Stothers, Meghan PSA:EX

From:Stothers, Meghan PSA:EX Sent:15 Apr 2015 14:44:28 -0700

To:Mayhew, Marnie PSA:EX; Kremler, Zac PSA:EX

Subject: UPDATE: Web Team Support for Crisis Communications

Hi Marnie and Zac,

I'm happy to report that Thayne and Chris have done some work on our crisis communications planning.

They've done some research and put together some recommendations in a **report they will bring forward to our meeting next Tuesday**. Below, I've included more specific notes beside the parts of their technical work plan to give you a sense of progress made. But please let me know if more info is required before Tuesday.

On a meeting note, Thayne noticed the s.15 is booked at that time/date, so I will see if we can grab the s.15 . It seems meeting space is in high demand with so many minds at work.....

Cheers,

Meghan

From: Kremler, Zac PSA:EX

Sent: Tuesday, April 14, 2015 3:53 PM

To: Stothers, Meghan PSA:EX

Subject: Web Team Support for Crisis Communications

Hi,

Before you took over the A/Manager for the web team (I believe), there was a conversation about this 'Crisis Communications' initiative, which Marnie has been asked to lead within the Agency (see her notes attached). The web team was pulled into this because there are some technical-type solutions that may be needed if there is a major crisis and email is down.

So, I was hoping you could follow up with the team and see if there has been any progress on the following:

- 1. Thayne and Chris to develop technical work plan (scope, functionality), training plan and define technical support roles during a crisis.
 - Research on the feasibility of the development of an app for smart phones
 Thayne has done some research and has identified a possible app for sharing push
 notifications and sending geo-specific messages. He's identified a few ways we could take
 next steps to build the app in html through a contractor or co-op student. He's also signalled
 the possibility of developing an @Work app.
 - Cross-functional training plan, specifically so that folks in Kamloops can update MyHR/@Work to keep employees informed if there is a Victoria-based natural disaster or something of that nature

Thayne has draft plan in progress for Tuesday's meeting that will outline the steps. His recommended steps presume that the Kamloops team is technically savvy and that we'd possibly have some budget for (approx.) one day of in-person training.

• Development of a 'shadow site' – one that would allow us to collect info from employees who were able to get online and potentially provide support

This shadow site has been built as a temporary prototype, but is bare bones at this time. Ready for next steps with more direction and decisions.

I realize this is completely out of the blue, but another one of those projects for your radar. If you could check with Thayne/Chris and see if they've managed to make progress on any of these things, that would be great. Please email both myself and Marnie back, as we've both taken on different components of this larger project.

Please come and find me with any questions or if more info is needed.

Thanks Meghan...

Zac

From: Mayhew, Marnie PSA:EX

Sent: Monday, March 16, 2015 4:10 PM

To: Kremler, Zac PSA:EX

Subject:

As discussed

Marnie Mayhew
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Public Service Engagement and Corporate Initiatives, BC Public Service Agency
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Stothers, Meghan PSA:EX

From:Stothers, Meghan PSA:EX Sent:21 Apr 2015 09:07:27 -0700

To:Mayhew, Marnie PSA:EX; Kremler, Zac PSA:EX

Cc:Werdal, Thayne PSA:EX

Subject:SUMMARY (DRAFT): Emergency response technical plan

Attachments:Internal Disaster Response Plan_TWerdal_ms_edit_V3_clean.docx,

internal_disaster_plan_summary.docx

Good morning, Marnie and Zac.

Thayne has prepared a summary of the larger report in order to highlight the key points of his larger report. I've attached this summary (as well as the full report) in preparation of our meeting this afternoon. We're looking forward to sharing ideas and outcomes related to this interesting work.

Please come and find one of us with any questions.

Thanks,

Meghan

From: Stothers, Meghan PSA:EX **Sent:** Friday, April 17, 2015 4:58 PM

To: Mayhew, Marnie PSA:EX **Cc:** Kremler, Zac PSA:EX

Subject: DRAFT: Emergency response technical plan

Hi Marnie,

Attached is a very early draft of an emergency response plan for our internal crisis communications meeting next Tuesday. In essence, this is a paper on how technology could be used in various disaster scenarios, some of the technologies that could be useful, as well as a scoping out of some potential roles and requirements in a disaster scenario affecting BC Public Service employees.

You will note from the breadth of the document (14 pages) that Thayne has done considerable research to launch our discussions and point to some possibilities we might want to investigate further. I have had a high-level look at this report, but did not change it substantially. I have asked him to

- pull together a one-pager that captures his key points and recommendations.
- be prepared to speak about his report at our meetings.

Thayne's plan is to continue working on the doc up until our Tuesday meeting. I would love your initial thoughts, and any other direction that might shape our Tuesday meeting.

Best,

Meghan

DRAFT: Internal Disaster Response Plan

Prepared By:

Thayne Werdal

Prepared on: April 16, 2015

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Internal Disaster Response Plan: Technical Response Requirements and Proposal

1. Introduction

Recently, a gap was identified in regards to the planning, communication strategy and informational resources available to government employees should a localized, regional or province-wide disaster occur. This document outlines the technical requirements that could serve as key component parts in filling this critical gap. This report also proposes possible technical solutions to meet these requirements. Initially, we will outline how our government wide intranet could support an overarching emergency communications plan.

Next, the report looks at how the development of a companion app could greatly expand the reach of any communications tools used in a disaster communications strategy. Other existing technologies will also be looked at as having potential to support critical communications during such an event. Although it is hard to plan for every potential situation, the report outlines how this technology could be used in different types of hypothetical situations, focusing on the flexibility that the technology would provide depending on the particular severity of emergency. The report closes with a discussion of the requirements, roles and risks that have been identified as important components to this initial technical part of the overall response plan.

2. Technical integration

How the Government Wide Web (gww.gov.bc.ca) can Support a Disaster Response Plan Currently, the government intranet is known as @Work, and resides at the URL https://gww.gov.bc.ca. The @Work intranet site is known as a location that employees can access corporate information (through news stories, blogs and polls for example) as well as being a web destination for employees to connect with each other (through discussion forums, comments etc). In the event of an emergency, the technology behind the @Work site could be leveraged to deliver prompt, timely and relevant information to employees – and conversely to receive and record relevant, timely and important information from (and between) government employees.

In order to fully leverage the current technology, we would propose the development of a "shadow site" built upon the Drupal platform. Drupal is a Content Management System (CMS) that is open source, and currently powers the @Work intranet site. Drupal is uniquely suited as a solution to house a disaster communication shadow site for a number of reasons:

- As an open source solution, Drupal has a large library of prebuilt modules, which translates into shorter development time and allows greater flexibility and options when planning the functions that the site must deliver.
- The current @Work installation is built on Drupal, meaning that we would have the
 option to quickly and seamlessly transition the existing @Work URL to display the predeveloped "shadow-site" as and when it is deemed necessary.

 Government employee's currently use a Drupal based solution, which should make interacting with the shadow-site much more intuitive.

The proposed shadow site would appear as a stripped down version of the current site – including only what is understood to be necessary functionality. At the time of writing, we are proposing:

- a news feed RSS that could update employees with relevant, timely information;
- a discussion forum that would allow employees to check-in and engage in specific emergency response, government oriented, or human resource type communications while also receiving tailored replies from other employee's or communication staff;
- a twitter API feed that would instantly and automatically update with any informational tweets originating from the official BCPSA emergency twitter feed¹.

This approach would insure timely, dynamic, up-to-date information, while also offering self-archiving records of prior announcements and conversations that employees could access when they are best able to do so.

How a Mobile Application Can Support a Disaster Response Plan

In 2012, The Globe and Mail reported that nearly three-quarters of Canadians owned a wireless device, with suspected wireless penetration to reach 100 per cent in the coming "few years"². In addition, CBC News reported in October of 2014 that "49 per cent of [time online] is now tied to mobile devices"³. Because of the relative penetration and proliferation of mobile ready devices, and familiarity of accessing the Internet through such devices, we propose leveraging this technology in order to coordinate targeted communication to governmental employees.

A mobile application (App) would allow reach to employees mobile devices regardless of their current location (at home, in transit, at work etc.), and could act as an essential link between organizers, communications and government employees. Mobile applications allow unique functionality that could be used to allow such actions as push notifications and geolocation.

Creating an app that would present up-to-date information on screen, which would originate from the shadow-site. This would require no duplication of effort, and could be sent to devices programmatically. Push notifications could be used in order to alert employees to any new information (in the form of on screen badges, and/or audio/vibration queues). Geolocation services would allow us to alert only employees located in specific areas to relevant news. The apps would allow increased scalability and choices for government employees which will be explored more fully in the next section. Currently,

¹ The BCPSA Twitter feed is a proposed part of the emergency response for employees at the time or writing. It may or may not be part of the finalized plan.

² Trichur, Rita, "Canada on track to pass 100-per-cent wireless penetration rate", *The Globe and Mail* published Jun 4, 2012. Accessed on April 16, 2015 at http://www.theglobeandmail.com/technology/mobile/canada-on-track-to-pass-100-per-cent-wireless-penetration-rate/article4230795/>

³ The Canadian Press, "49% of time online now spent on mobile devices, comScore says", *CBCNews* posted October 10, 2014. Accessed on April 16, 2015 at http://www.cbc.ca/news/business/49-of-time-online-now-spent-on-mobile-devices-comscore-says-1.2794903

@Work does not have a companion app that could be leveraged, however, open source application building technology exists that could be leveraged free of charge⁴. Development time may be further reduced by selecting and purchasing out of box software that can aid in compiling regular code for multiple mobile platforms (for example Android, iPhone, Windows phone etc.) simultaneously⁵.

How Other Existing Infrastructure Can Support a Disaster Response Plan

The current government phone system⁶ and electronic mailing systems are also important resources that could be leveraged to fulfill urgent emergency communications needs. Email would allow decision makers to reach out to government employees utilizing existing infrastructure, namely government mail servers and mailing lists. Mailing lists could be used to send targeted or government wide information directly to employee's mailboxes. It may be beneficial to request the creation of a designated emergency government wide restricted mailing list. Access to this list would be given to relevant executive positions and members of the disaster response team. This will be discussed more in the "roles" section of this document (see page 7).

Conclusion

By leveraging our existing technology (the @Work site, Drupal, mobile phones, mail system, phone/voicemail system) and incorporating new technology (a dedicated mobile application) we believe that we can greatly expand the reach and options for communicating with government employees under a wide range of circumstances. These solutions include cost, mainly measured in development time and training time, with a small amount of hardware/software cost (which will be outlined in the Requirements section [see page 9]).

3. Preliminary Situational Response Plan:

Introduction

This section lays out a preliminary attempt at outlining how technology and employee roles would be instituted specific severities and infrastructure environments. As a point of departure, we suggest that crises severity can be broken down into the following theoretical intensities:

- Low local: This severity would cover extremely geographically localized situations that have logged no current injury or loss of life, and/or is assessed to be a low to moderate concern to health and wellbeing of government employees, with low to no expected impact on existing infrastructure. Examples could include situations such as gas leaks, threatening phone calls etc.
- Low regional: This severity would cover geographically regional situations that have logged no
 current injury or loss of life, and is assessed to be a low to moderate concern to the health and
 wellbeing of government employees, with low to no expected impact on existing infrastructure.

⁴ At the time of writing, PhoneGap has been identified as a potential open source framework for app development http://phonegap.com/>

⁵ At the time of writing, PhoneGap Build has been identified as a powerful PhoneGap support application that could drastically speed up development https://build.phonegap.com/>

⁶ Sending pre-recorded phone messages out to lists of employees via contact numbers may be a possibility, however, the practicality and technology of doing so would need to be assessed by the relevant parties (as phone system management and infrastructure are not within the purview of this branch at the time of writing).

Examples would include severe storm/weather systems, tornados, multi-day blackouts, low grade earthquakes etc. This could also be the result of a medium or extreme geographically localized event.

- Low province-wide: This severity would cover the entire geography of British Columbia, logged no current injury or loss of life, and is assessed to be a low to moderate concern to the health and wellbeing of government employees, with low to no expected impact on existing infrastructure. Examples could include province wide power or communications outages etc. This could also be the result of a medium or extreme regional or localized event.
- Medium local: This severity would cover extremely geographically localized situations that
 have logged some cases of bodily injury or loss of life, or is assessed to be a critical concern to
 health and wellbeing, and may include a heightened likelihood to damage or incapacitate
 existing infrastructure. Examples could include gas line explosions, building collapse, building
 fire, an actual or expected aggressive or violent attack by an individual or group.
- Medium regional: This severity would cover geographically regional situations that have
 logged some cases of bodily injury or loss of life, or is assessed to be a critical concern to health
 and wellbeing, and may include a heightened likelihood to damage or incapacitate existing
 infrastructure. Examples could include extremely sever weather or storm systems, regional
 floods, localized earthquake, forest fire etc. This could also be the result of an extreme local
 event.
- Medium province-wide: This severity would cover the entire geography of British Columbia
 and have logged some cases of bodily injury or loss of life, or is assessed to be a critical concern
 to health and wellbeing, and may include a heightened likelihood to damage or incapacitate
 existing infrastructure. Examples could include extremely sever weather systems, such as a
 province wide, multi-day heat wave. This could be the result of an extreme local or regional
 event.
- Extreme local: This severity would cover extremely geographically localized events that have
 logged significant cases of bodily injury and/or loss of life, and/or is assessed to be an urgently
 critical concern to health, wellbeing and life, and may include an extreme likelihood to damage
 or incapacitate exiting infrastructure. Examples could include complete building collapse,
 unchecked building fire, localized chemical or biological attack etc.
- Extreme regional: This severity would cover geographically regional situations that have logged significant cases of bodily injury and/or loss of life, and/or is assessed to be an urgently critical concern to health, wellbeing and life, and may include an extreme likelihood to damage or incapacitate existing infrastructure. Examples could include severe flooding, regionally intense forest fires, regionally specific deadly disease outbreaks, sever earthquakes etc. This could also be the result of an extreme local event.
- Extreme province-wide: This severity would cover the entire geography of British Columbia
 and have logged significant cases of bodily injury and/or loss of life, and/or is assessed to be an
 urgently critical concern to health, wellbeing and life, and may include an extreme likelihood to
 damage or incapacitate existing infrastructure. Examples could include province-wide deadly

disease outbreak, meteorite impact, extreme volcanism etc. This could be the result of an extreme local or regional event that affects the wider province.

In addition, each severity can be understood to have differing levels of access to technology:

- Full access: Mobile and structural networks are up and responsive. Power is freely available for technological hardware.
- Partial Network Available: Either Mobile or structural network is available in some form, Power is freely available.
- Power is Unavailable, Mobile Network is Available: Network signals can be accessed, but power is not dependable or there is a blackout.
- No access / satellite only: Blackout conditions, networks and mobile networks are unavailable.

All above theoretical access patterns could differ locally, regionally and B.C. wide, depending on the relative circumstance and severity of the event. For example, it is plausible to assume that Vancouver employees could have no network access, while Victoria employees have full network access. Technological level of access in conjunction with overall severity will dictate the type of response that is possible (from a technologically situated viewpoint), and thus, what roles and personnel would be needed, and how they would best be used.

Roles

Every emergency response will require specific roles in order to quickly and efficiently disseminate information to government employees. This document assumes that executive will be (at least initially) safe, healthy and reachable in some form to give direction⁷. The following essential roles have been identified⁸:

• Communication Lead: This role would communicate directly with one or more members of the executive. This roll would include gathering information, completing a communications plan, and preparing communications information. They would oversee the disbursement of information (though not directly), and have some input into general responses to government employee questions. This means that this role must have direct contact with the Technological Lead, and the Community Communications Lead. This role would currently (at the time of writing) be filled by Marnie Mayhew, Director, Public Service Engagement and Corporate Initiatives. Ideally, there should be a local and regional alternate⁹ assigned to this role in the event that the designate is unable to perform their duties or are unreachable at the time. In addition, an alternate communications lead should be available in order to avoid complete exhaustion if the event runs for multiple days. Equipment requirements: Cell phone, satellite

⁷ The Assessment of emergency executive succession is out of scope for this paper.

⁸ This list is subject to change as the plan continues to evolve towards its final form

⁹ Ideally, alternates for the identified roles would reside in Kamloops – the proposed alternate central command center if Victoria is unavailable. Regional alternates would exist outside of both other regions – in order to plan for an event or series of events that affected both regions simultaneously.

- phone, satellite ready laptop computer, traditional writing materials, approval to send to government wide email list.
- Technical Lead: This role would work directly with the Communications lead in order to disburse relevant information through web and mobile application mediums. This would include posting information to the site, along with monitoring that the shadow site and mobile application are up and running properly. This role would be responsible for overseeing the process of bringing the Shadow Site online, as well as being on point for any technological issues that may arise. Ideally, there should be a local and regional backup assigned to this role in the event that the primary designate is unable to perform their duties or are unreachable at the time of the event. In addition, role alternates should available in order to avoid complete exhaustion if the event runs for multiple days. Currently, this role would be filled by either Thayne Werdal, or Chris Deakin. Equipment requirements: Cell phone, computer, satellite phone, satellite enabled laptop, approval to send to government wide email list.
- Community Communications Lead: This role would be responsible for coordinating governmental employee feedback. This would include answering questions, coordinating communication and passing relevant feedback/information back up through the Communication Lead to the Executive. In addition, this role could include opening lines of communication to external sources (i.e. Federal government, Police, Fire, Army, Regional Governments, City Governments etc.) Finally, this roll would include sending relevant information via email (to the proper government email list). Currently this role would be filled by Tom Billings or Meghan Stothers. If necessary, this role could be assumed by the Technical Lead. Equipment requirements: Cell phone, laptop, approval to send to government wide email list.
- Regional Monitors: This role would be assigned to a set number of employees, but at least
 one in each region. Their role would be to check in through the shadow site, by email or by
 phone to update the conditions in their specific region (current severity, current infrastructural
 status, employee status etc.) This information will be collected by the Community
 Communications Lead and passed up to the Communications lead, and forwarded to executive if
 necessary. This will serve to keep any command center appraised of regional conditions,
 allowing outgoing communications to be optimized both technically and tonally. This
 information can also be shared in part or in whole with external crises management teams as
 needed (i.e. police, federal, army etc.).

Risks

Assessing possible risks is a key priority for any response plan. At this early stage, the following technological and personnel related risks have been noted¹⁰. This list should continue to grow as work moves forward on this project:

1. RISK: Technology fails to work as plan

¹⁰ In the interest of time and space, this should not be considered an exhaustive list as not all possible risks have been explored. This is more of an example of the types of risks as they relate to roles, and situations that require attention in the overall plan.

- a. RESPONSE: Technical Lead will focus all energies on troubleshooting the technology. They may enlist the help of alternate or regional alternate lead. Technology lead should have access to communicate with a member of HPAS (local and regional contacts) in the case that the issue is identified as server related.
- 2. RISK: Injury to a key role holder
 - a. RESPONSE: Key role holders should have a succession plan. This includes training of all members who may/could fill their roll.
 - i. Communications Lead: Must have a local and alternate (outside of the current region) backup who can fulfill this role if the key role holder is MIA. In addition, the Community Communications Lead could be trained to fulfill parts of this role in the case that all Communications Leads are MIA.
 - ii. Technical Lead: Must have a local and alternate (outside of the current region) backup who can fulfill this role if the key role holder is MIA. In addition, the Community Communications role could be trained to fulfill parts of this role in case the technical lead is pulled in other directions.
 - iii. Community Communications Lead: Must have a local and alternate (outside of the current region) backup who can fulfill this role if the key role holder is MIA. In addition, Technical Leads could be trained to fulfill this role if needed.
 - iv. Regional Monitors: Should have local backup who can fulfill this role if the key role holder is MIA
- 3. RISK: Primary leads experience power loss:
 - a. RESPONSE: transition current work as needed to alternate or regional alternate lead prior to final battery discharge.
- 4. RISK: Primary leads experience network loss:
 - a. RESPONSE: Use alternative technology as required (i.e. satellite phones, satellite intranet, land lines etc.) unless this becomes untenable at which point they should contact and transition current work as needed to alternate or regional alternate lead.
- 5. RISK: Network, Power loss:
 - a. RESPONSE: Use alternative technology as required (i.e. satellite phones, satellite intranet) to transition current work as needed to alternate or regional alternate lead.
- 6. RISK: Follow up event intensification of event (example aftershock):
 - a. RESPONSE: Leads should check in with either their alternate or regional alternate lead regularly. Missed check-ins should prompt the alternate or regional alternate to seek communication with their role leader, followed by communications between role alternates in order to assess why communication has stopped. If no leader can be contacted, the leads should contact each other in order to assess who should assume the role as lead until the primary lead resumes contact.

Conclusion

In this section we have started an initial outline concerned with possible situational event levels, explored technologically restricting considerations that could affect communications, outlined roles that are essential to this initial model of crises communication, and laid the groundwork to explore risk and

risk mitigation strategies focused on keeping the chain of command intact. It is of the upmost importance that the chain of command is established quickly and maintained so that information can be moved in a timely and efficient manner to government employees.

The next section will focus on the Requirements and training necessary to implement the type of system that has been outlined here.

4. Requirements:

This section will be split between hardware requirements, resource requirements, and training requirements.

Hardware Requirements:

It is assumed that any candidate for the roles above would have access to a cell phone, a computer, an IDIR, and the government email system. Additional needs are outlined below by role:

Communications Lead:

- Satellite phone: Allows owner to maintain contact with executives and other members of the leadership team in event of network outage.
- Satellite ready laptop: In order to have ability to switch to a satellite network as necessary if traditional infrastructure is damaged or down.

Technical Lead:

- Satellite ready laptop: In order to have ability to switch to a satellite network as necessary if traditional infrastructure is damaged or down. In order to move to central command location if available
- Satellite phone: In order to have ability to maintain contact with HPAS, or to transition technical work to alternate or regional alternate technical lead as needed. To contact communications lead in event of network outage or infrastructure collapse.
- Community Communications Lead: None¹¹
- Regional Monitors: None.

Resource Requirements:

Resource Requirements is focused more on the preparatory stage of the Internal Disaster Response Plan.

- App creation software for development this may be completely open source. Currently the following software has been identified as best candidates:
 - Drupal (Apache, PHP, MySQL) Completely open source
 - o Phone Gap Built on NodeJS, this is open source
 - PhoneGap Build: This IDE allows rapid creation of phone apps, and is built on top of PhoneGap, increasing its functionality. Available for purchase as one off, or as part of the Adobe Creative Cloud Suite software¹².

¹¹ It may be important to assess if community communications lead should have access to similar equipment as Communication and technical leads if they are part of emergency succession plan.

- Possible dedicated development/maintenance role
- Training documentation: Created by each lead as they are identified in order to train alternate
 and regional alternates to fulfill their role should they be unavailable during a disaster response.
- Government wide emergency email list
 - Communications leads, Technical Lead and Community Communications leads should have access to this list.
- Access to a satellite internet source (such as http://www.xplornet.com/) which would keep satellite ready laptops online in the event of local infrastructure damage/downtime.

Training Requirements:

Each role will have to further outline how much training would be needed in order to fulfill their role in the event of their absence.

Initial recommendations:

- Drupal training for alternate and regional alternates in both the Technical Lead position and Community Communications lead
- The Technical Lead would also require a more intensive technical and server training.
- Total training time for Community Communications lead candidates is estimated at a half day.
- Total estimated training time for Technical Lead candidates is one full day.
- Training would be performed after the shadow site and app have been fully developed, so that they may aid in the training program

Hours/Cost:

It is difficult to outline the hours and cost associated with this plan at the current time. A rough outline is provided below.

a.	Planning, identifying, designing Shadow Site:	8 hours
b.	Planning, identifying, designing app:	20 hours
c.	Development of Shadow Site:	20 – 40 hours ¹³
d.	Development of App:	80 – 100 hours ¹⁴
e.	Integration of Shadow Site and App:	20 – 40 hours ¹⁵
f.	Comms plan to help with app adoption:	10 hours
g.	Training Material/course development:	5 - 10 hours
h.	Identifying/Enlisting Candidates	2 – 21 hours?
i.	Training:	3.5 – 7 hours per session
j.	Training travel time:	?

^{12 &}lt; http://www.adobe.com/ca/creativecloud.html>

Depending on the level of functionality that is deemed necessary for this project. Projected numbers are currently for base-level functionality.

¹⁴ Depending on the level of functionality that is deemed necessary for this project. Projected numbers are currently for base-level functionality.

¹⁵ Depending on the level of functionality that is deemed necessary for this project. Projected numbers are currently for base-level functionality.

Overall report:	?	

. Exec Training/ Briefing ?

5. Initial Response Steps:

Introduction:

This section will quickly outline a proposed order of operations that could assess and react if a particular event occurred.

- Event Occurs: An event has occurred in the province depending on severity, communications lead is alerted.
- Order of Communication This is a quick overview of the proposed order of communication.
 The purpose of the order of communication is to (as quickly as possible) allow each member of the Disaster Response Team to assume a primary or supporting role and establish a chain of command.
 - i. Immediate: Communications lead is required to use means at hand to contact alternate/outside alternate region leads that they are assuming role. Primary communications lead then communicates with executive to inform them of their role, and to gather initial information and direction. If alternate / outside alternate communications are not reachable, Communications lead assumes role and delegates responsibility for reaching alternate / outside alternate.
 - ii. Immediate: Alternate, outside region leads wait for communication from Communication lead. After a five minute interval, an attempt is made to communicate with each other for information. During this communication, a declaration is made as to who will assume the role of Communications lead pending further contact from primary communication lead. Non primary communications leads use means at hand to contact technical lead, community comms lead to let them know who their primary contact is. If there are no alternate or outside region alternate leads available, or infrastructure is down – the backup is the declaration by Technical and Communication leads.
 - iii. Immediate: Technical Lead contacts local and regional technical leads with means at hand to let them know they are assuming role. They then communicate with primary communication lead to declare they have assumed role. If the primary communication lead is unavailable, they reach out to alternate and finally regional alternate. If no communications lead is available, technical lead puts the shadow site live to open up another avenue for communication and collaborates with Community Communications lead in order to contact Executives directly.
 - iv. Immediate: Community Communications follows suite on Technical leads order of declaration

- v. Immediate: Regional Monitors should assess situation and be ready for communications via email, phone or web.
- vi. After initial communication All alternative and regional alternative leads should take a supportive role, remaining available for contact in case they are needed to relieve / support the current lead.
- 3. Disaster Response team is alerted to event (see section on Risks: Order of Communication pg. 8)
 - a. Assesses state of severity:
 - i. If low, and network/power available Initiates order of communication and heads to central disaster response headquarters.
 - If this is a local or regional event:
 - a. Notice placed on @Work that directs affected employees to Shadow Site.
 - b. Shadow Site put online under its own URL
 - c. App sends notifications via. Geolocation setting to specifically affected areas.
 - 2. If this is a province wide event:
 - a. Leadership assess if shadow site should replace current @Work site.
 - b. Shadow Site put online OR replaces @Work
 - c. App sends notifications to all employees.
 - ii. If low, and network/power not available assesses best course of action and either head to central disaster response headquarters or transition primary role to alternate or regional alternate and takes on support role
 - iii. If Medium and network/power available initiates order of communication and heads to central disaster response headquarters.
 - 1. If this is a local or regional event:
 - a. Notice placed on @Work that directs affected employees to Shadow Site.
 - b. Shadow Site put online under its own URL
 - c. App sends notifications via. Geolocation setting to specifically affected areas.
 - 2. If this is a province wide event:
 - a. Leadership assess if shadow site should replace current @Work site
 - b. Shadow Site put online OR replaces @Work
 - c. App sends notifications to all employees.
 - iv. If Medium and network/power not available assesses best course of action and either heads to central disaster response headquarters or transitions primary role to alternate / regional alternate and takes on support role.
 - v. If Extreme and network/power available initiates order of communication and heads to central disaster response headquarters.
 - Leadership assess if shadow site should replace current @Work site.

- 2. Shadow Site put online OR replaces @Work
- 3. App sends notifications to all employees.
- vi. If Extreme and network/power not available assesses best course of action and either heads to central disaster response headquarters or transitions primary role to alternate / regional alternate and takes on support role.

6. Conclusion:

This paper is an initial attempt to propose action(s) that would fill an organizational gap in disaster planning. Moving forward, it is essential to identify relevant technologies, hardware and modes of communication in order to ensure that the provincial government of British Columbia and its employees may continue to serve the people of British Columbia in the most efficient, effective and timely manner possible. It is hoped that this paper can be used as a stepping-off point that would allow us to meet any challenge in the best, quickest and most effective possible way.

Internal Disaster Response Plan

Introduction

Below is an outline of the potential technical tools, roles and requirements that could assist with internal communication efforts to reach all BC Public Service employees in the event of a localized, regional or province-wide disaster.

Technical Integration

Below is a list of potential tools that could be used in an emergency event:

- Drupal: Open source CMS to create a shadow site
 - o Create a stripped down version of the current site (@Work) with:
 - News feed, discussion forum
- Mobile Application: PhoneGap used to create a companion app
 - Pulls news from Shadow site, sends notifications when new information arrives, includes geolocation services that can push news alerts to mobile devices in specific locations.
 This option involves development costs, time and training.
- Electronic Mail: Current government electronic mail system: Outlook
 - Communications team to use government distribution lists to send emails to all employees
- Phone System: Current government phone system
 - Ascertain if it would be possible to push out pre-recorded voicemails
- Satellite-based technology: phone and laptop

Hardware and other requirements

- Satellite phone: Comms Lead, Tech Lead, Exec.
- Satellite ready laptop: Comms Lead, Tech Lead, Exec.
- PhoneGap build: Tech Lead
- Dedicated app development role
- Training and documentation
- Permissions to internal government email distribution lists to regional locations
- Access to satellite internet source¹

Potential roles²

• **Communication Lead:** Communicates directly with executives. Prepares and updates communications plan with tactics.

• **Technical Lead:** Responsible for maintenance and control of technologies. Works with Communication Lead to leverage technologies to disperse communications.

¹ This is currently still under review – a potential candidate may look something like Xplorenet http://www.xplornet.com/, this would allow key members of command structure to maintain access to the internet regardless of the status of local or regional networks.

² It is suggested that each role has an alternate lead (ideally located in Kamloops – the purposed alternate command center location) and a regional alternate (outside both Capital Region and Kamloops) in order to ensure maximum redundancy. Alternates would assume supporting roles to unless they became Primary leads. Alternates may relieve Primary leads for set periods to avoid exhaustion if event continues for an extended period.

- Community Communications Lead: Responsible for gathering information from regional monitors, answers questions from government employees, supports technical and communication leads.
- Regional Monitors: Staff member in each region is tasked with reporting current regional status.
 Information can be shared with external stakeholders as deemed necessary (police, firefighters, army etc.)

Emergency severity scale

- Low: No injury or loss of life, and/or is assessed to be a low to moderate concern to health and wellbeing of government employees, with low to no expected impact on existing infrastructure
- Medium: Some cases of bodily injury or loss of life, or is assessed to be a critical concern to health and wellbeing, and/or may include a heightened likelihood of damaging or incapacitating existing infrastructure
- Extreme: Significant cases of bodily injury and/or loss of life, and/or is assessed to be an
 urgently critical concern to health, wellbeing and livelihood, and/or may include an extreme
 likelihood of damaging or incapacitating existing infrastructure.

Locale³

- Local: The emergency situation is localized by geography (E.g. low-local: low grade gas leak; med-local: partial building collapse; extreme-local: chemical/biological targeted attack.)
- Regional: Severity would cover geographically regional situations. (E.g. low-regional: storm/weather systems; med-regional: flooding; extreme-regional: severe earthquake.)
- Provincial: Severity would affect entire geography of British Columbia. (E.g.. low-provincial: power or communications outages; med-provincial: disease outbreak; extreme-provincial: meteor impact.)

Technological access tiers

- **Full access:** Mobile and structural networks are functional and responsive, power is freely available for IT hardware.
- **Partial network available**: Mobile or structural networks are at least partially available, power is freely available.
- Powerless, network available: Network signals can be accessed, but power is not dependable or there is a blackout.
- No network access/satellite only: Blackout conditions, networks and mobile networks are unavailable.

³ *Note: Various simultaneous instances of severity/geography are both possible and likely – for example, an extreme-local event could have a med-regional impact, with a low-provincial rating.

Appendix A:

Simulated walkthrough of an emergency situation

- 1) Emergency event occurs, Communication Lead is informed of the severity of the event.
- 2) If low severity and network/power available Initiates order of communication and, if possible/recommended, heads to central disaster response headquarters.
 - a) If this is a local or regional event:
 - i) Message posted on @Work that directs affected employees to shadow site.
 - ii) Shadow site put online under its own URL
 - iii) App sends notifications via. Geolocation setting to specifically affected areas.
 - b) If this is a province-wide event:
 - i) Leaders determine if shadow site should replace current @Work site.
 - ii) Shadow site put online or replaces @Work
 - iii) App sends notifications to all employees.
- 3) If low, and network/power not available assesses best course of action and either head to central disaster response headquarters or transition primary role to alternate or regional alternate and takes on support role
- 4) If medium and network/power available initiates order of communication and heads to central disaster response headquarters.
 - a) If this is a local or regional event:
 - i) Notice placed on @Work that directs affected employees to Shadow site.
 - ii) Shadow site put online under its own URL
 - iii) App sends notifications via. Geolocation setting to specifically affected areas.
 - b) If this is a province wide event:
 - i) Leaders assess if shadow site should replace current @Work site.
 - ii) Shadow site put online or replaces @Work
 - iii) App sends notifications to all employees.
- 5) If medium and network/power not available assesses best course of action and either heads to central disaster response headquarters or transitions primary role to alternate / regional alternate and takes on support role.
- 6) If extreme and network/power available initiates order of communication and heads to central disaster response headquarters.
 - a) Leaders assess if shadow site should replace current @Work site.
 - b) Shadow site put online or replaces @Work
 - c) App sends notifications to all employees.
- 7) If extreme and network/power not available assesses best course of action and either heads to central disaster response headquarters or transitions primary role to alternate / regional alternate and takes on support role.

Appendix B:

Hours / Cost

Below is a rough estimate of the hours associated with implementing this plan at the current time:

a. Planning, identifying, designing shadow site: 8 hours
 b. Planning, identifying, designing app: 20 hours
 c. Development of shadow site: 20 – 40 hours⁴
 d. Development of App: 80 – 100 hours⁵
 e. Integration of Shadow site and app: 20 – 40 hours⁶

f. Comms plan to help with app adoption: 10 hours
 g. Training Material/course development: 5 - 10 hours
 h. Identifying/enlisting candidates 2 - 21 hours?

i. Training: 3.5 – 7 hours per session

j. Training travel time: ?k. Overall report: ?

l. Exec Training/ Briefing ?

⁴ Depending on the level of functionality that is deemed necessary for this project. Projected numbers are currently for base-level functionality.

⁵ Depending on the level of functionality that is deemed necessary for this project. Projected numbers are currently for base-level functionality.

⁶ Depending on the level of functionality that is deemed necessary for this project. Projected numbers are currently for base-level functionality.

Kremler, Zac PSA:EX

From:Kremler, Zac PSA:EX Sent:16 Jul 2015 12:42:32 -0700 To:Mayhew, Marnie PSA:EX Cc:Kremler, Zac PSA:EX

Subject:FW: Can you give me a call if you have any time between now and 930?

Hi – forwarding the whole email just so that you have some of the context behind the numbers, in case Alison asks (though given her dislike for detail, it sounds unlikely ©)

In summary, we'd be looking for the following to build the 2 technical elements (shadow site and mobile phone app) as part of the crisis communications plan preparation:

	Project	Time	Cost
Tier 1	Shadow site	5 days	\$1,500.00
	Phone app	10 days	\$3,000.00
			\$4,500.00
Tier 2	Shadow site	10 days	\$3,000.00
	Phone app	15 days	\$4,500.00
			\$7,500.00
Tier 3	Shadow site	20 days	\$6,000.00
	Phone app	15 days	\$4,500.00
			\$10,500.00

This is based on bringing in a qualified contractor to work on these two projects on a full time basis. There would be some up front consultation and planning as indicated in Thayne's message below, but this approach would allow us to essentially leave Thayne and Chris alone to work on the @Work refresh.

For what it's worth, I also think we can get Susan I to do a bit of the preliminary comms work on the writing/planning for the bigger document, and we wouldn't have to factor that cost in to the equation as it's covered elsewhere.

Let me know if you have any questions.

Thanks, Zac

From: Werdal, Thayne PSA:EX

Sent: Thursday, July 16, 2015 10:57 AM

To: Kremler, Zac PSA:EX **Cc:** Deakin, Chris PSA:EX

Subject: RE: Can you give me a call if you have any time between now and 930?

Hi Zac,

Chris and I discussed this and came up with the following.

Keep in mind that there is a large amount of uncertainty as to what exactly would be required for the shadow site and the app. Also, not all costs are clear to us at this point. With some assumptions, we put together the following:

1. Shadow Site:

- a. Tier 1: A stand-alone website that could disseminate news: 2-3 days for two employees
 - i. Assumptions no app integration. Siteminder/LDAP integration would be required.
- b. Tier 2: A stand-alone website with more features (forum, check-in, etc): 4-5 days for two employees.
- c. Tier 3: A stand-alone website with features and mobile app integration: 10 days for two employees.

2. Mobile Application:

- d. Tier 1: Application that could direct users to site, feature site news: 10 days for two employees
- e. Tier 2: Geolocation and push-notifications from site: 15 days for two employees
- 3. Testing/UI: 10 days for one or two employees
- 4. Ongoing maintenance/updates etc: a few hours every couple weeks for an employee.

COSTS:

- 1. Apple developer account: \$90.00 per year
- 2. Siteminder setup costs: \$?? * Dependent on deciding if this site should be behind siteminder / can use our current config.
- 3. Server space and maintenance: ?? * Dependent of location/server this site sits on
- Application related development tools: \$?? * Dependant on what is identified as the most relevant stack
 of tools.

A couple of notes:

- 1. We did not include the decision/pre-planning stages. This would require extra time, as the vision for the site and technical requirements are gathered and considered.
- 2. These numbers were arrived at under the assumption that the employee would be free from all other daily or emergency tasks during development.
- 3. Until we created a prototype (if we wanted to create room for some research/prototyping) it is difficult to accurately project the work involved in creating the final project (like deciding on how long it will take to dig a ditch somewhere by looking at a map, prior to visiting the site to see the terrain, and considering a test-trench which gives you an idea of the soil-makeup.) That being said, it does feel like this project with top tier integration could conservatively be wrapped up in two months or less, assuming a two person development team, and access to the required materials/support.

If you have any questions about this, pop by or email me.

Thayne.

From: Kremler, Zac PSA:EX

Sent: Thursday, July 16, 2015 9:07 AM

To: Werdal, Thayne PSA:EX

Subject: Can you give me a call if you have any time between now and 930?

250-507-4464 Thanks, Z

Sent from my BlackBerry 10 smartphone on the Rogers network.



BC Public Service Internal Crisis Communications Strategy

BROUGHT TO YOU BY THE
BC PUBLIC SERVICE AGENCY

YOUR ALLY for SUCCESS

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Introduction

Communications in the time of an emergency have always been part of expectations and accountabilities placed on government. However, existing structures and protocols established to date have had a decidedly external or public focus, and are a direct responsibility of the Government Communications and Public Engagement branch (formerly the Public Affairs Bureau). There are no existing agreements or directives that speak directly to accountabilities for formal employee communications in the event of an emergency or crisis.

All ministries are responsible for developing site-specific contingency plans to recover their work site and business operations in the case of an emergency. While all ministries have their Business Continuity Plans (BCP) approved at the executive level, not all plans address employee communications specifically – in fact, it is unknown to what extent Ministry BCPs across the BC Public Service have contemplated communication with their own employees.

Purpose

The purpose of this plan is two-fold. First, it is intended to serve as a guideline for developing a consistent, integrated, effective and flexible communications response to a crisis affecting public service employees locally, regionally or province-wide. Second, this plan is meant to assist with coordinating and integrating public and employee communications in the event of a crisis.

Context

In 2013 and 2014, two significant events occurred:

- Ottawa: October 22, 2014 fatal shooting of a Canadian soldier on ceremonial sentry duty at Canadian National War Memorial by an individual and the ensuing shoot-out with Parliament Hill security personnel.
- 2. Victoria: July 1, 2013 failed plot by individuals attempting to use explosives to attack the B.C. Legislature.

While these events are not natural disasters, the response to each – and the critical communication challenges raised – highlighted the importance of effective communications in the time of a crisis. Upon review, it was noted that while considerable resources are in place for external communications with citizens of B.C. as part of Government Communications and Public Engagement (GCPE) responsibilities, there is not a similar process or structure in place for communications with employees within the BC Public Service.

It should be noted that there has been considerable work done recently in the area of emergency communications within government:

- GCPE has recently updated communications protocols detailed in the 'BC Communications Strategy for Major Emergencies' document;
- The Ministry of Justice has been developing a plan to manage communications in the case of a human or security threats to government or its personnel (see Appendix A for more information);
- Emergency Management BC has recently updated the 'B.C. Earthquake Immediate
 Response Plan', in consultation with representatives from across the BC Public Service,
 municipal governments, the Canadian Red Cross, the Department of National Defense,
 Natural Resources Canada and Public Safety Canada.

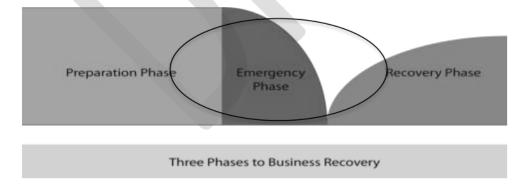
The intention of this plan is to work in concert with the structure and protocols identified in the Immediate Response Plan in order to deliver effective, timely communications to employees in the event of a crisis.

Definition of Crisis

For the purpose of this plan, a crisis is defined as a serious event that affects employees BC Public Service employees in a substantive way. This could involve injury, death or displacement of employees or citizens, and would include incidents of significant damage to government buildings in any area of the province.

Scope

This plan involves communications roles and responsibilities for communicating with employees during the emergency and recovery phases of a crisis. The plan should be implemented if there is a need to communicate with all or a significant proportion of BC Public Service employees during or in the aftermath of a crisis event.



In Scope

- ▶ Communications to all active employees covered by the BC *Public Service Act*.
- Communication with private or public organizations that share office space with BC Public Service employees.

Out of Scope

- Small emergency events, such as power outage of a ministry branch or building.
- ▶ All external communication channels to the public or media, unless approved by government communications (GCPE).
- Communications processes and protocols activated in the event of a human security incident or threat.

Approach

Rapid information dissemination is the major communication challenge in crisis situations. In the case of a crisis event affecting BC Public Service employees, effective communication will require pre-determined protocols and a common understanding of roles and responsibilities in order to direct internal communications efficiently.

Objectives

The objectives of this internal communications strategy are to:

- Communicate frequent, timely, accurate and concise messaging to employees as a crisis develops and until a return to normal business operations.
- Provide a mechanism to gather employee feedback and provide reassurance to employees.
- Clarify or correct information, rumours or misinformation circulating by word of mouth, social media or through the news media.
- ▶ Where possible, support the emotional, psychological and physical needs of employees during a time of confusion, stress and possible trauma.
- Provide a process to answer employee questions and, where answers are unknown, commit to finding out and following up in a timely manner.

Interdependencies

There are a number of key inter-dependencies involved in the successful implementation of this plan. In order to ensure internal communications are consistent and reference relevant information, the following stakeholders must be coordinated during a crisis event:

- Premier's/Minister's Office
 - Provide updates received from emergency responders including the Canadian Red Cross, military, municipalities and federal/other provincial governments.
 - Current government priorities including mission critical business operations.
- Public Service Agency (PSA)
 - Human resource information including pay, benefits and employee health and safety. See Appendix D for structure of the Public Service Agency Executive Operations Centre.
- Ministry of Technology, Innovation and Citizens' Services

- Primarily as a point of contact for employee email distribution lists and voicemail broadcast voice messaging.
- ► Government Communications and Public Engagement (GCPE)
 - Overall government direction, messaging and information to taxpayers related to available services and taxpayer responsibilities.
- Emergency Management BC (EMBC)
 - Receive ministry situation reports and critical updates from high level authorities and send out government status reports to ministries.
 - Government building safety assessments and status updates.

The organization's ability to pre-determine the role of these agencies and coordinate their related responsibilities will be vital to effective employee communications in the time of a crisis.

Audiences and Key Messages

The table below shows key audiences and recommended key messages.

Audience	Description	Key Messages	
Corporate Executive	This includes Deputy Ministers and Assistant Deputy Ministers across the BC Public Service	Focus on providing information that is relevant to all employees across the BC Public Service. Nature and details of the event Who to contact if they require further information	
Affected	This includes the Deputy	Focus on suggested messages relevant to	
Ministry	Minister and Assistant	affected employees.	
Executives	Deputy Minister(s) from the ministries impacted	Impact of the crisis event across the organization	
		Focus on employee health and safety	
		Include information and messaging that	
		should be provided to all employees.	
Affected	These employees have been	Focus on personal health and safety.	
employees	directly affected by the	► Stay safe	
	crisis.	► Look after yourself and your family	
		► Contact your supervisor/manager	
		Wait for instructions (the exception are	
mission critical employees who v		mission critical employees who will implement	
	BCP Plans as per previous instruction and		
		exercises)	
Affected	Managers and supervisors	Focus on personal health and safety	
managers	affected by the disaster.	► Stay safe	
and		► Look after yourself and your family	
supervisors		► Contact your branch lead and your	

Indirectly	Employees not directly	employees ➤ Wait for instructions ➤ Support your colleagues
affected employees & managers	affected by the disaster but aware of the impact on affected employees. May be affected by business disruptions and increased	 Immediately following a crisis, do not attempt to contact colleagues - leave communication lines open for emergency use Help your colleagues by providing support
Premier's Office, GCPE, PSA, EMBC, Other Agencies (see below)	stress. These bodies will provide support and will be kept informed as requested. (specific communications to each are out of scope for	to continue operations where possible Ensure messages are consistent with information received from other government leads Provide links to other government information sources in all communications
	this plan)	

^{**} Messages will need to change as a crisis evolves, but universal key messages are included.

Communications Consistency

While communications channels may vary according to what technology is available during a crisis, communications with impacted employees should include the following information, in order of priority.

Priority	Topic	Description
1 Current situation An overview of the c		An overview of the current situation and any updates since
		the previous communication.
2	What you can do	This information tells employees what they need to do in the
		short and longer term.
3	Mission critical	Information needed by employees to help participate in the
	information	response to the disaster and recovery efforts.
4	Employee	This section acknowledges the employee's experience in the
support event and		event and offers options to access support such as counselling
	information	or emergency assistance. This will also include ongoing Q &
		As, responding to anticipated and known employee
		questions/concerns.
5 Information for Information on the		Information on the status of work for those not directly
unaffected affecte		affected by the crisis. This could include assisting with the
personnel recovery effort an		recovery effort and/or reassignment within the ministry or
		government.
6	When the next	Information on when, how and from whom the next
	update will	communication will come.

occur

** See the examples of crisis communications scripts based on this template in Appendix C.

Roles and Responsibilities

In addition to providing internal corporate communications for employees, the BC Public Service Agency provides a number of mission critical services. These include the following:

- ▶ Ensure the service of payroll in not disrupted for BC Public Servants.
- Provide policy direction to Deputy Minister to the Premier.
- Distribute Health and Safety information in case of an emergency.
- Communicate with BC Public Service employees (PSA responsible).

Crisis Communications Team

Every emergency response requires specific roles in order to quickly and efficiently disseminate information. In the event of a crisis, internal communications activities will be directed and delivered by the Crisis Communications Team, until the crisis has passed or the deputy minister or delegate directs otherwise. The assumption is that executive will be (at least initially) safe and able to provide direction. Essential roles are identified as follows:

Communication Lead: This role communicates directly with one or more members of the executive. Responsibilities include: gathering information, completing a communications plan, and preparing communications information. This role oversees the disbursement of information (though not directly), and has input into general responses to employee questions. This role must have direct contact with the Technological Lead, and the Community Communications Lead. Ideally, a local and regional alternate should be assigned to act for the Lead if they are unable to perform duties, are unreachable or in case they need relief in order to avoid burn-out if the event lasts for multiple days.

<u>Equipment requirements</u>: Cell phone, computer, satellite phone, satellite-ready laptop computer, approval to send to government wide email list.

Technical Lead: This role reports to s directly with the Communications Lead to disburse relevant information through web and mobile application mediums. This includes posting information to the shadow site, as well as monitoring the shadow site and mobile application to ensure they are up and running properly. This role is responsible for overseeing the process of bringing the Shadow Site online and for dealing with any technological issues that may arise. Ideally, there should be a local and regional backup assigned to this role in the event that the primary designate is unable to perform their duties or are unreachable at the time of the event. In addition, role alternates should available in order to avoid burn-out if the event lasts for multiple days.

<u>Equipment requirements</u>: Cell phone, computer, satellite phone, satellite-ready laptop computer, approval to send to government wide email list.

Internal Communications Lead: This role reports to the Communications Lead and is responsible for coordinating employee feedback. This includes interacting with Ministry communications leads, answering questions, coordinating communication and passing relevant feedback/information back up through the Communication Lead to the Executive. Finally, this role includes sending relevant information by email (to the proper government email list). If necessary, this role could be assumed by the Technical Lead.

Equipment requirements: Cell phone, laptop, approval to send to government wide email list.

External Communications Lead: This role reports to the Communications Lead and is responsible for coordinating with Ministry and GCPE contacts and providing relevant information and updates to the Community Communications Lead and the Technical Lead as required.

Equipment requirements: Cell phone, laptop.

Regional Monitors: This role is assigned to a set number of employees, but at least one in each region of the province. The role is responsible for checking-in – through the shadow site, by email or by phone – to update the conditions in their specific region (current severity, current infrastructural status, employee status, etc.) Information provided is collected by the Community Communications Lead and then passed to the Communications Lead, and forwarded to executive if necessary. This approach will serve to keep a command center appraised of regional conditions, allowing outgoing communications to be optimized both technically and tonally. This information could also be shared in part or in whole with external crises management teams as needed (i.e. police, federal, army etc.).

Equipment requirements: Cell phone, laptop.

Risks and Mitigation

Where possible, this plan accounts for roles and responsibilities in assessing communications needs as well as delivering necessary communications in the event of a crisis. However, assessment of risks and mitigations plans should be considered where applicable.

Risks	Response	Tools
Key lead/role unavailable	Implement succession plan	
Technology fails	Options tba	Satellite phone
Power loss	Contingencies tba	Satellite-ready laptop
Network loss	Contingencies tba	
Power and Network loss	Contingencies tba	

Monitoring and Evaluation

A comprehensive evaluation of the effectiveness of this plan will be completed before any crisis during regular Emergency Operations Committee (EOC) meetings within the Public Service Agency, and post-crisis by a designated member of the Public Service Engagement and Communications Branch.

- <u>Pre-Crisis:</u> The Agency EOC will conduct regular communication exercises to test the content and effectiveness of this plan.
- Post Event: Evaluation tools will be developed which will include feedback from members of each audience/stakeholder group in order to determine the effectiveness of this plan.
 - Volume of employee submitted questions and concerns that were not addressed through existing communications process.
 - Employee comments and other relevant information gleaned from social media channels.
 - Volume and nature of complaints regarding communications from ministry employees.
 - Informal feedback from across and all levels of the BC Public Service.
- ► Follow-up actions will include:
 - Update all crisis contact lists.
 - Recognize 'heroes' in the crisis.
 - Convene crisis communications team to evaluate response and actions.
 - Revisions to the communications plan as necessary.

Crisis Assessment

In the case of any crisis, the communications response plan will require situational assessment including:

- Regional Impact: Local, regional, province-wide.
- Criticality: From none to extreme.
- Access to technology and infrastructure: Will dictate the ability to communicate with employees, and may include the following:
 - Full access: Mobile and structural networks are up and responsive. Power is freely available for technological hardware.
 - Partial Network Available: Either Mobile or structural network is available in some form, Power is freely available.
 - o **Power is Unavailable, Mobile Network is Available**: Network signals can be accessed, but power is not dependable or there is a blackout.

 No access, satellite only: Blackout conditions, networks and mobile networks are unavailable.

Depending on the relative circumstance and severity of the event, access to technology will differ locally, regionally and province-wide. Assuming the lead roles have access to a cell phone, a computer, an IDIR, and the government email system, they can employ the following:

- Broadcast voice messaging.
- Email through dedicated government-wide list.
- Geographical and localized email lists.
- Messages posted on @Work intranet or mobile 'shadow site'.

Tools and Resources

There are a number of resources and tactics that are already available that can be utilised in the event of a crisis. Potential tactics include the following:

- Face-to-face meetings
- Email distribution
- Desktop alerts
- Voicemail / broadcast voice messaging landline and mobile
- Information hotline (possible 7-7000)
- Audio-conference
- Signage posters
- @Work article
- Twitter/Facebook messages

Tools and Resources

In order for the Crisis Communications Team to function effectively in the event of a Crisis, the following tools and resources will be necessary:

- Satellite phones additional purchase required
- Satellite-ready laptops purchase required
- Emergency 'shadow @Work site' intranet development required
- Mobile phone app development required

^{**} For more assessment information, see the Scenario Based Response Matrix in Appendix A

Next Steps:

There are a number of decisions required and processes to be determined in order for this plan to be fully operational:

- First, interdependencies between organizations with related responsibilities should be clarified. Most importantly, this includes the relationship between the Public Service Agency, Government Communications and Public Engagement, Emergency Management B.C. and MTICS.
- 2. Second, a decision is required as to how much of an investment will be made in hardware (satellite-ready laptops and additional satellite phones), and technical builds (@Work shadow site and mobile phone application).
- 3. Finally, a process must be determined to identify and provide orientation and training to regional monitors as required.

Conclusion

History has demonstrated that those with solid plans in place, which include the right resources and processes, are the organizations which succeed in a time of crisis. This plan attempts to:

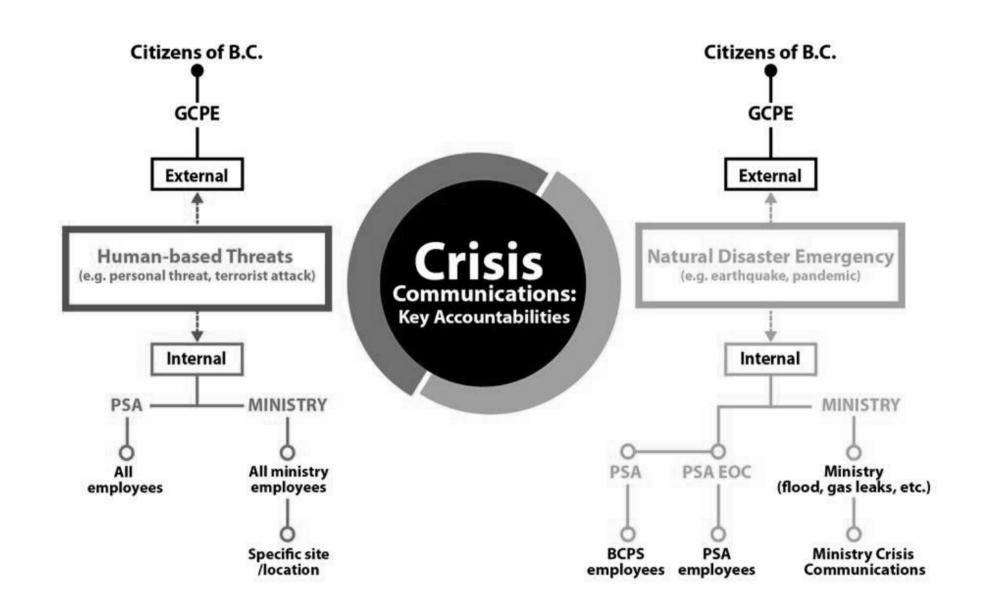
- Identify the necessary resources and processes, as well as those who will be responsible and accountable should an unexpected crisis occur.
- Confirm roles and responsibilities of those involved in communications should a crisis occur.
- Provide some of the necessary support tools and templates that will be useful in the case of a crisis.

It is only through a significant investment of time and resources **before** that unthinkable event that the BC Public Service can expect to be fully prepared.

Appendix A: Crisis Communications – Key Accountabilities









Appendix B: Scenario-based Response Matrix

Internal Crisis Communications Strategy

Provide frequent, accurate, timely and concise information to employees through whatever channels and means available.*

3. Employee



Conduct Situation Analysis Analysis will determine which communication tools and technology are appropriate and available. Assess:

Geographic Impact:

- Local
- Regional
- Province-wide Criticality:
- None
- Low
- Medium
- Extreme

Technology Access:

- Full network access & power
- Partial network & power
- No power, mobile available
- No access or power satellite only

Determine Primary: Affected employees, all levels.

Audience: Secondary: Unaffected personnel, PSA, EMBC, PO, GCPE, Family members, local communities, etc.

1. Current situation: Provide overview of situation, clarify event status. Develop Q & As. Update any

communications.

Key messages

assess what,

when, where,

how, etc.

Full extent of crisis

is not vet known.

We are working to

previous

2. What vou can do: Describe what actions employees can take in short and longer term.

Key messages

Focus on your

personal safety.

and your family.

Contact your

supervisor and

advise them of

your status. Wait

for instructions.

support information: Acknowledge employees' experience. Offer options for support, such as emergency assistance or counselling. Include Q&A's and respond to concerns.

Key messages This is a difficult time. Take care of Look after yourself, offer support to others if possible. Seek out Homewood Solutions services for personal support.

4. Mission critical information: Provide information to employees able to participate in response and recovery efforts.

Key messages Monitor government info sources. See message boards in Recovery Centres, social media sites. Help your colleagues by supporting operations where possible.

5. Information for unaffected personnel: Describe the status of work for those not directly affected by the crisis. This could include assisting with the recovery effort and/or

or government. Key messages Do not contact employees in impacted area. Allow emergency responders to have full access to cell & telephone capacity.

reassignment

within the ministry

6. Time of next update:

Describe when. how and from whom the next communication will come.

Key messages Situation is under the control of ER personnel on site. The next update will be provided by the XX Team Lead by text message in XX minutes. Watch for update messages on mobile network. Take care of your health and safety.

...... Identify Internal Communication Tools:

- √ Face-to-face
- ✓ Cell phone network
- ✓ Government email ✓ Print
- ✓ Government phone ✓ Radio
- Intranet (@Work)
- ✓ Social media
- Smart phone mobile application (NEW)
- Satellite-ready laptops (NEW)
- 'Shadow' @Work site, featuring news feed and employee check-in capability (NEW)

^{*}Assumes government crisis communications protocol and chain-of-command are established.



[✓] Satellite phone system

Sample Crisis Scenario - Vancouver Island

Provide frequent, accurate, timely and concise information to employees through whatever channels and means available.



Situation Analysis

Environmental: Earthquake, Tsunami, Flood. Landslide with debris flow, Mudslide Human: Injury and loss of life to employees

Property: Buildings damaged, unstable

Geographic Impact: Regional - Victoria

Criticality:

Extreme

area

Technology Access: No power, no landlines Mobile network available. Satellite available

Priority Audience: Primary - Affected employees, all levels. Secondary - Unaffected employees.

Current situation:

Sample message A major earthquake affecting south Vancouver Island. Injuries and possible deaths. No power to region. Known damage to buildings and infrastructure. Full extent of situation is not yet known. We are working to assess the people affected in Victoria. Do not access any buildings until

What you can do:

Sample message If you are in the affected area, see to your immediate health and safety. Find shelter-inplace. Look after your family. Once able, contact your supervisor and advise them of vour status. Wait for evacuation instructions. Direct for personal any media enquiries to GCPE.

information:

Sample message This is a difficult time for all involved. Take care of yourself first, offer support to others if possible. See mobile message board for questions and answers. Seek out Homewood Solutions services support.

Employee support Mission critical information:

Sample message The Operations & Recovery Centre has been activated at xxx. Monitor message boards, social media sites. If you are not in danger: Help your colleagues by supporting operations where possible.

Information for unaffected personnel:

Sample message If you are outside of the affected area: Work will continue as usual until further notice. Do not contact employees in impacted area allow emergency responders to have full access to mobile capacity.

Time of next info update:

Sample message Disaster situation is under the control of emergency personnel on site. The next update will be provided by the Site Response Team Lead by text message in 30 minutes. Watch for update messages on mobile @Work. Take care of your health and safety.

Internal Communication Tools Available:

√ Face-to-face

further notice.

- ✓ Cell phone network
- ✓ Government email ✓ Print

 - system
- ✓ Satellite phone
- ✓ Intranet (@Work) ✓ Social media
- ✓ Government phone ✓ Radio
- Satellite-ready laptops (NEW)

 - 'Shadow' @Work site, featuring news feed and employee check-in capability (NEW)

Smart phone mobile application (NEW)

^{*}Assumes government crisis communications protocol and chain-of-command are established.



Appendix C: Crisis Communication Scripts

Be advised that the following scripts may not be useful in all circumstances. Adapt and adjust the template contents to convey and support messages that are important for employees to understand and remember. Consider the condition of infrastructure and the technology available to communicate. Test messages with subject matter experts to validate the accuracy of technical information. Number each message in the series.

Examples:

1. Emergency Event: First Message

To: All employees

From: Deputy Minister to the Premier, Head of the Public Service (**OR** alternate)

Subject: For Your Immediate Attention – Earthquake Event, Message #X

situation	Messages A major earthquake has occurred on Vancouver Island in the Victoria region (be specific - struck the <city cities=""> of st>). While the extent of the impact to government employees and facilities is not yet known, we are working to assess the situation. Choose one if known: At this time, there is no access to ministry buildings in < list of cities> or <pre>provide</pre> list of addresses>. <or> Please do not access ministry buildings in the impacted area(s) until you have been told it is safe to do so.</or></city>		
situation	(be specific - struck the <city cities=""> of <list>). While the extent of the impact to government employees and facilities is not yet known, we are working to assess the situation. <i>Choose one if known</i>: At this time, there is no access to ministry buildings in < list of cities> or <pre>provide</pre> list of addresses>. <or> Please do not access ministry buildings in the impacted area(s) until you have</or></list></city>		
	to government employees and facilities is not yet known, we are working to assess the situation. <i>Choose one if known</i> : At this time, there is no access to ministry buildings in < list of cities> or <pre>provide</pre> list of addresses>. <or> Please do not access ministry buildings in the impacted area(s) until you have</or>		
	assess the situation. <i>Choose one if known</i> : At this time, there is no access to ministry buildings in < list of cities> or <pre>provide</pre> list of addresses>. <or> Please do not access ministry buildings in the impacted area(s) until you have</or>		
	ministry buildings in < list of cities> or <pre>cprovide list of addresses>. <or> Please do not access ministry buildings in the impacted area(s) until you have</or></pre>		
	Please do not access ministry buildings in the impacted area(s) until you have		
	been told it is safe to do so.		
What you	Safety is the top priority. If you are in an affected area, please take care of		
can do	your health and safety and that of your family. Once you are able, please		
	contact your supervisor and advise them of your personal / family status,		
	availability and confirm your contact information. Your supervisor will		
	provide any work-related information and instructions.		
	If you receive media enquiries, please redirect them to Government		
	Communications and Public Engagement (GCPE) at 250 356 2821.		
Employee	We understand that this is a difficult time for everyone. Please take care of		
support	yourself, and if possible offer your support to others in need. If you have		
information	access to telephone or internet, personal counselling services are available		
	by calling Homewood Human Solutions 1-800-655-5004 or through their		
	website at:		
	https://www.homewoodhumansolutions.com/contact/request.aspx.		
Mission	The X Operations Centre (XOC), headed by <insert lead="" name="" xoc=""> or</insert>		
critical	alternate, has been activated and will lead government's recovery efforts,		
information	working with Emergency Management BC and other government resources.		
	In some ministries, Business Continuity Plans have been activated. ADMs will		
	regularly communicate with the XOC to coordinate recovery efforts and		
	provide progress updates.		
Information	If you are outside the affected region, work will continue as usual. Please do		
for	not attempt to contact your colleagues at this time. You can help emergency		
unaffected	responders in their efforts by limiting your use of cellphone and telephone		
personnel	calls to this area.		
When the	You will receive another update within <xx 24="" 48="" 72<="" hours="" hrs="" td=""></xx>		
next update	hrs> by <meeting dark="" email="" message="" site="" social<="" td="" telephone="" text=""></meeting>		
will occur	media>.		

Sequence	Messages	
	Please ensure your health and safety.	

2. Emergency Event: Update on Recovery Efforts

To: All Employees

From: Deputy Minister **OR** Recovery Operations Centre Lead

Subject: For Your Immediate Attention – Emergency Event, Recovery Update, Message #X

Sequence	Messages			
Current	As a result of the earthquake that struck the <city cities=""> of <list cities=""> on</list></city>			
Situation	<date>, we have determined that employees have been impacted in the</date>			
	following ways:			
	list impacts> 			
Mission	The X Operations Centre is implementing a plan to recover business			
Critical	operations. The first priorities for business recovery are the following lines of			
Information	business: <update as="" business="" progresses.="" recovery=""></update>			
	<list here="" operations="" specific=""></list>			
	Employees assigned to mission critical roles should be prepared to take			
	action immediately. Advise your supervisor of your availability.			
	Some employees may be assigned temporary duties to assist in the recovery			
	of critical business areas or in the broader government recovery. This will be			
	discussed with your supervisor. Other lines of business will be recovered in			
What you	the order of priority as determined prior to the business outage.			
What you can do	If it is possible, please contact your supervisor about your personal / family status, availability, and to confirm your contact information. Your health and			
can do	safety is important to us.			
	If you and your family are safe and you can help, your supervisor may provide			
	instructions on how you can support the recovery effort. Please contact your			
	supervisor for further information.			
	If you have been unable to make contact with your supervisor, please contact			
	their alternate.			
	Should you receive media enquiries, please redirect them to Government			
	Communications and Public Engagement (GCPE) at 250 356 2821.			
Employee	We understand that this is a difficult time for everyone. Please take care of			
support	yourself, and if possible, support to others in need. If you have access to			
information	telephone or internet, personal counselling services from Homewood Human			
	Solutions are available by calling 1-800-655-5004 or via their website at:			
	https://www.homewoodhumansolutions.com/contact/request.aspx.			
	We have established an employee Q&A site that includes answers to			
	employees' questions. You can access the site here (insert hyperlink).			
Information	Choose one:			
for	<if affected="" are="" attempt="" contact<="" do="" not="" outside="" p="" please="" region,="" the="" to="" you=""> your colleggues at this time. You can halp amorganey regrenders in their</if>			
unaffected	your colleagues at this time. You can help emergency responders in their			
personnel	efforts by limiting your use of cellphone and telephone calls to this area. > <or></or>			
	< If you are outside the affected region, it is now safe to contact your			
	colleagues impacted by the earthquake. However, you may experience			

Sequence	Messages		
	delays or difficulties due to widespread impacts to telecommunications		
	infrastructure. >		
	Your supervisor will discuss with you how you can help the recovery effort.		
When the You will receive another update within <xx 1-3="" 7="" <="" days="" hours="" th=""></xx>			
next update	days> by <meeting dark="" email="" message="" site="" social<="" telephone="" text="" th=""></meeting>		
will occur media>.			
	Please continue to ensure your health and safety.		

3. Emergency Event: Response to Employees on Slow Recovery

To: All Employees

From: Deputy Minister OR Recovery Operations Centre Lead

Subject: For Your Immediate Attention – Emergency Event, Status Update: Recovery of Operations (might

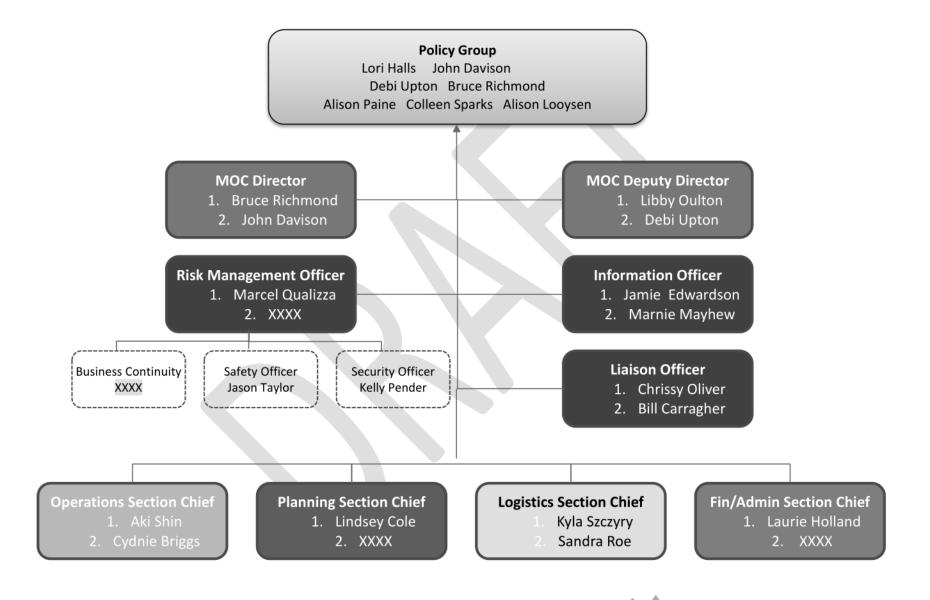
include specific location, e.g.: Victoria), Message #X

Sequence	Messages			
Current	Since the earthquake on <insert date="">, all mission critical business areas have</insert>			
Situation	been recovered. <include been="" date="" done="" examples="" has="" of="" to="" what=""> We</include>			
	would not have been able to do this work without your support and			
	dedication. There is a still a lot more work to do and you will be needed to			
	ensure our success.			
What you	As we continue to recover all business areas, executives will continue to			
can do	provide direction and support. Please ensure you are in contact with your			
	supervisor to discuss immediate business requirements.			
	If you receive media enquiries, please redirect them to Government			
	Communications and Public Engagement at 250 356 2821.			
Employee	We understand that <the of="" period="" time=""> has been a stressful and difficult</the>			
support	time for all employees both inside and outside the impacted region. You may			
information	, , , , , , , , , , , , , , , , , , , ,			
	events such as the one we have experienced will take a significant amount			
	time before we feel we have returned to "normal".			
	<relay a="" if="" personal="" possible="" story,=""></relay>			
	It is important for you to take care of yourself and stay healthy. Personal			
	counselling services from Homewood Human Solutions continue to be			
	available by calling 1-800-655-5004 or via their website at:			
	https://www.homewoodhumansolutions.com/contact/request.aspx			
	We encourage you to contact these services if you find you are experiencing			
	stress or difficulties moving forward. The trained professionals at Homewood			
	Human Solutions can help and are waiting to hear from any employees that			
	would benefit from their assistance.			
	<u>Please continue refer to the employee Q&A site that includes answers to</u>			
	employees' questions. You can access the site here (insert hyperlink).			
Mission	Mission critical business processes have been recovered. The next objective			
Critical	is to recover business areas that have been identified as a business priority.			
Information	Your supervisor will have further details.			

Sequence	Messages		
When the	We are committed to providing you with regular updates on government's		
next update	recovery effort. Thank you for your contributions as we recover from this		
will occur	crisis.		



Appendix D: PSA Executive Operations Centre (needs to be updated)



Appendix E: Frequently Asked Questions

(DRAFT examples in categories below; more to be determined...)

General:

What happened; when did it happen?

Answer includes event facts including Who, What, When, etc.

Who is in charge of the emergency response?

Answer includes names, offices of local, regional response directors, teams, etc.

Regarding work:

Where can I go to get the most up to date information about the business recovery?

Your first source for information is your supervisor/manager or branch head. Additionally, an information centre is available at: (Examples: Physical Address / Internet / Twitter / Facebook / YouTube / @Work site). Also, watch for e-mail updates directly from the executive-in-charge or their designate.

Regarding safety:

The building I work at was damaged. Where should I report to work?

Contact your supervisor for instructions. Your supervisor will work with your Branch Head and ADM to identify alternate arrangements. Work will resume when... include details such as Business Continuity Plan (BCP).

Regarding personal health:

I am feeling stressed. What can I do?

Seek out assistance if you are feeling overwhelmed. Contact Homewood Health Solutions, who offer free, personalized counselling services to all public service employees. You can reach them by phone at 1-800-655-5004 or on the company website at: https://www.homewoodhumansolutions.com/contact/request.aspx.

Appendix F: Contact Information

Appendix X: Contact Information

(List of names, updated as of x date)

Priority	Responsible	Delivered by	Contact (last updated)
1	Deputy Minister,	Who or What? (DM, ADM,	Name: Lori Halls
	Public Service	Response Team Lead, etc)	T:
	Agency		M:
			E: Lori.Halls@gov.bc.ca
2	Communications		Marnie Mayhew
	Lead		T:
			M:
			E:
3	Technical Lead		Thayne Werdal
4	Community		
	Communications		
	Lead		
4	Regional Monitor		
	(Region 1 –		
	Vancouver Island)		
5	Regional Monitor		
	(Region 2 – Lower		
	Mainland)		

Appendix G: Outstanding Questions

- What is the government-wide response protocol for a natural disaster/crisis/emergency?
- Who (or what role) is responsible/accountable for leading employee communications for the overall crisis event? (Deputy Minister to Premier, Head of the Public Service? Head of the Public Service Agency?)
- How are second-in-command or designates determined, overall and in ministries/agencies by seniority, by hierarchy?
- How does the employee Communications Lead work with the GCPE Lead and EMBC Lead? What's the protocol?
- How will messages be coordinated to be consistent, timely, and accurate? Who is the ultimate authority if there are conflicts?
- What role do ministry Business Continuity Plans (BCPs) have in the government-wide crisis communications protocol? Need to clarify where Ministry and Agency roles are different.
- Where will crisis communications technology (satellite phones, laptops) be stored? Who needs access and what is the contingency plan if they are unavailable? Includes digital and hard copies (and storage) of all plans, templates, etc.
- Who is responsible for the regular updates of contact lists? How often will that occur? (Should a schedule be established?)
- What is the timeline for a completed internal crisis communications plan and how will it be made available to those in roles of responsibility?
- What other government documents for crisis communications planning need to be referenced in this document?