Insley, Kara MTIC:EX

From:

Ehle, Dan MTIC:EX

Sent:

September-19-13 6:40 AM

To:

Murch, Dennis MTIC:EX; Quill, Robert MTIC:EX

Subject:

FW: IM312831 - EMBC voice outage

Making sure that awareness is there because of this having impacted EMBC and possibly BCAS.

Depending on what comes back from JAG, I may ask Robert to document the occurrence.

Thanks

From: Sadler, Bobbi JAG:EX

Sent: Thursday, September 19, 2013 6:35 AM
To: Ehle, Dan CITZ:EX; Mah, Chris K JAG:EX
Cc: Hackett, Stu CITZ:EX; Duffy, Chris D JAG:EX
Subject: Re: IM312831 - EMBC voice outage

Thanks for the note Dan. Please work with Chris Mah and brief him. Chris will keep me in the loop as needed. I have also cc'd Chris Duffy for information.

On 2013-09-19, at 6:29 AM, "Ehle, Dan CITZ:EX" < Dan.Ehle@gov.bc.ca> wrote:

Hi Bobbi.

A voice outage last night affected EMBC services (see below). I don't believe it affected 911, but that's not clear from the incident details.

Is this likely to have public exposure? If so I'd like to proactive in briefing those who may be required to comment on it.

Thanks

From: Ehle, Dan CITZ:EX

Sent: Thursday, September 19, 2013 6:21 AM

To: Murch, Dennis CITZ:EX; Quill, Robert CITZ:EX; Strzelecki, Cheryl L CITZ:EX

Subject: FW: IM312831 FW: Update from Telus

Importance: High

Thanks for managing this Cheryl!

09/19/2013 01:09:34 (CLSTRZEL):

See attachment tab for communications if required.

09/19/2013 01:07:19 (CLSTRZEL):

Call received from Cheryl Strzelecki SSBC Customer Service Centre at 0104, Confirmation received that Telus services have been restored.

Additionally, see following message received from Bruce Conley, BCAS regarding status of 911 services.

EMBC Emergency Coordination Centre staff have confirmed all toll free lines appear to be operational. Deployed duty staff are standing down and ECC operations are returning to normal staffing level.

This will be the FINAL message from EMBC concerning this event.

09/19/2013 01:06:34 (CLSTRZEL):

Will monitor until the morning.

09/19/2013 01:05:40 (CLSTRZEL):

SUSPENDED

Ticket suspended by CLSTRZEL.

09/19/2013 01:04:07 (CLSTRZEL):

Called Andrew Bryan to advise all Services have been restored.

09/19/2013 01:02:30 (CLSTRZEL):

Gary Michalchuk called to advise all Service have been restored.

09/19/2013 01:01:21 (CLSTRZEL):

Called 387-7000 # 3, spoke with help desk.

09/19/2013 00:56:57 (CLSTRZEL):

Called Andrew Bryan to advised of the Telus update.

He also advised they can see there lines starting to come back but are not sure if there local or the toll free, and what the transfer status will be...but knows Telus is still working on the issues....No ETR 09/19/2013 00:45:47 (CLSTRZEL):

Gary Michalchuk called to advise services are starting to come back on line, seeing toll free numbers, Tech's continue to work on the issue. No ETR.

09/19/2013 00:21:41 (CLSTRZEL):

updated Incident title:

Telus outage, BC and Alberta

09/19/2013 00:19:50 (CLSTRZEL):

Called Andrew Bryan and advised of the Telus update.

09/19/2013 00:18:23 (CLSTRZEL):

Called Stu Hacket and advise of the situation.

09/19/2013 00:17:28 (CLSTRZEL):

Called Gary Michalchuk, he advised they have identified the route cause and are currently working on the situation. No ETR at this time.

09/18/2013 23:59:36 (CLSTRZEL):

e-mail sent to:

PSSG EMBC ALL EM STAFF; Lapointe, Lisa JAG:EX; 77000 Shared Services BC Service Desk CITZ:EX;

Conley, Bruce EHS:EX; Mike Webb; Jason JASCHINSKY; David Bertoia; Ivan Kusal (ivan.kusal@telus.com);

Strzelecki, Cheryl L CITZ:EX

09/18/2013 23:58:54 (CLSTRZEL):

Email from Andrew:

Received call from Bruce Conley, BCAS Manager Telecommunications at 2345 hrs.

Bruce advised:

- 911 calls appear to be getting through;
- Internally, sporadic access to both landline and cellular for calls made by BCAS staff.

BCAS technical staff involved, BCAS will provide point of contact.

09/18/2013 23:56:10 (CLSTRZEL):

Spoke with Andrew, from what they can see the 911 services is reachable, they do not know the outdifficulties experienced once that caller is transfered to police, ambulance or fire lines...Advised i should get an update from Telus in the next 10 minutes and would call him back... 09/18/2013 23:49:36 (CLSTRZEL):

Tried Dan Ehle, reached voice mail.

09/18/2013 23:46:27 (CLSTRZEL):

Received e-mail from Andrew Bryan:

Received call at 2319 hrs from Ivan Kusal, Telus Business Continuity in Calgary.

Ivan advised:

- Issue appears to be emanating out of Edmonton;
- May relate to a network change implemented earlier this evening;
- Conference bridge is up and key technical staff are "working the problem";
- It is known that BOTH toll free numbers AND 911 services are impacted;
- Suggestions was that problem resolution "should not be long".

Emergency Coordination Centre toll free numbers are not functioning.

Recommend all calls to the ECC use local number 250-952-4554.

EMBC Emergency Coordination Centre will remain in contact with Telus Business Continuity pending resolution

09/18/2013 23:45:32 (CLSTRZEL):

Called Denis, received voice mail, left message advising.

09/18/2013 23:39:58 (CLSTRZEL):

Received out of office for Rosemarie, Denis Murch is her contact.

09/18/2013 23:38:44 (CLSTRZEL):

Called Rosemarie Hayes, reached voice mail, left message advising of the situation and Gary was our Telus contact at this time.

09/18/2013 23:32:39 (CLSTRZEL):

Sent Dan Ehle an e-mail to call me along with a very light description of the issue.

09/18/2013 23:28:04 (CLSTRZEL):

Between 11:00 and 11:30...Tried calling 877-215-1099 and received fast busy, called CSC Hotline, received dead air. Called Telus SAM team, reached fast busy. Called Gary Michalchuk Telus, 250 812-8109 and advised. Gary will follow up with his team and advise.....Called Lynne Rhysler, spoke with Lynne....Called Dan Ehle received voice mail left a message for him to call me back.....Gary called and advised he can see there are issues within BC and Alberta and their team are aware and looking into the issue. Gary will call Dave Bertoia...

09/18/2013 23:07:15 (JUTHOMSO):

Six attempts to reach Telus at 877 215 1099 have failed - cut to fast busy - tested from desk phones and cell phones.

issue seems to be province wide,

contacted Cheryl Strzlecki; she is making additional attempts to raise incident with Telus,

We tested 611 from a Telus phone - also cut to fast busy

Andrew Bryan is contacting Telus business continuity in Calgary directly, and will follow up with me here.

From: Ehle, Dan CITZ:EX

Sent: Thursday, September 19, 2013 6:10 AM

To: 'David Bertoia'; Gary Michalchuk

Cc: Murch, Dennis CITZ:EX; Strzelecki, Cheryl L CITZ:EX

Subject: Fw: IM312831 FW: Update from Telus

Importance: High

Gary, Dave, An update asap please.

From: Strzelecki, Cheryl L CITZ:EX

Sent: Wednesday, September 18, 2013 11:36 PM

To: 77000 Shared Services BC Service Desk CITZ:EX; Ehle, Dan CITZ:EX; Rehsler, Lynne CITZ:EX

Cc: Frykas, Todd ISMC:EX; Yalland, Richard ISMC:EX **Subject:** RE: IM312831 FW: Update from Telus

Thank you,

Cheryl

From: 77000 Shared Services BC Service Desk CITZ:EX **Sent:** Wednesday, September 18, 2013 11:34 PM

To: Strzelecki, Cheryl L CITZ:EX; Ehle, Dan CITZ:EX; Rehsler, Lynne CITZ:EX

Cc: Frykas, Todd ISMC:EX; Yalland, Richard ISMC:EX

Subject: IM312831 FW: Update from Telus

Importance: High

Update below

Justin Thomson Shared Services Service Desk Phone: 250.387.7000

Toll Free: 1-866-660-0811 Email: 77000@gov.bc.ca

From: Bryan, Andrew J JAG:EX

Sent: Wednesday, September 18, 2013 11:29 PM

To: PSSG EMBC ALL EM STAFF; Lapointe, Lisa JAG:EX; 77000 Shared Services BC Service Desk CITZ:EX;

Conley, Bruce EHS:EX; Mike Webb; Jason JASCHINSKY; David Bertoia

Cc: Ivan Kusal (ivan.kusal@telus.com)

Subject: Update from Telus

Importance: High

Received call at 2319 hrs from Ivan Kusal, Telus Business Continuity in Calgary.

Ivan advised:

- Issue appears to be emanating out of Edmonton;
- May relate to a network change implemented earlier this evening;
- Conference bridge is up and key technical staff are "working the problem";
- It is known that BOTH toll free numbers AND 911 services are impacted;
- Suggestions was that problem resolution "should not be long".

Emergency Coordination Centre toll free numbers are not functioning.

Recommend all calls to the ECC use local number 250-952-4554.

EMBC Emergency Coordination Centre will remain in contact with Telus Business Continuity pending resolution.

A.J. (Andrew) Bryan

Emergency Management Technology Specialist

EMERGENCY MANAGEMENT BRITISH COLUMBIA

Block A - Suite 200 2261 Keating Cross Road Saanichton BC V8M 2A5 CANADA www.embc.gov.bc.ca Ph 250.952.4896 Fax 250.952.4888

E-mail: <u>andrew.bryan@gov.bc.ca</u>

andrew.bryan@pep.gov.bc.ca

Amateur Radio Callsign: VE7KSN

24 Hour Emergency Reporting 1.800.663.3456

Insley, Kara MTIC:EX

From:

Ehle, Dan MTIC:EX

Sent:

September-19-13 6:44 AM

To:

Quill, Robert MTIC:EX; Mah, Chris K JAG:EX

Cc:

Murch, Dennis MTIC:EX

Subject:

FW: IM312831 - EMBC voice outage

Hi Robert.

Could you get a detailed update/explanation from TELUS and give Chris Mah a call?

Thanks

From: Sadier, Bobbi JAG:EX

Sent: Thursday, September 19, 2013 6:35 AM To: Ehle, Dan CITZ:EX; Mah, Chris K JAG:EX Cc: Hackett, Stu CITZ:EX; Duffy, Chris D JAG:EX Subject: Re: IM312831 - EMBC voice outage

Thanks for the note Dan. Please work with Chris Mah and brief him. Chris will keep me in the loop as needed. I have also cc'd Chris Duffy for information.

On 2013-09-19, at 6:29 AM, "Ehle, Dan CITZ:EX" < Dan. Ehle@gov.bc.ca> wrote:

Hi Bobbi.

A voice outage last night affected EMBC services (see below). I don't believe it affected 911, but that's not clear from the incident details.

Is this likely to have public exposure? If so I'd like to proactive in briefing those who may be required to comment on it.

Thanks

From: Ehle, Dan CITZ:EX

Sent: Thursday, September 19, 2013 6:21 AM

To: Murch, Dennis CITZ:EX; Quill, Robert CITZ:EX; Strzelecki, Cheryl L CITZ:EX

Subject: FW: IM312831 FW: Update from Telus

Importance: High

Thanks for managing this Cheryl!

09/19/2013 01:09:34 (CLSTRZEL):

See attachment tab for communications if required.

09/19/2013 01:07:19 (CLSTRZEL):

Call received from Cheryl Strzelecki SSBC Customer Service Centre at 0104, Confirmation received that Telus services have been restored.

Additionally, see following message received from Bruce Conley, BCAS regarding status of 911 services.

EMBC Emergency Coordination Centre staff have confirmed all toll free lines appear to be operational. Deployed duty staff are standing down and ECC operations are returning to normal staffing level.

This will be the FINAL message from EMBC concerning this event.

09/19/2013 01:06:34 (CLSTRZEL):

Will monitor until the morning.

09/19/2013 01:05:40 (CLSTRZEL):

SUSPENDED

Ticket suspended by CLSTRZEL.

09/19/2013 01:04:07 (CLSTRZEL):

Called Andrew Bryan to advise all Services have been restored.

09/19/2013 01:02:30 (CLSTRZEL):

Gary Michalchuk called to advise all Service have been restored.

09/19/2013 01:01:21 (CLSTRZEL):

Called 387-7000 # 3, spoke with help desk.

09/19/2013 00:56:57 (CLSTRZEL):

Called Andrew Bryan to advised of the Telus update.

He also advised they can see there lines starting to come back but are not sure if there local or the toll free, and what the transfer status will be...but knows Telus is still working on the issues....No ETR 09/19/2013 00:45:47 (CLSTRZEL):

Gary Michalchuk called to advise services are starting to come back on line, seeing toll free numbers, Tech's continue to work on the issue. No ETR.

09/19/2013 00:21:41 (CLSTRZEL):

updated Incident title:

Telus outage, BC and Alberta

09/19/2013 00:19:50 (CLSTRZEL):

Called Andrew Bryan and advised of the Telus update.

09/19/2013 00:18:23 (CLSTRZEL):

Called Stu Hacket and advise of the situation.

09/19/2013 00:17:28 (CLSTRZEL):

Called Gary Michalchuk, he advised they have identified the route cause and are currently working on the situation. No ETR at this time.

09/18/2013 23:59:36 (CLSTRZEL):

e-mail sent to:

PSSG EMBC ALL EM STAFF; Lapointe, Lisa JAG:EX; 77000 Shared Services BC Service Desk CITZ:EX;

Conley, Bruce EHS:EX; Mike Webb; Jason JASCHINSKY; David Bertoia; Ivan Kusal (ivan.kusal@telus.com);

Strzelecki, Cheryl L CITZ:EX

09/18/2013 23:58:54 (CLSTRZEL):

Email from Andrew:

Received call from Bruce Conley, BCAS Manager Telecommunications at 2345 hrs.

Bruce advised:

- 911 calls appear to be getting through;
- Internally, sporadic access to both landline and cellular for calls made by BCAS staff.

BCAS technical staff involved, BCAS will provide point of contact.

09/18/2013 23:56:10 (CLSTRZEL):

Spoke with Andrew, from what they can see the 911 services is reachable, they do not know the outdifficulties experienced once that caller is transferred to police, ambulance or fire lines...Advised i should get an update from Telus in the next 10 minutes and would call him back... 09/18/2013 23:49:36 (CLSTRZEL):

Tried Dan Ehle, reached voice mail.

09/18/2013 23:46:27 (CLSTRZEL):

Received e-mail from Andrew Bryan:

Received call at 2319 hrs from Ivan Kusal, Telus Business Continuity in Calgary.

Ivan advised:

- Issue appears to be emanating out of Edmonton;
- May relate to a network change implemented earlier this evening;
- Conference bridge is up and key technical staff are "working the problem";
- It is known that BOTH toll free numbers AND 911 services are impacted;
- Suggestions was that problem resolution "should not be long".

Emergency Coordination Centre toll free numbers are not functioning.

Recommend all calls to the ECC use local number 250-952-4554.

EMBC Emergency Coordination Centre will remain in contact with Telus Business Continuity pending resolution

09/18/2013 23:45:32 (CLSTRZEL):

Called Denis, received voice mail, left message advising.

09/18/2013 23:39:58 (CLSTRZEL):

Received out of office for Rosemarie, Denis Murch is her contact.

09/18/2013 23:38:44 (CLSTRZEL):

Called Rosemarie Hayes, reached voice mail, left message advising of the situation and Gary was our Telus contact at this time.

09/18/2013 23:32:39 (CLSTRZEL):

Sent Dan Ehle an e-mail to call me along with a very light description of the issue.

09/18/2013 23:28:04 (CLSTRZEL):

Between 11:00 and 11:30...Tried calling 877-215-1099 and received fast busy, called CSC Hotline, received dead air. Called Telus SAM team, reached fast busy. Called Gary Michalchuk Telus, 250 812-8109 and advised. Gary will follow up with his team and advise.....Called Lynne Rhysler, spoke with Lynne....Called Dan Ehle received voice mail left a message for him to call me back.....Gary called and advised he can see there are issues within BC and Alberta and their team are aware and looking into the issue. Gary will call Dave Bertoia...

09/18/2013 23:07:15 (JUTHOMSO):

Six attempts to reach Telus at 877 215 1099 have failed - cut to fast busy - tested from desk phones and cell phones.

issue seems to be province wide,

contacted Cheryl Strzlecki; she is making additional attempts to raise incident with Telus,

We tested 611 from a Telus phone - also cut to fast busy

Andrew Bryan is contacting Telus business continuity in Calgary directly, and will follow up with me here.

From: Ehle, Dan CITZ:EX

Sent: Thursday, September 19, 2013 6:10 AM

To: 'David Bertoia'; Gary Michalchuk

Cc: Murch, Dennis CITZ:EX; Strzelecki, Cheryl L CITZ:EX

Subject: Fw: IM312831 FW: Update from Telus

Importance: High

Gary, Dave,
An update asap please.

From: Strzelecki, Cheryl L CITZ:EX

Sent: Wednesday, September 18, 2013 11:36 PM

To: 77000 Shared Services BC Service Desk CITZ:EX; Ehle, Dan CITZ:EX; Rehsler, Lynne CITZ:EX

Cc: Frykas, Todd ISMC:EX; Yalland, Richard ISMC:EX Subject: RE: IM312831 FW: Update from Telus

Thank you,

Cheryl

From: 77000 Shared Services BC Service Desk CITZ:EX **Sent:** Wednesday, September 18, 2013 11:34 PM

To: Strzelecki, Cheryl L CITZ:EX; Ehle, Dan CITZ:EX; Rehsler, Lynne CITZ:EX

Cc: Frykas, Todd ISMC:EX; Yalland, Richard ISMC:EX

Subject: IM312831 FW: Update from Telus

Importance: High

Update below

Justin Thomson Shared Services Service Desk Phone: 250.387.7000

Toll Free: 1-866-660-0811 Email: 77000@gov.bc.ca

From: Bryan, Andrew J JAG:EX

Sent: Wednesday, September 18, 2013 11:29 PM

To: PSSG EMBC ALL EM STAFF; Lapointe, Lisa JAG:EX; 77000 Shared Services BC Service Desk CITZ:EX;

Conley, Bruce EHS:EX; Mike Webb; Jason JASCHINSKY; David Bertoia

Cc: Ivan Kusal (ivan.kusal@telus.com)

Subject: Update from Telus

Importance: High

Received call at 2319 hrs from Ivan Kusal, Telus Business Continuity in Calgary.

Ivan advised:

- Issue appears to be emanating out of Edmonton;
- May relate to a network change implemented earlier this evening;
- Conference bridge is up and key technical staff are "working the problem";
- It is known that BOTH toll free numbers AND 911 services are impacted;
- Suggestions was that problem resolution "should not be long".

Emergency Coordination Centre toll free numbers are not functioning.

Recommend all calls to the ECC use local number 250-952-4554.

EMBC Emergency Coordination Centre will remain in contact with Telus Business Continuity pending resolution.

A.J. (Andrew) Bryan

Emergency Management Technology Specialist

EMERGENCY MANAGEMENT BRITISH COLUMBIA

Block A - Suite 200 2261 Keating Cross Road Saanichton BC V8M 2A5 CANADA www.embc.gov.bc.ca Ph 250.952.4896 Fax 250.952.4888 E-mail: andrew.bryan@gov.bc.ca

andrew.bryan@pep.gov.bc.ca

Amateur Radio Callsign: VE7KSN 24 Hour Emergency Reporting 1.800.663.3456

Insley, Kara MTIC:EX

From:

Mah, Chris K JAG:EX

Sent:

September-19-13 8:47 AM

To:

Quill, Robert MTIC:EX

Cc:

Strobl, Lou MTIC:EX; Murch, Dennis MTIC:EX

Subject:

RE: IM312831 - EMBC voice outage

I'm not at the number listed in the GAL today.

You can reach me at 250 952 4544 or on my mobile at S15, S17

Chris.

From: Quill, Robert CITZ:EX

Sent: Thursday, September 19, 2013 8:34 AM

To: Mah, Chris K JAG:EX

Cc: Strobl, Lou CITZ:EX; Murch, Dennis CITZ:EX **Subject:** FW: IM312831 - EMBC voice outage

Importance: High

Hello Chris,

I've asked Lou Strobl to contact you. Lou is our team lead for Voice Architecture and Infrastructure and manages incidents. Lou will also be contacting TELUS to get the full details on this one.

Thank you so much Lou!

Cheers, Robert.

From: Quill, Robert CITZ:EX

Sent: Thursday, September 19, 2013 8:27 AM **To:** Ehle, Dan CITZ:EX; Mah, Chris K JAG:EX

Cc: Murch, Dennis CITZ:EX

Subject: RE: IM312831 - EMBC voice outage

Hello Dan,

Yes will do. Keep you posted.

Cheers, R.

From: Ehle, Dan CITZ:EX

Sent: Thursday, September 19, 2013 6:44 AM **To:** Quill, Robert CITZ:EX; Mah, Chris K JAG:EX

Cc: Murch, Dennis CITZ:EX

Subject: FW: IM312831 - EMBC voice outage

Hi Robert.

Could you get a detailed update/explanation from TELUS and give Chris Mah a call?

Thanks

From: Sadler, Bobbi JAG:EX

Sent: Thursday, September 19, 2013 6:35 AM **To:** Ehle, Dan CITZ:EX; Mah, Chris K JAG:EX **Cc:** Hackett, Stu CITZ:EX; Duffy, Chris D JAG:EX **Subject:** Re: IM312831 - EMBC voice outage

Thanks for the note Dan. Please work with Chris Mah and brief him. Chris will keep me in the loop as needed. I have also cc'd Chris Duffy for information.

On 2013-09-19, at 6:29 AM, "Ehle, Dan CITZ:EX" < Dan. Ehle@gov.bc.ca> wrote:

Hi Bobbi.

A voice outage last night affected EMBC services (see below). I don't believe it affected 911, but that's not clear from the incident details.

Is this likely to have public exposure? If so I'd like to proactive in briefing those who may be required to comment on it.

Thanks

From: Ehle, Dan CITZ:EX

Sent: Thursday, September 19, 2013 6:21 AM

To: Murch, Dennis CITZ:EX; Quill, Robert CITZ:EX; Strzelecki, Cheryl L CITZ:EX

Subject: FW: IM312831 FW: Update from Telus

Importance: High

Thanks for managing this Cheryl!

09/19/2013 01:09:34 (CLSTRZEL):

See attachment tab for communications if required.

09/19/2013 01:07:19 (CLSTRZEL):

Call received from Cheryl Strzelecki SSBC Customer Service Centre at 0104, Confirmation received that Telus services have been restored.

Additionally, see following message received from Bruce Conley, BCAS regarding status of 911 services.

EMBC Emergency Coordination Centre staff have confirmed all toll free lines appear to be operational. Deployed duty staff are standing down and ECC operations are returning to normal staffing level.

This will be the FINAL message from EMBC concerning this event.

09/19/2013 01:06:34 (CLSTRZEL):

Will monitor until the morning.

09/19/2013 01:05:40 (CLSTRZEL):

SUSPENDED

Ticket suspended by CLSTRZEL.

09/19/2013 01:04:07 (CLSTRZEL):

Called Andrew Bryan to advise all Services have been restored.

09/19/2013 01:02:30 (CLSTRZEL):

Gary Michalchuk called to advise all Service have been restored.

09/19/2013 01:01:21 (CLSTRZEL):

Called 387-7000 # 3, spoke with help desk.

09/19/2013 00:56:57 (CLSTRZEL):

Called Andrew Bryan to advised of the Telus update.

He also advised they can see there lines starting to come back but are not sure if there local or the toll free, and what the transfer status will be...but knows Telus is still working on the issues....No ETR 09/19/2013 00:45:47 (CLSTRZEL):

Gary Michalchuk called to advise services are starting to come back on line, seeing toll free numbers, Tech's continue to work on the issue. No ETR.

09/19/2013 00:21:41 (CLSTRZEL):

updated Incident title:

Telus outage, BC and Alberta

09/19/2013 00:19:50 (CLSTRZEL):

Called Andrew Bryan and advised of the Telus update.

09/19/2013 00:18:23 (CLSTRZEL):

Called Stu Hacket and advise of the situation.

09/19/2013 00:17:28 (CLSTRZEL):

Called Gary Michalchuk, he advised they have identified the route cause and are currently working on the situation. No ETR at this time.

09/18/2013 23:59:36 (CLSTRZEL):

e-mail sent to:

PSSG EMBC ALL EM STAFF; Lapointe, Lisa JAG:EX; 77000 Shared Services BC Service Desk CITZ:EX;

Conley, Bruce EHS:EX; Mike Webb; Jason JASCHINSKY; David Bertoia; Ivan Kusal (ivan.kusal@telus.com);

Strzelecki, Cheryl L CITZ:EX

09/18/2013 23:58:54 (CLSTRZEL):

Email from Andrew:

Received call from Bruce Conley, BCAS Manager Telecommunications at 2345 hrs.

Bruce advised:

- 911 calls appear to be getting through;
- Internally, sporadic access to both landline and cellular for calls made by BCAS staff.

BCAS technical staff involved, BCAS will provide point of contact.

09/18/2013 23:56:10 (CLSTRZEL):

Spoke with Andrew, from what they can see the 911 services is reachable, they do not know the outdifficulties experienced once that caller is transferred to police, ambulance or fire lines...Advised i should get an update from Telus in the next 10 minutes and would call him back...

09/18/2013 23:49:36 (CLSTRZEL):

Tried Dan Ehle, reached voice mail.

09/18/2013 23:46:27 (CLSTRZEL):

Received e-mail from Andrew Bryan:

Received call at 2319 hrs from Ivan Kusal, Telus Business Continuity in Calgary.

Ivan advised:

- Issue appears to be emanating out of Edmonton;
- May relate to a network change implemented earlier this evening;

- Conference bridge is up and key technical staff are "working the problem";
- It is known that BOTH toll free numbers AND 911 services are impacted:
- Suggestions was that problem resolution "should not be long".

Emergency Coordination Centre toll free numbers are not functioning.

Recommend all calls to the ECC use local number 250-952-4554.

EMBC Emergency Coordination Centre will remain in contact with Telus Business Continuity pending resolution

09/18/2013 23:45:32 (CLSTRZEL):

Called Denis, received voice mail, left message advising.

09/18/2013 23:39:58 (CLSTRZEL):

Received out of office for Rosemarie, Denis Murch is her contact.

09/18/2013 23:38:44 (CLSTRZEL):

Called Rosemarie Hayes, reached voice mail, left message advising of the situation and Gary was our Telus contact at this time.

09/18/2013 23:32:39 (CLSTRZEL):

Sent Dan Ehle an e-mail to call me along with a very light description of the issue.

09/18/2013 23:28:04 (CLSTRZEL):

Between 11:00 and 11:30...Tried calling 877-215-1099 and received fast busy, called CSC Hotline, received dead air. Called Telus SAM team, reached fast busy. Called Gary Michalchuk Telus, 250 812-8109 and advised. Gary will follow up with his team and advise.....Called Lynne Rhysler, spoke with Lynne....Called Dan Ehle received voice mail left a message for him to call me back.....Gary called and advised he can see there are issues within BC and Alberta and their team are aware and looking into the issue. Gary will call Dave Bertoia...

09/18/2013 23:07:15 (JUTHOMSO):

Six attempts to reach Telus at 877 215 1099 have failed - cut to fast busy - tested from desk phones and cell phones.

issue seems to be province wide,

contacted Cheryl Strzlecki; she is making additional attempts to raise incident with Telus,

We tested 611 from a Telus phone - also cut to fast busy

Andrew Bryan is contacting Telus business continuity in Calgary directly, and will follow up with me here.

From: Ehle, Dan CITZ:EX

Sent: Thursday, September 19, 2013 6:10 AM

To: 'David Bertoia'; Gary Michalchuk

Cc: Murch, Dennis CITZ:EX; Strzelecki, Cheryl L CITZ:EX

Subject: Fw: IM312831 FW: Update from Telus

Importance: High

Gary, Dave,

An update asap please.

From: Strzelecki, Cheryl L CITZ:EX

Sent: Wednesday, September 18, 2013 11:36 PM

To: 77000 Shared Services BC Service Desk CITZ:EX; Ehle, Dan CITZ:EX; Rehsler, Lynne CITZ:EX

Cc: Frykas, Todd ISMC:EX; Yalland, Richard ISMC:EX

Subject: RE: IM312831 FW: Update from Telus

Cheryl

From: 77000 Shared Services BC Service Desk CITZ:EX **Sent:** Wednesday, September 18, 2013 11:34 PM

To: Strzelecki, Cheryl L CITZ:EX; Ehle, Dan CITZ:EX; Rehsler, Lynne CITZ:EX

Cc: Frykas, Todd ISMC:EX; Yalland, Richard ISMC:EX

Subject: IM312831 FW: Update from Telus

Importance: High

Update below

Justin Thomson Shared Services Service Desk Phone: 250.387.7000 Toll Free: 1-866-660-0811

Email: 77000@gov.bc.ca

From: Bryan, Andrew J JAG:EX

Sent: Wednesday, September 18, 2013 11:29 PM

To: PSSG EMBC ALL EM STAFF; Lapointe, Lisa JAG:EX; 77000 Shared Services BC Service Desk CITZ:EX;

Conley, Bruce EHS:EX; Mike Webb; Jason JASCHINSKY; David Bertoia

Cc: Ivan Kusal (ivan.kusal@telus.com)

Subject: Update from Telus

Importance: High

Received call at 2319 hrs from Ivan Kusal, Telus Business Continuity in Calgary.

Ivan advised:

- Issue appears to be emanating out of Edmonton;
- May relate to a network change implemented earlier this evening;
- Conference bridge is up and key technical staff are "working the problem";
- It is known that BOTH toll free numbers AND 911 services are impacted;
- Suggestions was that problem resolution "should not be long".

Emergency Coordination Centre toll free numbers are not functioning.

Recommend all calls to the ECC use local number 250-952-4554.

EMBC Emergency Coordination Centre will remain in contact with Telus Business Continuity pending resolution.

A.J. (Andrew) Bryan

Emergency Management Technology Specialist

EMERGENCY MANAGEMENT BRITISH COLUMBIA

Block A - Suite 200 2261 Keating Cross Road Saanichton BC V8M 2A5 CANADA www.embc.gov.bc.ca Ph 250.952.4896 Fax 250.952.4888 E-mail: andrew.bryan@gov.bc.ca

andrew.bryan@pep.gov.bc.ca

Amateur Radio Callsign: VE7KSN

24 Hour Emergency Reporting 1.800.663.3456

Ehle, Dan MTIC:EX

From:

Quill, Robert CITZ:EX

Sent:

Thursday, September 19, 2013 10:08 AM

To:

Ehle, Dan CITZ:EX

Cc:

Mah, Chris K JAG:EX; Murch, Dennis CITZ:EX

Subject:

FW: IM312831 - EMBC voice outage

Importance:

High

Hello Dan,

Here is the update so far... I asked Lou to deal with this one... (see below)

Cheers,

R.

From: Strobl, Lou CITZ:EX

Sent: Thursday, September 19, 2013 9:59 AM

To: Quill, Robert CITZ:EX

Subject: RE: IM312831 - EMBC voice outage

Importance: High

Talked to TELUS and got some info, but more info that is meaningful will be provided later today. I called Chris and indicated to him what TELUS told me regarding the outage and what was affected (see below).

Basically, TELUS' SS7 network (see below) was down which affected all set up of calls in BC and Alberta. Calls from landlines or cell phones were affected and calls could not be completed. TELUS indicated in the IM that 911 was not affected.

The outage last about 3 hours- about 2300 hrs - 0100 hrs.

TELUS isn't saying much as most likely their legal dept is involved as well as their media relations dept. Don't expect any details or admittance of error from TELUS other than they had a problem with the network that they immediately addressed and fixed in a timely manner.

Signalling System No. 7

Signalling System No. 7 (SS7) is a set of telephony signaling protocols which are used to set up most of the world's public switched telephone network telephone calls. The main purpose is to set up and tear down telephone calls. Other uses include number translation, local number portability, prepaid billing mechanisms, short message service (SMS), and a variety of other mass market services.

From: Ouill. Robert CITZ:EX

Sent: Thursday, September 19, 2013 8:34 AM

To: Mah, Chris K JAG:EX

Cc: Strobl, Lou CITZ:EX; Murch, Dennis CITZ:EX Subject: FW: IM312831 - EMBC voice outage

Importance: High

Hello Chris,

I've asked Lou Strobl to contact you. Lou is our team lead for Voice Architecture and Infrastructure and manages incidents. Lou will also be contacting TELUS to get the full details on this one.

Thank you so much Lou! @

Cheers, Robert.

From: Quill, Robert CITZ:EX

Sent: Thursday, September 19, 2013 8:27 AM To: Ehle, Dan CITZ:EX; Mah, Chris K JAG:EX

Cc: Murch, Dennis CITZ:EX

Subject: RE: IM312831 - EMBC voice outage

Hello Dan,

Yes will do. Keep you posted.

Cheers, R.

From: Ehle, Dan CITZ:EX

Sent: Thursday, September 19, 2013 6:44 AM **To:** Quill, Robert CITZ:EX; Mah, Chris K JAG:EX

Cc: Murch, Dennis CITZ:EX

Subject: FW: IM312831 - EMBC voice outage

Hi Robert.

Could you get a detailed update/explanation from TELUS and give Chris Mah a call?

Thanks

From: Sadler, Bobbi JAG:EX

Sent: Thursday, September 19, 2013 6:35 AM
To: Ehle, Dan CITZ:EX; Mah, Chris K JAG:EX
Cc: Hackett, Stu CITZ:EX; Duffy, Chris D JAG:EX
Subject: Re: IM312831 - EMBC voice outage

Thanks for the note Dan. Please work with Chris Mah and brief him. Chris will keep me in the loop as needed. I have also cc'd Chris Duffy for information.

On 2013-09-19, at 6:29 AM, "Ehle, Dan CITZ:EX" < Dan. Ehle@gov.bc.ca> wrote:

Hi Bobbi.

A voice outage last night affected EMBC services (see below). I don't believe it affected 911, but that's not clear from the incident details.

Is this likely to have public exposure? If so I'd like to proactive in briefing those who may be required to comment on it.

Thanks

From: Ehle, Dan CITZ:EX

Sent: Thursday, September 19, 2013 6:21 AM

To: Murch, Dennis CITZ:EX; Quill, Robert CITZ:EX; Strzelecki, Cheryl L CITZ:EX

Subject: FW: IM312831 FW: Update from Telus

Importance: High

Thanks for managing this Cheryll

09/19/2013 01:09:34 (CLSTRZEL):

See attachment tab for communications if required.

09/19/2013 01:07:19 (CLSTRZEL):

Call received from Cheryl Strzelecki SSBC Customer Service Centre at 0104, Confirmation received that Telus services have been restored.

Additionally, see following message received from Bruce Conley, BCAS regarding status of 911 services.

EMBC Emergency Coordination Centre staff have confirmed all toll free lines appear to be operational. Deployed duty staff are standing down and ECC operations are returning to normal staffing level.

This will be the FINAL message from EMBC concerning this event.

09/19/2013 01:06:34 (CLSTRZEL):

Will monitor until the morning.

09/19/2013 01:05:40 (CLSTRZEL):

SUSPENDED

Ticket suspended by CLSTRZEL.

09/19/2013 01:04:07 (CLSTRZEL):

Called Andrew Bryan to advise all Services have been restored.

09/19/2013 01:02:30 (CLSTRZEL):

Gary Michalchuk called to advise all Service have been restored.

09/19/2013 01:01:21 (CLSTRZEL):

Called 387-7000 # 3, spoke with help desk.

09/19/2013 00:56:57 (CLSTRZEL):

Called Andrew Bryan to advised of the Telus update.

He also advised they can see there lines starting to come back but are not sure if there local or the toll free, and what the transfer status will be...but knows Telus is still working on the issues....No ETR 09/19/2013 00:45:47 (CLSTRZEL):

Gary Michalchuk called to advise services are starting to come back on line, seeing toll free numbers, Tech's continue to work on the issue. No ETR.

09/19/2013 00:21:41 (CLSTRZEL):

updated Incident title:

Telus outage, BC and Alberta

09/19/2013 00:19:50 (CLSTRZEL):

Called Andrew Bryan and advised of the Telus update.

09/19/2013 00:18:23 (CLSTRZEL):

Called Stu Hacket and advise of the situation.

09/19/2013 00:17:28 (CLSTRZEL):

Called Gary Michalchuk, he advised they have identified the route cause and are currently working on the situation. No ETR at this time.

09/18/2013 23:59:36 (CLSTRZEL):

e-mail sent to:

PSSG EMBC ALL EM STAFF; Lapointe, Lisa JAG:EX; 77000 Shared Services BC Service Desk CITZ:EX; Conley, Bruce EHS:EX; Mike Webb; Jason JASCHINSKY; David Bertoia; Ivan Kusal (<u>ivan.kusal@telus.com</u>); Strzelecki, Cheryl L CITZ:EX

09/18/2013 23:58:54 (CLSTRZEL):

Email from Andrew:

Received call from Bruce Conley, BCAS Manager Telecommunications at 2345 hrs.

Bruce advised:

- 911 calls appear to be getting through;
- Internally, sporadic access to both landline and cellular for calls made by BCAS staff.

BCAS technical staff involved, BCAS will provide point of contact.

09/18/2013 23:56:10 (CLSTRZEL):

Spoke with Andrew, from what they can see the 911 services is reachable, they do not know the outdifficulties experienced once that caller is transferred to police, ambulance or fire lines...Advised i should get an update from Telus in the next 10 minutes and would call him back...

09/18/2013 23:49:36 (CLSTRZEL):

Tried Dan Ehle, reached voice mail.

09/18/2013 23:46:27 (CLSTRZEL):

Received e-mail from Andrew Bryan:

Received call at 2319 hrs from Ivan Kusal, Telus Business Continuity in Calgary.

Ivan advised:

- Issue appears to be emanating out of Edmonton;
- May relate to a network change implemented earlier this evening;
- Conference bridge is up and key technical staff are "working the problem";
- It is known that BOTH toll free numbers AND 911 services are impacted;
- Suggestions was that problem resolution "should not be long".

Emergency Coordination Centre toll free numbers are not functioning.

Recommend all calls to the ECC use local number 250-952-4554.

EMBC Emergency Coordination Centre will remain in contact with Telus Business Continuity pending resolution

09/18/2013 23:45:32 (CLSTRZEL):

Called Denis, received voice mail, left message advising.

09/18/2013 23:39:58 (CLSTRZEL):

Received out of office for Rosemarie, Denis Murch is her contact.

09/18/2013 23:38:44 (CLSTRZEL):

Called Rosemarie Hayes, reached voice mail, left message advising of the situation and Gary was our Telus contact at this time.

09/18/2013 23:32:39 (CLSTRZEL):

Sent Dan Ehle an e-mail to call me along with a very light description of the issue.

09/18/2013 23:28:04 (CLSTRZEL):

Between 11:00 and 11:30...Tried calling 877-215-1099 and received fast busy, called CSC Hotline, received dead air. Called Telus SAM team, reached fast busy. Called Gary Michalchuk Telus, 250 812-8109 and advised. Gary will follow up with his team and advise.....Called Lynne Rhysler, spoke with Lynne....Called Dan Ehle received voice mail left a message for him to call me back.....Gary called and advised he can see there are issues within BC and Alberta and their team are aware and looking into the issue. Gary will call Dave Bertoia...

09/18/2013 23:07:15 (JUTHOMSO):

Six attempts to reach Telus at 877 215 1099 have failed - cut to fast busy - tested from desk phones and cell phones.

issue seems to be province wide,

contacted Cheryl Strzlecki; she is making additional attempts to raise incident with Telus,

We tested 611 from a Telus phone - also cut to fast busy

Andrew Bryan is contacting Telus business continuity in Calgary directly, and will follow up with me

From: Ehle, Dan CITZ:EX

Sent: Thursday, September 19, 2013 6:10 AM

To: 'David Bertoia'; Gary Michalchuk

Cc: Murch, Dennis CTTZ:EX; Strzelecki, Cheryl L CITZ:EX

Subject: Fw: IM312831 FW: Update from Telus

Importance: High

Gary, Dave,

An update asap please.

From: Strzelecki, Cheryl L CITZ:EX

Sent: Wednesday, September 18, 2013 11:36 PM

To: 77000 Shared Services BC Service Desk CITZ:EX; Ehle, Dan CITZ:EX; Rehsler, Lynne CITZ:EX

Cc: Frykas, Todd ISMC:EX; Yalland, Richard ISMC:EX Subject: RE: IM312831 FW: Update from Telus

Thank you,

Cheryl

From: 77000 Shared Services BC Service Desk CITZ:EX **Sent:** Wednesday, September 18, 2013 11:34 PM

To: Strzelecki, Cheryl L CITZ:EX; Ehle. Dan CITZ:EX; Rehsler, Lynne CITZ:EX

Cc: Frykas, Todd ISMC:EX; Yalland, Richard ISMC:EX

Subject: IM312831 FW: Update from Telus

Importance: High

Update below

Justin Thomson Shared Services Service Desk

Phone: 250.387.7000 Toll Free: 1-866-660-0811 Email: <u>77000@gov.bc.ca</u>

From: Bryan, Andrew J JAG:EX

Sent: Wednesday, September 18, 2013 11:29 PM

To: PSSG EMBC ALL EM STAFF; Lapointe, Lisa JAG:EX; 77000 Shared Services BC Service Desk CITZ:EX;

Conley, Bruce EHS:EX; Mike Webb; Jason JASCHINSKY; David Bertola

Cc: Ivan Kusal (ivan.kusal@telus.com)

Subject: Update from Telus

Importance: High

Received call at 2319 hrs from Ivan Kusal, Telus Business Continuity in Calgary.

Ivan advised:

- Issue appears to be emanating out of Edmonton;
- May relate to a network change implemented earlier this evening;
- Conference bridge is up and key technical staff are "working the problem";
- It is known that BOTH toll free numbers AND 911 services are impacted;
- Suggestions was that problem resolution "should not be long".

Emergency Coordination Centre toll free numbers are not functioning.

Recommend all calls to the ECC use local number 250-952-4554.

EMBC Emergency Coordination Centre will remain in contact with Telus Business Continuity pending resolution.

A.J. (Andrew) Bryan

Emergency Management Technology Specialist

EMERGENCY MANAGEMENT BRITISH COLUMBIA

Block A - Suite 200 2261 Keating Cross Road Saanichton BC V8M 2A5 CANADA www.embc.gov.bc.ca Ph 250.952.4896 Fax 250.952.4888 E-mail: andrew.bryan@gov.bc.ca

andrew.bryan@pep.gov.bc.ca Amateur Radio Callsign: VE7KSN 24 Hour Emergency Reporting 1.800.663.3456

Insley, Kara MTIC:EX

From:

Strobl. Lou MTIC:EX

Sent:

September-19-13 10:03 AM

To:

Strzelecki, Cheryl L MTIC:EX

Subject:

RE: IM312831 Telus outage, BC and Alberta:

Not sure that anyone other than PEP were up that late to be affected.

FYI. Keep in mind though, any alarm lines that are tied into the PSTN, would have been affected.

From: Strzelecki, Cheryl L CITZ:EX

Sent: Thursday, September 19, 2013 9:59 AM

To: Ehle, Dan CITZ:EX; Strobl, Lou CITZ:EX; Quill, Robert CITZ:EX; Mitrou, Shirley CITZ:EX; Smith, Pattie M CITZ:EX;

Inkster, Cam C CITZ:EX

Cc: SSBC WTS CSC Incident Management; Coughlin, Colin W CITZ:EX

Subject: IM312831 Telus outage, BC and Alberta:

Importance: High

Hi,

Please be advised I have marked this incident restricted.

If this was not actioned, clients would have the ability via ICE to view information and details of the incident. Seeing the high level of attention this situation has reached, we should not have information available to enable assumptions and or further communications as a result within the client community.

If you require access to this incident, please let either Neil, Cori or myself now and we can update the incident or provide details.

We are also advising the Agents of the following if they receive calls not to share any information contained within the incident.

There was an issue within BC and Alberta affecting the Telus Network, Service was restored at approximately 1:00 am.

We are currently reviewing the cause.

If Clients are requesting more detailed information, please have them follow up with their CIA or DCR.

If the call is media related, follow our documentation and let me know.

Cheryl Strzelecki
Manager, CSC and Incident Management
Network, Communications and Collaboration Services (NCCS)
Shared Services BC
Ministry of Technology, Innovation and Citizens' Services
4000 Seymour Place
Phone: (250) 387-7636
E-mail mailto:Cheryl.Strzelecki@gov.bc.ca

ITIL Certified

Ehle, Dan MTIC:EX

From:

CSCHELP - SSBC TSD DSS Customer Service Centre MTIC:EX

Sent:

Wednesday, October 9, 2013 4:33 PM

To:

SSBC TSD DSS CSC Agents; SSBC TSD DSS CSC Supervisors

Subject:

FW: U03131009 - *New*- National - 2G,3G,LTE - Unplanned Rogers Enterprise Service

Assurance Notification, - 10/9/2013 - 6:00 PM

----Original Message----From: Lam, Keith CITZ:EX

Sent: Wednesday, October 9, 2013 4:04 PM

To: 77000 Shared Services BC Service Desk CITZ:EX; CSCHELP - SSBC TSD DSS Customer Service Centre CITZ:EX

Cc: Murch, Dennis CITZ:EX

Subject: FW: U03131009 - *New*- National - 2G,3G,LTE - Unplanned Rogers Enterprise Service Assurance Notification, -

10/9/2013 - 6:00 PM

This is a Rogers national issue.

Keith Lam

Mobile Enterprise Services (MES)
Ministry of Technology Innovation Citizens Services

4000 Seymour Place | Phone: (250) 387-9252

----Original Message----

From: Rogers Data Notifications [mailto:data.notifications@rci.rogers.com]

Sent: Wednesday, October 9, 2013 3:45 PM

Subject: U03131009 - *New*- National - 2G,3G,LTE - Unplanned Rogers Enterprise Service Assurance Notification, -

10/9/2013 - 6:00 PM

Rogers Enterprise Service Assurance has been advised of the following unplanned outage.

Ticket: 0005675730

Notification Type: Unplanned(New)

Service Affected: 2G,3G,LTE Area Affected: National

Start Date: Wednesday, October 09, 2013

Start Time: 6:00 PM EDT

End Date: End Time:

ETA:

Work Summary: Please be advised that customers will be unable to place voice calls on 2G,3G network. Network Operations is actively working on this. More updates to come.

Additional Comments/Update:

Thank You, Enterprise Service Assurance Rogers Business Care

This e-mail (and attachment(s)) is confidential, proprietary, may be subject to copyright and legal privilege and no related rights are waived. If you are not the intended recipient or its agent, any review, dissemination, distribution or copying of this e-mail or any of its content is strictly prohibited and may be unlawful. All messages may be monitored as permitted by applicable law and regulations and our policies to protect our business. E-mails are not secure and you are deemed to have accepted any risk if you communicate with us by e-mail. If received in error, please notify us immediately and delete the e-mail (and any attachments) from any computer or any storage medium without printing a copy.

Ce courriel (ainsi que ses pièces jointes) est confidentiel, exclusif, et peut faire l'objet de droit d'auteur et de privilège juridique; aucun droit connexe n'est exclu. Si vous n'êtes pas le destinataire visé ou son représentant, toute étude, diffusion, transmission ou copie de ce courriel en tout ou en partie, est strictement interdite et peut être illégale. Tous les messages peuvent être surveillés, selon les lois et règlements applicables et les politiques de protection de notre entreprise. Les courriels ne sont pas sécurisés et vous êtes réputés avoir accepté tous les risques qui y sont liés si vous choisissez de communiquer avec nous par ce moyen. Si vous avez reçu ce message par erreur, veuillez nous en aviser immédiatement et supprimer ce courriel (ainsi que toutes ses pièces jointes) de tout ordinateur ou support de données sans en imprimer une copie.

Strzelecki, Cheryl L MTIC:EX

From:

CSCHELP - SSBC TSD DSS Customer Service Centre MTIC:EX

Sent:

Wednesday, October 9, 2013 4:33 PM

To:

SSBC TSD DSS CSC Agents; SSBC TSD DSS CSC Supervisors

Subject:

FW: U03131009 - *New*- National - 2G,3G,LTE - Unplanned Rogers Enterprise Service

Assurance Notification, - 10/9/2013 - 6:00 PM

----Original Message----

From: Lam, Keith CITZ:EX

Sent: Wednesday, October 9, 2013 4:04 PM

To: 77000 Shared Services BC Service Desk CITZ:EX; CSCHELP - SSBC TSD DSS Customer Service

Centre CITZ:EX

Cc: Murch, Dennis CITZ:EX

Subject: FW: U03131009 - *New*- National - 2G,3G,LTE - Unplanned Rogers Enterprise Service

Assurance Notification, - 10/9/2013 - 6:00 PM

This is a Rogers national issue.

Keith Lam

Mobile Enterprise Services (MES)

Ministry of Technology Innovation Citizens Services 4000 Seymour Place | Phone: (250) 387-9252

----Original Message---From: Rogers Data Notifications [mailto:data.notifications@rci.rogers.com]

Sent: Wednesday, October 9, 2013 3:45 PM

Subject: U03131009 - *New*- National - 2G,3G,LTE - Unplanned Rogers Enterprise Service

Assurance Notification, - 10/9/2013 - 6:00 PM

Rogers Enterprise Service Assurance has been advised of the following unplanned outage.

Ticket: 0005675730

Notification Type: Unplanned(New)

Service Affected: 2G,3G,LTE Area Affected: National

Start Date: Wednesday, October 09, 2013

Start Time: 6:00 PM EDT

End Date:
End Time:
ETA:

Work Summary: Please be advised that customers will be unable to place voice calls on 2G,3G network.

Network Operations is actively working on this. More updates to come.

Additional Comments/Update:

Thank You, Enterprise Service Assurance Rogers Business Care

This e-mail (and attachment(s)) is confidential, proprietary, may be subject to copyright and legal privilege and no related rights are waived. If you are not the intended recipient or its agent, any review, dissemination, distribution or copying of this e-mail or any of its content is strictly prohibited and may be unlawful. All messages may be monitored as permitted by applicable law and regulations and our policies to protect our business. E-mails are not secure and you are deemed to have accepted any risk if you communicate with us by e-mail. If received in error, please notify us immediately and delete the e-mail (and any attachments) from any computer or any storage medium without printing a copy.

Ce courriel (ainsi que ses pièces jointes) est confidentiel, exclusif, et peut faire l'objet de droit d'auteur et de privilège juridique; aucun droit connexe n'est exclu. Si vous n'êtes pas le destinataire visé ou son représentant, toute étude, diffusion, transmission ou copie de ce courriel en tout ou en partie, est strictement interdite et peut être illégale. Tous les messages peuvent être surveillés, selon les lois et règlements applicables et les politiques de protection de notre entreprise. Les courriels ne sont pas sécurisés et vous êtes réputés avoir accepté tous les risques qui y sont liés si vous choisissez de communiquer avec nous par ce moyen. Si vous avez reçu ce message par erreur, veuillez nous en aviser immédiatement et supprimer ce courriel (ainsi que toutes ses pièces jointes) de tout ordinateur ou support de données sans en imprimer une copie.

	Call Detail Update All	achments Resolution Detail Audit H	story Helated Records		
	Call ID: CA	LL588082	Status:	Closed	
	Contact Name: BRY	AN, ANDREW JUAG:EX	Owner:	JUTHOMSO	
Creals Incident	Full Name: Andr	ew Bryan	Category:	VOICE	
	Email: Andr	ew.8iyan@gov.bc.ca	Subcategory:	NO IN OR OUT CALLS	囯
	Client Org/Group: JAG	<u> </u>	Product Type:	HARDWARE	1
	Department	9	Problem Type:		13
Show Related	Phone: s1	5, s17 Ext	Assignment:	CSC SERVICE DESK	
	Fax		Seventy:	2	Ī
	Reom/Floor:		Priority.	2	Ī
	Critical User 📗		Emergency		7
	Reported By different from Contact Name		SL& Projection	Standard Priority 2	At the se
			Notily By:	None	¥
0			Call Source;	Telephone	<u> </u>
53		불쾌하는 사이트			
Add/Edit Contact	Asset Tag: 8006	633456 <u>B</u> /2			
	IP Address:	ĵ.	Source IP:		
	Location Code: CSAC	080-00 3].P	Í		
	Facility Code:	<u> </u>	Destination Asset		1
	Site Number: SG		Destination IP:		
	History:		Cause code:		
		vn EMBC 2261 Keating Cross Rd			
	Victoria BC Multiple sites reportant t	ast busy signals calling in to Envergency s	אפיצעום אפיצעום		
	toll free numbers:	dat cass as and low some of the classification as			
	8006633456 8883445058				
11:44	and others:				· •
5 5 5 2			and the contract of the first of the first of the contract of		

All 800 numbers are down EMBC 2261 Keating Cross Rd Victoria BC Multiple sites reporting fast busy signals calling in to Emrergency services toll free numbers: 8006633456 8883445058 and others: Forrest emergency: 2509524050

Received fast busy trying to contact Telus to open ticket with them, also receiving call from sother sites, and have received one report that emergency services may be impacted in Kamloops, personal cell phones and IBM business continuity phones are impacted

number logical.na user.pr assignment problem.status company brief.description

open.time update.time status sla.alert.ti opened.by cits.third.party.ticket subcategory category product.ty cause.code resolution.code resolved.tim

downtime sla.expire update.act

IM312831 800633456 2 CSC SERVICE DESK TELUS
Closed JAG Telus outage, BC and Alberta: All 800 numbe

09/18/2013 23:02:54 09/20/2013 16:00:06 closed 09/20/2013 1 JUTHOMSO
NO IN OR OUT CAL VOICE
HARDWARE VENDOR SOFTWARE RELOAD/RESET/RECONNECT 09/20/2013 1

09/20/2013

09/20/2013 14:07:44 (CLSTRZEL): Service has been stable... Telus will be performing an internal review and advising SSBC of there findings. 09/20/2013 12:00:44 (unsuspend alert) **UNSUSPENDED** 09/19/2013 09:40:48 (CLSTRZEL): Incident has been marked restricted as a result of the reported issue. 09/19/2013 01:09:34 (CLSTRZEL): See attachment tab for communications if required. 09/19/2013 01:07:19 (CLSTRZEL): Call received from Cheryl Strzelecki SSBC Customer Service Centre at 0104, Confirmation received that Telus services have been restored. Additionally, see following message received from Bruce Conley, BCAS regarding status of 911 services. EMBC Emergency Coordination Centre staff have confirmed all toll free lines appear to be operational. Deployed duty staff are standing down and ECC operations are returning to normal staffing level. This will be the FINAL message from EMBC concerning this event. 09/19/2013 01:06:34 (CLSTRZEL): Will monitor until the morning. 09/19/2013 01:05:40 (CLSTRZEL): **SUSPENDED** Ticket suspended by CLSTRZEL. 09/19/2013 01:04:07 (CLSTRZEL): Called Andrew Bryan to advise all Services have been restored. 09/19/2013 01:02:30 (CLSTRZEL): Gary Michalchuk called to advise all Service have been restored. 09/19/2013 01:01:21 (CLSTRZEL): Called 387-7000 # 3, spoke with help desk. 09/19/2013 00:56:57 (CLSTRZEL): Called Andrew Bryan to advised of the Telus update. He also advised they can see there lines starting to come back but are not sure if there local or the toll free, and what the transfer status will be...but knows Telus is still working on the issues.... No ETR 09/19/2013 00:45:47 (CLSTRZEL): Gary Michalchuk called to advise services are starting to come back on line, seeing toll free numbers, Tech's continue to work on the issue. No ETR. 09/19/2013 00:21:41 (CLSTRZEL): updated Incident title: Telus outage, BC and Alberta 09/19/2013 00:19:50 (CLSTRZEL): Called Andrew Bryan and advised of the Telus update. 09/19/2013 00:18:23 (CLSTRZEL): Called Stu Hacket and advise of the situation. 09/19/2013 00:17:28 (CLSTRZEL): Called Gary Michalchuk, he advised they have identified the route cause and are currently working on the situation. No ETR at this time. 09/18/2013 23:59:36 (CLSTRZEL): e-mail sent to: PSSG EMBC ALL EM STAFF; Lapointe, Lisa JAG: EX; 77000 Shared Services BC Service Desk CITZ: EX; Conley, Bruce EHS: EX; Mike Webb; Jason JASCHINSKY; David Bertoia; Ivan Kusal (ivan.kusal@telus.com); Strzelecki, Cheryl L CITZ:EX 09/18/2013 23:58:54 (CLSTRZEL): Email from Andrew: Received call from Bruce Conley, BCAS Manager Telecommunications at 2345 hrs. Bruce advised: - 911 calls appear to be getting through; - Internally, sporadic access to both landline and cellular for calls made by BCAS staff.

BCAS technical staff involved, BCAS will provide point of contact.

09/18/2013 23:56:10 (CLSTRZEL):

Spoke with Andrew, from what they can see the 911 services is reachable, they do not know the outdifficulties experienced once that caller is transferred to police, ambulance or fire lines...Advised i shoudl get an update from Telus in the next 10 minutes and would call him back...

09/18/2013 23:49:36 (CLSTRZEL):

Tried Dan Ehle, reached voice mail.

09/18/2013 23:46:27 (CLSTRZEL):

Received e-mail from Andrew Bryan:

Received call at 2319 hrs from Ivan Kusal, Telus Business Continuity in Calgary.

Ivan advised:

- Issue appears to be emanating out of Edmonton;

- May relate to a network change implemented earlier this evening;

- Conference bridge is up and key technical staff are "working the problem";
- It is known that BOTH toll free numbers AND 911 services are impacted;
- Suggestions was that problem resolution "should not be long".

Emergency Coordination Centre toll free numbers are not functioning.

Recommend all calls to the ECC use local number 250-952-4554.

EMBC Emergency Coordination Centre will remain in contact with Telus Business Continuity pending resolution 09/18/2013 23:45:32 (CLSTRZEL):

Called Denis, received voice mail, left message advising.

09/18/2013 23:39:58 (CLSTRZEL):

Received out of office for Rosemarie, Denis Murch is her contact.

09/18/2013 23:38:44 (CLSTRZEL):

Called Rosemarie Hayes, reached voice mail, left message advising of the situation and Gary was our Telus contact at this time,

09/18/2013 23:32:39 (CLSTRZEL):

Sent Dan Ehle an e-mail to call me along with a very light description of the issue. 09/18/2013 23:28:04 (CLSTRZEL):

Between 11:00 and 11:30...Tried calling 877-215-1099 and received fast busy, called CSC Hotline, received dead air. Called Telus SAM team, reached fast busy. Called Gary Michalchuk Telus, 250 812-8109 and advised. Gary will follow up with his team and advise.....Called Lynne Rhysler, spoke with Lynne....Called Dan Ehle received voice mail left a message for him to call me back.....Gary called and advised he can see there are issues within BC and Alberta and their team are aware and looking into the issue. Gary will call Dave Bertoia...

09/18/2013 23:07:15 (JUTHOMSO):

Six attempts to reach Telus at 877 215 1099 have failed - cut to fast busy - tested from desk phones and cell phones.

issue seems to be province wide,

contacted Cheryl Strzlecki; she is making additional attempts to raise incident with

We tested 611 from a Telus phone - also cut to fast busy

Andrew Bryan is contacting Telus business continuity in Calgary directly, and will follow up with me here.

incident.id open.time product.type priority.code update.time Status cits.web.upd Description assignment cits.owner.group opened.by closed.by close.time company cause.code resolution.c Resolution CALL588082 09/18/2013 23:02:36 HARDWARE false All 800 numbers are 09/20/2013 16:00:1 Closed down EMBC 2261 Keating Cross Rd CSC SERVICE DESK AFTERHOURS HELP DESK linker

09/20/2013 16:00:19 JAG JUTHOMSO
RELOAD/RESET Related incident IM312831 closed. 09/20/2013 16:00:06 (DLLAWREN):
Left vmail with Andrew to confirm closure but Cheryl/CSC says that this can be closed without his confirmation. 09/20/2013 14:08:29 (CLSTRZEL): *** *** There are no other related tickets. Call closed by Incident IM31283

77000 Shared Services BC Service Desk CITZ:EX

Sent:

Wednesday, September 18, 2013 11:34 PM

To:

Strzelecki, Cheryl L CITZ:EX; Ehle, Dan CITZ:EX; Rehsler, Lynne CITZ:EX

Cc:

Frykas, Todd ISMC:EX; Yalland, Richard ISMC:EX

Subject:

#1: IM312831 FW: Update from Telus

Importance:

High

Update below

Justin Thomson

Shared Services Service Desk

Phone: 250.387.7000 Toll Free: 1-866-660-0811 Email: 77000@gov.bc.ca

From: Bryan, Andrew J JAG:EX

Sent: Wednesday, September 18, 2013 11:29 PM

To: PSSG EMBC ALL EM STAFF; Lapointe, Lisa JAG:EX; 77000 Shared Services BC Service Desk CITZ:EX;

Conley, Bruce EHS:EX; Mike Webb; Jason JASCHINSKY; David Bertoia

Cc: Ivan Kusal (ivan.kusal@telus.com)

Subject: Update from Telus

Importance: High

Received call at 2319 hrs from Ivan Kusal, Telus Business Continuity in Calgary.

Ivan advised:

- Issue appears to be emanating out of Edmonton;
- May relate to a network change implemented earlier this evening;
- Conference bridge is up and key technical staff are "working the problem";
- It is known that BOTH toll free numbers AND 911 services are impacted;
- Suggestions was that problem resolution "should not be long".

Emergency Coordination Centre toll free numbers are not functioning.

Recommend all calls to the ECC use local number 250-952-4554.

EMBC Emergency Coordination Centre will remain in contact with Telus Business Continuity pending resolution.

A.J. (Andrew) Bryan

Emergency Management Technology Specialist

EMERGENCY MANAGEMENT BRITISH COLUMBIA

Block A - Suite 200
2261 Keating Cross Road
Saanichton BC V8M 2A5 CANADA
www.embc.gov.bc.ca
Ph 250.952.4896 Fax 250.952.4888
E-mail: andrew.bryan@gov.bc.ca
andrew.bryan@pep.gov.bc.ca
Amateur Radio Callsign: VE7KSN
24 Hour Emergency Reporting 1.800.663.3456

Strzelecki, Cheryl L CITZ:EX

Sent:

Wednesday, September 18, 2013 11:36 PM

To:

'Gary Michalchuk'; 'David Bertoia'

Cc:

Ehle, Dan CITZ:EX; Hayes, Rosemarie CITZ:EX

Subject:

#1,5 FW: IM312831 FW: Update from Telus

Importance:

High

Resending to include Gary, Dave and Rosemarie...

From: 77000 Shared Services BC Service Desk CITZ:EX Sent: Wednesday, September 18, 2013 11:34 PM

To: Strzelecki, Cheryl L CITZ:EX; Ehle, Dan CITZ:EX; Rehsler, Lynne CITZ:EX

Cc: Frykas, Todd ISMC:EX; Yalland, Richard ISMC:EX

Subject: IM312831 FW: Update from Telus

Importance: High

Update below

Justin Thomson Shared Services Service Desk

Phone: 250.387.7000 Toll Free: 1-866-660-0811 Email: 77000@gov.bc.ca

From: Bryan, Andrew J JAG:EX

Sent: Wednesday, September 18, 2013 11:29 PM

To: PSSG EMBC ALL EM STAFF; Lapointe, Lisa JAG:EX; 77000 Shared Services BC Service Desk CITZ:EX;

Conley, Bruce EHS:EX; Mike Webb; Jason JASCHINSKY; David Bertoia

Cc: Ivan Kusal (ivan.kusal@telus.com)

Subject: Update from Telus

Importance: High

Received call at 2319 hrs from Ivan Kusal, Telus Business Continuity in Calgary.

Ivan advised:

- Issue appears to be emanating out of Edmonton;
- May relate to a network change implemented earlier this evening;
- Conference bridge is up and key technical staff are "working the problem";
- It is known that BOTH toll free numbers AND 911 services are impacted;
- Suggestions was that problem resolution "should not be long".

Emergency Coordination Centre toll free numbers are not functioning.

Recommend all calls to the ECC use local number 250-952-4554.

EMBC Emergency Coordination Centre will remain in contact with Telus Business Continuity pending resolution.

A.J. (Andrew) Bryan

Emergency Management Technology Specialist

EMERGENCY MANAGEMENT BRITISH COLUMBIA

Block A - Suite 200
2261 Keating Cross Road
Saanichton BC V8M 2A5 CANADA
www.embc.gov.bc.ca
Ph 250.952,4896 Fax 250.952.4888
E-mail: andrew.bryan@gov.bc.ca

<u>andrew.bryan@pep.gov.bc.ca</u> Amateur Radio Callsign: VE7KSN

24 Hour Emergency Reporting 1.800.663,3456

Bryan, Andrew J JAG:EX

Sent:

Wednesday, September 18, 2013 11:35 PM

To:

Strzelecki, Cheryl L CITZ:EX

Subject:

#2 FW: Update from Telus

Importance:

High

Cheryl:

Got your name from Justin Thompson at 7-7000. I am unable to call him back at 250-220-2885.

We have been in contact with Telus Business Continuity in Calgary and received following update.

You can contact us at EMBC's Emergency Coordination Centre, Use local dial 250-952-4554 or my cell $_{\rm s15,\ s17}$ (Telus).

A.J. (Andrew) Bryan

Emergency Management Technology Specialist

EMERGENCY MANAGEMENT BRITISH COLUMBIA

Block A - Suite 200
2261 Keating Cross Road
Saanichton BC V8M 2A5 CANADA
www.embc.gov.bc.ca

Ph 250.952.4896 Fax 250.952.4888 E-mail: andrew.bryan@gov.bc.ca

<u>andrew.bryan@pep.gov.bc.ca</u> Amateur Radio Callsign: VE7KSN

24 Hour Emergency Reporting 1.800.663.3456

"If you don't like change, you're going to like irrelevance even less."
—General Eric Shinseki, retired Chief of Staff, U. S. Army

From: Bryan, Andrew J JAG:EX

Sent: Wednesday, September 18, 2013 23:29 PM

To: PSSG EMBC ALL EM STAFF; Lapointe, Lisa JAG:EX; 77000 Shared Services BC Service Desk CITZ:EX;

Conley, Bruce EHS:EX; Mike Webb; Jason JASCHINSKY; David Bertoia

Cc: Ivan Kusal (ivan, kusal@telus.com)

Subject: Update from Telus

Importance: High

Received call at 2319 hrs from Ivan Kusal, Telus Business Continuity in Calgary.

Ivan advised:

- Issue appears to be emanating out of Edmonton;
- May relate to a network change implemented earlier this evening;
- Conference bridge is up and key technical staff are "working the problem";
- It is known that BOTH toll free numbers AND 911 services are impacted;
- Suggestions was that problem resolution "should not be long".

Emergency Coordination Centre toll free numbers are not functioning.

Recommend all calls to the ECC use local number 250-952-4554.

EMBC Emergency Coordination Centre will remain in contact with Telus Business Continuity pending resolution.

A.J. (Andrew) Bryan

Emergency Management Technology Specialist

EMERGENCY MANAGEMENT BRITISH COLUMBIA

Block A - Suite 200 2261 Keating Cross Road Saanichton BC V8M 2A5 CANADA www.embc.gov.bc.ca Ph 250.952.4896 Fax 250.952.4888

E-mail: <u>andrew.bryan@gov.bc.ca</u> andrew.bryan@pep.gov.bc.ca

Amateur Radio Callsign: VE7KSN

24 Hour Emergency Reporting 1.800.663.3456

Bryan, Andrew J JAG:EX

Sent:

Wednesday, September 18, 2013 11:56 PM

To:

PSSG EMBC ALL EM STAFF; Lapointe, Lisa JAG:EX; 77000 Shared Services BC Service Desk CITZ:EX; Conley, Bruce EHS:EX; Mike Webb; Jason JASCHINSKY; David Bertoia; Ivan Kusal (ivan.kusal@telus.com); Strzelecki, Cheryl L CITZ:EX

Subject:

#3 Update - Telus Outage - BC Ambulance Service

Importance:

High

Received call from Bruce Conley, BCAS Manager Telecommunications at 2345 hrs.

Bruce advised:

911 calls appear to be getting through;

- Internally, sporadic access to both landline and cellular for calls made by BCAS staff.

BCAS technical staff involved, BCAS will provide point of contact.

A.J. (Andrew) Bryan

Emergency Management Technology Specialist

EMERGENCY MANAGEMENT BRITISH COLUMBIA

Block A - Suite 200 2261 Keating Cross Road Saanichton BC V8M 2A5 CANADA www.embc.gov.bc.ca

Ph 250.952.4896 Fax 250.952.4888 E-mail: <u>andrew.bryan@gov.bc.ca</u>

<u>andrew.bryan@pep.gov.bc.ca</u> Amateur Radio Callsign: VE7KSN

24 Hour Emergency Reporting 1.800.663.3456

Bryan, Andrew J JAG:EX

Sent:

Thursday, September 19, 2013 12:01 AM

To:

PSSG EMBC ALL EM STAFF; Lapointe, Lisa JAG:EX; 77000 Shared Services BC Service Desk CITZ:EX; Conley, Bruce EHS:EX; Mike Webb; Jason JASCHINSKY;

David Bertoia; Ivan Kusal (ivan.kusal@telus.com); Strzelecki, Cheryl L CITZ:EX

Subject:

#4 Update - Telus Outage - SSBC

Received call from Cheryl Strzelecki, Manager SSBC Customer Service Centre at 2350 hrs.

Cheryl advised that SSBC staff will be on call with Telus technical staff at approx, 2400 hrs. She will call the ECC and provide an update following discussion with Telus.

A.J. (Andrew) Bryan

Emergency Management Technology Specialist

EMERGENCY MANAGEMENT BRITISH COLUMBIA

Block A - Suite 200 2261 Keating Cross Road Saanichton BC V8M 2A5 CANADA www.embc.gov.bc.ca Ph 250.952.4896 Fax 250.952.4888

E-mail: andrew.bryan@gov.bc.ca

andrew.bryan@pep.gov.bc.ca Amateur Radio Callsian: VE7KSN

24 Hour Emergency Reporting 1.800.663.3456

Bryan, Andrew J JAG:EX

Sent:

Thursday, September 19, 2013 12:24 AM

To:

PSSG EMBC ALL EM STAFF; Lapointe, Lisa JAG:EX; 77000 Shared Services BC Service Desk CITZ:EX; Conley, Bruce EHS:EX; Mike Webb; Jason JASCHINSKY; David Bertoia; Ivan Kusal (ivan.kusal@telus.com); Strzelecki, Cheryl L CITZ:EX;

Pires, Christine EHS:EX

Subject:

#5 Update - SSBC

Importance:

High

Received call from Cheryl Strzelecki, Manager SSBC Customer Service Centre at 0015 hrs.

Outcome of call with Telus technical staff as follows:

- Root cause has been identified;
- Telus unable to provide an ETA at this time.

A.J. (Andrew) Bryan

Emergency Management Technology Specialist

EMERGENCY MANAGEMENT BRITISH COLUMBIA

Block A - Suite 200 2261 Keating Cross Road Saanichton BC V8M 2A5 CANADA www.embc.gov.bc.ca

Ph 250.952.4896 Fax 250.952.4888 E-mail: andrew.bryan@gov.bc.ca

andrew.bryan@pep.gov.bc.ca

Amateur Radio Callsign: VE7KSN

24 Hour Emergency Reporting 1.800.663.3456

Bryan, Andrew J JAG:EX

Sent:

Thursday, September 19, 2013 1:05 AM

To:

PSSG EMBC ALL EM STAFF; Lapointe, Lisa JAG:EX; 77000 Shared Services BC Service Desk CITZ:EX; Conley, Bruce EHS:EX; Mike Webb; Jason JASCHINSKY; David Bertola; Ivan Kusal (Ivan.kusal@telus.com); Strzelecki, Cheryl L CITZ:EX;

Pires, Christine EHS:EX; McCaffrey, Julianne GCPE:EX

Subject:

#6 Update - Telus Outage

Importance:

High

Call received from Cheryl Strzelecki SSBC Customer Service Centre at 0104, Confirmation received that Telus services have been restored.

Additionally, see following message received from Bruce Conley, BCAS regarding status of 911 services.

EMBC Emergency Coordination Centre staff have confirmed all toll free lines appear to be operational. Deployed duty staff are standing down and ECC operations are returning to normal staffing level.

This will be the FINAL message from EMBC concerning this event.

From: Conley, Bruce EHS:EX

Sent: Thursday, September 19, 2013 0:52 AM

To: Bryan, Andrew J JAG:EX

Subject: Fwd: TELUS Network Service Interruption Sept 18, 2013

Bruce Conley

Begin forwarded message:

From: Linda Lawson < Linda.Lawson@telus.com > Date: 19 September, 2013 12:51:09 AM PDT

To: (list removed)

Subject: RE: TELUS Network Service Interruption Sept 18, 2013

TELUS has resolved the network service interruption affecting the BC 911 Primary and Secondary Centers.

If you are still having issues please call into the TELUS Repair 604-688-1911 or 1800-664-1911 If you have any questions please contact me

Linda LAWSON Client Service Manager II 6B 555 Robson Street
Vancouver, BC V6B 3K9
Tel. 604-663-2621 Cell. 604-209-7020
linda.lawson@telus.com
Member of the TELUS team
the future is friendly®

A.J. (Andrew) Bryan

Emergency Management Technology Specialist

EMERGENCY MANAGEMENT BRITISH COLUMBIA

Block A - Suite 200 2261 Keating Cross Road Saanichton BC V8M 2A5 CANADA www.embc.gov.bc.ca Ph 250.952.4896 Fax 250.952.4888

E-mail: andrew.bryan@gov.bc.ca andrew.bryan@pep.gov.bc.ca

Amateur Radio Callsign: VE7KSN

24 Hour Emergency Reporting 1.800.663.3456