will be able to use radio equipment across the border. Cross border interoperability will improve.

What will make achieving the ideal future outcome difficult? (challenges)

1.Acheiving buy-in from all regulatory agencies.

Urgency / Priority

Why should this be a priority?

1.Present state presents large obstacles to effective cross border communication.
2.Risks including access to secure communications devices are increased.
3.Need for constant training eliminated.

Existing Tools/Infrastructure/Information and Best Practices

Are there existing tools/infrastructure/information, current initiatives/projects or best practices that might inform or support this initiative?

What?	Who "owns" it?	Where can we get more information?
FCC/IC Liaison	FCC/IC	FCC/IC – Radio Technical Liaison Committees
PS Radio Infrastructure	PS/Public	FCC/IC databases
IBET	RCMP/US Border	RCMP/US Border

Call for Leadership

Who might lead this initiative? Is there an organization that might seem better suited to work in the leadership role?

IC/FCC

Who might want to be involved? e.g. individual(s) or organization(s)

CITIG
NPSTC
PSST
Public Safety Portfolio Agencies

Describe a general approach to getting this done. Think of a "to-do" list.

Creation of 'letter' between FCC/IC
Meetings between FCC/IC/State Department/DFAIT

What might be some of the potential deliverables?

The signed agreement

Coordination and Further Detailed Planning **First Step**
If we decided to move forward and address this opportunity, what does your group believe is the necessary FIRST STEP towards the ideal future state? Kick off meeting between FCC/IC
What are the objectives of the First Step?
Who might want to inform or take an active role in this First Step?
What are any of the particular activities that might be part of the First Step?
Are there any time restrictions or opportunities that might inform the timeline for taking this First Step?

Opportunity Analysis

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~ Thomas A. Edison

6. Creation of a stakeholder map and service inventory

Detailed Opportunity Description

What name can we give this opportunity so that everyone understands what it is?
OA6. Who on either side of the border requires interoperability

What are some of the key elements that make up this opportunity?
If you were going to "tell someone the story", what are the certain facts, events, dates, people, etc. that you would have to include in order to "give them the picture"?

1) Who are the users
   - local first response
   - provincial/state emergency responders
   - local non-profit organizations (i.e. red cross, salvation army)
   - local critical infrastructure (i.e., Public Works)
   - Federal
   - International

2) When will they use interoperability?
   - emergency events (large scale and small scale - geographically)
   - daily use
   - local use (i.e. coordinating snow plow and garbage pick-up)
   - wide scale events

Identifying the roles, responsibilities, and capabilities for those requiring interoperability once a circumstance of interoperability arises.

Identify who the users need to talk to?

3) What is already available?
Establish existing agreements, relationships, and efforts related to interoperability
(make contact with organizations to find out how their efforts will coordinate with yours)

4) Ownership of a database –
- at what level will the database be governed
- maintenance of the database

Ideal Future State

What is the ideal future state? When we seize the opportunity, what will be different?
Map out stakeholders
   - group stakeholders by levels (local, state/provincial, federal)

Establish a single database/catalogue to identify all stakeholders as well as their roles and responsibilities, capabilities, authorities, and capacities

Identify all existing plans, agreements, MOUs, and current efforts relating to interoperability

Ownership of a database that is regularly maintained

How will we know that we are successful? How will we measure success?

There will be a shared database (federal/provincial?) that is updated on a regular basis that identifies who the stakeholders are, what their needs are, and what their responsibilities are

We can measure the success by identifying users who are able to quickly identify/work with other stakeholders as needed. Any changes (i.e, of authority) are updated on a regular basis.

What will make achieving the ideal future outcome difficult? (challenges)
- Funding for the creation/maintenance of the database
- Political obstacles
- Technological organization of changes
- Lack of trust of government organizations
- Recognition of command authority

Urgency / Priority

Why should this be a priority?
Operations are occurring on a daily basis, with no formal policy/agreement in place.

Existing Tools/Infrastructure/Information and Best Practices

Are there existing tools/infrastructure/information, current initiatives/projects or best practices that might inform or support this initiative?

What?   *Who "owns" it?*   *Where can we get more information?*

Government agencies who are already managing emergency needs(i.e., EMO, Chiefs of EMS, Community emergency management coordinators, office of continuity planning, Public Safety Canada, CBSA).

Call for Leadership

Who might lead this initiative? Is there an organization that might seem better suited to work in the leadership role?
Provincial/state interoperability offices with inputs from working groups, committees to ensure inclusion of all levels of government. Possibly associations (e.g. police chiefs).

Who might want to be involved? e.g. individual(s) or organization(s)
All levels of government and association.

Opportunity Analysis

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~ Thomas A. Edison

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7. **Appointment of a cross-border communications interoperability coordinator from each province and at the federal level equivalent to the Statewide Interoperability Coordinators (SWIC) in the U.S.**

Detailed Opportunity Description

What name can we give this opportunity so that everyone understands what it is?

OA7. Establish an interoperability coordinator role/office at provincial and federal levels.

What are some of the key elements that make up this opportunity?
If you were going to "tell someone the story", what are the certain facts, events, dates, people, etc. that you would have to include in order to "give them the picture"?

- Equivalent of SWIC role.
- Provincial interoperability coordinator.
- Federal representative to help coordinate and support Federal, inter-provincial and international issues. Single point of contact for PWIC.
- Push issues up for policy development and legislated support.
- Coordinate

Ideal Future State

What is the ideal future state? When we seize the opportunity, what will be different?

Coordination and resources are readily available to all public safety-security- stakeholders so that interoperability is developed in a prioritized consistent manner federally, provincially, and locally.

Resources: Liaison, Information exchange/clearinghouse function, resource sharing, best practices, expertise-advice are facilitated nationally.

Teeth? Mandated at senior levels in each province, Federal government. Funding (infrastructure) tied to following established guidelines.

How will we know that we are successful? How will we measure success?

- Every province and territory establishes role.

- Effective interoperability is a continuum requiring ongoing oversight, evaluation, further development, refreshing as requirements evolve.

- Annual reporting of progress on mandate.

- Interoperability progress visible on SAFECOM/CITIG continuum nationally

- Working group of SOREM?

What will make achieving the ideal future outcome difficult? (challenges)

Federal cannot mandate provincial role(s). However, elements of influence can be drawn-Ind Can to encourage participation. Federal departments/agencies will participate in provincial group.

Urgency / Priority
Why should this be a priority?
Patchwork of support and coordination resources currently.
Duplication of resources (development models, exercises,) and lack of awareness or easy access of resources, best practices hinders development of interoperability in many

Existing Tools/Infrastructure/Information and Best Practices
Are there existing tools/infrastructure/information, current initiatives/projects or best practices that might inform or support this initiative?

What?	*Who "owns" it?*	*Where can we get more information?*
	PSC	
	NB –	Ernie MacGilivray
	BC-	Mike Webb
	NS-	
	SWIC	
	DHA	

Call for Leadership
Who might lead this initiative? Is there an organization that might seem better suited to work in the leadership role?
Provincial – emergency management agencies Federal - PSC
Who might want to be involved? e.g. individual(s) or organization(s)

Describe a general approach to getting this done. Think of a "to-do" list.
- Needs mandate/authority clarified. - Development roadmap across provinces & federal. - Identify resource person in each province/territory & federal - Representation from tri-services, local governments, provincial departments, federal(regional) representatives
What might be some of the potential deliverables?
- Establish Federal-Provincial development team. - Common framework

Coordination and Further Detailed Planning First Step
If we decided to move forward and address this opportunity, what does your group believe is the necessary FIRST STEP towards the ideal future state? PSC encourages each province to identify local working contact for interoperability. Consideroint letter from DM's.
What are the objectives of the First Step? Establish clear mandate and ownership
Who might want to inform or take an active role in this First Step? Working group-BC, Ont, NB, NS
What are any of the particular activities that might be part of the First Step?
Are there any time restrictions or opportunities that might inform the timeline for taking this First Step?

Opportunity Analysis

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dressed in overalls and looks like work"*

~ Thomas A. Edison

8. Identification and engagement of cross-border champions

Detailed Opportunity Description

What name can we give this opportunity so that everyone understands what it is?

OA8. There is a major requirement to create champions to drive cross border interoperability.

What are some of the key elements that make up this opportunity?
If you were going to "tell someone the story", what are the certain facts, events, dates, people, etc. that you would have to include in order to "give them the picture"?

To date there has been good workshop and facilitating the discussion, but the next step evolves into creating a clear champion. There has been a lot of ground level support, workgroups, workshops, but no clear champion that has been created who is responsible and accountable to deliver on this initiative.

Has to have major influence to make it happen both up and down.
Champion must have a vested interest (skin in the game) in the success of the cross border interoperability.

Ideal Future State

What is the ideal future state? When we seize the opportunity, what will be different?

Have to communicate the current state so that influential stakeholders fully understand the current state and the lack of interoperability, in order to create champions to formally address this issue.

Create an office within Public Safety to formally address cross border interoperability. This would parallel the champions on the US side(NRCC and OEC).This office would have dedicated funding in order to deliver on this strategic priority of cross border interoperability.

How will we know that we are successful? How will we measure success?

We will know that this is successful when an actual office is created that addresses cross border interoperability within Canada.

What will make achieving the ideal future outcome difficult? (challenges)

Lack of funding and Government prioritization.

Urgency / Priority

Why should this be a priority?

It does not exist now and cross border interoperability remains a unsolved problems which directly affects the ability of first responders to operate together around the US/Canada Border.

Existing Tools/Infrastructure/Information and Best Practices

Are there existing tools/infrastructure/information, current initiatives/projects or best practices that might inform or support this initiative?

What?   *Who "owns" it?*   *Where can we get more information?*

Call for Leadership

Who might lead this initiative? Is there an organization that might seem better suited to work in the leadership role?

Public Safety and DHS.

Who might want to be involved? e.g. individual(s) or organization(s)

CACP, IBET Agencies, CITIG, CAFC, IAFC, IACP,

Describe a general approach to getting this done. Think of a "to-do" list.

All of the agencies and association must speak with a common voice in order to get the message prioritized.

What might be some of the potential deliverables?

Creating a Canadian version of the OEC in states within public safety Canada.

Coordination and Further Detailed Planning First Step
If we decided to move forward and address this opportunity, what does your group believe is the necessary FIRST STEP towards the ideal future state? Create Champion and dedicated funding.
What are the objectives of the First Step?
Who might want to inform or take an active role in this First Step? Public safety Canada.
What are any of the particular activities that might be part of the First Step? Common communication strategy, outlining the priority of addressing this issue.
Are there any time restrictions or opportunities that might inform the timeline for taking this First Step?

Opportunity Analysis

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~ Thomas A. Edison

9. Development of an information-sharing inventory

Detailed Opportunity Description

What name can we give this opportunity so that everyone understands what it is?

OA9. Who's Who in the Zoo!

What are some of the key elements that make up this opportunity?
If you were going to "tell someone the story", what are the certain facts, events, dates, people, etc. that you would have to include in order to "give them the picture"?

- Formally interview services on both sides of the border.
- Obtain pertinent information to facilitate identifying the current state of cross border interaction.
- Create a list (Database) containing the contact information necessary for each service and this, based on a pre-established template.
- Use the information to obtain an accurate "State of Affairs" picture, Nationally, Locally as well as Internationally (if needed).
- This will help identify Best Practices, as well as gaps the system.

Ideal Future State

What is the ideal future state? When we seize the opportunity, what will be different?

We will know WHO interacts with WHO, HOW they so it, WHAT they do it with, WHEN (or how often) they do it. The database will be maintained up-to-date so that it is of use operationally. This can be done through a secure database managed Federally or by the State/Province.

How will we know that we are successful? How will we measure success?

When the end user (Fire Officer, Police Officer, EMS Officer, etc…) can access "needed" Information contained in the database.

What will make achieving the ideal future outcome difficult? (challenges)

Coordinating and cataloging the information from smaller agencies who do not have the resources. Convincing certain agencies of a need to share.

Urgency / Priority

Why should this be a priority?

- This information is critical to every service and to proper planning.
- This is "Low Hanging Fruit"!
- Regardless of how the information is made available (electronic, etc…) usable formats are available to every level of technology.

Urgency / Priority

Existing Tools/Infrastructure/Information and Best Practices

Are there existing tools/infrastructure/information, current initiatives/projects or best practices that might inform or support this initiative?

What?	*Who "owns" it?*	*Where can we get more information?*
Databases	Industry Canada	Interviews
	EMO	Municipal EMO

Call for Leadership

Who might lead this initiative? Is there an organization that might seem better suited to work in the leadership role?

CITIG

Who might want to be involved? e.g. individual(s) or organization(s)

Public Safety Canada, Department of Homeland Security, EMO, FEMA, other Feds, Provinces, States, Municipalities

Describe a general approach to getting this done. Think of a "to-do" list.

What might be some of the potential deliverables?

- Establish a template which appends or expands, so that it fits all, and post it on a "secure" web site or by formal interview for those agencies that cannot or will not use electronic media.

- Process the information so as to glean the data necessary for planning and catalog and publish all necessary operational information.

- Create a process to ensure that the information is kept accessible and up-to-date so that it is of use to practitioners.

Coordination and Further Detailed Planning **First Step**
If we decided to move forward and address this opportunity, what does your group believe is the necessary FIRST STEP towards the ideal future state?
What are the objectives of the First Step?
Who might want to inform or take an active role in this First Step?
What are any of the particular activities that might be part of the First Step?
Are there any time restrictions or opportunities that might inform the timeline for taking this First Step?