Communications Interoperability Action Plan for Canada

MARCH 2013

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Communications Interoperability Action Plan Tasks, Sub-Tasks and Deliverables 2013-2014

1. The purpose of this Communications Interoperability Action Plan is to articulate the specific tasks assigned to each action item derived from the Communications Interoperability Strategy for Canada (CISC), including those items carried forward from the previous version of the 2012 Action Plan, the last Federal, Provincial, Territorial (F/P/T) Interoperability Sub-Working Group (IWG) meeting in Toronto, Ontario December 2012 and the Canadian Communications Interoperability Plan Working Group's last meeting in Windsor in September 2010. The Action Plan integrates related interoperability initiatives within the public safety community used in the compendium of day-to-day to extreme operations, thereby enhancing the safety of emergency personnel and improved efficacy for the emergency management community. Each designated task is assigned a coordinator, deliverable(s) and a prospective timeline.

   The F/P/T IWG is based on the membership of F/P/T interoperability coordinators. In addition, there are representatives/liaisons from federal departments, the Canadian Association of Chiefs of Police, the Canadian Association of Fire Chiefs, Emergency Medical Services Chiefs of Canada, the Canadian Interoperability Technology Interest Group and non-voting members from other government departments, municipalities, academia and industry. Additional representation at meetings may be invited by the co-chairs to achieve a balanced representation of expertise and perspectives, in order to fully represent issues being discussed.

   Members of the working group will provide the F/P/T IWG with a link to other F/P/T and international interoperability groups, act as a resource body to F/P/T agencies in their achievement of voice/data communications interoperability and provide policy and operational perspective to jurisdictional specific working groups on communications interoperability.

   The mandate of the F/P/T IWG is to set goals and identify key national priorities to enhance governance, planning, technology, training and exercises to promote national and bilateral interoperable voice and data communications.

2. Action items are directly linked to the Strategic Objectives laid out in the CISC:

   - Governance: The development of supportive and responsive governance architecture at the national and bi-lateral level;

   - Standard Operating Procedures: The development of harmonized standardized operational procedures, information exchange models and protocols;

   - Technology: Promote and support the ongoing and future development of a national emergency communications based on common user requirements, open standards and a system of systems approach. Develop a public safety controlled mobile broadband communications network expected to operate in the 700 megahertz (MHz) band;

   - Training and Exercises: The continued evolution of multi-faceted and cross-jurisdictional education, training, exercise and evaluation programs; and

- Usage: The daily use of present and future communication and information system(s) including all further development and evolution.

3. The specific timelines established for each action item will be reviewed by the F/P/T IWG and approved by Senior Officials Responsible for Emergency Management (SOREM) during its cyclical review of the Action Plan. Any requirement for reprioritization will be addressed through SOREM and incorporated via the annual version of this evergreen process.

4. The organization or agency initially identified as the coordinator for each action item is the primary or lead for that issue. Through discussion and approval via the F/P/T IWG, additional organizations have been identified as those who are in direct support to, or directly linked with, the specific item.

5. This document guides the development of complimentary and supportive action plans for each of the identified action items. This concurrent planning activity will facilitate the coherency of multi-jurisdictional efforts in the move towards the desired interoperability end state.

6. These action items complete with tasks, deliverables and timelines will be prioritized annually by the F/P/T IWG and subsequently approved by SOREM.

Action Items	Task	Sub-Task	Coordinators	Deliverable	Tracked Source	Timeline
Canada Governance						
1. Develop and share F/P/T Interoperability Plans & Roadmaps (3-5 years forecast on specific lines of operation/ development)	1. Develop/refine P/T interoperability plan framework	a. Conduct interoperability self-assessment. Self-assessment should be reviewed and confirmed on a regular period	PS IDO/FPT IWG		CCIP Goal 6	2013 *Carried over from 2012 Action Plan*
2. Maintain proactive communication of interoperability and the Communications Interoperability Action Plan	1. Develop strategic communication plan supportive of National Strategy	a. Develop strategic communications plan for: (1) Policy Makers and IM/IT practitioners (2) Decision makers (for voting WG representatives) (3) Public (4) Emergency Responders	PS IDO/CITIG P/T	A strategic communications plan that informs and educates senior F/P/T organizations, interested agencies and the public on issues of interoperability	CCIP Goal 2 F/P/T IWG Meeting 8 Dec 2011	2013 *Carried over from 2012 Action Plan*
3. Review and update the Communications Interoperability Strategy for Canada			PS IDO/FPT IWG	Communications Interoperability Strategy for 2014 approved by SOREM		Dec 2014
Standard Operating Procedures (SOPs)						
4. Shape common interoperability environment for voice and data communication		a. Implement a Change Management Process (CMP) for Canadian Emergency Management Communications Specifications (CEMCS)	PS IDO / CSS	Usage of the approved CMP to publish CAP-CP 1.0 . A web site will be established to house CAP-CP and other CEMCS documents managed under the CMP		Oct 2013

Action Items	Task	Sub-Task	Coordinators	Deliverable	Tracked Source	Timeline
Future Communication Systems						
5. Develop a 700 MHz spectrum national implementation strategy and program for public safety use	1. Develop the governance structure for the National Public Safety Broadband Network	Form a 5 person Governance Working Group	FPT IWG	Develop the Not-for-Profit Corporation framework Define the Board of Directors composition and selection process Define the appropriate legal framework to support the Corporation	700 MHz PMT and DRDC CSS Canadian Safety and Security Program (CSSP)	Oct 2013 *Carried over from 2012 Action Plan*
	2. Develop the business case in support of the governance model	a. Develop the market sounding report	FPT IWG / P3 Canada	Business and funding model identified	700 MHz PMT and DRDC CSS' CSSP	Apr 2013
		b. Develop the financial feasibility study	FPT IWG / P3 Canada			
	3. Develop SOPs and Training	Develop a template for SOPs Articulate an exercise and training framework	FPT IWG	Exercise and SOPs framework distributed for implementation	700 MHz PMT and DRDC CSS' CSSP	Mar 2014
	4. Establish a center to conduct tests, evaluations and research on communications technologies (e.g., CIRTEC, PSCR (Boulder, CO)	a. Develop national voice/data testing methods for use by F/P/T, interoperability community, including municipalities, industry and associations	DRDC CSS	National communications testing modality that supports interoperability evaluation and validation	DRDC CSS' CSSP	Dec 2013 *Carried over from 2012 Action Plan*

Action Items	Task	Sub-Task	Coordinators	Deliverable	Tracked Source	Timeline
	5. Define the National Public Safety Broadband Network architecture		DRDC CSS	Technical document detailing the network architecture incl the delineation between the national and regional levels	DRDC CSS' CSSP	Apr 2013
	6. Establish the network and information security requirements		DRDC CSS	Security framework to include a risks and threats assessment	DRDC CSS' CSSP	Oct 2013
	7. Establish a set of minimum interoperability standards		DRDC CSS	Minimum set of interoperability standards adopted	DRDC CSS' CSSP	Apr 2013
	8. Prepare the technical sections of the reference RFI		DRDC CSS	Technical RFI developed and published		June 2013
	9. Establish pilot programs		PS IDO (PMT)		DRDC CSS' CSSP	Oct 2013 *Carried over from 2012 Action Plan*
6. Support national implementation of MASAS	1. Operationalization of MASAS National Information Exchanges (MASAS-X) and transition to self-sustainable business model		CSS/PS IDO		CSS MASAS Operationalization Task Group	2013 *Carried over from 2012 Action Plan*
	2. Technical support to FPT and participating vendor system(s), basic tools and data aggregation (hub) architecture		CSS		CSS MASAS Development Task Group	Mar 2013

Action Items	Task	Sub-Task	Coordinators	Deliverable	Tracked Source	Timeline
	3. Define the national geographic information system and emergency management information sharing architecture		CSS/PS IDO/NRCan	Functional and interoperable geographic information system	CSS MASAS Operationalization Task Group	*Carried over from 2012 Action Plan*
	4. Produce the "as is" architecture that identifies those national information sharing tools that are currently operational and relevant to emergency management		CSS/PS IDO		CSS MASAS Operationalization Task Group	Dec 2013 *Carried over from 2012 Action Plan*
	5. Develop target architecture		CSS		CSS MASAS Operationalization Task Group	Dec 2013
	6. Develop effective and scalable information exchange SOPs and best practices for local, regional, P/T emergency responder agencies	a. Identify communications interoperability best practices at the P/T level	CSS	Compendium of information exchange SOPs and best practices for review and integration by stakeholders	CCIP Goal 4 – CCIP Annex E Action Plan 6 CCIP Annex F Action Plan 7 –	Ongoing *Carried over from 2012 Action Plan*
	7. Support development and implementation of an Operations Center Information Portal (OCIP) complete with integrated MASAS interface and accessible to all Canadian EM government agencies		GOC/CSS	Operational OCIP MASAS module for OCIP		Ongoing *Carried over from 2012 Action Plan*

Action Items	Task	Sub-Task	Coordinators	Deliverable	Tracked Source	Timeline
	8. Establish a High Resilience Environment (HRE) for supporting critical-to-EM tools such as MASAS and OCIP. Accommodated in a government-owned and controlled high-resilience secure data center		CSS technical coordination lead with initial partners from PS/GOC, HC, PWGSC, and NSS	HRE at Shared Services Canada (site 1); Environment Canada Met Center (site 2); Simon Fraser University Network Center for Emergency Management Operations (site 3)		Site 1: Jan 2013 Site 2: Apr 2013 Site 3: Nov 2013 *Carried over from 2012 Action Plan*
	9. Transition implementation to an operational capability of national decision supporting capabilities each with interoperable interface to MASAS: - Long Range Weather Forecast		CSS technical lead coordinator with following partners from: NRCan (HAZUS), Environment Canada (Weather), PS/GOC			Nov 2013 *Carried over from 2012 Action Plan*
	10. Promote MASAS-X to regional F/T emergency management stakeholders through coordination with the Arctic Security Working Group (ASWG) and the Northern Communications and Information Systems Working Group (NCIS WG)	a. Identify opportunities to promote MASAS-X through emergency exercises including tabletop, functional and/or live exercises. b. Support CITIG and the SOREM F/P/T Interoperability WG c. Support PS IDO d. Support ASWG	NCIS WG Executive Committee / PS IDO	NCIS WG to support through biannual meetings	NCIS WG Portal	Ongoing
7. Support the adoption of data exchange standards/ models	1. Educate stakeholders on the national and international data exchange standards		PS CIOD		PS	Ongoing *Carried over from 2012 Action Plan*

Action Items	Task	Sub-Task	Coordinators	Deliverable	Tracked Source	Timeline
	2. Advocacy of National Information Exchange Model (NIEM)	Advice, guidance, training and briefings about NIEM to the Canadian information sharing user community	PS CIOD			Ongoing
	3. Support emergency management departments and agencies in the management and adoption of these standards		PS CIOD		PS	Ongoing *Carried over from 2012 Action Plan*
8. Support implementation of the National Public Alerting System (NPAS)	1. Support SOREM F/P/T Public Alerting Sub Working Group		PS IDO/MB	Chairing/Secretariat support for bimonthly meetings		Ongoing *Carried over from 2012 Action Plan*
	2. Develop alert Common Look and Feel (CLF) guidelines		MB/PS IDO	CLF policy and requirements for the National Public Alerting System CSS Tiger Team CLF project technical recommendations – February 2013		Ongoing *First guidelines document to be complete by Apr 2013* *Carried over from 2012 Action Plan*
	3. Expansion of public alerting to wireless devices		IC/CSS/PS IDO	Workplan, reference model and technical specification for wireless alerting gateway. Includes a planning workshop with industry and FPT stakeholders in summer 2013. Preliminary FPT issuer requirements necessary for the development of technical protocols /standards, by June 2013.	CSSP Wireless Public Alerting Project Number CSSP-2012-TI-1063	Ongoing 2012-2016 *Carried over from 2012 Action Plan* Jun 2013

Action Items	Task	Sub-Task	Coordinators	Deliverable	Tracked Source	Timeline
				Develop prototype wireless alerting gateway for NAAD System alert feed in 2013-15 (funding dependent).		2013-2015
				Lab and field test a pilot wireless alerting system in partnership with regional public alerting agencies in 2014-16 (funding dependent), with the objective of demonstrating the feasibility of wireless (cell phone) alerting.		2014-2016
				Validate public safety operational requirements for a wireless (cell phone) public alerting capability.		
				Produce a recommended transition strategy for Canadian wireless public alerting implementation in 2016.		
Social Media						
9. Support development of social media activities related to emergency management	1. Capture knowledge and best practices on social media for EM	a. Explore availability, and if nonexistent, plan and execute development of an online training module for EOCs and first responder agencies, on "Best Practices for Filtering and Exploiting SM Feeds for use in Decision-Supporting Environments"	PS/CSS/CITIG	Tutorial module (~ 1 hour) to provide knowledge from experienced Social Media EM practitioner/organizers (Ushahidi, Crisis Commons etc) using professionally packaged multi-media format material delivered through a web site or packaged on a CD/USB Target audience: EOC and responder agency Social Media EM analysts		Aug 2013

Action Items	Task	Sub-Task	Coordinators	Deliverable	Tracked Source	Timeline
		b. Identify public safety and EM open data resources from public, NGO, academic and private sector sources that can help Canadians better mitigate, prepare for, respond to and recover from emergency incidents	PS IDO	Research report that includes: a) inventory of public safety / EM open data sources; b) recommendations on an IT/IM approach to best aggregate this data for public consumption and to spur innovation with Web 2.0 and social media c) Three case studies on usage of social media for EM, at least one of which will focus on a cross-border emergency event		Mar 2013
10. Host Second National Social Media for Emergency Management Workshop		a. Take the results of the first national summit, combine its recommendations with the current Action Plan and bring together SMEM practitioners from across Canada to a hosted workshop. Workshop goal is to develop further action plan items for discussion at the 2013 SOREM IWG face to face meeting.	Yukon Government– Protective Services, CITIG and Canadian Red Cross	Detailed Summit report containing clear next steps and tasks designed to further this Action Plan		Nov 2013

Action Items	Task	Sub-Task	Coordinators	Deliverable	Tracked Source	Timeline
Canada's Northern Strategy						
11. Align Canada's Communications Interoperability Action Plan for Canada and Canada's Northern Strategy	1. Coordinate with northern partners to ensure priorities are reflected in the Communications Interoperability Action Plan for Canada	a. Formalize linkages between the PS Arctic Regional Office, the Arctic Security Working Group, the Northern Communications Information Systems Working Group and the F/P/T IWG	PS Arctic Regional Office Arctic Security Working Group (ASWG) Northern Communication & Information Systems Working Group Co-Chair F/P/T IWG	Provide northern voice on pan territorial communications realities and issues Comprehensive Arctic Communications Strategy Opportunities are identified for Yukon/Alaska cross border interoperability activities	Portals	Ongoing Mar 2014 Ongoing
Canada – United States Governance						
12. Maintain bilateral governance protocols	1. Identification (i.e., via a look-up table/ directory)and engagement of cross-border interoperability champions/groups (provincial/state/federal level)		PS IDO/DHS OEC	Named national champions for cross border interoperability	Windsor Report Pt 8 CANUS NIEM Governance agreement CANUS CIWG Work Plan for 2012/2013	2013 *Carried forward from 2012 Action Plan*
	2. Province/State relationships to identify cross-border interoperability efforts		PS IDO	P/Ts to deliver information to the Canada-U.S. Communications Interoperability Work Plan	CANUS CIWG Work Plan for 2012/2013	Ongoing
Future Communication Systems						
13. Enhance bilateral communications in the safety and security forums	1. Develop a stakeholder information and asset exchange matrix		PS IDO/DHS OEC	CANUS border-related stakeholder information and asset inventory	CANUS CIWG Work Plan	Dec 2013 *Carried over from 2012 Action Plan*

Action Items	Task	Sub-Task	Coordinators	Deliverable	Tracked Source	Timeline
	2. Begin formal identification of cross-border interoperability channels available border-wide		PS IDO/DHS OEC	Compendium of available border voice/data channels	CAN US CIWG Work Plan	2012-Ongoing *Carried over from 2012 Action Plan*
	3. Resolve restrictions that prohibit sharing of frequencies, personnel and resources across state, provincial, and national boundaries		(PS IDO & IC) /(DHS OEC & FAA)	Operational freedom amongst CANUS safety and security practitioners	CANUS CIWG Work Plan	2012-Ongoing *Carried over from 2012 Action Plan*
Training and Exercises						
14. Integration or Synchronization of education, training, and exercise plans	1. Develop an integrated training and exercise calendar involving communications (voice) interoperability at the F/P/T/M level		PS/CSS	Calendar of educational opportunities, training activities, and exercise programs at the F/P/T/M level to allow stakeholders to maximize their preparedness and confirm required interoperability		2013 *Carried over from 2012 Action Plan*
15. The establishment of common communications interoperability evaluation standards	1. Develop assessment and evaluation criteria for communication interoperability standards and SOPs		PS IDO/CSS/BC	TOR and evaluation/assessment parameters for this capability	CSS 700 MHz National Architecture Implementation Task Group	2013 *Carried over from 2012 Action Plan*
	2. Develop assessment and evaluation plan templates for use at the F/P/T level		PS IDO/CSS/BC	Assessment and Evaluation Methodology and Plan		*Carried over from 2012 Action Plan*
	3. Implement assessment and evaluation program at F/P/T/M level		PS IDO/CSS/BC	Baseline assessments at F/P/T level to validate SOPs, best practices, and provide observations and lessons learned emergency response community		*Carried over from 2012 Action Plan*

Completed 2012-2013 Action Items

Action Items	Task	Sub-Task	Coordinators	Deliverable	Tracked Source	Timeline	Status
Canada Governance							
2) Maintain proactive communication of interoperability and the Communications Interoperability Action Plan		b. Maintain a web presence for interoperability best practices and tools for data	PS CIOD	Collection of tools, white papers, architecture, artifacts and standards information		Mar 2012	Complete –IDO SharePoint site
Standard Operating Procedures (SOPs)							
4) Shape common interoperability environment for voice and data communication		Develop a Change Management Process (CMP) for Canadian Emergency Management Communications Specifications	PS IDO / CSS	A CMP process document that can be used to manage communication specifications of national interest, including CAP-CP		Jun 2012	CSS funded Project launched with Canadian General Standards Board (CGSB) to provide advice and serve as pseudo-auditor of first CMP usage with CAP-CP 1.0 and establishment of a GoCweb site to host CAP-CP / CEMCS documents. Next steps will be application of approved CMP for publication of CAP-CP 1.0. This will include a project with the Canadian General Standards Board serving as pseudo-auditor of this first usage of CMP, and advice on the establishment of a GoC website resource to host CAP-CP documents

Action Items	Task	Sub-Task	Coordinators	Deliverable	Tracked Source	Timeline	Status
Future Communication Systems							
5) Support national implementation of MASAS	Develop effective and scalable information exchange SOPs and best practices for local, regional, P/T emergency responder agencies	a) Identify communications interoperability best practices at the P/T level	CSS	Compendium of information exchange SOPs and best practices for review and integration by stakeholders	CCIP Goal 4 – CCIP Annex E Action Plan 6 CCIP Annex F Action Plan 7	Aug 2012	Initial deliverables complete - CSS published a version 1.0 on MASAS site and were looking at an online forum for all stakeholders, including municipalities, to support
Canada – United States Governance							
9) Maintain bilateral governance protocols	2. Implement bilateral interoperability mandate between Public Safety Canada and the Department of Homeland Security		PS/DHS CANUS CIO WGs and NIEM, ISE CSS/DHS S&T	Bi-lateral mandates that facilitate cross border operations	Windsor Report Pt 3 NIEM Governance agreement	2012-ongoing *Carried forward from 2011 Action Plan*	Complete – reflected in the Canada-United States Communications Interoperability Working Group Work Plan
	3. Develop MOU/MOA to eliminate legal impediments to cross-border sharing of communications and information		PS/DHS CSS/FEMA PS/FEMA	A MOU/MOA that eliminates legal impediments that limits cross-border information sharing and communications IPAWS-MASAS Agreement (Developmental use) IPAWS-MASAS (Operational Use)	Windsor Report Pt 10 CSS-MASAS National Implementation Team	2012 *Carried forward from 2011 Action Plan* Feb 2012	Complete – reflected in the Canada-United States Communications Interoperability Working Group Work Plan
	4. Develop bilateral interoperability protocols at CANUS, state/provincial levels		PS	Compendium of interoperability procedures currently in between province/state and local/local use during all bilateral operations		Dec 2012	

Action Items	Task	Sub-Task	Coordinators	Deliverable	Tracked Source	Timeline	Status
	5. Draft model MOU for routine cross-border use of the licensed spectrum		PS/CSS & DHS/PSCR &/or NPSTC	MOU that facilitates cross-border communications and information exchange	CSS 700 MHz National Architecture Implementation Task Group	2014	Complete – reflected in the Canada-United States Communications Interoperability Working Group Work Plan
10. Establish CANUS Border Communication Procedures	1. Develop standardized bilateral communications SOPs for normal and disaster/emergency operations		CSS/PS IDO	Flexible, robust and effective operating procedures that increases the efficacy of bilateral safety and security operations	CSS 700 MHz National Architecture Implementation Task Group	Dec 2012	Complete – reflected in the Canada-United States Communications Interoperability Working Group Work Plan
Future Communications Systems							
11. Enhance Science and Technology Interoperability Collaboration	1. Develop through the Enhanced Resiliency Experimentation Program (aka CAUSE Resiliency) a CANUS Border Region Interoperability Technology Demonstration Series (CBRITD Series)	NRCan EQ alert feed integration CANUS CAP alert exchange interface. A) Execute CAUSE Resiliency 1; B) Video & Report CNPHI – MASAS Pilot Execute Regional Experiment	PS/CSS and DHS S&T	Mandate, concept of operations and terms of reference for A) "CBIRTD series" and for B) "Interoperable EM/EOC Series" CAUSE Resiliency (West Coast) - report and videos CAUSE Resilience (Pandemic)	PS Data Input	Jun 2012 A) Jun 2011 B) Apr 2012 Dec 2012	Complete – reflected in the Canada-United States Communications Interoperability Working Group Work Plan

Action Items	Task	Sub-Task	Coordinators	Deliverable	Tracked Source	Timeline	Status
			PS/CSS and DHS S&T	Guidance on project deliverables expected from the CBRITD Series program			
			PS/CSS and DHS S&T	Multi-year forecast of CBRITD Series locations, potential Series themes and sponsors		2012 - Ongoing	
			PS/CSS and DHS S&T	CBRITD Series resource requirement and allocation program		May require bridging to mesh with Canada's business cycle	

Acronyms

ASWG	Arctic Security Working Group
CANUS	Canada-United States
CAP-CP	Common Alerting Protocol – Canadian Profile
CAUSE	Canada-United States Enhances Resiliency Experiment
CBRITD	CANUS Border Region Interoperability Technology Demonstration
CCIP	Canadian Communications Interoperability Plan
CEMCS	Canadian Emergency Management Communications Specifications
CIOD	Chief Information Officer Directorate
CIRTEC	Communications Interoperability Research, Test & Evaluation Centre
CITIG	Canadian Interoperability Technical Interest Group
CLF	Common Look and Feel
CMP	Change Management Process
CRC	Communications Research Centre
CSS	Centre for Security Science
DHS	Department of Homeland Security
DND	Department of National Defense
DRDC	Defense Research and Development Canada
EC	Environment Canada

EM	Emergency Management
EMBC	Emergency Management British Columbia
EMSI	Emergency Management Systems and Interoperability
EOC	Emergency Operations Centre
EQ	Earthquake
FEMA	Federal Emergency Management Agency
FOC	Full Operational Capability
F/P/T/M	Federal/Provincial/Territorial/Municipal
GIS	Geographic Information System
GOC	Government Operations Centre
HAZUS	Hazards United States
HC	Health Canada
HRE	High Resilience Environment
IC	Industry Canada
ICOE	Interoperability Centre of Excellence
ICS/IMS	Incident Command System/Incident Management System
IDO	Interoperability Development Office
IER	Information Exchange Requirements
IOC	Initial Operational Capability

IPAWS	Integrated Public Alert and Warning System
ISE	Information Sharing Environment
MASAS	Multi-Agency Situational Awareness System
MB	Manitoba
MIP	Master Implementation Plan
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
NAADS	National Alert Aggregation and Dissemination System
NPAS	National Public Alerting System
NB	New Brunswick
NDQS	National Data Quality Standards
NIEM	National Information Exchange Model
NPAS	National Public Alerting System
NPSTC	National Public Safety Telecommunications Counsel
NRCAN	Natural Resources Canada
NSS	National Search and Rescue Secretariat
OCIP	Operations Center Interconnectivity Portal
ON	Ontario
PM	Project Management

PMO	Project Management Office
PMT	700 MHz Project Management Team
PS	Public Safety Canada
PSCR	Public Safety Communications Research program
PWGSC	Public Works and Government Services Canada
RCMP	Royal Canadian Mounted Police
S&T	Science and Technology
SCONSAD	Standing Committee on National Security and Defence
SOREM	Senior Officials Responsible for Emergency Management
SOPs	Standard Operating Procedures
SOR(s)	Statement of Requirement
TBS	Treasury Board Secretariat
TBC	To Be Confirmed
TBD	To Be Determined
TBS	Treasury Board Secretariat
TC	Transport Canada
TOR(s)	Terms of Reference
WG	Working Group
WRT	With respect to/ With regards to