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RESULTS OF THE RESILIENCE STAKEHOLDER COMMUNITY SURVEY

INTRODUCTION

On March 18, 2013, Public Safety (PS) Canada hosted an Interdepartmental Workshop on Resilience that brought together a variety of stakeholders engaged in resilience-related activities. The workshop was intended to solicit feedback on a proposed set of guiding principles that would define a common approach to resilience-related work and support a new national resilience strategy for Canadians. Researchers from the Defence Research and Development Canada (DRDC) Centre for Security Science (CSS) supported PS Canada's efforts by preparing and administering a survey which was designed to capture information in support of the workshop objectives (Annex A). The results of the survey analysis are presented in this report.

DISCUSSION

There were 93 attendees at the workshop, representing federal departments and agencies, provincial and municipal organizations, international partners and academia. Fifty-one individuals completed the survey, of whom 67% said that they were a member of a resilience-related working group or roundtable. The most commonly referred to working groups were the Technical Integration Group Engaged in Research on Resilience (TIGER Team) at Public Safety (PS) Canada, the Climate Change Adaptation Platform, Canada's Platform for Disaster Risk Reduction (DRR), Canada's Risk and Hazards Network (CRHNet) and the All Hazards Risk Assessment (AHRA) interdepartmental working group.

Participants were asked to identify programs, activities, or projects in which they were involved that deal with some aspect of resilience, and to indicate to which federal or departmental policies or strategies those were linked. This information was intended to augment the network analysis previously undertaken by the DRDC CSS research team.¹ However, responses tended to be inconsistent and incomplete. Consequently very few activities, programs and projects were identified (see Annex B). The pertinent question will be restructured to address these irregularities during a second wave of surveys.

Another survey objective was to undertake a social network analysis of the mostly federal government employees that were engaged in resilience-related activities. Sixty-one percent of respondents provided a valid list of names, which enabled the generation

¹ K. Kaminska, S. Norton and S. Verga "Mapping of Legislation and Policy Instruments Related to Emergency Management and National Security", DRDC CSS Letter Report, February 14, 2013.

of preliminary social network diagram shown in Figure 1 of Annex B. Actual names are omitted for reasons of privacy. Given the small size of the network, and the amount of missing information, it is not surprising that the network is fragmented into 14 separate groupings. More data is needed before it can be determined whether this degree of fragmentation actually exists between the individuals who work in the area of resilience or whether it is in fact an artifact of the small sample size.

A final survey objective was to evaluate the relative importance of seven proposed resilience principles. Respondents were asked to rate the importance of each of the principles, on a four-point Likert scale, before being asked to indicate which ones they considered to be the most and next most important principle (see Annex B). The average rating for all seven principles was found to be “rather important”. The principles: “Understand and adapt to meet the actual needs of the whole community”, “Involve, engage and empower all parts of the community “, and “Foster shared, local ownership for action to address short and long-term risks” were rated higher than the rest in terms of importance. By contrast, the principle “Establish a holistic governance approach” was ranked as being somewhat less important when compared to the others.

Participants were encouraged to provide comments on any aspect of the survey or on the workshop itself, of which 41% elected to do so. Approximately half of the comments related directly to the proposed resilience principles. One common theme was the perceived overlap between many of the proposed principles along with suggestions that they be consolidated or streamlined. The fact that all of the principles received similar overall rankings on importance lends credence to this view. Another theme involved a lack of understanding among the workshop participants as to the purpose of the principles. Respondents expressed confusion about how the principles would relate to a new strategy. Other comments dealt with the need for a clear definition of the term “resilience” before a new strategy is developed, which reinforces the need for further research on the conceptualization of resilience; something the research team already intends to complete. All of the comments are presented in Annex C.

NEXT STEPS

The following recommendations stem from the findings outlined in this report:

- 1) Since the survey captured only a small subset of what is apparently a much larger population of stakeholders working in the area of resilience, it is recommended that a second targeted, electronic survey be administered to capture the missing data. The data will permit the research team to augment and layer the multi-mode network map that was previously completed with an understanding of the stakeholders who are engaging in resilience-based activities, and to complete an analysis of the structure of relationships and activities that exist, and their links to legislation and policy.
- 2) It is recommended that the proposed draft resilience principles be revised to address confusion and concerns about duplication; following which, another round of consultation on the revised principles is recommended with key stakeholders.
- 3) A policy-relevant, concept paper on resilience will be developed that will serve as background and input when developing the new national resilience strategy.

Comments or questions on this Letter Report are welcome and can be addressed to:

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**Canadian Safety
and Security Program**

Study of Resilience and the Stakeholder Community

Survey Objective

Public Safety Canada has identified its long-term enduring benefit for Canadians, or strategic outcome, to be: “A safe and resilient Canada”. Public Safety’s Technical Integration Group Engaged in Research on Resilience (TIGER Team) was created to help advance the horizontal management of the issue of resilience.

This study is being undertaken so that Public Safety Canada can better understand the stakeholder community, pertaining to resilience across the Public Safety portfolio and the federal government. It includes an exercise to map the “community of interest” to help the Department initiate consultations with these stakeholders on a new Whole-of-Community Resilience Strategy for Canadians. Public Safety Canada is interested in the policies and programs which advance resilience, as well as the activities and actors which support these areas.

Your Participation

You have been identified as a relevant and important stakeholder. Your perspective and input are therefore essential.

Time Commitment

We estimate the survey will take about 15 minutes to complete. Thank you very much for your time!

Confidentiality

- The information reported in this process will be used for purposes of analysis and future consultation.
- Results that identify you, and others, by name will be kept within the team administering this study.
- For publication purposes, all names will be replaced with pseudonyms or published in aggregate form.

Questions?

Defence R&D Canada Centre for Security Science was asked to lead the study and produce a report of findings.

If you have questions or concerns about the nature of this study, please contact:
Matthew Godsoe, Special Advisor to the Associate DM, at 613-991-3241 or Matthew.Godsoe@ps-sp.gc.ca.

For questions about the survey questions, please call or email:
Sean Norton, Defence Scientist at 613-944-8190 or norton.sg@forces.gc.ca.

Name:

E-mail

How to complete this questionnaire:

Use a black or blue pen to:

Mark a circle OR Print on a line or in a box



Background

1. Which organization do you work for?
Provincial employees should specify the Ministry and specific organization or Crown corporation

- ¹ Agriculture and Agri-Food Canada
- ² Canadian Food Inspection Agency
- ³ Canadian Heritage
- ⁴ Canadian International Development Agency
- ⁵ Citizenship and Immigration Canada
- ⁶ Correctional Service of Canada
- ⁷ Environment Canada
- ⁸ Foreign Affairs and International Trade
- ⁹ Health Canada
- ¹⁰ National Defence
- ¹¹ Public Health Agency of Canada
- ¹² Public Safety Canada
- ¹³ Royal Canadian Mounted Police
- ¹⁴ Statistics Canada
- ¹⁵ Transport Canada
- ¹⁶ Other, *specify* _____

2. What is the name of your work unit?

3. What is your position?

4. Are you a member of any working group or roundtable that deals with some aspect of **resilience**?

¹ No

² Yes, *specify* _____

Resilience Programs/Activities/Projects

5. Please list any and all departmental **programs, activities or projects** in which you're involved that deal with some aspect of **resilience**. Please identify which, if any, federal and/or departmental policy or strategy it supports? *The projects, programs and activities can deal with any threat, hazard or risk in relation to your interpretation of resilience.*

Resilience Program/Activity/Project	Supported by the following Federal and/or Departmental Policy/Strategy (<i>List all that apply</i>).
1. _____	(a) _____ (b) _____ (c) _____
2. _____	(a) _____ (b) _____ (c) _____
3. _____	(a) _____ (b) _____ (c) _____

Staple additional pages to this survey if you need more space.

Social Network Analysis

Your answer to the following question will help us to identify relationships that reveal collaboration on resilience-related programs and activities. Names will permit Public Safety to begin consultations with these stakeholders.

6. Who do you typically work or consult with on resilience-related projects, programs or activities?

These can deal with any threat, hazard or risk, and the people can come from within and/or outside your organization.

Person	Department/Agency
1. _____	_____
2. _____	_____
3. _____	_____
4. _____	_____
5. _____	_____
6. _____	_____
7. _____	_____
8. _____	_____
9. _____	_____
10. _____	_____
11. _____	_____
12. _____	_____
13. _____	_____
14. _____	_____
15. _____	_____

Resilience

7. People often understand “resilience” differently. What in your view are some of its key aspects?

8. The following principles have been derived from international sources. How important would you say are each of these principles when developing a new national resilience strategy for Canadians?

	Importance				
	Very important	Rather important	Not very important	Not at all important	Don't Know
a. Understand and adapt to meet the actual needs of the whole community	1 <input type="radio"/>	2 <input type="radio"/>	3 <input type="radio"/>	4 <input type="radio"/>	5 <input type="radio"/>
b. Involve, engage and empower all parts of the community	1 <input type="radio"/>	2 <input type="radio"/>	3 <input type="radio"/>	4 <input type="radio"/>	5 <input type="radio"/>
c. Build on actions, structure and key leaders already in place in the community	1 <input type="radio"/>	2 <input type="radio"/>	3 <input type="radio"/>	4 <input type="radio"/>	5 <input type="radio"/>
d. Conduct comprehensive, and coordinated risk assessments	1 <input type="radio"/>	2 <input type="radio"/>	3 <input type="radio"/>	4 <input type="radio"/>	5 <input type="radio"/>
e. Improve awareness of resilience and risk information in the whole community, share broadly (mainstreaming)	1 <input type="radio"/>	2 <input type="radio"/>	3 <input type="radio"/>	4 <input type="radio"/>	5 <input type="radio"/>
f. Foster shared, local ownership for action to address short and long-term risks	1 <input type="radio"/>	2 <input type="radio"/>	3 <input type="radio"/>	4 <input type="radio"/>	5 <input type="radio"/>
g. Establish a holistic governance approach	1 <input type="radio"/>	2 <input type="radio"/>	3 <input type="radio"/>	4 <input type="radio"/>	5 <input type="radio"/>

9. Would you please say which one of these principles you, yourself, consider the most important?

- Understand and adapt to meet the actual needs of the whole community
- Involve, engage and empower all parts of the community
- Build on actions, structure and key leaders already in place in the community
- Conduct comprehensive, and coordinated risk assessments
- Improve awareness of resilience and risk information in the whole community, share broadly (mainstreaming)
- Foster shared, local ownership for action to address short and long-term risks
- Establish a holistic governance approach

10. And what would be the next most important?

- Understand and adapt to meet the actual needs of the whole community
- Involve, engage and empower all parts of the community
- Build on actions, structure and key leaders already in place in the community
- Conduct comprehensive, and coordinated risk assessments
- Improve awareness of resilience and risk information in the whole community, share broadly (mainstreaming)
- Foster shared, local ownership for action to address short and long-term risks
- Establish a holistic governance approach

Annotated Principles - Description

Understand and adapt to meet the actual needs of the whole community: Community engagement can lead to a deeper understanding of the complex, unique, and diverse needs of a population; including its demographics, values, norms, community structures, networks, and relationships. The more we know about our communities, the better we can understand their real-life safety needs and motivations to participate in resilience-related activities. Initiatives that are cross-cultural, inter-generational and inter-disciplinary in nature help strengthen the whole community, and identify different kinds of needs, capacities and knowledge. Fostering creativity and innovation can build adaptive capacity.

Involve, engage and empower all parts of the community: Engaging the whole community through open and authentic dialogue better positions stakeholders to plan for and meet the actual needs of a community and strengthen the local capacity to deal with the consequences of all hazards, threats and risks. This requires all members of the community to be part of the resilience building activities, which should include diverse community members, social and community service groups and institutions, faith-based and disability groups, academia, professional associations, and the private and nonprofit sectors, while including government agencies who may not traditionally have been directly involved in building resilience.

Build on actions, structure and key leaders already in place in the community: A whole of community approach to building resilience requires finding ways to support and strengthen the institutions, assets, relationships and networks that already work well in communities on a daily basis. Existing structures and relationships that are present in the daily lives of individuals, families, businesses, and organizations before an incident occurs can be leveraged and empowered to act effectively during and after a hazard, threat or risk event presents itself. It is important to foster relationships with key community champions, leaders and active community members (teachers, social workers, professionals, religious and spiritual leaders), they are knowledgeable, trusted and respected, as such they are an important part of any resilience building activity.

Conduct comprehensive, and coordinated risk assessments: In order to take responsibility for risks, communities must understand the complex and integrated nature of the risks they face. Assembling comprehensive local information about hazards, threats, risks, and capacities is an important first step. Consistent methodologies and data frameworks applied to these assessments could enable information sharing and accurate interpretation. These assessments could be utilized to prioritize the allocation of resources based on the areas where they are most needed, and therefore, have the greatest impact.

Improve awareness of resilience and risk information in the whole community, share broadly (mainstreaming): Not enough is known about the interactions among the physical, social, political, economic and constructed systems that are reshaping our hazards, threats and risks. What is known is often siloed, or disparate; to be meaningful this information should be shared openly. Government's ability to facilitate collaboration amongst many different stakeholders can be leveraged to build broad-based awareness and understanding complex resilience-related issues in order to motivate and promote action across the whole community. Information on lessons learned—from local, national, and international sources—should be accessible and available for use by the whole community.

Foster shared, local ownership for action to address short and long-term risks: Resilience building activities should seek to respond to short-term observable and long-term, and emerging risks. Then communities can take steps to anticipate hazards, threats and risks and protect themselves their assets and their livelihoods (including their homes and possessions, cultural heritage and economic capital) therefore minimizing physical, economic and social losses. Working together and drawing on the expertise and capacity of various partners can produce more sustainable results than individual efforts alone. It can be important to recognize and legitimize productive actions taken by any part of the whole community.

Establish a holistic governance approach: In order to facilitate efficient resilience capacity building, policies and programs related to resilience, should be integrated and consistent, to the greatest extent possible. Partnerships with various levels of government are important considerations for communities in tackling issues. Trust must exist between communities and government partners. Government has an important role to play in maintaining that trust

ANNEX B: RESILIENCE SURVEY RESULTS AND ANALYSIS

Questions 1, 2, and 3

The survey first asked participants to identify the organizations they work for, as well as their work unit and position. There were 93 attendees present at the workshop, and 51 of those individuals completed the survey. Table 1 below lists the sample population characteristics of the survey respondents by organizational affiliation.

Table 1: Sample population characteristics by organizational affiliation

Organization	n
Federal Organization	49
Foreign Affairs and International Trade	1
Environment Canada	3
Public Safety Canada	11
Privy Council Office	1
Agriculture and Agri-Food Canada	1
Health Canada	5
Status of Women Canada	2
Shared Services Canada	1
Canadian Food Inspection Agency	1
Natural Resources Canada	2
National Defence	1
Aboriginal Affairs & Northern Development	2
Canada Revenue Agency	1
Public Health Agency of Canada	2
Service Canada	2
Communications Security Establishment Canada	1
RCMP/ITAC	1
Canadian Heritage	2
Transport Canada	2
Canadian International Development Agency	1
Justice Canada	1
Canadian Border Services Agency	1
DFO/CCG Maritime Services	1
Industry Canada	2
Finance Canada	1
Academia	2
University of Ottawa	1
Dalhousie University	1

Question 4

In an attempt to map the community, Question 4 asked participants whether they are part of a working group or roundtable that deals with some aspect of resilience, and if so, to provide details of their involvement. Sixty-seven percent of respondents indicated that they were a member of a resilience-related working group or roundtable, nearly all of whom gave specific information. The most frequently identified working groups in which respondents are involved are shown in Table 2.

Table 2: A list of the most frequently identified working groups or roundtables by the number of times they were identified

Working Group	No. of Respondents
Tiger team	7
Climate Change Adaptation Platform	4
Canada's Platform for Disaster Risk Reduction (DRR)	3
Canada's Risk and Hazards Network (CRHNet)	2
All Hazards Risk Assessment (AHRA) interdepartmental working group	2

Question 5

Question 5 asked participants to identify the programs, activities, or projects in which they are involved that deal with some aspect of resilience, and to indicate the federal or interdepartmental policy or strategies from whence they derive support. The findings from this question were intended to augment a network analysis that was previously undertaken by the research team to uncover the current structure of all Canadian federal government legislation and policy related to emergency management, national security and law enforcement.

Participants' responses show a varied understanding of the question's intent. While many responses correctly identified programs, activities or projects as such, a number of responses referred instead to policies or plans. When asked about policies and strategies, a number of responses identified legislation instead, or simply indicated departments, as opposed to departmental policy. The research team attempted to correct the data to the extent possible. Table 3 contains a list of programs/activities/projects identified by more than one participant, together with policies and strategies they support, as identified by the participants.

Activities related to three of the working groups or round tables identified by more than one participants in response to Question 4 (i.e., Climate Change Adaptation Platform, Canada's Platform for Disaster Risk Reduction, and All Hazards Risk Assessment) were also mentioned by more than one participants in response to Question 5.

Based on responses to Questions 4 and 5, the research team plans to restructure the survey prior to a second wave of targeted surveys in order to limit confusion and to obtain the necessary information on resilience-related programs, activities, and projects

and their link to policy and legislation. Question 6 sought to capture the relationships that reveal collaboration on resilience-related programs and activities, which will be used to further augment the previously completed resilience network.

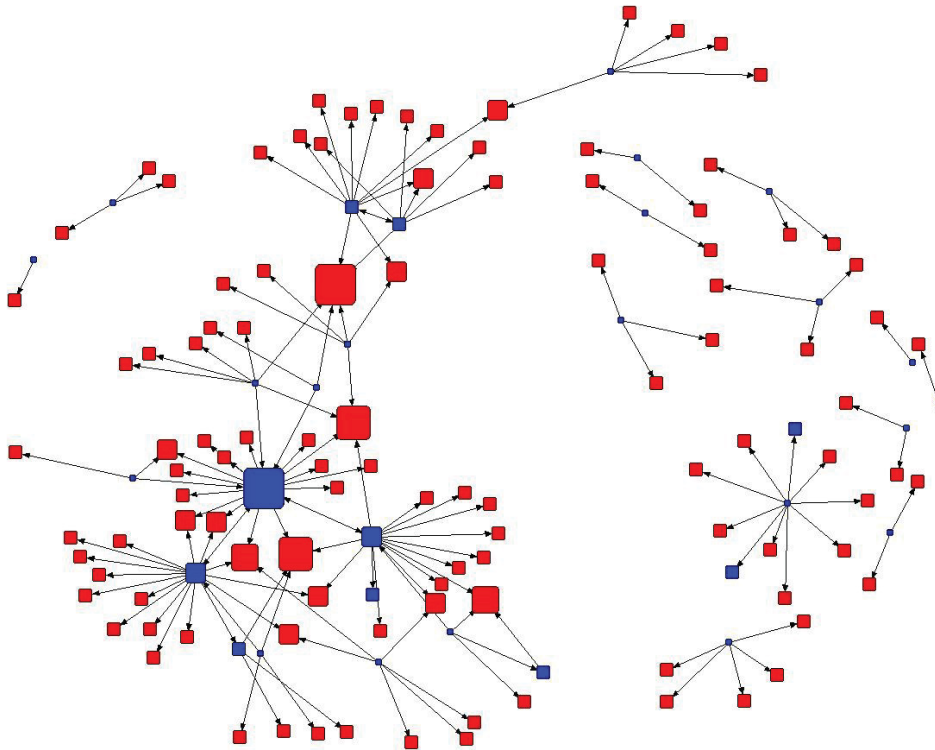
Table 3: The most frequently identified resilience-related programs, activities, or projects

Programs/Activities/Projects	Policy/Strategy	Department/ Organization	Count
Canada's Platform for Disaster Risk Reduction (DRR)		PS Canada, CIDA	3
National Disaster Mitigation Program	National Disaster Mitigation Strategy, Federal Emergency Response Plan (FERP)	PS Canada	3
General social survey (e.g., social identity, victimization)		Statistics Canada, Canadian Heritage, HRSDC, CIC	3
Survey of Emergency Preparedness and Resilience		Statistics Canada, PS Canada	2
All-Hazards Risk Assessment (AHRA)		PS lead - Interdepartmental	2
Measurement of Community Resilience Project		PS Canada	2
Heat Resiliency Program (climate change adaptation)	Federal adaptation framework, Health Canada Strategic Outcome	Health Canada	2

Question 6

Question 6 of the survey asked respondents to identify all of the individuals with whom they typically work or consult on resilience-related projects, programs or activities. Thirty-one individuals responded with a valid list of names².

Figure 1: Partial Network (n=138) of persons who typically collaborate on resilience-related projects and activities



Note. The network is referred to as a partial or preliminary network since it conveys only limited information obtained from the participants at the workshop. Those persons who completed the survey are shown in “blue” (n=31); whereas, those who were identified, but who either did not attend the workshop or did not complete the survey are shown in “red” (n=107).

² Nine individuals who responded to this question neglected to identify the names of specific individuals with whom they typically work or consult on resilience-related activities; as such, were omitted from the analysis. It is recommended that these individuals be canvassed as part of a second, electronic survey to capture missing data.

Figure 1 shows a partial network of 138 nodes representing the names of individuals who were identified in question 6 of the survey, comprising 28 Canadian federal departments and agencies, four provincial and two municipal organizations, nine Canadian academia institutions, as well as five domestic and three international non-governmental organizations (Table 4). The nodes in “blue” represent those 31 individuals who attended the workshop, and who completed the survey question. The vast majority (n=107), shown in “red”, represent individuals who were identified as part of the analysis, but who did not attend the workshop.

Table 4: List of Organizations that were Identified as part of the Social Network Analysis (Question 6)

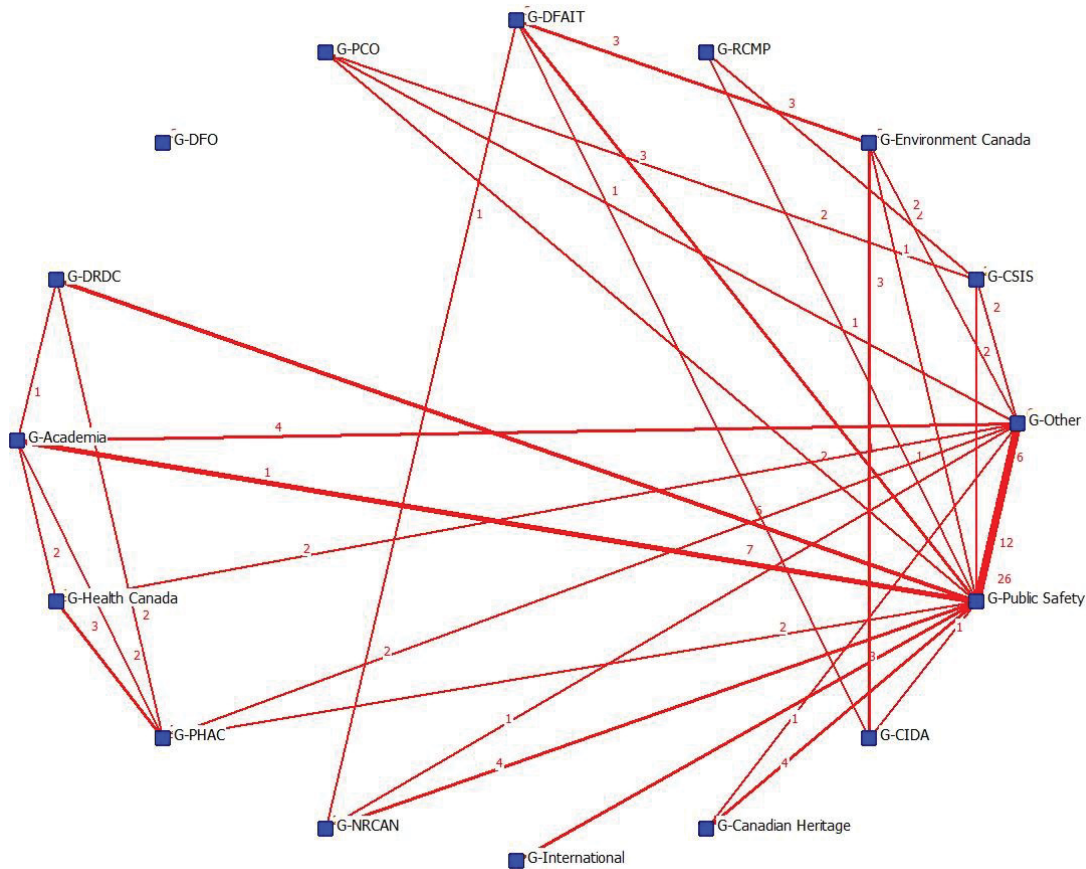
Organization	n	%	Organization	n	%
Federal	112	81.2	Provincial	4	2.9
Aboriginal Affairs and Northern Development Canada	1	0.9	Emergency Management B.C.	1	25.0
Canada Revenue Agency	1	0.9	L'Institut national de santé publique	1	25.0
Canada School of the Public Service	1	0.9	Ministere Securite Publique du Quebec	1	25.0
Canadian Border Services Agency	2	1.8	Pacific Federal Council Vancouver	1	25.0
Canadian Food Inspection Agency	1	0.9			
Canadian Heritage	4	3.6	Municipal	3	2.2
Canadian International Development Agency	5	4.5	City of Vancouver	1	33.3
Canadian Security Intelligence Service	2	1.8	Ottawa Police	2	66.7
Citizenship and Immigration Canada	1	0.9			
Conference Board of Canada	1	0.9	Academia	11	8.0
Defence R&D Canada	7	6.3	Academic University of Ottawa	1	9.1
Department of Fisheries and Oceans	4	3.6	Dalhousie University	1	9.1
Department of Foreign Affairs and International Trade	6	5.4	Harvard University	1	9.1
Environment Canada	6	5.4	Justice Institute of British Columbia	1	9.1
Finance Canada	1	0.9	Royal Roads University	3	27.3
Health Canada	5	4.5	University of Ottawa	1	9.1
Human Resources and Skills Development	3	2.7	University of Toronto	1	9.1
Industry Canada	1	0.9	University of Waterloo	1	9.1
Integrated Threat Assessment Centre	1	0.9	National Center Disaster Preparedness	1	9.1
Natural Resources Canada	6	5.4			
Privy Council Office	4	3.6	Organizations	5	3.6
Public Health Agency Canada	8	7.1	Canada Risks and Hazards Network	1	20.0
Public Safety	31	27.7	First Nation Caring Society of Canada	1	20.0
RCMP	3	2.7	Nova Scotia Health Research Foundation	1	20.0
Statistics Canada	2	1.8	Paukhuih't Inuit Women of Canada	1	20.0
Status of Women	3	2.7	Sunnybrook Healthcare Centre Toronto	1	20.0
Transport Canada	1	0.9			
Treasury Board Secretariat	1	0.9	International	3	2.2
			DEMOS	1	33.3
			RAND	1	33.3
			START	1	33.3

In Figure 1, the size of the nodes represents the number of times individuals were identified by others as being someone with whom they typically work or consult on resilience-related projects. The larger the node the more often a given individual was identified. Of the 108 nodes, the vast majority (n=100) were only identified once. Eleven individuals were identified twice, and only very few (n=6) were identified by between three and five other persons. This finding is entirely a function of who attended the workshop. A separate, follow-on survey of the 107 individuals shown in “red” who were not surveyed is necessary in order to obtain a more accurate picture of the level of collaboration that currently exists on resilience-related projects, programs and activities.

Given the size of the network, and the amount of missing information, it is not surprising that the network view in Figure 1 is fragmented into 14 separate groupings of individuals. More data is needed before such time as it can be determined whether this level of fragmentation actually exists, and makes sense, given the type of resilience-related activities the people within government are involved in.

Figure 2 shows the complete network by organization. Whereas there were 138 individuals identified as part of the network analysis, representing 51 separate organizations, for visual simplicity, the number of was reduced to 16 in Figure 2. Specific organizations with three or more representatives at the workshop are identified; the one exception being an “International” category of three such organizations. A line exists between any two organizations based on there having been at least one individual from the one organization who was identified as having typically worked or consulted with an individual from the other organization. The size of the line denotes the strength of relationship between organizations, which is solely based on information received from the relatively small number of people who completed the survey. The wider the line, the greater the perceived strength of the collaborative relationship, based on the number of respondents that were identified as having worked or consulted with individuals from an organization. Those in attendance from Public Safety Canada identified as working or consulting with the most number of people from “other” organizations besides those listed. They also identified strong ties to persons from academia.

Figure 2: Complete Network (Phase 1) Collapsed by Organization (n=16)



Note. Organizations were identified having three or more representatives at the workshop; the one exception being “International” which was seen to warrant being identified separately.

Question 7

Question 7 queried the participants as to what they considered key aspects of resilience. Participants’ responses echoed the vast number of diverse, often divergent, definitions of resilience in existing scientific and government literature. A proper conceptualization of resilience is needed in order to facilitate a clear understanding of what constitutes a resilient community. The research team at DRDC CSS plans to undertake additional research on the conceptualization of resilience, to further support PS Canada’s efforts to develop a “whole of society” national resilience strategy. A more in-depth analysis of participants’ responses to this question is intended to be included as part of that research.

Question 8

The survey contained a set of seven principles that were drawn from the academic literature on resilience, as well as international, government sources. The principles are seen as high-level goals when defining a national resilience strategy. The workshop organizers introduced each principle to the participants, who were then asked to evaluate their overall and relative importance when developing a new national strategy for Canadians. Although the survey contained a full description of the principles to assist respondents with their evaluation, some participants reported difficulty in their ability to distinguish between the principles, believing them to be ambiguous and overlapping in some cases.

Participants were asked to rate the importance of each of the seven principles when developing a new strategy on a four-point Likert scale (i.e., 1-Very Important, 2-Rather Important, 3-Not very important, 4-Not at all important).

Table 5: Mean overall score on importance for each resilience principle (Question 8)

Principles	Number of Responses	Mean	Standard Deviation
1. Understand and adapt to meet the actual needs of the whole community.	49	1.39	.571
2. Involve, engage and empower all parts of the community	47	1.47	.620
3. Build on actions, structure and key leaders already in place in the community	48	1.50	.619
4. Conduct comprehensive and coordinated risk assessments	48	1.67	.694
5. Improve awareness of resilience and risk information in the whole community, share broadly (mainstreaming)	48	1.71	.683
6. Foster shared, local ownership for action to address short and long-term risks	49	1.47	.649
7. Establish a holistic governance approach	46	1.98	.856

Table 5 shows the mean and standard deviation on the score of importance for each principle. The lower the mean, the higher was the perceived overall importance. The average rating for all seven principles was at least “rather important”. Although the first principle in Table 2, “Understand and adapt to meet the actual needs of the whole community” appears to have received the highest overall score (M=1.39), the difference between the mean score for principle 1 and principle 2: “Involve, engage and empower all parts of the community “ (M=1.47), principles 1 and 3: “Build on actions, structure and key leaders already in place in the community (M=1.50), and principles 1 and 6: “Foster shared, local ownership for action to address short and long-term risks” (M=1.47), was not found to be statistically significant (principle 1 and 2, $t(46)=0.554$; principle 1 and 3, $t(47)=0.390$; and principle 1 and 6, $t(48)=0.471$). As such, we must assume that the ratings for these four principles are roughly equivalent. On the other hand, we can see that there is a statistically significant difference in the overall score between principle 1 and principles 4 (a mean of 1.39 as compared to 1.67, $t(47)=0.026$, $p<0.05$), 5 (a mean of 1.39 as compared to 1.71, $t(47)=0.010$, $p<0.05$), and 7 (a mean of 1.39 as compared

to 1.98, $t(45)=0.000$, $p<0.01$). Thus, we can conclude that principle 1 did receive a higher overall importance rating when compared to these other three principles. By contrast, principle 7, “Establish a holistic governance approach”, was ranked somewhat lower than all of the other principles.

As interesting as it is to determine which principle received the highest, overall, importance rating, it can also be revealing to examine and compare the distribution of scores for the principles (Table 6). The 7th principle (Establish a holistic governance approach) was the only item that received a rating of “not at all important”, albeit by only a very small percentage of those who completed the question (6.3%). An equally small number were also unsure about how to rate the importance of this item (4.2% indicated “don’t know”). Although, nearly one third of respondents (29.2%) did actually rate this item as “very important”, this proportion was much less when compared to the ratings for “very important” the other six principles received.

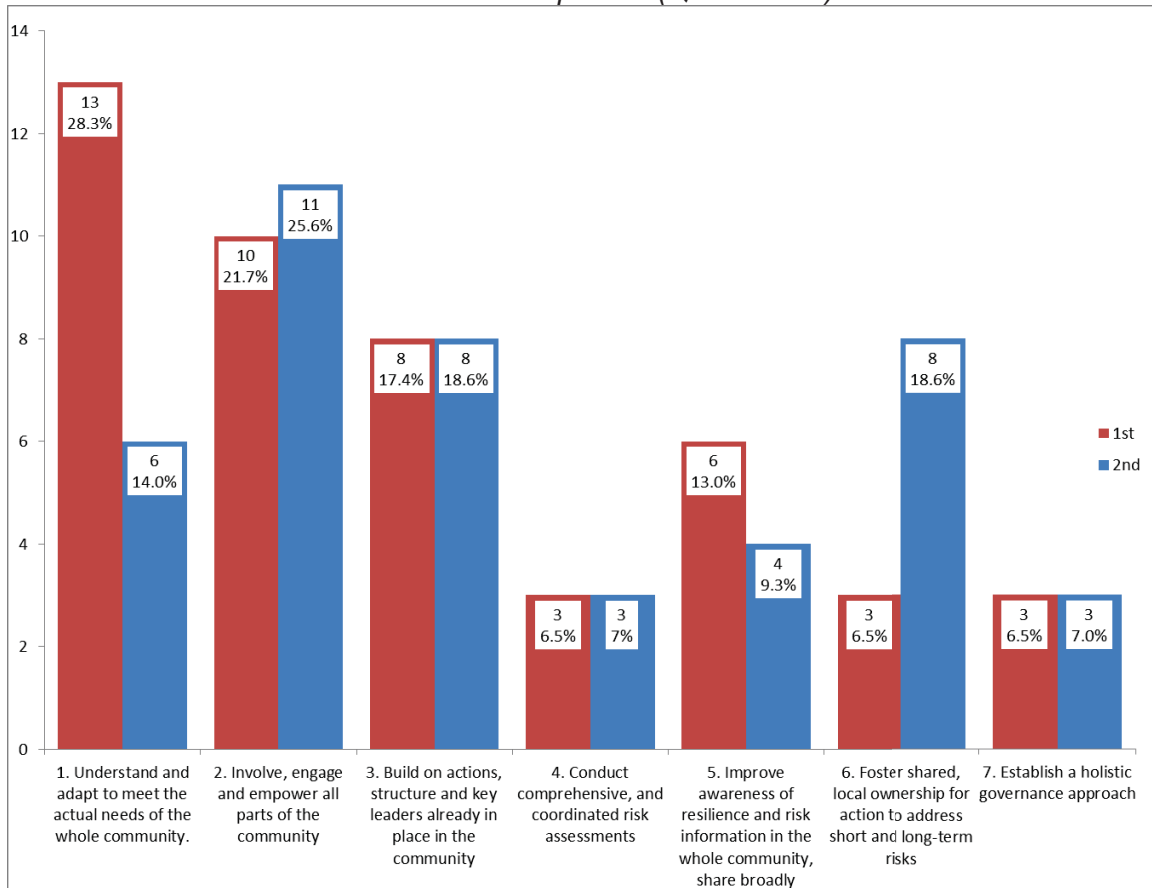
Table 6: Distribution of scores for each principle by level of importance (Question 8)

	Very important	Rather important	Not very important	Not at all important	Don't know
	n (%)				
1. Understand and adapt to meet the actual needs of the whole community	32 (65.3)	15 (30.6)	2 (4.1)	-	-
2. Involve, engage and empower all parts of the community	28 (59.6)	16 (34)	3 (6.4)	-	-
3. Build on actions, structure and key leaders already in place in the community	27 (56.3)	18 (37.5)	3 (6.3)	-	-
4. Conduct comprehensive and coordinated risk assessments	22 (45.8)	20 (41.7)	6 (12.5)	-	-
5. Improve awareness of resilience and risk information in the whole community, share broadly (mainstreaming)	20 (41.7)	22 (45.8)	6 (12.5)	-	-
6. Forster shared, local ownership for action to address short and long-term risks	30 (61.2)	15 (30.6)	4 (8.2)	-	-
7. Establish a holistic governance approach	14 (29.2)	22 (45.8)	7 (14.6)	3 (6.3)	2 (4.2)

Question 9-10

These findings are further reinforced following an analysis of questions nine and ten, which asked respondents to say which of the principles they considered to be the most and second most important (Figure 3). Principle 1 was rated as being the most important principle (28.3%), overall, followed closely by principle 2, which was rated by nearly the same percentage as being most important (21.7%), and by the greatest percentage of respondents, and one in four overall, as the next most important principle (25.6%). By contrast, principles 4, 6 and 7 shared the lowest rating in terms of overall importance (6.5%).

Figure 3: The rating of each principle as most important (Question 9) and next more important (Question 10)



ANNEX C: COMMENTS

The content of the comments section of the surveys was analyzed to extract common themes and issues that were identified by the workshop participants. Out those who completed the survey, 41% provided comments. Of those, about half related directly to the Resilience Principles that were proposed by Public Safety Canada to support the new national resilience strategy.

One common theme, which was echoed by the discussion throughout the workshop, was that there was considerable overlap between many of the proposed principles. It is recommended that they be consolidated or streamlined. The written comments which echo this sentiment are as follows:

“The principles could potentially be collapsed and simplified. Need to survey minority communities to see which principles they consider to be important. Access to resources should be a primary principle - it is the most powerful indicator of resilience.” – Research Analyst from Status of Women Canada

“Many of the guiding principles relate to each other I found that some principles were sub activities of other more broad principles.” – Analyst, Public Safety Canada

“Many of the principles overlap and can be combined together. [It is] completely false to choose [just] one principle - elements of many of them are important. Responding to the context is key - not all people, places, and systems have the same needs.” – Senior Policy Analyst, Canadian International Development Agency

Another theme was that there appeared to be confusion surrounding the purpose of the proposed principles, as well as a lack of understanding about how they would relate to a national resilience strategy. This misunderstanding was expressed through the following comments:

“It's not clear to me how these principles would be used - to help guide 'shape the objectives and actions of the strategy'. This is important in understanding which ones are most important and relevant. For example, the principles aren't all that useful on the operational level: to develop an emergency response plan for example.” – Policy Advisor, Transport Canada

“[A] broader theme to consider is how to transform principles into practice. Empowerment and collaboration are resource - intensive, controversial, and take a lot of time to effectively build trust and strong relationships. Building a case that centers around the direct, but also indirect benefits of engagement is crucial. For example, increasing opportunities for genuine participation by the public and stakeholders external to government can act as a way of stimulating social capital. If the community is meaningfully involved and governance is shared, this incentivizes local cooperation, interest group information, and a stronger more

resilient civil society overall. Be prepared to come to the table and talk about issues other than emergency response/disaster management. Stakeholders will participate more if they feel a sense of ownership, belonging and mutual benefit.”
– Articling Student, Justice Canada

“These [principles] seem really community oriented. I have a hard time wrapping my head around the Federal - community relationship. It feels like the PT link is missing. We should be working on building a more solid F/P/T link so PT could then take this to their municipal and community partnership.” – EM Senior Advisor, Communications Security Establishment Canada

“I feel it is very important to be looking at resilience and be prepared to challenge our assumptions. The first is that the world is a predictable place and we can prepare and control for everything. Everyone should look at the world through the VUCA lens- which stands for Volatile, Unpredictable, Complex and Ambiguous. If we accept this assumption then we start to ask ourselves different questions. I believe resilience is about adaptability and [our ability to] adapt. That is why there is a lot we can learn from our natural world. Also, if we look at Canada as a system and take a more holistic/systemic view to this issue of resilience and not something that the Federal government imposes on the Canadian public, [then the] principles should really reflect the assumptions about our ability to be resilient not just from natural disasters but [also relate to] safety, aging, economics, growth as human beings. Are Canadians resilient? What do we have to do to be resilient? What is the connection between resilience and our ability to innovate? How would we make this thinking visible?” - Senior Consultant, Health Canada

“I think these principles can be very effective in communities with existing resilience. In the case of some communities with lower resilience there may need to be additional work done. [It] is not just about raising awareness in the community but about working to meet existing needs, building capacity etc. There may also not be sufficient leadership in place but there may be the need for training/development amongst other groups to take on leadership roles. There is also a learning process after a disaster to build lessons learned.” - Senior Policy Advisor, Aboriginal and Northern Affairs Development

A couple of the comments also related to the language in the proposed version of the principles:

“I don't like 'establish a holistic, governance approach' principle. It doesn't really mean anything. Why the term coordinated in 'conduct comprehensive and coordinated risk assessments'.” – Policy Analyst, Aboriginal and Northern Affairs Development

“Although the term 'partnerships' is used as one of the recurrent themes, our table thought that 'relationships' may be a better term. Building and maintaining

key relationships is clearly one of the keys to success. While relationships can be at different levels of maturity there is not necessarily a formality i.e. an MOU, letter of agreement or other such formalities required to enter into a 'partnership'."
– Workshop Participant, Justice Canada

Other comments spoke to the need for a clear definition of the term “resilience”, before such time as a new strategy is developed:

“Resilience must be defined for this initiative to succeed. Indicators (of success or failure in achieving or improving resiliency, once defined) must be developed before any work program is put in place.” – Senior Operations Officer, Provincial Operations Center

“Personal and professional ties among stakeholders a pre-requisite for successful planning. Awareness of EM and resiliency go together therefore messaging should be twinned. Provide the widest possible definition of resilience to facilitate understanding and buy in. Draw attention to example of successful resilience so that it's seen as do-able.” – Regional Communications Manager, Public Safety Canada

The remainder of the comments provided by the workshop participants, could not easily be classified under any common themes and should be treated individually. They are presented below:

“Service Canada is responsible for issuing billions of dollars in social benefits to Canadians in need. It is necessary that the business processes and physical infrastructure are resilient when exposed to unanticipated events.” – Policy Advisor from Service Canada

“Found it an interesting workshop, however not as much information as I would have thought on the existing resources such as the Resilient Community WG of the platform or the Resilient CSSP projects that have been going on for several years. Need to get the knowledge transfer done in these communities.” – Policy Analyst, Public Health Agency Canada

“Disasters happen locally. Networks of trust should be established in advance. Local authorities will be responsible for response and are best placed to assist with planning and communications. The Federal government doesn't do a good job yet of information exchange and partnership. [Access to] core information (e.g. population, demographics, locations of old age homes, hospitals, shelters, schools, etc) would help pre-position and focus first responder plans and actions and allow targeted pre-emergency planning or messaging which would help to alleviate problems in advance and better inform local citizens in order that they can be better prepared. Single source of consistent messaging ensures consistent information of good reliability and simplifies public access to useful and timely information. There still appears to be a void between local and more

senior levels of government in terms of information flow and co-ordinated assistance pre, during and post event.” - Service Development Officer, Industry Canada

“1) [...] How do you know when you have resiliency? 2) Goal - development of resilience strategy - inherent in this decision will be the irrevocable commitment to resources to action the strategy. The question is - what strategies do we have in place already that, as a sum total, add up to the resiliency we desire? Vision must be clear, as well as metrics and connection to strategy. 3) The strategy - a core to this is proper engagement of both structure (government and private sector) and culture (communities, traditions, artifacts, degree of integration and collaboration) The strategy is the means to express the linkages between purpose, goal, culture and structure. 4) The portfolio - this is the sum total of programs, projects, activities (one-time recurring, emergency, emergent). The value or benefits of how the inputs (money, people, time) are maximized to create a tangible outcome. 5) Changes in conditions changes in learning, behaviour - and ultimately changes in practices. The “owner” of the portfolio for EM is, arguably, the DM of Public Safety. Can the sum total of the EM portfolio demonstrate assurance that we can avoid, if not recover from any threat or hazard? Really don't think we need another silo-ed strategy. Rather to spend the time and effort to align the value chain – purpose, goal, vision, culture, structure to assure compliance with safety, security, and EM policy and legislation and assume [that] the capabilities and know-how are in place to avoid, if not prepare for, ready ourselves (training, exercises), respond to, and recover. A resilient society shifts the cost to the front end and “coherently improves” instead of being “defensive/reactive”. The true realization of or demonstration of the portfolio alignment is the operationalization of this strategy. Who would operationalize the strategy? Which departments need to be involved from day 1? So, in sum, [I am] not convinced a strategy with the goal of a “new strategy” is unbiased enough (from an academic perspective) to justify a study to prove it. The question of interest is to determine: 1. What is resiliency? 2. How does it function? 3. How / Who manages it? 4. How is it implemented / operated? 5. How resilient are we? It is highly likely that this will boil down to alignment of policy, program funding, training and exercise? Just a thought for consideration...” - Senior Advisor, Privy Council Office

“Very interesting workshop.” – Risk Manager, Canadian Food Inspection Agency

“An excellent workshop overall. You should probably provide copies of the instructions for the workshop to all participants. Having to work in character made it difficult to think about the case study in a broader fashion. The lack of food options makes this a poor venue.” - Policy and Research Analyst, Status of Women Canada

“As a first step to a lasting dialogue on resilience and how it pertains to the GoC this workshop was excellent. The table to exercise was particularly effective due to the requirement to engage in roles that remove the person from his or her comfort zone into a new role. Great experience this affords allows everyone a chance to think outside the box.” – EM and Fire Prevention Co-ordinator, Environment Canada

“This workshop is part of a larger process (which was explained poorly this morning) which should be clearer - it was explained too fast [with] perhaps a handout to support the visualization of that process.” – Emergency Preparedness Educator, Public Health Agency of Canada

“In the context of Public Safety Canada's National Strategy and Action Plan on Critical Infrastructure, Industry Canada is responsible for leading activities with the ICT sector. Industry Canada engaged Government Consulting Services (GCS) to assist with the formulation of a methodology and approach for the initial stages. Contributions were constructive and useful. In the initial stage of the Action Plan, a Sector Network composed of government and private sector organizations is to undertake a risk assessment of the sector's critical infrastructure. IC has developed a preliminary risk assessment framework; has looked at international practices; has consulted with companies in the sector, mainly through existing industry committees (eg. CSTAC, CTEPA) and conducted a gap analysis. IC is currently working on validating a final product; an approach and methodology for a sector critical infrastructure risk assessment, which should be ready for ongoing use beginning FY 2013/2014.” – Emergency Telecommunications Officer, Industry Canada