SCHEDULE H – SERVICE DESCRIPTIONS

1. In accordance with the Agreement, TELUS will as of the Effective Date make available to the GPS Entities the Available Services described in the following Attachments to this Schedule H:

   a) Attachment H1 - Long Distance Services;

      i) Attachment H1-A – Outbound Long Distance Services;

      ii) Attachment H1-B – Calling Card Services; and

      iii) Attachment H1-C – Toll-Free Services;

   b) Attachment H2 – Conferencing Services;

      i) Attachment H2-A - Reservation-less Conferencing Services;

      ii) Attachment H2-B - Operator Assisted Conferencing Services;

      iii) Attachment H2-C - Event Conferencing Services;

      iv) Attachment H2-D - Web Conferencing Services; and

      v) Attachment H2-E – Crisis Management Conferencing Services;

   c) Attachment H3 – Voice Services;

      i) Attachment H3-A – Hosted Telephony Services;

      ii) Attachment H3-B – Exchange Services; and

      iii) Attachment H3-C - Hosted IVR Services;

   d) Attachment H5 – Data Services;

      i) Attachment H5-A – Initial Data Services

      ii) Attachment H5-B – Internet and Security Services;

      iii) Attachment H5-C – Optical Ethernet Service; and

      iv) Attachment H5-E – STS WAN L3 VPN Services; and

   e) Attachment H9 – Cellular Services;

      i) Attachment H9-A – Standard Cellular Services; and

      ii) Attachment H9-B – iDEN Network (Mike) Services; and

   f) Attachment H10 – Hardware and Software Procurement Services.

2. TELUS will provide the Available Services described in the Attachments to this Schedule if and when requested by a GPS Entity pursuant to a Service Order or Service Change Order, subject to section 7.4.3 of the main body of this Agreement, in each case entered into in accordance with the terms of this Agreement, for the applicable Fees as set out in the Price Book and/or, subject to section 1.3.3 of the main body of this Agreement, the applicable Service Order or Service Change Order and as such Available Services are delivered in accordance with the terms of the Agreement including, without limitation, the Service Levels for such Services. Where Fees for an Available Service or any optional features related thereto are not separately identifiable in the Price Book or, subject to section 1.3.3 of the main body of this Agreement, the applicable Service Order or Service Change Order, then the Fees for such Available Service or optional features related thereto shall be deemed to be zero.

3. Each separate Available Service provided by TELUS to a GPS Entity pursuant to a Service Order or Service Change Order will include all of the attributes, features, characteristics, components and service parameters described in its separate Attachment to this Schedule, unless:

   a) particular attributes, features, characteristics, components or service parameters of such Available Service are expressly excluded or modified by such Service Order or Service Change Order; or

   b) the Attachment states expressly that an attribute, feature, characteristic, component or service parameters of an Available Service is an optional feature, and the optional feature has not been selected by such GPS Entity in such Service Order or Service Change Order.

4. Where an attribute, feature, characteristic, component or service parameters of an Available Service is described as an optional feature in the Attachments to this Schedule, and the optional feature has been selected by a GPS Entity in a Service Order or Service Change Order, then TELUS will provide such optional feature as a part of such Services without any additional Fee being payable unless otherwise specifically provided in the Price Book and/or, subject to section 1.3.3 of the main body of this Agreement, the applicable Service Order or Service Change Order with respect to that optional feature and otherwise in accordance with the terms of this Agreement including, without limitation, any applicable Service Levels and any additional terms or conditions set out in the Attachments to this Schedule or in such Service Order or Service Change Order, as the case may be.

5. Each Available Service ordered pursuant to a Service Order or Service Change Order shall be delivered to the GPS Entity for the duration of its Service Term in accordance with the description of such Available Service and, subject to section 1.3.3. of the main body of this Agreement, as expressly contemplated in the applicable Service Order or Service Change Order.

6. The Available Services will be deemed to include any service that: (a) TELUS provides to any of the GPS Entities as of immediately prior to the Effective Date; (b) is similar in nature to any of the services described in the Attachments to this Schedule H; and (c) is included on an invoice provided in connection with a TELUS Prior Agreement for a billing period ending on or including the Effective Date. Spend for the services that are deemed by this section 6 to be Available Services will not constitute Eligible Spend for

the purposes of section 3 of Schedule MM, unless: (x) spend on such services was included in the calculation of the initial Revenue Commitment and such inclusion was not an error (as determined in accordance with section 2(a)(viii) of Schedule MM); or (y) an adjustment is made to the Revenue Commitment as it relates to such services or the parties agree that no such adjustment is required, in accordance with section 2(a)(viii) of Schedule MM or otherwise in accordance with this Agreement.

Attachment H1

Long Distance Services

In accordance with this Agreement, the Contractor will as of the Effective Date make available to the GPS Entities the following separate types of Long Distance Services:

- Outbound Long Distance Services, as described in Attachment H1-A;
- Calling Card Services, as described in Attachment H1-B; and
- Toll-Free Services, as described in Attachment H1-C.

Attachment H1-A

Outbound Long Distance Services

Service Title:	Outbound Long Distance Services
Service Number:	H1-A

1. Service Title and Number

1.1 The Service Title and the Service Number of this specific Available Service are set out in the above table.

1.2 Where a Service Order or Service Change Order, in each case entered into in accordance with the terms of this Agreement, references such Service Title or such Service Number, TELUS will provide such GPS Entity with Outbound Long Distance Services which include all of the attributes, features, characteristics, components and service parameters described in this Attachment H1-A, unless expressly excluded or modified in the Service Order or Service Change Order.

2. Service Description

2.1 Outbound Long Distance Services enable the GPS Entities to place and receive calls domestically and internationally using: (a) telephone lines for which TELUS is the Primary Interexchange Carrier ("PIC"); (b) a toll-free number for which TELUS is the responsible organization and toll-free carrier; and (c) calling cards and calling card numbers issued to the GPS Entities by TELUS.

3. Service Availability

3.1 The Outbound Long Distance Services will be available from all existing and future GPS Entity lines with PSTN access in British Columbia that fall within H3-A and H3-B, except where equal access impediments prevent TELUS from delivering Long Distance Services into an exchange area. For clarity, where equal access (i.e. the facilities, services and agreements that allow alternative inter-exchange carriers to interconnect with local exchange carriers for the purpose of provisioning long distance services through 1+ dialling to end-customers of local exchange carriers, as more fully described in Telecom Decision CRTC 92-12) is not available, Outbound Long Distance Services will not be available.

3.2 The Outbound Long Distance Services will be made available by TELUS in accordance with the availability-related Service Levels for the Outbound Long Distance Services set out in Schedule J**.**

4. Service Standards

4.1 TELUS will ensure that the Outbound Long Distance Services available to GPS Entities meet the applicable Service standards set out in Exhibit H1-A1 to Schedule H.

5. Service Features

5.1 TELUS will ensure the following features are available to GPS Entities with respect to the Outbound Long Distance Services:

5.1.1 It will not be necessary for the user to enter a code to access such Outbound Long Distance Service.

5.1.2 TELUS will provide call detail recording features in accordance with the call detail record related security features set out in Attachment R1.

6. Service Support Features

6.1 Intentionally Deleted.

7. Optional Features

7.1 Fee-Based Optional Features. TELUS will make each of the optional features with respect to the Outbound Long Distance Services set out in the table below available to all GPS Entities at the additional price stated for each such feature in the Price Book. Where an optional feature has been selected by a GPS Entity in a Service Order or Service Change Order, then TELUS will provide such optional feature as part of the Outbound Long Distance Services ordered.

No.	Optional Feature Title	Description
H1-Op7	Billing Charge Back	Provides billing charge back detailed charges.
H1-Op10	Full Traffic Study	Provides analysis of voice network rates, volumes, densities, capacities, and patterns over the entire voice network usually for system performance improvement of the voice network.
H1-Op11	Trunk Study	Provides analysis of voice network rates, volumes, densities, capacities, and patterns over a particular trunk (i.e. direct line between two telephone switchboards) usually for system performance improvement of the trunk.
H1-Op13	Programming Change	Optional feature changes that TELUS implements remotely at the request of a GPS Entity after a line has been installed.

Exhibit H1-A1

Long Distance Standards Table

1. Long Distance Standards

Where indicated, the voice standards set out in the table below will apply to the Outbound Long Distance Services, the Calling Card Services and the Toll-Free Services:

No.	Voice Standard	Outbound	Calling Card	Toll-Free
1.	There will be no single point of failure across TELUS' GPS Entity Long Distance Services toll network infrastructure.	X	X	X
2.	The applicable types of Services will include route diversity for all calls within TELUS' network.	X	X	X
3.	TELUS will conduct proactive voice quality monitoring. Acceptable Radcom MOS scores for TELUS' TDM network will be between 3.85 and 3.99 during Business Hours.	X	X	X
4.	End-to-end delay in voice circuit paths will comply with ITU-T G.114.	X	X	X
5.	TELUS' network will perform within accepted industry standards including ITU-T G. 101 and ANSI T1.508 for speech transmission loss and noise performance for public network services.	X	X	X
6.	TELUS' network will perform within accepted industry standards for talker and listener echo control.	X	X	X
7.	TELUS' network will permit end-to-end transmission of dual-tone multi-frequency (DTMF) signals with minimum distortion within industry standards, including ITU Q24 and ANSI/TIA-464.	X	X	X
8.	TELUS' Long Distance Services will support the transparent transmission of commonly used facsimile calls, including calls to or from Group 3 and Group 4 facsimile terminals as defined by the ITU.			
9.	TELUS' Long Distance Services will be capable of delivering calling number identification information (CLID).	X	X	X
10.	TELUS' voice service will support carrier identification from any line by calling 1-700-555-4141 and after the call by referring to the call record data.	X		
11.	TELUS will provide intercept to a recorded announcement when a call cannot be completed.	X	X	X

No.	Voice Standard	Outbound	Calling Card	Toll-Free
12.	The applicable types of Services will support Circuit Switched Data Service (CSDS) at data rates of up to 56kbps/64kbps.	X	X	X
13.	TELUS will support computer telephony integration (CTI) allowing the transfer of caller information and GPS Entity specified data between inbound toll-free calls and GPS Entity specified systems based on the ITU-CSTA specification.			X

Exhibit H1-A2

Directory Listing Services

1. Directory Listing Services

TELUS will, as part of the Toll-Free Services, provide the GPS Entities with directory listing services, which will include the following:

1.1 TELUS will provide a process to enable GPS Entities to list toll-free numbers in the local directories of the incumbent local exchange carriers if such listing is requested by any GPS Entity.

1.2 GPS Entity toll-free numbers may be listed with the Canadian toll-free directory assistance service. No charge will apply for a single listing per toll-free number.

1.3 GPS Entity toll-free numbers may be listed in TELUS' White Pages for a monthly charge as specified in the Price Book.

1.4 The GPS Entities may list toll-free numbers in the Yellow Pages for a monthly charge as quoted by the third party Yellow Pages provider.

Attachment H1-B
Calling Card Services

Service Title:	Calling Card Services
Service Number:	H1-B

1. Service Title and Number

1.1 The Service Title and the Service Number of this specific Available Service are set out in the above table.

1.2 Where a Service Order or Service Change Order, in each case entered into in accordance with the terms of this Agreement, references such Service Title or such Service Number, TELUS will provide such GPS Entity with Calling Card Services which include all of the attributes, features, characteristics, components and service parameters described in this Attachment H1-B, unless expressly excluded or modified in the Service Order or Service Change Order.

2. Service Description

2.1 The Calling Card Services provide for the ability to place calls to and from most countries worldwide and local calling capability. Such Services may be used for voice, data, or fax transmission and will include operator assistance, fraud protection, reporting, and other services as described in this Attachment.

3. Service Availability

3.1 The Calling Card Services will be available from any telephone that has unrestricted access to the PSTN. Access will be provided by dialling a single toll-free number in North America and designated toll-free numbers outside of North America. The designated toll-free numbers outside of North America are listed in Exhibit H1-B2.

3.2 The Calling Card Services will be made available by TELUS in accordance with the availability-related Service Levels for the Calling Card Services set out in Schedule J**.**

4. Service Standards

4.1 TELUS will ensure that the Calling Card Services available to GPS Entities meet the Service standards set out in Exhibit H1-A1 to Schedule H.

5. Service Features

5.1 TELUS will ensure the following features are provided to GPS Entities with respect to the Calling Card Services:

5.1.1 TELUS will provide security protection features to reduce the potential for third party fraudulent activities, including due to loss or theft, in accordance with industry best practices and such features will include:

5.1.1.1 assignment of customer business numbers and a security passcode technology;

5.1.1.2 a self-select passcode service which complies with section 5.1.3;

5.1.1.3 a customer support help line which complies with section 5.1.4 and permits GPS Entities to report lost or stolen cards;

5.1.1.4 the identification of calling card calls within each invoice to support GPS Entity review and detection of fraudulent call patterns; and

5.1.1.5 implementation of a 24 hours per day, 7 days per week fraud detection process to detect, monitor, report, investigate and support fraud detection, which process will include the following features:

5.1.1.5.1 the immediate notification by TELUS to the calling card owner upon the detection of suspicious usage patterns with respect to the Calling Card Services provided to such calling card owner and the provision of security notification information to such person;

5.1.1.5.2 software that identifies fraudulent calling card call patterns;

5.1.1.5.3 use of specially trained and experienced fraud management agents to identify and investigate potential and actual fraud cases based on established rules and thresholds which take into consideration regional and uniquely established calling patterns;

5.1.1.5.4 fraud monitoring for all 1+ international and cross-border calls to the United States of America, using calling cards; and

5.1.1.5.5 the provision of assistance and support to GPS Entities with respect to fraud detection and investigation.

5.1.2 TELUS and each GPS Entity will cooperate to enhance their protection from losses occasioned by the theft or fraudulent use of the Calling Card Services.

5.1.3 TELUS will provide a self-select passcode service allowing GPS Entity users to change their respective passcodes 24 hours per day, 7 days per week.

5.1.4 TELUS will provide a customer support help line that will be available 24 hours per day, 7 days per week. The telephone number for such help line will be printed on the back of each calling card provided by TELUS.

5.1.5 The calling cards provided by TELUS will be equipped with a magnetic stripe and may be used in card reader phones in Canada and the United States.

5.1.6 TELUS will provide the following process to allow the GPS Entities to request, activate and cancel calling cards for GPS End Users:

5.1.6.1 GPS Entities may elect to control their own activations. Upon request, and upon receipt of a list of approved GPS End Users, TELUS will issue bulk supply calling cards to the GPS Entity.

5.1.6.2 The GPS Entity may request that a calling card be activated. Activation will be complete within 24 hours from the time TELUS receives such request from the GPS End User or the GPS Entity. Each GPS Entity will provide the TELUS calling cards to each GPS End User upon activation.

5.1.6.3 Cancellation of calling cards can be done by either the GPS Entity or the GPS End User calling TELUS “Customer Care”.

5.1.7 An error correction feature will be available that enables cardholders to correct a dialling mistake by pressing a key (e.g. “#”) and re-entering the correct number.

5.1.8 Dial access to the Calling Card Services will be provided by toll-free dial access and by operator assistance dial access.

5.1.9 Calling cards may be used to originate or terminate long distance calls using the TELUS Calling Card International Access Numbers. TELUS Calling Card International Access Numbers are provided with each calling card and are available at www.telus.com.

5.1.10 A multiple call feature will be available to allow the user to dial a code (e.g. “#”) after a call in order to make multiple calls without re-dialling the access and card number.

5.1.11 The GPS Entities will not be liable for charges arising from any loss, theft, unauthorized or compromised use of the Calling Card Services:

5.1.11.1 following the reporting or confirmation by a GPS Entity of the same in respect of the applicable calling card via a designated toll-free number provided in writing by TELUS to the

Administrator and the GPS Group (as of the Effective Date, the current number is 1-888-308-2222); and

5.1.11.2 if TELUS has failed to comply with its obligations under section 5.1.1, prior to such reporting or confirmation.

5.1.12 For calling card calls carried on TELUS' network, TELUS will provide call detail recording features in accordance with the call detail record related security features set out in Attachment R1.

5.2 The terms and conditions set out in Exhibit H1-B1 will apply to any use of the Calling Card Services by end-users of a GPS Entity and will supersede any terms or conditions printed on the reverse of calling cards provided by TELUS.

6. Service Support Features

6.1 Intentionally Deleted.

7. Optional Features

7.1 Fee-Based Optional Features. TELUS will make each of the optional features with respect to the Calling Card Services set out in the table below available to all GPS Entities at the additional price stated for each such feature in the Price Book. Where an optional feature has been selected by a GPS Entity in a Service Order or Service Change Order, then TELUS will provide such optional feature as part of the Calling Card Services ordered.

No.	Optional Feature Title	Description
H1-Op7	Billing Charge Back	Provides billing charge back detailed charges which will support allocation of Calling Card Services costs within the GPS Entities.

8. Amendment to Exhibit H1-B2

The toll-free numbers listed in Exhibit H1-B2 are current as of the Effective Date. However, TELUS may, from time to time, amend the toll-free numbers in Exhibit H1-B2 at any time by: (a) delivery to the GPS Group of a revised Exhibit incorporating such revised toll-free numbers; or (b) posting the revised toll-free numbers to a site acceptable to the GPS Group, and such revised Exhibit or posting to such site will supersede and replace the prior Exhibit without any further action of the GPS Group or TELUS.

Exhibit H1-B1

Calling Card Agreement

(See Attached)

business calling card

your new TELUS Business Calling Card

your Personal
Identification Number (PIN):

when calling from Canada and the US

Always dial our access number to receive great TELUS rates:

1-800-646-0000

When prompted, enter your Business Calling Card number and 4-digit PIN. Then enter the area code and phone number you want to call.

Use this number to call anywhere in North America and to over 240 countries around the world.

important information

For Business Calling Card calls, you will be prompted to enter your PIN. Memorize your PIN and for security reasons, do not write it down or carry it with you.

call 1-888-308-2222

- To change your PIN or if you've forgotten your PIN
- To report a lost or stolen Business Calling Card
- For current *Canada Direct*™ access numbers
- For Business Calling Card information

time-saving tips when using your TELUS Business Calling Card

- Press # after you enter your info (i.e. your PIN) to hear the next prompt—handy for frequent Calling Card users.
- When you dial 1-800-646-0000 from North America, you can place up to 5 calls in a row by pressing # after the person you were speaking to hangs up—saves you from having to enter your Business Calling Card number and PIN for each call.

pack your TELUS Business Calling Card and Pocket Guide

The enclosed Pocket Guide is useful when you travel overseas:

- For overseas dialing instructions
- For *Canada Direct* access numbers to over 130 countries

G23731-5 S

Use of the TELUS Calling Card is subject to the terms and conditions of the Cardholder Agreement on reverse.

BLACK PMS 2745 PMS 376

TELUS
Q-2/2002 Calling Card Carrier Re-brand – Standard
8-1/2" x 11" (Trim) – 8-3/4" x 11-1/4" (Bleed)
3/C – Black + PMS 2745 + PMS 376
Prepared: June 2002
G23731-5 Std. Carrier
(Document page 1 – FRONT)

Telecommunications Services Master Agreement

security

Protect your TELUS Business Calling Card and Personal Identification Number (PIN) at all times.

- When entering your Business Calling Card number and PIN on the keypad or reading the number to the operator, ensure that no one can see or hear the numbers.
- If your TELUS Business Calling Card is lost or stolen, or if you suspect others have obtained your number for fraudulent use, report it immediately. Call 1-888-308-2222. You can select a new PIN or request a replacement card.

rates

Depending on where you're calling from and to, and which TELUS Long Distance savings plan you've selected, rates will vary. Call us for more information on long distance savings plans at 1-888-308-2222.

Transaction charges apply for calls made from overseas locations. Transaction charges may apply for calls made from Canada and the US.

cardholder agreement

Use of the enclosed Business Calling Card(s) constitutes acceptance by the cardholder (as agent for the billed party if the cardholder is not the billed party) of the terms and conditions below.

Except as modified by this Cardholder Agreement or any other agreement between TELUS and the billed party, 1) in respect of tariffed services, the terms, conditions, rates and charges in the General Tariff are incorporated, and 2) in respect of non-tariffed services, the terms and conditions in TELUS "General Terms for Non-Tariffed Services" and "Long Distance Terms of Service," and TELUS regular rates and transaction charges for such services, as amended from time to time, are incorporated.

The billed party shall pay all charges incurred through the use of this Calling Card or Calling Card number. Subsequent use shall constitute acceptance of such changed terms and conditions.

TELUS determines the countries to which Calling Card calls are permitted. The list of those countries is subject to periodic revision. The enclosed Calling Card is the property of TELUS and must be returned upon request.

TELUS reserves the right to remove the Calling Card number from the validation databases for fraudulent or suspected fraudulent use.

The enclosed Calling Card has no expiry date and is valid as long as the billed party retains the billing number with which it is associated. Use of the Calling Card after service is discontinued, cancelled or changed is illegal and fraudulent. Under such circumstances, please destroy the Calling Card. This Calling Card is not transferable to another telephone number or person. If your employer has provided you with this Calling Card, please return it to your employer if you change employment.

The card number contains a personal identification number (PIN) for validation. Please do not give this number to anyone other than the telephone operator when you are placing a call. Please ensure that unauthorized persons cannot overhear or see the Calling Card number.

To receive TELUS rates for Calling Card calls placed within Canada and the US, place your call using 1-800-646-0000. If you place calls within Canada using "0" or "0+", the billed party will be billed at the rates in effect where the call was placed. If you place calls within the US using "0" or "0+", the billed party will be billed at US rates in effect where the call was placed. To receive TELUS rates for Calling Card calls placed from overseas locations, use the *Canada Direct* service. Local calls from pay phones charged to the Calling Card include a transaction fee in addition to the pay phone charge. All Calling Card calls made will appear on the billed party's monthly telephone bill.

If your Calling Card is lost, stolen, or the Calling Card number becomes known to or used by unauthorized persons, please call 1-888-308-2222 (toll-free) or notify your Business Office immediately to prevent fraudulent use. The billed party shall pay all charges incurred through the use of this Calling Card or Calling Card number until such loss, theft, or unauthorized use has been reported.

Canada Direct is a trademark of Teleglobe Canada Inc. TELUS is a licensed user.

323CBR0700N

BLACK

TELUS
Q-2/2002 Calling Card Carrier Re-brand – Standard
8-1/2" x 11" (Trim) – 8-3/4" x 11-1/4" (Bleed)
1/C – Black *(back only)*
Prepared: June 2002
G23731-5 Std. Carrier
(Document page 1 – BACK)

Exhibit H1-B2

Calling Card International Access Numbers

Country	Access Number	Notes
Antigua	1-800-744-2580	Service available from dedicated phones at airports, seaports, post offices and selected hotels.
Argentina**	0-800-222-1004 800-888-3868	-
Australia**	1-800-551-177 1-800-881-150	Public phones may require coins or phone card.
Austria**	0-800-200-217	-
Azores	See Portugal	-
Bahamas	1-800-463-0501	Service available from dedicated phones at airports, seaports, post offices and selected hotels.
Bahrain	80000-100	Public phones may require coins or phone card.
Balearic Islands	See Spain	-
Barbados	1-800-744-2580	Service available from dedicated phones at airports, seaports, post offices and selected hotels.
Belarus	8; wait for a second dial tone; 800-111	Cities/areas where Canada Direct service is available: Mogilev, Gomel, Vitebsk, Grodno, Brest, Minsk.
Belgium**	0-800-100-19	Public phones may require coins or phone card.
Belize	(hotels) 558, (payphones) 816	Service available from dedicated phones at airports, seaports, post offices and selected hotels.
Bermuda	1-800-744-2580	Service available from dedicated phones at airports, seaports, post offices and selected hotels.
Bolivia	800-10-0101	Public phones may require coins or phone card.
Brazil	0800-890-0014	Operator assistance not available. Public phones may require coins or phone card.
Brunei	800-010	Public phones may require coins or phone card.
Bulgaria	00-800-1359	Service not available from pay phones. .50 BG Leva per call will be charged from the domestic carrier in addition to the long distance charges.
Canada**	1-800-646-0000	-
Canary Islands	See Spain	-
Cayman Islands	1-800-744-2580	Service available from dedicated phones at airports, seaports, post offices and selected hotels.
Chatham Islands	See New Zealand	-

Chile**	800-360-280 800-800-226	-
China - Northern provinces	108-718 (from all major cities)	Includes Shandong, Henan, Liaonin, Heilongjiang and Jilin and such cities as Beijing and Tianjing
China - Southern provinces	108-186 (from all major cities)	Includes Jinagsu, Zhejiang, Fujian , Guangdong, Guangxi, Guizhou, Hunam, Hubei, Anhui, Sichuan, Tibat, Xinjiang and Shanghai. Some of the major cities are Shanghai, Guangzhou, Shenzhen and Hangzhou
Christmas Islands	See Australia	-
Colombia	1-800-9-19-0057	-
Corsica Island	See France	-
Costa Rica	0-800-015-1161	Public phones may require coins or phone card.
Croatia**	0-800-22-0101	-
Cuba	0-800-22632	Available only from Cayo Coco & Cayo Guillermo. Third country calling is allowed (Canada/USA/International termination). No collect or operator handled calls from Cuba, even through Canada Direct. Only available from public/pay phones. No mobile originating calls
Cyprus	800-9-0012	-
Czech Republic**	800-001-115	-
Denmark**	80-01-00-11	-
Dominica	1-800-744-2580	Service available from dedicated phones at airports, seaports, post offices and selected hotels.
Dominican Republic**	1-800-333-0111	No access from Tricom network.
Ecuador**	1-999-175	Public phones may require coins or phone card.
Egypt	02-365-3643, (Cairo) 365-3643	Public phones may require coins or phone card.
Elba Island	See Italy	-
Estonia**	0-800-12011	-
Fiji**	004-890-1005	A charge may be applicable from hotels. A 10-second delay may be experienced to access Canada Direct Service.
Finland**	0-800-110-011	Public phones may require coins or phone card.
France**	0-800-99-00-16, 0-800-99-02-16	Public phones may require coins or phone card.
French Guyana**	0-800-99-00-16	Public phones may require coins or phone card.

Gabon	00; wait for second dial tone; 012	Service is available only on International Direct Dial (IDD) phones. Public phones may require coins or phone card.
Germany**	0-800-888-0014	-
Ghana**	0-19-233	Public phones may require coins or phone card.
Greece**	00-800-1611	Public phones may require coins or phone card.
Grenada	1-800-744-2580	Service available from dedicated phones at airports, seaports, post offices and selected hotels.
Guadeloupe**	0-800-99-00-16	Public phones may require coins or phone card.
Guam	1-888-788-1005	-
Guatemala**	9999-198	Public phones may require coins or phone card.
Guyana	0161, (Georgetown) 161	-
Haiti	161	-
Hong Kong**	800-96-1100	An international credit card is required to activate the phone card but is not debited. Hotels may charge for calls.
Hungary**	06-800-01211	Public phones may require coins or phone card.
Iceland**	800-9010	-
India	000167	Calls may be charged as though from a mobile phone. Service is available only on International Direct Dial (IDD) phones. Public phones may require coins or phone card.
Indonesia**	008-801-16 001-801-16	Calls may be charged as though from a mobile phone. Service is available only on International Direct Dial (IDD) phones. Public phones may require coins or phone card.
Iran	-	Service available on dedicated phones that display the Canada Direct® symbol. Symbol found in Teheran at the Hotels Azadi and Esteghlal and at the Teheran Airport.
Ireland**	1-800-555001	Public phones may require coins or phone card.
Israel**	1-80-9494-105 1-80-9205-140	Service is charged as a mobile call from hotels. Service not available from Palestinian territories.
Italy**	800-172-213	Hotels may apply a surcharge on calls. Public phones may require coins or phone card.
Ivory Coast**	00-1100	-
Jamaica	1-800-222-0016, (hotels) 876	-
Japan**	00539-161 0066-35-161	Public phones may require coins or phone card. Public coin and Card phone to be recognized by green or gray color provided by NTT. Dedicated phone to be recognized by red color with "001 IC Global Phone" logo by KDDI. A minimum of 10 or 100 yen is required for coin phone.

Kenya	0-800-2201-14	Public phones may require coins or phone card.
Korea (South)**	00722-015	Public phones may require coins or phone card.
Lebanon	01-423-935	Service not available from pay phones.
Lithuania	8-800-9-0004	-
Luxembourg**	800-2-0119	Hotels may apply a surcharge on calls. Public phones may require coins or phone card.
Macao**	0-800-100	-
Macedonia (FYROM)	00-800-4277	Public phones may require coins or phone card.
Madeira	See Portugal	-
Malaysia**	1-800-800-017	Public phones may require coins or phone card.
Malta	800-90150	-
Martinique**	0-800-99-00-16	Public phones may require coins or phone card.
Mauritius**	01-110	-
Mexico	01-800-123-0200 01-800-021-1994	When calling from a public pay phone, use one marked LADATEL or Telmex. Public phones may require coins or phone card.
Monaco**	800-90016	Public phones may require coins or phone card.
Montserrat	1-800-744-2580	Service available on dedicated phones that display the Canada Direct® symbol.
Morocco	00-211-0010	Surcharge may be added to calls placed from pay phones, hotels and residences. Public phones may require coins or phone card.
Netherlands**	0-800-022-9116	If using a public phone, use one marked KPN. Public phones may require coins or phone card.
New Zealand**	000919	-
Nicaragua	1-800-0168	Public phones may require coins or phone card.
Northern Ireland	See United Kingdom	-
Norway**	800-19-111	Hotels may apply a surcharge per call.
Pakistan	00-800-15-001	-
Panama**	00-800-0119	-
Paraguay	008-14-800	Service is available only on International Direct Dial (IDD) phones.
Peru	800-502-90	Hotels may apply a surcharge per call. Public phones may require coins or phone card.
Philippines**	10 10 55 1400	Operator assistance not available. Public phones may require coins or phone card.
Poland**	0; wait for second dial tone; 0-800-	Public phones may require coins or phone card. A charge may be applied by hotels. A debit card is required to activate

	111-4118	card phones and will be debited after the call. Token phones will charge a fee per call.
Portugal**	800-800-122	-
Puerto Rico**	1-800-496-7123	Public phones may require coins or phone card. Hotels may apply a surcharge per call. Calls from mobile phones will be charged airtime.
Reunion Island**	0-800-99-0016	-
Romania	080803 5000	Public phones may require coins or phone card. Operator assistance not available.
Russia**	8; wait for second dial tone; 10-800-110-1012	Cities/areas where Canada Direct service is available: Moscow, St. Petersburg, Samara, Rostov on Don, Ekaterinburg, Novosibirsk, Khabarovsk, Saratov, Volgograd, Orenburg, Chita, Yuzhno-Sakhalinsk. When using a pay phone use those marked Rostelecom.
Saint Barthlemy	See Guadeloupe	-
St. Kitts & Nevis	1-800-744-2580	Service available from dedicated phones at airports, seaports, post offices and selected hotels.
Saint Lucia	1-800-744-2580	Service available from dedicated phones at airports, seaports, post offices and selected hotels.
Saint Martin	See Guadeloupe	-
Saint Vincent	1-800-744-2580	Service available from dedicated phones at airports, seaports, post offices and selected hotels. Hotels may apply a surcharge per call.
San Marino	See Italy	-
Scotland	See United Kingdom	-
Senegal	800 10 30 74	Public phones may require coins or phone card.
Singapore**	8000-100-100	Hotels may apply a surcharge per call.
South Africa**	0-800-99-0014	Public phones may require coins or phone card.
Spain**	900-99-0015	Hotels may apply a surcharge per call.
Sri Lanka	Colombo: 43-00-77; Rest of country: 01-430077	Public phones may require coins or phone card.
St. Pierre et Miquelon**	0-800-99-00-16	Public phones may require coins or phone card.
Sweden**	020-799-015	Service available from card phones only.
Switzerland**	0-800-558-330	Public phones may require coins or phone card. Hotels may apply a surcharge per call.

Syria	0811	-
Taiwan**	00-801-120-012	Public phones may require coins or phone card. Hotels may apply a surcharge per call.
Tasmania	See Australia	-
Thailand	1-800-0-001-50	Service is available only on International Direct Dial (IDD) phones.
Trinidad & Tobago	(hotels) 1-800-744-3501, (seaports) 22	Service available from dedicated phones at airports, seaports, post offices and selected hotels.
Turkey**	0-811-288-0014	Public phones may require coins or phone card.
Turks & Caicos	01-800-744-2580	Service only available from hotels who install a dedicated line for Canada Direct service.
Ukraine**	00-017	Public phones may require coins or phone card. Service is available only on International Direct Dial (IDD) phones.
United Arab Emirates	8000 0 41	Effective January 1, 2004, an access fee of 0.90Dh will be charged per call by the local telephone company.
United Kingdom**	0-800-559-3141 0-800-096-0634	-
United States**	1-800-646-0000	-
Uruguay	000-419	Public phones may require coins or phone card.
Vatican City	See Italy	-
Venezuela	0-800-100-1100	Public phones may require coins or phone card.
Vietnam	1201-1010	Service available from dedicated phones at airports, seaports, post offices and selected hotels.
Virgin Islands (British)	1-800-744-2580	Service only available from hotels that install a dedicated line for Canada Direct service. Service available from dedicated phones at airports, seaports, post offices and selected hotels.
Virgin Islands (U.S.)**	1-800-496-0008	Public phones may require coins or phone card. Hotels may apply a surcharge per call.
Wales	See United Kingdom	-
Zambia	00-883	-
Zimbabwe	00-897	Service is available only on International Direct Dial (IDD) phones.

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**Country-to-country calling available from this country to locations within this country or to most other countries (some restrictions may apply). Check the country-to-country rates with the Canada Direct operator for calls to other countries.

Also available through
http://www.telus.com/portalWeb/inlineLink/CP_SCS/Help/Telephone_Help/Canada_Direct/Access_Numbers/Canada_Direct_International_Access_Numbers/All_Platforms/?_region=AB

Attachment H1-C

Toll-Free Services

Service Title:	Toll-Free Services
Service Number:	H1-C

1. Service Title and Number

1.1 The Service Title and the Service Number of this specific Available Service are set out in the above table.

1.2 Where a Service Order or Service Change Order, in each case entered into in accordance with the terms of this Agreement, references such Service Title or such Service Number, TELUS will provide such GPS Entity with Toll-Free Services which include all of the attributes, features, characteristics, components and service parameters described in this Attachment H1-C, unless expressly excluded or modified in the Service Order or Service Change Order.

2. Service Description

2.1 Toll-Free Services provide for inbound toll-free voice or fax calls from anywhere within Canada and the United States, and other international locations (Toll-Free Global Services and Toll-Free International Services). Such Services may be used for high volume inbound calling to GPS Entity call centres and will include call routing, announcement, and reporting capability, and other services as described in this Attachment.

3. Service Availability

3.1 The Sites, communities, parts of communities or geographic areas where this Available Service is and can be delivered by TELUS are as follows:

3.1.1 Inbound Toll-Free Service, with a consistent set of features, will be available at all existing and future GPS Entity locations with PSTN access in British Columbia, including areas served by TELUS, Northwestel and CityWest.

3.1.2 Toll-free numbers will be reachable, without charge to the caller, from any PSTN-connected telephone in British Columbia, including cellular phones with PSTN access.

3.1.3 Individual toll-free numbers, as specified by the GPS Entities, will be reachable without charge to the caller, from any PSTN-connected telephone in the NANP area and from any PSTN-connected international telephone.

3.2 The Toll-Free Services will be made available by TELUS in accordance with the availability-related Service Levels for the Toll-Free Services set out in Schedule J.

4. Service Standards

4.1 TELUS will ensure that the Toll-Free Services available to GPS Entities meet the Service standards set out in Exhibit H1-A1 to Schedule H**.**

5. Service Features

5.1 TELUS will ensure the following features are available to GPS Entities with respect to the Toll-Free Services:

5.1.1 It will be possible for the GPS Entities to specify allowed and restricted exchanges (within British Columbia) and allowed and restricted numbering plan area codes for call origination. There will be no call origination restriction limitations that will limit the ability of the GPS Entities to set origination restrictions by exchange and numbering plan area codes in British Columbia.

5.1.2 Mnemonic type (e.g. 1-800-get-XXXX) custom numbers, subject to availability of specific numbers, will be available for selection by end-users.

5.1.3 It will be possible, under conditions specified by end-users, for calls to be routed to custom announcements recorded on equipment within TELUS' network. It will be possible to activate and route pre-determined groups of toll-free numbers with a single transaction.

5.1.4 It will be possible to activate emergency re-routing from a self-serve application available to the GPS Entities 24 hours per day, 7 days per week, every day of each year. Emergency routing plans can be activated or deactivated at no cost to the GPS Entity by: (a) using a TELUS-provided Web service; or (b) calling a TELUS-provided toll-free number.

5.1.5 It will be possible for calls to a single toll-free number to be differentially routed (to terminating numbers or announcements) based on a schedule including:

5.1.5.1 the time of day at which the call terminates;

5.1.5.2 the day of the week on which the call terminates; and

5.1.5.3 the day of the year (e.g. statutory holidays) on which the call terminates.

5.1.6 It will be possible for calls to a single toll-free number to be differentially routed based on:

5.1.6.1 the area code of the caller;

5.1.6.2 the exchange code of the caller; and

5.1.6.3 the full 10-digit telephone number of the caller.

5.1.7 It will be possible to route calls using schedule based routing in conjunction with area code or exchange code routing.

5.1.8 It will be possible to activate schedule-based and code-based routing from a self-serve application available to the GPS Entities 24 hours per day, 7 days per week, every day of each year. Activation assumes that a pre-plan configuration is in place. A pre-plan configuration allows for re-routing of a toll-free call in an emergency situation to an alternate termination so that the toll-free call is not lost.

5.1.9 The capability for a single toll-free number to terminate at multiple locations will be available. Calls may be directed to two or more answering locations based on GPS Entity pre-specified percentage distributions.

5.1.10 The Toll-Free Services will be capable of automatically re-routing calls to pre-defined alternate terminations if all facilities at the primary termination are busy, or if the calls remain unanswered at the primary termination for a specified period of time. Calls may be re-routed to a maximum of up to three alternative answering locations.

5.1.11 The Toll-Free Services will provide the ability to use call processing within TELUS' network to route callers to appropriate locations. Callers will be provided with informational messages and be routed according to information entered via DTMF signal. End-users will have the ability to customize the messages on the call processing system. The ability to transfer out (also known as menu routing) during an announcement to a GPS Entity specified pre-defined termination and an option to return back to an announcement/menu without needing to redial will be available.

5.1.12 The Toll-Free Services will provide recorded messages within TELUS' network to inform callers of information such as no longer in service, office hours or a local number to call. End-users will have the ability to record custom messages and change messages at any time.

5.1.13 TELUS will enable calls to be transferred by TELUS' network from the called party or agent to another toll-free number or any PSTN number, no matter which platform the call is being re-directed from.

5.1.14 The GPS Entities will have online access to view dynamic real-time, toll-free high level usage information and detailed historical information and will be provided the capability to generate both snap-shot high level reports based on real-time information or detailed reports based on historical call detail information.

5.1.15 The GPS Entities will be able to change routing and announcement features, including changes to terminating numbers that are within the

terminating number set. TELUS will provide access to a dynamic Web tool to make configuration changes at no additional charge.

5.1.16 For specific toll-free numbers identified by the GPS Entities, the Service will:

5.1.16.1 identify to the GPS Entities, on a real time basis, the telephone number from which each incoming call originates or not inhibit the delivery of calling number identification except where the caller has automatic blocking or per call blocking; and

5.1.16.2 when multiple toll-free numbers are terminated to a single 'conversion' number or trunk group, the Toll-Free Services will provide a means of identifying to the GPS Entities, in real-time, the toll-free number which was originally dialed.

5.1.17 The choice of providing a busy signal or recorded announcement for all calls encountering network congestion and/or terminating egress congestion, will be made by each subscribing GPS Entity.

5.1.18 TELUS will provide a referral message to callers of a disconnected toll-free number. Upon request, a referral telephone number will be provided in an announcement message to callers of the disconnected toll-free number.

5.1.19 TELUS will provide call detail recording features in accordance with the call detail record related security features set out in Attachment R1.

6. Service Support Features

6.1 Intentionally Deleted.

7. Optional Features

7.1 Fee-Based Optional Features. TELUS will make each of the optional features with respect to the Toll-Free Services set out in the table below available to all GPS Entities at the additional price stated for each such feature in the Price Book. Where an optional feature has been selected by a GPS Entity in a Service Order or Service Change Order, then TELUS will provide such optional feature as part of the Toll-Free Services ordered.

No.	Optional Feature Title	Description
H1-Op1	Call Prompter	Provides call processing within TELUS' network to route callers to appropriate locations. Callers are provided with instructional messages and are routed according to information entered via DTMF signal. This feature will provide the GPS Entities with: (a) the ability to customize the messages on the call processing system; (b) the ability to transfer out (using menu routing) during an announcement to a GPS Entity specified pre-defined termination; and (c) an available option to return back to an announcement/menu without needing to redial.
H1-Op2	Courtesy	Provides the caller with a GPS Entity recorded announcement (up

No.	Optional Feature Title	Description
	Response	to four minutes long) within TELUS' network. The announcement can be changed by a GPS Entity.
H1-Op3	Database Routing	Provides the ability to route calls based on database information within TELUS' network including schedule information, caller number information, and alternate location information.
H1-Op4	Enroute Announcement	Provides the ability to insert a message within TELUS' network that provides callers with information before the call is answered.
H1-Op5	Toll-Free Network Reporting	This toll-free network reporting tool provides access to network call detail information in real-time and includes the ability to generate reports which are further described in Attachment M1.
H1-Op10	Full Traffic Study	Provides the analysis of voice network rates, volumes, densities, capacities, and patterns over the entire voice network usually for system performance improvement of the voice network.
H1-Op11	Trunk Study	Provides analysis of voice network rates, volumes, densities, capacities, and patterns over a particular trunk (i.e. direct line between two telephone switchboards) usually for system performance improvement of the trunk.
H1-Op12	TELUS Web Access Toll-Free Reporting Tool	This tool allows the following: • Activation/deactivation of emergency routing pre-plans; and • Toll-free routing and announcement features control.
H1-Op13	Programming Change	Optional feature changes that TELUS implements at the request of a GPS Entity and performed by TELUS remotely. Programming changes are not applicable if the feature is implemented at the time the line is installed. Programming changes are required for both record changes and database changes. A record change is a change to: • Any service address; • Toll-free directory assistance listing (add/change/delete); or • Billing name, including change of business ownership. A database change is a change to: • Toll-free or terminating number change; • Modifying service coverage; • Toll-free feature change; or • Removal of a toll-free feature where the toll-free number remains in service. For greater certainty, programming change fees do not apply to: • A new toll-free installation; • Request for customized/vanity toll-free numbers (3 numbers maximum); • Adding or deleting toll-free plans; • Adding new features to existing toll-free numbers; and • Changing from dedicated to non-dedicated access.

Attachment H2

Conferencing Services

1. Available Types of Conferencing Services

In accordance with this Agreement, TELUS will, as of the Effective Date, make available to the GPS Entities the following separate types of Conferencing Services:

- Reservationless Conferencing Services, as described in Attachment H2-A;
- Operator Assisted Conferencing Services, as described in Attachment H2-B;
- Event Conferencing Services, as described in Attachment H2-C;
- Web Conferencing Services, as described in Attachment H2-D; and
- Crisis Management Conferencing Services, as described in Attachment H2-E.

2. Optional Features Cross Reference Table

The following table lists the chargeable and non-chargeable optional features that are available for each type of Conferencing Service.

No.	Optional Feature	Reservationless	Operator Assisted	Event	Web	Crisis Management
H2-Op1	Help with Bad Lines	X	X	X		X
H2-Op2	In-Conference Help	X	X	X		X
H2-Op3	Dial in by Operator	X	X	X		X
H2-Op4	Dial in by Moderator	X	X			X
H2-Op5	Record Meeting	X	X	X		X
H2-Op6	Playback	X	X	X		X
H2-Op7	Transcription	X	X	X		X
H2-Op8	Automated Roll Call	X	X			X
H2-Op9	Bilingual Service	X	X	X		X
H2-Op10	Entry and Exit Tones	X	X	X		X
H2-Op11	Name Announcements	X	X	X		X
H2-Op12	Music on Hold	X	X	X		
H2-Op13	Security Lock	X	X	X		X
H2-Op14	Lecture Feature (Audio)	X	X	X		X
H2-Op15	Wait for Moderator	X	X	X		X

No.	Optional Feature	Reservationless	Operator Assisted	Event	Web	Crisis Management
H2-Op16	Muting (Audio)	X	X	X		X
H2-Op17	Conference Monitoring	X	X	X		X
H2-Op18	Post-Conference Reports	X	X	X		X
H2-Op19	Sub-Conferencing	X	X	X		X
H2-Op20	Digital Recording	X	X	X		X
H2-Op21	Audio Web Console	X	X	X		X
H2-Op22	24x7x365 Live Agent Support	X	X	X	X	X
H2-Op23	Q & A		X	X		
H2-Op24	Polling		X	X		
H2-Op25	Set Up		X	X	X	
H2-Op26	Communication Line		X	X		
H2-Op27	Confirmation		X	X		
H2-Op28	Meet and Greet		X	X		
H2-Op29	Announce Late Callers		X			
H2-Op30	Pre-Conference Consultation		X	X		
H2-Op31	Participant List		X	X		
H2-Op32	Event Coordinator			X		
H2-Op33	Meet Me Secure	X	X	X		

Attachment H2-A

Reservationless Conferencing Services

Service Title:	Reservationless Conferencing Services
Service Number:	H2-A

1. Service Title and Number

1.1 The Service Title and the Service Number of this specific Available Service are set out in the above table.

1.2 Where a Service Order or Service Change Order, in each case entered into in accordance with the terms of this Agreement, references such Service Title or such Service Number, TELUS will provide such GPS Entity with Reservationless Conferencing Services which include all of the attributes, features, characteristics, components and service parameters described in this Attachment H2-A, unless expressly excluded or modified in the Service Order or Service Change Order.

2. Service Description

2.1 Reservationless Conferencing Services are self-serve Audio Conferencing Services that do not require a reservation and that can be initiated and utilized at any time by the Moderator and Subscribers without the assistance of an operator.

3. Service Availability

3.1 TELUS will supply a North American toll-free number, accessible via the PSTN anywhere within Canada and United States, and a global toll-free access number, accessible via the PSTN from all of the countries listed in Exhibit H2-A2 (as may be updated or otherwise changed from time to time in accordance with Exhibit H2-A2), to enable Participants to access Conferences and facilitate the provision of Reservationless Conferencing Services to the GPS Entities.

3.2 TELUS will enable Subscribers to establish Conferences using the North American (Canada and United States) and global toll-free numbers described in section 3.1 above.

3.3 Reservationless Conferencing Services will be made available by TELUS in accordance with the availability-related Service Levels for Reservationless Conferencing Services set out in Schedule J.

4. Service Standards

4.1 TELUS will ensure that all Reservationless Conferencing Services available to GPS Entities meet the following Service standards:

4.1.1 The Reservationless Conferencing Services will support calls from anywhere in the world via PSTN-based phone lines or other applicable technology as agreed to by TELUS and the Administrator subject to third party technology at the calling location supporting the Service delivery technical requirements.

5. Service Features

5.1 TELUS will ensure the following features are available to GPS Entities with respect to all Reservationless Conferencing Services:

5.1.1 TELUS will provide the following access related features:

5.1.1.1 TELUS will not impose any limitation on the duration of Conferences.

5.1.1.2 Reservationless Conferencing Services will allow for a capacity of 100 simultaneous Conferences with at least 30 Participants per Conference including, if applicable, any simultaneous Conferences provided under Crisis Management Conferencing Services, during the Busy Hour.

5.1.2 TELUS will provide the following features related to reservations:

5.1.2.1 Only a Subscriber can be issued a unique Service Account Number, a telephone access number and a Passcode, and each GPS Entity, through a single point of contact at the GPS Entity level, will be responsible for providing TELUS with a list of valid Subscribers.

5.1.2.2 All Reservationless Conferencing Services being consumed by a particular Subscriber will be associated with such Subscriber's unique Service Account Number.

5.1.2.3 TELUS will not require a Subscriber to pre-book or make reservations for ordering Reservationless Conferencing Services.

5.1.2.4 Only Subscribers may initiate Reservationless Conferencing Services from TELUS.

5.1.2.5 A Subscriber may initiate Reservationless Conferencing Services from TELUS by dialling one of the Subscriber's telephone access numbers and entering the Subscriber's Passcode.

5.1.2.6 Subscribers may share their respective Participant Passcodes and their telephone access numbers with Participants to allow Participants to access a reservationless Conference.

5.1.2.7 When Participants access a reservationless Conference, TELUS will place Participants into “music on hold”, unless Participants request otherwise, until the Subscriber keys in his or her Moderator Passcode, at which time the reservationless Conference begins.

5.1.3 TELUS will provide the following Moderator features for all Reservationless Conferencing Services:

5.1.3.1 ability to play a roll call of Participants;

5.1.3.2 ability to mute all lines;

5.1.3.3 ability to mute selected lines;

5.1.3.4 ability to disconnect selected Participants;

5.1.3.5 recording and playback functionality;

5.1.3.6 ability to “lock” and “unlock” individual Conferences;

5.1.3.7 ability to optionally turn on or off Conference tones or name announcement to announce a Participant entry to or exit from a Conference;

5.1.3.8 ability to add additional callers once the call is in progress;

5.1.3.9 ability to initiate a sub-Conference;

5.1.3.10 ability of Moderators to dial a number outside a Conference, using touch-tone codes, and have a private conversation with the called party or bridge the called party into the Conference;

5.1.3.11 self-serve features available to Moderators through a secure interactive Internet Web page, which allows Moderators to perform functions that are available through touch-tone telephone keys, such as adding names to each line, mute, hang-up, hold, dial-out and initiate digital recordings; and

5.1.3.12 ability for the Moderator to either end the Conference using a touch-tone feature or to allow the Conference to continue even when the Moderator has disconnected.

5.1.4 TELUS will provide the Branded Extranet Site and such site will, with respect to the Reservationless Conferencing Services, comply with the requirements set out in Exhibit H2-A1.

6. Service Support Features

6.1 TELUS will ensure that the following Service support features are available to GPS Entities with respect to all Reservationless Conferencing Services:

6.1.1 TELUS will provide the Services in accordance with Schedule N (Problem and Incident Management Procedures).

6.1.2 TELUS will provide the following operator support service for all Reservationless Conferencing Services:

6.1.2.1 TELUS will assist Participants, on a 24 hours per day, 7 days per week basis through a toll-free number provided by TELUS, with regards to difficulties Participants may encounter with the Reservationless Conferencing Services, including general difficulties that do not specifically relate to a particular Conference.

6.1.2.2 Such operator support service will include the following features:

6.1.2.2.1 an operator answer time in accordance with applicable Service Levels as further described in Schedule J;

6.1.2.2.2 live operator assistance, either immediately before or during a Conference, not through a queue with recorded messages, 24 hours per day, seven days per week;

6.1.2.2.3 the ability for Participants to privately call and interact with operators without other Participants hearing the conversation;

6.1.2.2.4 access to the operator though dialling a simple code such as *0; and

6.1.2.2.5 the ability to have an operator dial-out and place a Participant into any Conference.

7. Optional Features

7.1 Included Optional Features. TELUS will make each of the optional features with respect to the Reservationless Conferencing Services set out in the table below available to all GPS Entities at no additional cost to the GPS Entities. Where an optional feature has been selected by a GPS Entity in a Service Order or Service Change Order as further described in Attachment F2, then TELUS will provide such optional feature as a part of the Reservationless Conferencing Services ordered without any additional Fee in respect of such feature being payable.

No.	Optional Feature Title	Description	Special Terms and Conditions
H2-Op1	Help with Bad Lines.	Using *0, Moderators can request the operator to do sound checks, isolate bad lines, redial Participants back in that needed to be taken off a Conference because of bad lines etc.	None
H2-Op2	In-Conference Help	Operator support for answering trouble calls in-Conference and helping Moderators with their Conference.	None
H2-Op3	Dial in by Operator	The Moderator can request the operator to dial in Participants in reservationless, operator assisted, event or the audio portion of a Web Conference.	Long distance charge may apply, but otherwise this Service/feature is of no charge.
H2-Op4	Dial in by Moderator	The Moderator should be able to dial out to a Participant on all conferencing options using phone dial pad (star codes).	Long distance charge may apply, but otherwise this Service/feature is of no charge.
H2-Op8	Automated Roll Call	A roll call and total count of Participants can be provided through the operator or by using star codes.	None
H2-Op9	Bilingual Service	Bilingual prompts.	None
H2-Op10	Entry and Exit Tones	This should be a toggle on or off feature set by default.	None
H2-Op11	Name Announcements	Setting to choose how Participants will enter a call: unannounced, with a generic announcement, or with a recorded name announcement.	None
H2-Op12	Music on Hold	All Participants hear music until the Moderator joins the call.	None
H2-Op13	Security Lock	Lock a Conference at a specific point in time to prevent additional Participants access after that point in time.	None
H2-Op14	Lecture Feature (Audio)	All lines except the meeting Moderator's can be muted. Ideal for presenting an uninterrupted message.	None
H2-Op15	Wait for Moderator	Participants who dial in before the Moderator will be placed on hold. Once the Moderator dials in, the call begins.	None
H2-Op16	Muting (Audio)	Ability for Moderators to mute their own line or all lines that used the Participant Passcode.	None
H2-Op17	Conference Monitoring	A teleconference representative to monitor the Conference and assist when required.	None
H2-Op18	Post-Conference Reports	These reports are sent to the Moderator's email within an hour after the Conference ended. They contain phone numbers of Participants, start and end time and total duration minutes for the Conference.	None

H2-Op19	Sub-Conferencing	A number of Participants can be placed into a side Conference for private discussion via Web Console, DTMF or via the operator.	None
H2-Op20	Digital Recording	Digital recording of a Conference, meeting or presentation for future review.	None
H2-Op21	Audio Web Console	A GPS Entity can view and manage a Conference via a standard web browser.	None
H2-Op22	24x7x365 Live Agent Support	Teleconference representatives are available 24 hours a day, 7 days a week, every day of each year.	None
H2-Op33	Meet Me Secure	A GPS entity can have both a Conference PIN and Participant level PIN codes.	None

Any special terms and conditions with respect to an optional feature set out in the table above will apply with respect to such optional feature.

7.2 Fee-Based Optional Features. TELUS will make each of the optional features with respect to the Reservationless Conferencing Services set out in the table below available to all GPS Entities at the additional price stated for each such feature in the Price Book. Where an optional feature has been selected by a GPS Entity in a Service Order or Service Change Order, then TELUS will provide such optional feature as part of the Reservationless Conferencing Services ordered.

No.	Optional Feature Title	Description	Special Terms and Conditions
H2-Op5	Record Meeting	A GPS Entity can record a Conference to CD or audio cassette. Either .wav is emailed to the Moderator or contact or CD mailed to the Moderator or contact.	None
H2-Op6	Playback	The call can be digitally recorded. Participants who missed the meeting can listen to the Conference at any time and from anywhere by dialing a toll-free number.	None
H2-Op7	Transcription	Transcription of all recorded Conferences.	Transcription of a Conference will be completed within 24 hours of the latter of the time the Conference is completed or the transcription is ordered.

Any special terms and conditions with respect to an optional feature set out in the table above will apply with respect to such optional feature.

Exhibit H2-A1

Branded Extranet Site Requirements

1. Description and features of the Branded Extranet Site

TELUS will provide the Branded Extranet Site and include information such as, but not limited to, how to access Conferencing Services, training regarding Conferencing Services, best practices, Q & As, conferencing etiquette, and tips and tricks. TELUS will provide such materials, which are proprietary to TELUS, in a format that allows the GPS Entities to affix their own brands. Maintenance and management of any such GPS Entity-branded materials will be the responsibility of the GPS Entities. The GPS Entities will be responsible to provide any GPS Entity-branded materials to TELUS for upload by TELUS to the Branded Extranet Site. The Branded Extranet Site will have the following features:

1.1 End-user access to the Branded Extranet Site, without the requirement of a password, which will be available through standard browsers (e.g. Internet Explorer version 6).

1.2 The Branded Extranet Site and its content will be hosted on a server located in Canada.

1.3 A single GPS Entity-branded look and feel of the Branded Extranet Site.

1.4 Support information, as is available, for the Conferencing Services; support information may include the following:

1.4.1 frequently asked questions and answers;

1.4.2 instructions on how to obtain Conferencing Services support;

1.4.3 alternative booking methods or links to online scheduling tools; and

1.4.4 troubleshooting instructions regarding Conferencing Services.

1.5 Training information for the Conferencing Services, including:

1.5.1 Web Conferencing training options, including how to access and where to get further information;

1.5.2 Audio Conferencing documentation and access instructions;

1.5.3 manuals and other documentation, as generally available; and

1.5.4 links to relevant Web Conferencing Services vendor information such as online training programs, information and supplemental materials that are available to TELUS.

1.6 TELUS will provide tools, as mutually agreed to by TELUS and the Province, to be used on the Branded Extranet Site. Tools may include:

1.6.1 basic cost savings calculator; and

1.6.2 basic carbon savings calculator.

The selection of tools will be agreed to by TELUS and the Province.

2. Obligations of TELUS

TELUS will:

2.1 prepare a project plan, in consultation with the Province, for the design, testing and implementation of the Branded Extranet Site within four months following the Effective Date of the Agreement, or as otherwise agreed to by all parties;

2.2 ensure such project plan is approved in writing by TELUS and the Province prior to having the design and implementation work of the Branded Extranet Site started;

2.3 host the Branded Extranet Site;

2.4 be responsible for uploading content to the Branded Extranet Site whether it is TELUS-owned content or GPS Entities-branded materials;

2.5 be responsible for the accuracy of TELUS content and will use reasonable efforts to maintain the currency of such TELUS content on the Branded Extranet Site;

2.6 follow the Province's scheduled and emergency maintenance management process as defined in Schedule RR to this Agreement;

2.7 follow the change process for Ordinary Course Changes described in section 9.1 of the Agreement for any changes related to the Branded Extranet Site;

2.8 ensure all changes are first tested in an offline environment prior to effecting such changes on the Branded Extranet Site; and

2.9 work collaboratively with the GPS Entities to assess and consider requested changes to the Branded Extranet Site by the GPS Entities. All changes will be approved, in writing, by TELUS and the relevant GPS Entity prior to TELUS making such changes to the Branded Extranet Site.

Exhibit H2-A2

Conferencing Services Availability Countries

Australia

Austria

Belgium

China

Columbia

Costa Rica

Denmark

Finland

France

Germany

Hong Kong

Hungary

Iceland

Ireland

Israel

Italy

Japan

Luxembourg

Malaysia

Mexico

Netherlands

New Zealand

Norway

Philippines

Portugal

Singapore

South Africa

South Korea

Spain

Sweden

Switzerland

Taiwan

United Kingdom

TELUS' global toll-free access number may not be accessible from all telecommunications carriers operating within the above countries and may not, in all cases, be accessible when dialling from a hotel room, cellular phone or payphone.

The countries listed in this Exhibit H2-A2 are current as of the Effective Date. However, TELUS may amend the countries listed in this Exhibit H2-A2 at any time by: (a) delivering to the GPS Group a revised Exhibit incorporating such revised list; or (b) posting the revised list of countries to the Branded Extranet Site, and such revised Exhibit or posting to the Branded Extranet Site will supersede and replace the prior Exhibit without any further action of the GPS Group or TELUS.

Attachment H2-B

Operator Assisted Conferencing Services

Service Title:	Operator Assisted Conferencing Services
Service Number:	H2-B

1. Service Title and Number

1.1 The Service Title and the Service Number of this specific Available Service are set out in the above table.

1.2 Where a Service Order or Service Change Order, in each case entered into in accordance with the terms of this Agreement, references such Service Title or such Service Number, TELUS will provide such GPS Entity with Operator Assisted Conferencing Services which include all of the attributes, features, characteristics, components and service parameters described in this Attachment H2-B, unless expressly excluded or modified in the Service Order or Service Change Order.

2. Service Description

2.1 Operator Assisted Conferencing Services are pre-booked or reserved Audio Conferencing Services where Moderators are required to make reservations and operators provide assistance to Participants throughout the Conference.

3. Service Availability

3.1 TELUS will supply a North American toll-free number, accessible via the PSTN anywhere within Canada and United States, and a global toll-free access number, accessible via the PSTN from all of the countries listed in Exhibit H2-A2 (as may be updated or otherwise changed from time to time in accordance with Exhibit H2-A2), to enable Participants to access Conferences and facilitate the provision of Operator Assisted Conferencing Services to the GPS Entities.

3.2 TELUS will enable Subscribers to establish Conferences using the North American (Canada and United States) and global toll-free numbers described in section 3.1 above.

3.3 Operator Assisted Conferencing Services will be made available by TELUS in accordance with the availability-related Service Levels for Operator Assisted Conferencing Services set out in Schedule J.

4. Service Standards

4.1 TELUS will ensure that all Operator Assisted Conferencing Services available to GPS Entities meet the following Service standards:

4.1.1 The Operator Assisted Conferencing Services will support calls from anywhere in the world via PSTN-based phone lines or other applicable technology as agreed to by TELUS and the Administrator subject to third party technology at the calling location supporting the Service delivery technical requirements.

5. Service Features

5.1 TELUS will ensure the following features are available to GPS Entities with respect to all Operator Assisted Conferencing Services:

5.1.1 TELUS will provide the following access related features:

5.1.1.1 Operator Assisted Conferencing Services will be able to support a minimum of 300 Participants on any single Conference; and

5.1.1.2 TELUS will not impose any limitation on the duration of operator assisted Conferences.

5.1.2 TELUS will provide the following features associated with making reservations for operator assisted Conferences:

5.1.2.1 Only a Subscriber can be issued a unique Service Account Number, a telephone access number and a Passcode, and each GPS Entity, through a single point of contact at the GPS Entity level, will be responsible for providing TELUS with a list of valid Subscribers.

5.1.2.2 All Operator Assisted Conferencing Services being consumed by a particular Subscriber will be associated with such Subscriber's unique Service Account Number.

5.1.2.3 TELUS will enable Subscribers to make reservations using an online tool via the Branded Extranet Site.

5.1.2.4 TELUS will confirm a reservation by email to the Subscriber within less than three hours of the Subscriber making a reservation request, and TELUS will provide a backup service for providing such confirmation when email is unavailable by confirming the reservation with the Subscriber via fax or telephone (using all reasonable efforts to meet the timeline commitment associated with the automated email confirmation detailed in this section 5.1.2.4).

5.1.2.5 TELUS will provide a system so that reservations, including those for pre-booked recurring operator assisted Conferences, may be booked up to one (1) year in advance by a Subscriber.

5.1.2.6 Operator Assisted Conferencing Services will be deemed ordered by a GPS Entity once a Subscriber has made a

reservation with an operator and has also actually initiated the operator assisted conferencing call.

5.1.2.7 Before an operator assisted Conference is actually initiated, a Subscriber may reschedule or cancel a reservation without penalty, monetary or otherwise. Due to human resources required by TELUS to facilitate operator assisted Conferences, the GPS Entities will make reasonable commercial efforts to ensure that their respective Subscribers provide at least 72 hours advance notice of cancellation.

5.1.2.8 Only Subscribers may order Operator Assisted Conferencing Services from TELUS.

5.1.2.9 A Subscriber may initiate Operator Assisted Conferencing Services, at the time designated in the reservation, from TELUS by dialling one of the Subscriber's telephone access numbers and entering the Subscriber's Passcode.

5.1.2.10 Subscribers may share their respective Participant Passcodes and their telephone access numbers with Participants to allow Participants to access an operator assisted Conference.

5.1.2.11 TELUS will make all reasonable efforts to allow a Subscriber to initiate an operator assisted Conference immediately if the reservation is for fewer than 50 Participants per operator assisted Conference.

5.1.2.12 Where deemed critical by a Subscriber, in its sole discretion, TELUS will use all reasonable efforts to set up and initiate the Subscriber's operator assisted Conference within one (1) hour of the Subscriber making the reservation if the reservation is for more than 50 Participants per operator assisted Conference. The GPS Entities will make all reasonable efforts to ensure their respective Subscribers book reservations well in advance of such one (1) hour period to the extent reasonably possible.

5.1.2.13 TELUS will charge Fees only for ports consumed during a Conference.

5.1.2.14 If a number of ports are being reserved by a GPS Entity and are not consumed, and where TELUS identifies that such reservation of unused ports may impact Audio Conferencing Services to other GPS Entities or to TELUS' other customers, TELUS and the GPS Entity, who made such reservation of ports, will jointly work to educate the Subscribers to only reserve the required number of ports. Education may include, but is not limited to, discussion at monthly joint operations calls between TELUS and the respective GPS Entity and escalation through the Governance Process to improve awareness.

5.1.3 TELUS will provide the following Moderator features for all Operator Assisted Conferencing Services:

5.1.3.1 ability to play a roll call of Participants;

5.1.3.2 ability to mute all lines;

5.1.3.3 ability to mute selected lines;

5.1.3.4 ability to disconnect selected Participants;

5.1.3.5 recording and playback functionality;

5.1.3.6 ability to "lock" and "unlock" individual Conferences;

5.1.3.7 ability to optionally turn on or off Conference tones or name announcement to announce a Participant entry to or exit from a Conference;

5.1.3.8 ability to add additional callers once the call is in progress;

5.1.3.9 ability to initiate a sub-Conference;

5.1.3.10 ability of Moderators to dial a number outside a Conference, using touch-tone codes, and have a private conversation with the called party or bridge the called party into the Conference;

5.1.3.11 self-serve features available to Moderators through a secure interactive Internet Web page, which allows Moderators to perform functions that are available through touch-tone telephone keys, such as adding names to each line, mute, hang-up, hold, dial-out and initiate digital recordings;

5.1.3.12 when the Passcode assigned to the Moderator is used, allow the Moderator access to privileged commands and prompts to assist with Conference management;

5.1.3.13 provide each Moderator with a toll-free dial-in number and a unique Passcode that are a minimum of four characters in length; and

5.1.3.14 ability for the Moderator to either end the Conference using a touch-tone feature or to allow the Conference to continue even when the Moderator has disconnected.

5.1.4 TELUS will provide the Branded Extranet Site and such site will, with respect to the Operator Assisted Conferencing Services, comply with the requirements set out in Exhibit H2-A1.

6. Service Support Features

6.1 TELUS will ensure that the following Service support features are available to GPS Entities with respect to all Operator Assisted Conferencing Services:

6.1.1 TELUS will provide the Services in accordance with Schedule N (Problem and Incident Management Procedures).

6.1.2 TELUS will provide the following operator support service for all Operator Assisted Conferencing Services:

6.1.2.1 TELUS will assist Participants, on a 24 hours per day, 7 days per week basis through a toll-free number provided by TELUS, with regards to difficulties Participants may encounter with the Operator Assisted Conferencing Services, including general difficulties that do not specifically relate to a particular Conference.

6.1.2.2 Such operator support service will include the following features:

6.1.2.2.1 an operator answer time of 20 seconds or less;

6.1.2.2.2 live operator assistance, either immediately before or during a Conference, not through a queue with recorded messages, 24 hours per day, seven days per week;

6.1.2.2.3 the ability for Participants to privately call and interact with operators without other Participants hearing the conversation;

6.1.2.2.4 access to the operator though dialling a simple code such as *0;

6.1.2.2.5 the ability to have an operator dial-out and place a Participant into any Conference;

6.1.2.2.6 the ability for Subscribers to pre-book recurring Conferences; and

6.1.2.2.7 in-Conference support available during operator assisted Conferences on a 24 hours per day, seven days per week basis.

6.1.2.3 Operators will book and reschedule Conferences as and when requested by Subscribers 24 hours per day, seven days per week.

7. Optional Features

7.1 Included Optional Features. TELUS will make each of the optional features with respect to the Operator Assisted Conferencing Services set out in the table below available to all GPS Entities at no additional cost to the GPS Entities. Where an optional feature has been selected by a GPS Entity in a Service Order or Service Change Order, as further described in Attachment F2, then TELUS will provide such optional feature as part of the Operator Assisted Conferencing Services ordered without any additional Fee in respect of such feature being payable.

No.	Optional Feature Title	Description	Special Terms and Conditions
H2-Op1	Help with Bad Lines.	Using *0, Moderators can request the operator to do sound checks, isolate bad lines, redial Participants back in that needed to be taken off a Conference because of bad lines etc.	None
H2-Op2	In-Conference Help	Operator support for answering trouble calls in-Conference and helping Moderators with their Conference.	None
H2-Op3	Dial in by Operator	The Moderator can request the operator to dial in Participants in reservationless, operator assisted, event or the audio portion of a Web Conference.	Long distance charge may apply, but otherwise this Service/feature is of no charge.
H2-Op4	Dial in by Moderator	The Moderator should be able to dial out to a Participant on all conferencing options using phone dial pad (star codes).	Long distance charge may apply, but otherwise this Service/feature is of no charge.
H2-Op8	Automated Roll Call	A roll call and total count of Participants can be provided through the operator or by using star codes.	None
H2-Op9	Bilingual Service	Bilingual prompts.	None
H2-Op10	Entry and Exit Tones	This should be a toggle on or off feature set by default.	None
H2-Op11	Name Announcements	Setting to choose how Participants will enter a call: unannounced, with a generic announcement, or with a recorded name announcement.	None
H2-Op12	Music on Hold	All Participants hear music until the Moderator joins the call.	None
H2-Op13	Security Lock	Lock a Conference at a specific point in time to prevent additional Participants access after that point in time.	None
H2-Op14	Lecture Feature (Audio)	All lines except the meeting Moderator's can be muted. Ideal for presenting an uninterrupted message.	None

No.	Optional Feature Title	Description	Special Terms and Conditions
H2-Op15	Wait for Moderator	Participants who dial in before the Moderator will be placed on hold. Once the Moderator dials in, the call begins.	None
H2-Op16	Muting (Audio)	Ability for Moderators to mute their own line or all lines that used the Participant Passcode.	None
H2-Op17	Conference Monitoring	A teleconference representative to monitor the Conference and assist when required.	None
H2-Op18	Post-Conference Reports	These reports are sent to the Moderator's email within an hour after the Conference ended. They contain phone numbers of Participants, start and end time and total duration minutes for the Conference.	None
H2-Op19	Sub-Conferencing	A number of Participants can be placed into a side Conference for private discussion via Web Console, DTMF or via the operator.	None
H2-Op20	Digital Recording	Digital recording of a Conference meeting or presentation for future review.	None
H2-Op21	Audio Web Console	A GPS Entity can view and manage a conference via a standard web browser.	None
H2-Op22	24x7x365 Live Agent Support	Teleconference representatives are available 24 hours a day, 7 days a week, every day of each year.	None
H2-Op23	Q & A	Use this feature to present an uninterrupted message and to respond to questions in an orderly manner.	None
H2-Op24	Polling	Participants can vote using their touch- tone key pad. Results are immediate.	None
H2-Op25	Set up	Pre-Conference set up.	None
H2-Op26	Communication Line	Extra line to access a TELUS teleconference representative outside of the main Conference to assist with call management.	None
H2-Op27	Confirmation	When booking a scheduled operator assisted or event Conference, Moderators will receive confirmation of their scheduled Conference in accordance with the applicable Service Levels.	None
H2-Op28	Meet and Greet	Teleconference representative to meet and announce callers into operator assisted and event Conferences.	None
H2-Op29	Announce Late callers	Teleconference representative to meet and announce callers into operator assisted and event Conferences.	None
H2-Op30	Pre-Conference	Access to a teleconference	None

No.	Optional Feature Title	Description	Special Terms and Conditions
	Consultation	representative to discuss specific Conference requirements.	
H2-Op33	Meet Me Secure	A GPS Entity can have both a Conference PIN and Participant level PIN codes.	None

Any special terms and conditions with respect to an optional feature set out in the table above will apply with respect to such optional feature.

7.2 Fee-Based Optional Features. TELUS will make each of the optional features with respect to the Operator Assisted Conferencing Services set out in the table below available to all GPS Entities at the additional price stated for each such feature in the Price Book. Where an optional feature has been selected by a GPS Entity in a Service Order or Service Change Order, then TELUS will provide such optional feature as part of the Operator Assisted Conferencing Services ordered.

No.	Optional Feature Title	Description	Special Terms and Conditions
H2-Op5	Record Meeting	A GPS Entity can record a Conference to CD or audio cassette. Either .wav is emailed to the Moderator or contact or CD mailed to the Moderator or contact.	None
H2-Op6	Playback	The call can be digitally recorded. Participants who missed the meeting can listen to the Conference at any time and from anywhere by dialing a toll-free number.	None
H2-Op7	Transcription	Transcription of all recorded Conferences.	Transcription of a Conference will be completed within 24 hours of the latter of the time the Conference is completed or the transcription is ordered.
H2-Op31	Participant List	Available upon request. List of Participants.	Mailed to the Moderator within one hour of the Conference.

Any special terms and conditions with respect to an optional feature set out in the table above will apply with respect to such optional feature.

Attachment H2-C

Event Conferencing Services

Service Title:	Event Conferencing Services
Service Number:	H2-C

1. Service Title and Number

1.1 The Service Title and the Service Number of this specific Available Service are set out in the above table.

1.2 Where a Service Order or Service Change Order, in each case entered into in accordance with the terms of this Agreement, references such Service Title or such Service Number, TELUS will provide such GPS Entity with Event Conferencing Services which include all of the attributes, features, characteristics, components and service parameters described in this Attachment H2-C, unless expressly excluded or modified in the Service Order or Service Change Order.

2. Service Description

2.1 Event Conferencing Services are Audio Conferencing Services that require special, facilitated operator attention, including such event functions as pre-registration, reminders to Participants, RSVP, question and answer sessions, polling, operator dial-out ability and general operator assistance throughout a Conference.

3. Service Availability

3.1 TELUS will supply a North American toll-free number, accessible via the PSTN anywhere within Canada and United States, and a global toll-free access number, accessible via the PSTN from all of the countries listed in Exhibit H2-A2 (as may be updated or otherwise changed from time to time in accordance with Exhibit H2-A2), to enable Participants to access Conferences and facilitate the provision of Event Conferencing Services to the GPS Entities.

3.2 TELUS will enable Subscribers to establish Conferences using the North American (Canada and United States) and global toll-free numbers described in section 3.1 above.

3.3 Event Conferencing Services will be made available by TELUS in accordance with the availability-related Service Levels for Event Conferencing Services set out in Schedule J.

4. Service Standards

4.1 TELUS will ensure that all Event Conferencing Services available to GPS Entities meet the following Service standards:

4.1.1 The Event Conferencing Services will support calls from anywhere in the world via PSTN-based phone lines or other applicable technology as agreed to by TELUS and the Administrator subject to third party technology at the calling location supporting the Service delivery technical requirements.

5. Service Features

5.1 TELUS will ensure the following features are available to GPS Entities with respect to all Event Conferencing Services:

5.1.1 TELUS will provide the following access related features:

5.1.1.1 Event Conferencing Services will not be limited to a minimum number of Participants;

5.1.1.2 Event Conferencing Services will have the ability to support a minimum of 1,000 Participants; and

5.1.1.3 TELUS will not impose any limitation on the duration of event Conferences.

5.1.2 TELUS will provide the following features associated with making reservations for event Conferences:

5.1.2.1 Only a Subscriber can be issued a unique Service Account Number, a telephone access number and a Passcode, and each GPS Entity, through a single point of contact at the GPS Entity level, will be responsible for providing TELUS with a list of valid Subscribers.

5.1.2.2 All Event Conferencing Services being consumed by a particular Subscriber will be associated with such Subscriber's unique Service Account Number.

5.1.2.3 TELUS will enable Subscribers to make reservations using an online tool via the Branded Extranet Site.

5.1.2.4 TELUS will confirm a reservation by email to the Subscriber within less than three hours of the Subscriber making a reservation request, and TELUS will provide a backup service for providing such confirmation when email is unavailable by confirming the reservation with the Subscriber via fax or telephone (using all reasonable efforts to meet the timeline commitment associated with the automated email confirmation detailed in this section 5.1.2.4).

5.1.2.5 TELUS will provide a system so that reservations, including those for pre-booked recurring event Conferences, may be booked up to one (1) year in advance by a Subscriber.

5.1.2.6 Event Conferencing Services will be deemed ordered by a GPS Entity once a Subscriber has made a reservation with an operator and has also actually initiated the event conferencing call.

5.1.2.7 Before an event Conference is actually initiated, a Subscriber may reschedule or cancel a reservation without penalty, monetary or otherwise.

5.1.2.8 Only Subscribers may order Event Conferencing Services from TELUS.

5.1.2.9 A Subscriber may initiate Event Conferencing Services, at the time designated in the reservation, TELUS by dialling one of the Subscriber's telephone access numbers and entering the Subscriber's Passcode.

5.1.2.10 Subscribers may share their respective Participant Passcodes and their telephone access numbers with Participants to allow Participants to access an event Conference.

5.1.3 TELUS will provide the following Moderator features for all Event Conferencing Services:

5.1.3.1 ability to play a roll call of Participants;

5.1.3.2 ability to mute all lines;

5.1.3.3 ability to mute selected lines;

5.1.3.4 ability to disconnect selected Participants;

5.1.3.5 recording and playback functionality;

5.1.3.6 ability to "lock" and "unlock" individual Conferences;

5.1.3.7 ability to optionally turn on or off Conference tones or name announcement to announce a Participant entry to or exit from a Conference;

5.1.3.8 ability to add additional callers once the call is in progress;

5.1.3.9 ability to initiate a sub-Conference;

5.1.3.10 ability of Moderators to dial a number outside a Conference, using touch-tone codes, and have a private conversation with the called party or bridge the called party into the Conference;

5.1.3.11 self-serve features available to Moderators through a secure interactive Internet Web page, which allows Moderators to perform functions that are available through touch-tone

telephone keys such as adding names to each line, mute, hang-up, hold, dial-out and initiate digital recordings;

5.1.3.12 when the Passcode assigned to the Moderator is used, allow the Moderator access to privileged commands and prompts to assist with Conference management;

5.1.3.13 provide each Moderator with a toll-free dial-in number and a unique Passcode that is a minimum of four characters in length; and

5.1.3.14 ability for the Moderator to either end the Conference using a touch-tone feature or to allow the Conference to continue even when the Moderator has disconnected.

5.1.4 TELUS will provide the Branded Extranet Site and such site will, with respect to the Event Conferencing Services, comply with the requirements set out in Exhibit H2-A1.

6. Service Support Features

6.1 TELUS will ensure that the following Service support features are available to GPS Entities with respect to all Event Conferencing Services:

6.1.1 TELUS will provide the Services in accordance with Schedule N (Problem and Incident Management Procedures).

6.1.2 TELUS will provide the following operator support service for all Event Conferencing Services:

6.1.2.1 TELUS will assist Participants, on a 24 hours per day, 7 days per week basis through a toll-free number provided by TELUS, with regards to difficulties Participants may encounter with the Event Conferencing Services, including general difficulties that do not specifically relate to a particular Conference.

6.1.2.2 Such operator support service will include the following features:

6.1.2.2.1 an operator answer time in accordance with applicable Service Levels, as further described in Schedule J;

6.1.2.2.2 live operator assistance, either immediately before or during a Conference, not through a queue with recorded messages, 24 hours per day, 7 days per week;

6.1.2.2.3 the ability for Participants to privately call and interact with operators without other Participants hearing the conversation;

6.1.2.2.4 access to the operator though dialling a simple code such as *0;

6.1.2.2.5 the ability to have an operator dial-out and place a Participant into any Conference;

6.1.2.2.6 the ability for Subscribers to pre-book recurring Conferences; and

6.1.2.2.7 in-Conference support available during event Conferences on a 24 hours per day, 7 days per week basis.

6.1.2.3 TELUS will, upon request, provide an additional operator, a secondary point of contact, and a communications line for every event Conference to allow a continuous flow of information and instructions from the secondary point of contact to the second operator, thereby allowing the event Conference to adapt to changing circumstances without interruption.

6.1.2.4 Operators will book and reschedule Conferences as and when requested by Subscribers 24 hours per day, seven days per week.

6.1.2.5 TELUS will ensure that operators announce speakers and provide customized welcoming announcements during event Conferences as per the instructions of the Conference Moderator.

6.1.2.6 When Participants access event Conferences, an operator will intercept the calls and place Participants into the Conference according to the instructions provided by the Moderator, which may include admitting all the Participants or only those identified on a Participant list provided by the Moderator.

7. Optional Features

7.1 Included Optional Features. TELUS will make each of the optional features with respect to the Event Conferencing Services set out in the table below available to all GPS Entities at no additional cost to the GPS Entities. Where an optional feature has been selected by a GPS Entity in a Service Order or Service Change Order, as further described in Attachment F2, then TELUS will provide such optional feature as part of the Event Conferencing Services ordered without any additional Fee in respect of such feature being payable.

No.	Optional Feature Title	Description	Special Terms and Conditions
H2-Op1	Help with Bad Lines.	Using *0, Moderators can request the operator to do sound checks, isolate bad lines, redial Participants back in that needed to be taken off a	None

No.	Optional Feature Title	Description	Special Terms and Conditions
		Conference because of bad lines etc.	
H2-Op2	In-Conference Help	Operator support for answering trouble calls in-Conference and helping Moderators with their Conference.	None
H2-Op3	Dial in by Operator	The Moderator can request the operator to dial in Participants in reservationless, operator assisted, event or the audio portion of a Web Conference.	Long distance charge may apply, but otherwise this service/feature is of no charge.
H2-Op9	Bilingual Service	Bilingual prompts.	None
H2-Op10	Entry and Exit Tones	This should be a toggle on or off feature set by default.	None
H2-Op11	Name Announcements	Setting to choose how Participants will enter a call: unannounced, with a generic announcement, or with a recorded name announcement.	None
H2-Op12	Music on Hold	All Participants hear music until the Moderator joins the call.	None
H2-Op13	Security Lock	Lock a Conference call at a specific point in time to prevent additional Participants access after that point in time.	None
H2-Op14	Lecture Feature (Audio)	All lines except the meeting Moderator's can be muted. Ideal for presenting an uninterrupted message.	None
H2-Op15	Wait for Moderator	Participants who dial in before the Moderator will be placed on hold. Once the Moderator dials in, the call begins.	None
H2-Op16	Muting (Audio)	Ability for Moderators to mute their own line or all lines that used the Participant Passcode.	None
H2-Op17	Conference Monitoring	A teleconference representative to monitor the Conference call and assist when required.	None
H2-Op18	Post-Conference Reports	These reports are sent to the Moderator's email within an hour after the Conference ended. They contain phone numbers of Participants, start and end time and total duration minutes for the Conference.	None
H2-Op19	Sub-Conferencing	A number of Participants can be placed into a side Conference call for private discussion via Web Console, DTMF or via the operator.	None
H2-Op20	Digital Recording	Digital recording of a Conference meeting or presentation for future review.	None
H2-Op21	Audio Web Console	A GPS Entity can view and manage a Conference via a standard web browser.	None
H2-Op22	24x7x365 Live Agent Support	Teleconference representatives are available 24 hours a day, 7 days a week, every day of each year.	None

No.	Optional Feature Title	Description	Special Terms and Conditions
H2-Op23	Q & A	Use this feature to present an uninterrupted message and to respond to questions in an orderly manner.	None
H2-Op24	Polling	Participants can vote using their touch- tone key pad. Results are immediate.	None
H2-Op25	Set up	Pre-conference set up.	None
H2-Op26	Communication line	Extra line to access a TELUS teleconference representative outside of the main Conference to assist with call management.	None
H2-Op27	Confirmation	When booking a scheduled operator assisted or event Conference, Moderators will receive confirmation of their scheduled Conference in accordance with the applicable Service Levels.	None
H2-Op28	Meet and greet	Teleconference representative to meet and announce callers into operator assisted and event conferences	None
H2-Op30	Pre-conference Consultation	Access to a teleconference representative to discuss specific Conference requirements.	None
H2-Op32	Event Coordinator	Event Conference set up.	None
H2-Op33	Meet Me Secure	A GPS Entity can have both a Conference PIN and Participant level PIN codes.	None

Any special terms and conditions with respect to an optional feature set out in the table above will apply with respect to such optional feature.

7.2 Fee-Based Optional Features. TELUS will make each of the optional features with respect to the Event Conferencing Services set out in the table below available to all GPS Entities at the additional price stated for each such feature in the Price Book. Where an optional feature has been selected by a GPS Entity in a Service Order or Service Change Order, then TELUS will provide such optional feature as part of the Event Conferencing Services ordered.

No.	Optional Feature Title	Description	Special Terms and Conditions
H2-Op5	Record Meeting	A GPS Entity can record a conference call to CD or audio cassette. Either .wav is emailed to the Moderator or contact or CD mailed to the Moderator or contact.	None
H2-Op6	Playback	The call can be digitally recorded. Participants who missed the meeting can listen to the Conference call at any time and from anywhere by dialing a toll-free number.	None

H2-Op7	Transcription	Transcription of all recorded Conferences	Transcription of a Conference will be completed within 24 hours of the latter of the time the Conference is completed or the transcription is ordered.
H2-Op31	Participant list	Available upon request. List of Participants.	Mailed to the Moderator within one hour of the Conference.

Any special terms and conditions with respect to an optional feature set out in the table above will apply with respect to such optional feature.

Attachment H2-D

Web Conferencing Services

Service Title:	Web Conferencing Services
Service Number:	H2-D

1. Service Title and Number

1.1 The Service Title and the Service Number of this specific Available Service are set out in the above table.

1.2 Where a Service Order or Service Change Order, in each case entered into in accordance with the terms of this Agreement, references such Service Title or such Service Number, TELUS will provide such GPS Entity with Web Conferencing Services which include all of the attributes, features, characteristics, components and service parameters described in this Attachment H2-D, unless expressly excluded or modified in the Service Order or Service Change Order.

1.3 Notwithstanding section 7.2 of the main body of this Agreement, an Initial Service Tower Commitment for Conferencing Services as it relates to the Microsoft Office Live Meeting will end no later than June 30, 2014, and cannot be renewed.

2. Service Description

2.1 Web Conferencing Services enable two or more Participants to share and present graphical information via a secure Internet connection and computer.

3. Service Availability

3.1 TELUS will ensure a Universal Resource Locator (URL) is available to enable the Named Users and Participants to access Web Conferencing Services. TELUS will not impose any limit, impediment or barrier of access to such URL or Web conferencing features related to the use of the Web Conferencing Services, regardless of the physical location of the Named Users or Participants.

3.2 Web Conferencing Services will be made available by TELUS in accordance with the Service Levels for Web Conferencing Services set out in Schedule J.

4. Service Standards

4.1 TELUS will not limit, impede or impose restrictions related to the choice of browsers.

4.2 TELUS will provide Web Conferencing Services that ensure all communication channels used by such Services will be encrypted with a minimum encryption level of AES 128-bit for symmetric key encryption and 1024-bit RSA for public key encryption.

4.3 TELUS will not limit, impede or impose restrictions which impact the functionality associated with the Web Conferencing Services, including the following:

4.3.1 establishment of SSL encryption; and

4.3.2 utilization with the Reservationless Conferencing Services, Operator Assisted Conferencing Services and Event Conferencing Services.

For greater certainty, this section 4.3 does not obligate TELUS to facilitate the functionality described in sections 4.3.1 through 4.3.2 or to integrate the Web Conferencing Services to achieve the functionality referred to in section 4.3.1 through 4.3.2.

5. Service Features

5.1 TELUS will ensure the following features are available to GPS Entities with respect to all Web Conferencing Services:

5.1.1 As part of, and for the purposes of receiving, accessing and using, the Web Conferencing Services, and subject to the terms set out in section 8 of this Attachment, TELUS will license to a GPS Entity the Microsoft Office Live Meeting and Cisco WebEx. Minimum system requirements will apply to the use of the Microsoft Office Live Meeting and Cisco WebEx.

5.1.2 TELUS will provide the following access related features for all Web Conferencing Services:

5.1.2.1 TELUS will allow for rescheduling or cancellation of pre-booked reserved Conferences at no additional Fee.

5.1.2.2 TELUS will provide a two-week trial account, at no additional Fee, for designated points of contact to review Web Conferencing Services before the GPS Entity commits to a subscription.

5.1.2.3 TELUS will not impose any limitation on the duration of Web Conferences.

5.1.3 TELUS will provide the following reservation features for all Web Conferencing Services:

5.1.3.1 All Web Conferencing Services being moderated by a particular Named User will be associated to that Subscriber through a unique identifier, such as a unique Service Account Number.

5.1.3.2 Each GPS Entity, through a single point of contact, will be responsible for providing TELUS with a list of valid and authorized Named Users.

5.1.3.3 Upon any GPS Entity notifying TELUS of any Subscribers that it wishes to designate as Named Users, TELUS will take such actions as necessary to designate those Subscribers as Named Users and to treat those Subscribers as Named Users for the purposes of pricing and invoicing Web Conferencing Services under this Agreement.

5.1.3.4 Upon any GPS Entity notifying TELUS of any Subscribers in respect of which it wishes to retract its designation as Named Users, TELUS will take such actions as necessary to deactivate the account associated with the Named Users and to no longer treat those Subscribers as Named Users for the purposes of pricing and invoicing Web Conferencing Services under this Agreement.

5.1.3.5 TELUS will provide each Subscriber with a unique Service Account Number and Named User login information.

5.1.3.6 Named Users may share login information and associated hyperlinks with Participants to allow Participants to access a Web Conference.

5.1.3.7 Only Subscribers may order Web Conferencing Services from TELUS.

5.1.4 Web Conferencing Services will include the following Web-related Conferencing Services features, as provided by third parties, for each Named User:

5.1.4.1 a URL and login information;

5.1.4.2 online chat ability;

5.1.4.3 white boarding ability to project information;

5.1.4.4 delivery of online presentations;

5.1.4.5 voice over IP (VOIP) via hardware devices such as computers, iPads, etc.;

5.1.4.6 remote desktop access; and

5.1.4.7 sharing and real-time collaboration of desktop applications.

5.1.5 TELUS will provide the Branded Extranet Site and such site will, with respect to the Web Conferencing Services, comply with the requirements set out in Exhibit H2-A1.

6. Service Support Features

6.1 TELUS will ensure that the following Service support features are available to GPS Entities with respect to all Web Conferencing Services:

6.1.1 TELUS will provide the Services in accordance with Attachment N2 (Problem and Incident Management Procedures).

6.1.2 TELUS will provide the following operator support features for all Web Conferencing Services:

6.1.2.1 TELUS will assist Participants, on a 24 hours per day, 7 days per week basis through a toll-free number provided by TELUS or by dialling *0 during a Web conferencing call which includes Audio Conferencing, with regards to difficulties Participants may encounter with the use of Web Conferencing Services, including general difficulties that do not specifically relate to a particular Conference.

6.1.2.2 The Web Conferencing Services will include Web Conference bilingual operator support 24 hours per day, 7 days per week by pressing a DTMF function through Audio Conferencing functionality.

7. Included Features

7.1 Included Features. TELUS will make each of the included features with respect to the Web Conferencing Services set out in the table below available to all GPS Entities at no additional cost to the GPS Entities. Where a feature has been selected by a GPS Entity in a Service Order or Service Change Order, then TELUS will provide such feature as part of the Web Conferencing Services ordered without any additional Fee in respect of such feature being payable.

No.	Optional Feature Title	Description	Special Terms and Conditions
H2-Op22	24x7x365 Live Agent Support	Teleconference representatives are available 24 hours a day, 7 days a week.	None
H2-Op25	Set Up	Pre-Conference set up.	None

Any special terms and conditions with respect to a feature set out in the table above will apply with respect to such feature.

8.

Exhibit H2-D1

Attachment H2-E

Crisis Management Conferencing Services

Service Title:	Crisis Management Conferencing Services
Service Number:	H2-E

1. Service Title and Number

1.1 The Service Title and the Service Number of this specific Available Service are set out in the above table.

1.2 Where a Service Order or Service Change Order, in each case entered into in accordance with the terms of this Agreement, references such Service Title or such Service Number, TELUS will provide such GPS Entity with Crisis Management Conferencing Services which include all of the attributes, features, characteristics, components and service parameters described in this Attachment H2-E, unless expressly excluded or modified in the Service Order or Service Change Order.

2. Service Description

2.1 Crisis Management Conferencing Services provide a business continuity and emergency notification tool to gather together critical personnel necessary to respond to a significant event. The Moderator may dial a phone number and enter a Passcode which will initiate “blast dial” to a pre-defined list of Participants, including multiple numbers for each Participant. Functionality filters out voicemail and limits the Conference call to pre-defined Participants.

3. Service Availability

3.1 TELUS will supply a North American toll-free number, accessible via the PSTN anywhere within Canada and United States, and a local access number, accessible via the PSTN from all of the countries listed in Exhibit H2-A2 (as may be updated or otherwise changed from time to time in accordance with Exhibit H2-A2), to enable Participants to access Conferences and facilitate the provision of Crisis Management Conferencing Services to the GPS Entities.

3.2 TELUS will enable Subscribers to establish Conferences using the North American (Canada and United States) and local access numbers described in section 3.1 above.

3.3 Crisis Management Conferencing Services will be made available by TELUS in accordance with the availability-related Service Levels for Crisis Management Conferencing Services set out in Schedule J.

4. Service Standards

4.1 TELUS will ensure that all Crisis Management Conferencing Services available to GPS Entities meet the following Service standards:

4.1.1 The Crisis Management Conferencing Services will support calls from anywhere in the world via PSTN-based phone lines or other applicable technology as agreed to by TELUS and the Administrator subject to third party technology at the calling location supporting the Service delivery technical requirements.

5. Service Features

5.1 TELUS will ensure the following features are available to GPS Entities with respect to all Crisis Management Conferencing Services:

5.1.1 TELUS will provide the following access related features:

5.1.1.1 TELUS will not impose any limitation on the duration of crisis management Conferences.

5.1.1.2 Crisis Management Conferencing Services will allow for a minimum of 100 simultaneous Conferences including, if applicable, any simultaneous Conferences provided under Reservationless Conferencing Services, during the Busy Hour.

5.1.1.3 Crisis Management Conferencing Services will support at least 30 Participants per Conference.

5.1.2 TELUS will provide the following features associated with making reservations for crisis management Conferences:

5.1.2.1 Only a Subscriber can be issued a unique Service Account Number, a telephone access number and a Passcode, and each GPS Entity, through a single point of contact at the GPS Entity level, will be responsible for providing TELUS with a list of valid Subscribers.

5.1.2.2 All Crisis Management Conferencing Services being consumed by a particular Subscriber will be associated with such Subscriber's unique Service Account Number.

5.1.2.3 TELUS will not require a Subscriber to pre-book or make reservations for ordering Crisis Management Conferencing Services.

5.1.2.4 Only Subscribers may order Crisis Management Conferencing Services from TELUS.

5.1.2.5 For each crisis management Conference, the Subscriber will be responsible for providing TELUS with the list of dial out numbers. TELUS will be responsible for maintaining this list of dial out numbers, including multiple numbers for Participants.

5.1.2.6 A Subscriber may initiate Crisis Management Conferencing Services from TELUS by dialling one of the Subscriber's

telephone access numbers and entering the Subscriber's Passcode.

5.1.2.7 Subscribers may share their respective Participant Passcodes and their telephone access numbers with Participants to allow Participants to access a crisis management Conference.

5.1.3 TELUS will provide the following Moderator features for all Crisis Management Conferencing Services:

5.1.3.1 ability to play a roll call of Participants;

5.1.3.2 ability to mute all lines;

5.1.3.3 ability to mute selected lines;

5.1.3.4 ability to disconnect selected Participants;

5.1.3.5 recording and playback functionality;

5.1.3.6 ability to "lock" and "unlock" individual Conferences;

5.1.3.7 ability to optionally turn on or off Conference tones or name announcement to announce a Participant entry to or exit from a Conference;

5.1.3.8 ability to add additional callers once the call is in progress;

5.1.3.9 ability to initiate a sub-Conference;

5.1.3.10 ability of Moderators to dial a number outside a Conference, using touch-tone codes, and have a private conversation with the called party or bridge the called party into the Conference;

5.1.3.11 self-serve features available to Moderators through a secure interactive Internet Web page, which allows Moderators to perform functions that are available through touch-tone telephone keys such as adding names to each line, mute, hang-up, hold, dial-out and initiate digital recordings; and

5.1.3.12 ability for the Moderator to either end the Conference using a touch-tone feature or to allow the Conference to continue even when the Moderator has disconnected.

5.1.4 TELUS will provide the Branded Extranet Site and such site will, with respect to the Crisis Management Conferencing Services, comply with the requirements set out in Exhibit H2-A1.

6. Service Support Features

6.1 TELUS will ensure that the following Service support features are available to GPS Entities with respect to all Crisis Management Conferencing Services:

6.1.1 TELUS will provide the Services in accordance with Schedule N (Problem and Incident Management Procedures).

6.1.2 TELUS will provide the following operator support service for all Crisis Management Conferencing Services:

6.1.2.1 TELUS will assist Participants, on a 24 hours per day, 7 days per week basis through a toll-free number provided by TELUS, with regards to difficulties Participants may encounter with the Crisis Management Conferencing Services, including general difficulties that do not specifically relate to a particular Conference.

6.1.2.2 Such operator support service will include the following features:

6.1.2.2.1 an operator answer time of 20 seconds or less;

6.1.2.2.2 live operator assistance, either immediately before or during a Conference, not through a queue with recorded messages, 24 hours per day, seven days per week;

6.1.2.2.3 the ability for Participants to privately call and interact with operators without other Participants hearing the conversation;

6.1.2.2.4 access to the operator though dialling a simple code such as *0; and

6.1.2.2.5 the ability to have an operator dial-out and place a Participant into any Conference.

7. Optional Features

7.1 Included Optional Features. TELUS will make each of the optional features with respect to the Crisis Management Conferencing Services set out in the table below available to all GPS Entities at no additional cost to the GPS Entities. Where an optional feature has been selected by a GPS Entity in a Service Order or Service Change Order, as further described in Attachment F2, then TELUS will provide such optional feature as a part of the Crisis Management Conferencing Services ordered without any additional Fee in respect of such feature being payable.

No.	Optional Feature Title	Description	Special Terms and Conditions
H2-Op1	Help with Bad Lines.	Using *0, Moderators can request the operator to do sound checks, isolate bad lines, redial Participants back in that needed to be taken off a Conference because of bad lines etc.	None
H2-Op2	In-Conference Help	Operator support for answering trouble calls in-Conference and helping Moderators with their Conference.	None
H2-Op3	Dial in by Operator	The Moderator can request the operator to dial in Participants in reservationless, operator assisted, event or the audio portion of a Web Conference.	Long distance charge may apply, but otherwise this Service/feature is of no charge.
H2-Op4	Dial in by Moderator	The Moderator should be able to dial out to a Participant on all conferencing options using phone dial pad (star codes).	Long distance charge may apply, but otherwise this Service/feature is of no charge.
H2-Op8	Automated Roll Call	A roll call and total count of Participants can be provided through the operator or by using star codes.	None
H2-Op9	Bilingual Service	Bilingual prompts.	None
H2-Op10	Entry and Exit Tones	This should be a toggle on or off feature set by default.	None
H2-Op11	Name Announcements	Setting to choose how Participants will enter a call: unannounced, with a generic announcement, or with a recorded name announcement.	None
H2-Op13	Security Lock	Lock a Conference at a specific point in time to prevent additional Participants access after that point in time.	None
H2-Op14	Lecture Feature (Audio)	All lines except the meeting Moderator's can be muted. Ideal for presenting an uninterrupted message.	None
H2-Op15	Wait for Moderator	Participants who dial in before the Moderator will be placed on hold. Once the Moderator dials in, the call begins.	None
H2-Op16	Muting (Audio)	Ability for Moderators to mute their own line or all lines that used the Participant Passcode.	None
H2-Op17	Conference Monitoring	A teleconference representative to monitor the Conference and assist when required.	None
H2-Op18	Post-Conference Reports	These reports are sent to the Moderator's email within an hour after the Conference ended. They contain phone numbers of Participants, start and end time and total duration minutes for the Conference.	None
H2-Op19	Sub-Conferencing	A number of Participants can be placed into a side Conference for	None

No.	Optional Feature Title	Description	Special Terms and Conditions
		private discussion via Web Console, DTMF or via the operator.	
H2-Op20	Digital Recording	Digital recording of a conference meeting or presentation for future review.	None
H2-Op21	Audio Web Console	A GPS Entity can view and manage a Conference via a standard Web browser.	None
H2-Op22	24x7x365 Live Agent Support	Teleconference representatives are available 24 hours a day, 7 days a week, every day of each year.	None

Any special terms and conditions with respect to an optional feature set out in the table above will apply with respect to such optional feature.

7.2 Fee-Based Optional Features. TELUS will make each of the optional features with respect to the Crisis Management Conferencing Services set out in the table below available to all GPS Entities at the additional price stated for each such feature in the Price Book. Where an optional feature has been selected by a GPS Entity in a Service Order or Service Change Order, then TELUS will provide such optional feature as a part of the Crisis Management Conferencing Services ordered.

No.	Optional Feature Title	Description	Special Terms and Conditions
H2-Op5	Record Meeting	A GPS Entity can record a Conference to CD or audio cassette. Either .wav is emailed to the Moderator or contact or CD mailed to the Moderator or contact.	None
H2-Op6	Playback	The call can be digitally recorded. Participants who missed the meeting can listen to the Conference at any time and from anywhere by dialing a toll-free number.	None
H2-Op7	Transcription	Transcription of all recorded Conferences.	Transcription of a Conference will be completed within 24 hours of the latter of the time the Conference is completed or the transcription is ordered.

Any special terms and conditions with respect to an optional feature set out in the table above will apply with respect to such optional feature.

Attachment H3

Voice Services

In accordance with this Agreement, TELUS will as of the Effective Date make available to the GPS Entities the following separate types of Voice Services:

- Exchange Services, as described in Attachment H3-A;
- Hosted Telephony Services, as described in Attachment H3-B; and
- Hosted IVR Services, as described in Attachment H3-C.

Attachment H3-A

Hosted Telephony Services

Service Title:	Hosted Telephony Services
Service Number:	H3-A

1. Service Title and Number

1.1 The Service Title and the Service Number of this specific Available Service are set out in the above table.

1.2 Where a Service Order or Service Change Order, in each case entered into in accordance with the terms of this Agreement, references such Service Title or such Service Number TELUS will provide such GPS Entity with Hosted Telephony Services which include all of the attributes, features, characteristics, components and service parameters described in this Attachment H3-A, unless expressly excluded or modified in the Service Order or Service Change Order.

2. Service Description

2.1 The Hosted Telephony Services are fully managed hosted voice services that include:

2.1.1 the provision of standard voice communication and enhanced applications such as voice messaging and automatic call distribution using Centrex Services; and

2.1.2 CallCentreAnywhere Services.

2.2 The Centrex Line and Centrex Multiline Services include:

2.2.1 the provision of Centrex Lines which include, for each Centrex Line:

2.2.1.1 one bi-directional PSTN access;

2.2.1.2 one telephone number (Primary Directory Number (PDN)) from the switch on which the Centrex Line is terminated;

2.2.1.3 toll-free calling for calls placed to the PSTN within the extended area service boundaries of the exchange area in which the Centrex Line terminates;

2.2.1.4 one directory listing;

2.2.1.5 access to 9-1-1 services;

2.2.1.6 access to 6-1-1 services provided by TELUS; and

2.2.1.7 access to Message Relay Service; and

2.3 CallCentreAnywhere is a fully hosted, multi-tenanted, contact centre solution which is supplied and managed by TELUS that includes:

2.3.1 functionality for unifying phone, fax (converted to email), voicemail, email, chat, web-collaboration and web-callback channels of communications with a weighted skills-based routing discipline that includes the ability to maintain consistent priority and business rules across media channels and geographically dispersed agents or locations;

2.3.2 DTMF based IVR call routing, screen-pops, auto email-management, supervisor call/screen monitoring, real time displays, voice call recording/logging and historical reporting;

2.3.3 the provision of concurrent login access to the CallCentreAnywhere Services which include, per concurrent login:

2.3.3.1 one user position/location to access the web portal for CallCentreAnywhere Service; and

2.3.3.2 for each concurrent login subscribed to by the GPS Entity,

2.3.3.2.1 an associated service bundle (Lite or Multimedia) selected by the GPS Entity with the login, where the Lite service bundle supports voice only customer communications and Multimedia service bundle supports the use of voice, email and web based customer communications, and

2.3.3.2.2 at least one (1) Internet portal user ID and password to allow access to the CallCentreAnywhere Services.

3. Service Availability

3.1 Subject to section 3.2, the Centrex Services will be available with respect to the Centrex Services capable exchanges listed in Exhibit H3-A1.

3.2 The Centrex Services will be made available by TELUS in accordance with the availability-related Service Levels for the Hosted Telephony Services set out in Schedule J.

3.3 TELUS will provide City Wide Centrex service in the following areas:

3.3.1 Vancouver City-Wide Centrex telephone numbers hosted out of Vancouver and made available to locations in New Westminster, Richmond, and Steveston (provided, however, that such numbers are not portable to solutions that are hosted in New Westminster, Richmond or Steveston);

3.3.2 Vancouver City-Wide Centrex telephone numbers with NXX 903 or 981 assigned to North Vancouver and made available to locations in West Vancouver (provided, however, that such numbers are not portable outside of North Vancouver);

3.3.3 Vancouver City-Wide Centrex telephone numbers with NXXs 933, 927 and 586 assigned to Port Moody, Westwood/Port Coquitlam and Whalley locations respectively (provided, however, that such numbers are not portable outside of each of these areas); and

3.3.4 Victoria City-Wide Centrex telephone numbers hosted out of Victoria and made available to locations in Keating and Sidney (provided, however, that such numbers are not portable to solutions hosted in Keating or Sidney).

3.4 TELUS will expand City-Wide Centrex services to a new area beyond the areas set out in section 3.3 if presented with a viable business case for such expansion by the GPS Entities, such viable business case meaning an opportunity size of greater than 15,000 PBX users and a community of interest spanning beyond the GPS Entities. TELUS will conduct business due diligence to consider the potential capital investment and migration to an overlay network capability.

3.5 TELUS will make available an automatic call distribution (ACD) service at all Sites served by a DMS 100 switch and at all future locations served by an ACD capable platform.

3.6 TELUS will make available an uniform call distribution (UCD) service at all Sites served by a GTD5 switch and at all future locations served by an UCD capable platform.

3.7 The CallCentreAnywhere Services will be available throught a combination of the PSTN and the public Internet, subject to the GPS End Users being located in Canada or the continental United States.

3.8 The Hosted Telephony Services, other than the Centrex Services already addressed in section 3.2, above, will be made available by TELUS in accordance with the availability-related Service Levels for the Hosted Telephony Services set out in Schedule J.

4. Service Standards

4.1 Unless otherwise approved by the parties pursuant to a Change Order, TELUS will provide the Hosted Telephony Services on a network that is exclusively owned and operated by TELUS.

4.2 TELUS will provide the Centrex Services on fully redundant network platforms.

4.3 For Hosted Telephony, TELUS will comply and remain compliant with the following international standards, as such standards may be amended, supplemented or replaced from time to time:

International Standards
ANSI/TIA-464-C-2002, Requirements for PBX Switching Equipment
ANSI/TIA-464-C-1-2004, Addendum, Requirements for PBX Switching Equipment
ANSI/TIA-470.110-C-2004, Handset Acoustic Performance Requirements for Analog Telephones
ANSI/TIA/EIA-810-A-2000, Transmission Requirements for Narrowband Voice over IP and Voice over PCM Digital Wireline Telephones
ANSI/TIA-912-A-2004, Voice Gateway Transmission Requirements
ANSI/IEEE 743-1995, Standard equipment requirements and measurement techniques for analogue transmission parameters for telecommunications
ATSI-T1.508-2003, Loss Plan for Digital Networks
TIA/EIA/TSB-122-A-2001, Telephone - IP Telephony Equipment - Voice Router/Gateway Loss and Level Plan Guidelines
ITU-T Rec. G.101, Transmission plan
ITU-T Rec. G.107, The E-model, a computational model for use in transmission planning
ITU-T Rec. G.108, Application of the E-model: A planning guide
ITU-T Rec. G.108.1, Guidance for assessing conversational speech transmission quality effects not covered by the E-model
ITU-T Rec. G.108.2, Transmission planning aspects of echo cancellers
ITU-T Rec. G.109, Definition of categories of speech transmission quality
ITU-T Rec. G.111, Loudness ratings (LRs) in an international connection
ITU-T Rec. G.113, Transmission impairments due to speech processing
ITU-T Rec. G.114, One-way transmission time
ITU-T Rec. G.121, Loudness ratings (LRs) of national systems
ITU-T Rec. G.122, Influence of national systems on stability and talker echo in international connections
ITU-T Rec. G.126, Listener echo in telephone networks
ITU-T Rec. G.131, Talker echo and its control
ITU-T Rec. G.136, Application rules for automatic level control devices

International Standards
ITU-T Rec. G.164, Echo suppressors
ITU-T Rec. G.165, Echo cancellers
ITU-T Rec. G.167, Acoustic echo controllers
ITU-T Rec. G.168, Digital network echo cancellers
ITU-T Rec. G.169, Automatic level control devices
ITU-T Rec. G.172, Transmission plan aspects of international conference calls March 2007 TELUS Confidential Page 31 of 32
TELUS Whitepaper: Transmission Loss Planning for Voice Services Issue 1.1
ITU-T Rec. G.173, Transmission planning aspects of the speech service in digital public land mobile networks
ITU-T Rec. G.173, Transmission planning aspects of the speech service in digital public land mobile networks
ITU-T Rec. G.174, Transmission performance objectives for terrestrial digital wireless systems using portable terminals to access the PSTN
ITU-T Rec. G.174, Transmission performance objectives for terrestrial digital wireless systems using portable terminals to access the PSTN
ITU-T Rec. G.175, Transmission planning for private/public network interconnection of voice traffic
ITU-T Rec. G.176, Planning guidelines for the integration of ATM technology into networks supporting voice band services
ITU-T Rec. G.177, Transmission planning for voice band services over hybrid Internet/PSTN connections

TELUS will ensure that the Centrex Services provided to a GPS Entity will connect to and interoperate with the long distance services (including toll-free services) being received by the GPS Entity and will support dedicated access line (DAL), an equal ease of access or both to provide long distance traffic to all service providers providing long distance services (including toll-free services) to the GPS Entity at all Centrex service locations without any limitations and using industry standard interface connections.

4.4 Voice Quality and Call Performance

4.4.1 TELUS will monitor and assure the voice quality of the Hosted Telephony Services through use of its QoS technologies. TELUS will use QoS technologies to continuously test, monitor and measure voice quality, call completion, MOS (PESQ VQ per ITU P.862), round trip delay, post dial delay, call answer time, echo attenuation, loss level, and DTMF success.

4.4.2 TELUS will periodically test, monitor and measure voice traffic to produce IP metrics such as packet loss, jitter, delay, and calculated voice quality to ensure optimal voice quality levels.

4.4.3 TELUS will enable QoS functions within its voice gateways to report via operational measurements any IP parameters that exceed preset quality thresholds as set out in this Agreement with respect to the Data Services.

4.4.4 TELUS will employ proactive and constant testing of voice quality. TELUS agrees to use an objective measurement tool such as Perceptual Evaluation of Speech Quality (PESQ) as defined in the ITU-T Recommendation P.862 for the evaluation of transmission quality. TELUS further agrees to benchmark VoIP service quality, verify availability across the network and detect service degradation before it impacts GPS End Users.

4.4.5 TELUS will ensure that the end-to-end delay in the voice circuit paths of Hosted Telephony Services will be consistent with established international standards as defined by ITU-T G.114 and that the delay will be less than 125ms one-way or 250ms for a round trip.

4.4.6 TELUS will ensure that speech transmission loss and noise performance of the Hosted Telephony Services will perform within accepted industry standards as established by ITU G-T G101 and ANSI T1.509.

4.4.7 TELUS will ensure that the Centrex Services will perform within accepted industry standards for talker and listener echo control. TELUS will utilize echo cancellation on toll voice circuits on long haul trunks. On its managed layer 3 network, TELUS will utilize echo cancellation (inherent in media gateways) on all voice circuits, but will automatically disable upon detection of data tones such as modems and faxes.

4.4.8 TELUS will ensure that the Centrex Services will permit end-to-end transmission of DTMF signals with minimum distortion.

4.4.9 TELUS will ensure that GPS Provided Equipment will conform to the Q.24 specification for DTMF parameters to minimize possible inter-networking issues with VoIP networks using RFC2833/4733 for DTMF transmission.

4.4.10 TELUS will use R-Factor (which is a numeric expression of voice quality as determined by an E-model calculation) as a metric for measuring the quality of voice conversation in the IP Network part of its Exchange Services using the E-model (which is the metric, as defined in ITU G.107, used to predict call quality in data networks and to determine if a data network is ready to carry VoIP calls) to provide calculation of QoS as an R-Factor, based on inputs such as jitter, packet loss, and delay.

4.4.11 TELUS will utilize ITU G.711 μ-law companding for the Centrex Services voice compression.

4.4.12 TELUS will proactively and continually test to ensure the Centrex Services comply with the requirements set above in this section 4.4.

4.5 TELUS will ensure that the Centrex Services will carry and switch all 911 and E911 calls (e.g. emergency service/assistance) for all Centrex Lines to the Public Safety Answering Point (PSAP) designated by the local government authority. TELUS will ensure that the address/location information, as recorded in TELUS' facility management system per each line provided under the Centrex Services, will be delivered to the PSAP upon call answer.

4.6 TELUS will ensure that the Hosted Telephony Services will comply with the NANP, including interchangeable central office codes, interchangeable numbering plan areas and dialing procedure changes. TELUS will also follow Canadian Number Administrator (CAN) guidelines.

4.7 TELUS will ensure that the Hosted Telephony Services will support the transparent transmission of commonly used facsimile calls, including calls to or from Group 3 and Group 4 facsimile terminals as defined by the International Telecommunication Union (ITU). TELUS will remove echo cancellation from the media path when facsimile calls are made using VoIP. Hosted Telephony Services will also accept T.38 fax over VoIP.

4.8 TELUS will ensure that the Hosted Telephony Services will support toll-free, non-measured local calling for PSTN calls originating or terminating on a hosted telephony line within at least the same ILEC exchange or extended area service boundary.

4.9 TELUS will provide the Hosted Telephony Services with the following standard tones and announcements:

Condition	Treatment	Recommended Announcement
All trunks busy-Reorder Tone	120-IPM tone	Not applicable
All trunks busy-Normal	Announcement	We're sorry all circuits are busy now. Will you please try your call again later? This is a recording. (pause)
All trunks busy – Emergency	Announcement	(With flexibility due to situation) We're sorry, (storm, flood, tornado, etc.) damage in (or near) (city) has blocked your call. Emergency calls may be placed through your operator. This is a recording. (pause)
Failed connection (e.g. switching path busy or sender or transmitter overload, partial (insufficient) digits)	Announcement	We're sorry; your call did not go through. Will you please hang up and try your call again. This is a recording. (Pause)
Vacant code (or number unobtainable code)	Announcement or Tone (0.5 seconds off, 0.5 seconds on and 1.5 seconds off)	We're sorry; your call cannot be completed as dialed. Please check the number and dial again or call your operator to help you. This is a recording. (Pause)

Condition	Treatment	Recommended Announcement
ACD Announcements	Generic RAN	Not applicable

4.10 TELUS will continue to make available all telephone numbers at all sites that are currently in use as of the Effective Date in connection with Centrex Services being provided to the GPS Entities as of immediately prior to such date.

4.11 Where TELUS provides ACD as part of the Centrex Services, TELUS will make available an ACD MIS data port that will allow the GPS Entities to monitor and manage, on a real-time basis, the activities and configuration of their ACD application by connecting directly into TELUS' central office on which the ACD lines are terminating.

4.12 Integration/Interoperability

4.12.1 TELUS will ensure that the Centrex Services will support, with no loss of functionality, the third party devices and the interfaces as listed below:

4.12.1.1 Line devices are 2500 analog station terminations or proprietary to Nortel.

4.12.1.2 SMDI and X.25 interfaces are as provisioned on the DMS-100 and or GTD5.

4.12.2 TELUS will ensure that the Centrex Services will support SMDI and X.25 interfaces and the CPE systems.

4.12.3 TELUS will ensure that the Centrex Services will support other interface and interoperability capabilities that support external applications such as IVR that are in place today.

4.12.4 TELUS will ensure that the Centrex Services will provide interfaces to existing installed GPS Provided Equipment and support industry standard interfaces and interoperability with external applications that are in place today and may change through the Change Order Process.

4.12.5 Centrex Services will work with the following GPS Provided Equipment listed in Exhibit H3-A2, as may be modified from time to time in accordance with section 4.12.6.

4.12.6 The GPS Entities and TELUS agree that the list of GPS Provided Equipment set out in Exhibit H3-A2 may be modified from time to time as an Ordinary Course Change in accordance with the process for making Ordinary Course Changes set out in the main body of the Agreement or an alternative process mutually agreed in writing by the parties, provided, however, that no change to Exhibit H3-A2 will be made unless requested by the GPS Entities or made by TELUS with the written approval of the GPS Entities.

4.13 TELUS will ensure that the switches used in delivering the Centrex Services have multiple logical routes assigned on multiple transport systems to eliminate single failure points for routing.

4.14 Where technically, geographically and commercially viable, or as otherwise required by Applicable Laws, TELUS will allow a GPS Entity to retain existing Centrex Services telephone numbers when moving from one location to another.

4.15 The CallCentreAnywhere Services will peform in accordance with their Specifications as identified throughout section 4 and the Documentation for the CallCentreAnywhere Services. For further clarity, where each service standard identifies Hosted Telephony Services, that service standard applies to Centrex Services and CallCentreAnywhere Services.

5. Service Features

5.1 TELUS will include as standard features for Centrex Services, the features listed in Exhibit H3-A3 and as standard features for CallCentreAnywhere, the features listed in Exhibit H3-A5.

5.2 TELUS will ensure the following features are available to GPS Entities with respect to the Centrex Services:

5.2.1 TELUS will provide proactive notification of NANP changes to the GPS Entities that may impact CPE systems.

5.2.2 TELUS will ensure that the Centrex Services will support Customer Groups; each group may be configured separately.

5.2.3 TELUS will offer voice mail box and voice information tree services wherever the Centrex Services is provided.

5.2.4 With respect to ACDs for the Centrex Services, TELUS will include ACD reporting with the following options:

5.2.4.1 Where TELUS provides ACD, TELUS will make available an ACD MIS data port that allows the GPS Entities to monitor and manage, on a real-time basis, the activities and configuration of their ACD application by connecting directly into TELUS' central office on which the ACD lines are terminating.

5.2.4.2 TELUS will ensure that the ACD MIS data port connectivity will allow each GPS Entity to control, within the limits set by TELUS on the GPS Entity's ACD group, the operation of the ACD group, including:

5.2.4.2.1 Moving agents between queues;

5.2.4.2.2 Dropping or adding agents;

5.2.4.2.3 Changing time thresholds and routes; and

5.2.4.2.4 Monitoring call flow, queues, and agents in real time, and making ACD service changes to accommodate call flow.

5.2.5 TELUS will ensure that the Centrex Services include emergency rerouting to provide business continuity during emergency circumstances through Intelliroute: ServiceSaver. Intelliroute: ServiceSaver enables emergency rerouting such that calls to one GPS Entity site to be re-routed to alternate GPS Entity sites. TELUS will make available throughout the Term to the GPS Group all the features of its Intelliroute: ServiceSaver as they exist as of the Effective Date subject to such GPS Entity subscribing to such optional, fee based feature set out in section 7.2 as H3-A-Op110).

5.2.6 TELUS will ensure that the GPS Entities will have the ability to view and modify Centrex configurations through a self service tool currently called Centrex Dynamic Change (CDC) for all locations in Vancouver and Victoria receiving the City-Wide Centrex service.

5.2.7 TELUS will ensure that any future development of the CDC will, at a minimum, retain the current functionality, including, without limitation, the following features:

5.2.7.1 Query line information or groups (e.g., MADNS, Call Pick-Up groups, etc.);

5.2.7.2 Change, add or delete their line feature options (e.g., add Ring Again, delete hunt group members or manipulate MADNS);

5.2.7.3 Move and swap directory number (like for like sets);

5.2.7.4 Set up changes to be performed at a later date (via a pending order file);

5.2.7.5 Change a line's Network Class of Service (NCOS);

5.2.7.6 Change but not add authorization codes;

5.2.7.7 Change name programming;

5.2.7.8 Create a pending order file; and

5.2.7.9 Billable items accessible via CDC will include speed call long, message waiting lamp and multiple appearance directory number/multiple call arrangement.

5.2.8 TELUS will be responsible for the administration of existing and new telephone numbers for the Centrex Services. This responsibility includes the following:

5.2.8.1 keeping records of telephone numbers assigned to each GPS Entity;

5.2.8.2 notifying each GPS Entity when agreed thresholds relating to inventory of used and available telephone numbers have been reached;

5.2.8.3 working with the GPS Entities to communicate operational practices covering agreed telephone number management;

5.2.8.4 allowing reserved numbers for the Centrex Services to be converted from reserved to active as additional numbers are needed;

5.2.8.5 working with the GPS Entities to assign a small number of reserved numbers to be available to any GPS Entity at no charge until activated; and

5.2.8.6 processing a number request to ensure that the number block is consistent with the dialling plan for the Access Service being used by the GPS Entity.

5.3 TELUS will ensure that the automatic call distribution (ACD) service included in the Centrex Services will have at least the following characteristics:

Standard Features	Description
Abandoned Call Clearing	Abandoned Call Clearing provides for the removal of a call when a caller abandons either while in an incoming call queue or after the call was presented to the GPS End User.
ACD Call Forcing Tone	ACD Call Forcing Tone provides an audible warning tone to alert GPS End User of an incoming ACD call
ACD Line of Business Code Key	ACD Line of Business Code Key enables a Line-of-Business code key to be assigned to each ACD agent position. When the GPS End User presses this key and dials a three-digit code associated with a particular line of business, the call category is recorded
ACD Multiple Line of Business Codes	ACD Multiple Line of Business Codes provides handling and tracking of multiple activities for the same call in a GPS Entity environment with more than one line of business.
ACD Observe Agent Enhanced/ACD Status-Lamp Enhancement/ACD	ACD Observe Agent Enhanced/ACD Status-Lamp Enhancement/ACD enables a supervisor to continuously monitor (visually) or observe (audio-monitor) individual ACD agent activities on both the GPS End User's ACD directory dumber and one designated secondary directory number

Standard Features	Description
ACD on 2500 Sets (and all related ACD on 2500 sets functionality)	ACD on 2500 Sets provides for ACD functions using a 2500 type set rather than a business set
ACD Overflow to Calls In Queue	ACD Overflow to Calls In Queue enhances the existing ACD call-overflow capability by adding new timing thresholds for calls in queue.
ACD Walkaway /Closed	ACD Walkaway /Closed enables GPS End Users to enter a three-digit code to make the line unavailable and identify the reason why.
Additional Queue Slots	Additional Queue Slot provides for greater than the number of access positions. Dedicated time slots used to hold incoming calls in a delayed state until an GPS End User becomes available.
Agent Login Enhancement	Agent Login Enhancement ensures that only assigned GPS End Users can log into an ACD group by partitioning of GPS End User login identification numbers between GPS Entity groups, and through an GPS End User login password option
Agent Login/Logout	Agent Login/Logout provides security to ensure only assigned GPS End Users are able to login to an ACD group.
Agent Queue	Agent Queue provides for even distribution of the calls among GPS End Users by routing the call to the GPS End User who has been idle the longest.
Agent Status Lamp	Agent Status Lamp provides lamp light conditions of “on”, “off”, “flashing”, and “winking” help the supervisor track the status of each GPS End User in the ACD group
Answer Agent	Answer Agent enables a key to be reserved to be used only for answering calls from GPS End Users.
Attendant Console to ACD	Attendant Console to ACD enables attendant consoles to extend or originate calls to ACD directory numbers.
Automatic Overflow	Automatic Overflow reroutes incoming calls when the maximum number of incoming calls are in queue or the first call in queue has reached the maximum waiting time.
Call Agent	Call Agent enables the supervisor to directly call a GPS End User.
Call Forcing	Call Forcing increases the speed of ACD call handling by automatically presenting incoming calls to the ACD agents.
Call Park by ACD agent	Call Park by ACD agent enables an ACD agent to park a call
Call Source ID	Call Source ID provides either the calling GPS End Users extension or directory number.
Call Supervisor	Call Supervisor enables the GPS End User quick access to the supervisor for help or consultation.
Call Transfer With Time	Call Transfer With Time enables a call that has been answered by an ACD agent and then transferred to another ACD agent group to be queued to the new group’s highest priority queue.
Called Name /Number Display	Called Name /Number Display shows the terminating group name and directory number for calls arriving on the GPS End User’s set.

Standard Features	Description
Controlled Interflow	Controlled Interflow enables a supervisor to temporarily divert a group's new incoming calls to another group.
Delay Treatment	Delay Treatment enables one of two treatments based on anticipated waiting time, either a ring back or a recorded announcement.
Display Agents Summary	Display Agents Summary enables supervisor to quickly check the status of all ACD agent positions within a group.
Display Queue Status	Display Queue Status enables the supervisor position to monitor the efficiency in which incoming calls are being handled.
Distinctive Ringing	Distinctive Ringing enables GPS End Users to distinguish ACD calls from non-ACD calls.
Emergency Alerting	Emergency Alerting enables the ACD agent to confer immediately with the supervisor.
Emergency Alerting Enhanced	Emergency Alerting Enhanced enables the ACD agent to add both a supervisor and a GPS Entity provided recording device to a call simultaneously by pressing a single key.
Emergency Answer	Emergency Answer permits an answer emergency key lamp, at the supervisory position, to flash when an GPS End User activates an emergency key.
Emergency Answer Backup	Emergency Answer Backup provides a method for redirecting emergency key calls to another designated position.
Extended Agent Observe	Extended Agent Observe enables the supervisor to observe calls presented to the Incalls key of any GPS End User or supervisor in any ACD group within the same GPS Entity group
Forced Agent Availability	Forced Agent Availability enables the supervisor to deactivate a Not Ready condition on a specific line.
Forced Announcement for New and Overflowed Calls	Forced Announcement for New and Overflowed Calls provides for a recorded message to be presented to every incoming and overflowed call, regardless of priority level
Incoming Call Queue	Incoming Call Queue provides queuing of incoming calls based on order of arrival priority.
Make Set Busy	Make Set Busy blocks ACD and non-ACD calls to the position. This feature can be automatically activated if the ringing timer expires on an ACD call presented to that GPS End User.
MIS Data Stream Interface	MIS Data Stream Interface enables a downstream processor to use a data stream to collect ACD group information, from the ACD node, to produce real-time statistics and historical reports. Includes Remote ACD load management which provides supervisors the capability to quickly reconfigure the structure and operational parameters of an ACD group. Includes variable wrap-up time which enables the supervisory position to vary the interval between call completion and the presentation of a new incoming call on either an individual GPS End User basis or group basis.
Multistage - Queue Status Display	Multistage - Queue Status Display enables the ACD agent to display the length of time calls have been held in the incoming call queue before being answered.

Standard Features	Description
Music on Delay	Music on Delay uses a GPS Entity provided music source to provide music to the caller after the recorded delay announcement, while the call is in queue to be answered.
Night Treatment	Night Treatment enables calls arriving after all GPS End Users have logged out to be handled by alternate means.
Not Ready	Not Ready provides that when the not ready key is pressed, any active call is terminated and the position cannot receive any new ACD calls.
Observe Agent	Observe Agent enables the supervisor position to monitor GPS End Users' calls.
Observe Agent from 2500 Set	Observe Agent from 2500 Set enables the supervisor to monitor GPS End Users' calls from a 2500 set.
Overflow Enhancement	Overflow Enhancement increases the options for answering ACD calls during periods of heavy traffic.
Overflow of Enqueued Call to Directory Number	Overflow of Enqueued Call to Directory Number provides an additional GPS Entity-defined timer and route
Queue Status Lamps	Queue Status Lamps enables supervisors to determine which ACD groups need help and whether additional GPS End Users or a redistribution of GPS End User positions is required to handle incoming calls more efficiently
Raw ACD Data	Raw ACD data will be provided in an electronic spreadsheet or comma delineated format from an ACD MIS Data Port so that data can then be manipulated by a Perimeter system (or equivalent) to enable the GPS Entities to develop their own ACD reports in the management of their ACD service.
Ring Threshold	Ring Threshold provides for the rerouting of a call when an GPS End User does not answer within a pre-programmed length of time.
Second and Third Recorded Announcements	Second and Third Recorded Announcements enables the specification of delay periods between announcements and the type of treatment that callers are given during those delays and after the last announcement is given
Secondary Directory Number	Secondary Directory Number provides for the assignment of a feature access position of one or more secondary directory numbers that are separate from the incoming ACD directory numbers. This enables the GPS End Users to receive direct non-ACD incoming calls and to make outgoing calls.
Set Not Ready	Set Not Ready this feature blocks the GPS End User's position from incoming ACD calls. Non-ACD incoming calls continue to be presented.
Standard Announcement	Standard Announcement this feature plays recorded announcements to callers in queue to advise them of answering delays.
Supervisor Control of Night Service	Supervisor Control of Night Service provides the supervisor position the capability to activate night treatment service for one or more GPS End User groups within the same ACD system.

Standard Features	Description
System Administrator Software Package	System Administrator Software Package provides for: 1. Real time display of GPS End User and call activity by call centre or queue; 2. Activate or deactivate the entire call centre group or queues within the group; 3. Assign passwords to GPS End Users 4. Increase or decrease number of GPS End Users; 5. Increase or decrease the number of queues; 6. Move GPS End User(s) to another call centre group within the system; 7. Control queues by changing the queue slots, queue size, and maximum wait time; 8. Change overflow routes and ring thresholds; and 9. Change password levels of supervisors into the system
Three-way Calling / Call Transfer to ACD	Three-way Calling / Call Transfer to ACD enables a supervisor to transfer a call to another GPS End User with or without establishing a three-way conference first.
Transfer to In-Calls Key	Transfer to In-Calls Key enables the ACD GPS End User to transfer an incoming ACD call directly to another ACD GPS End User's in-calls key.
Variable Wrap-Up Time	Variable Wrap-Up Time enables a GPS Entity to establish an interval between completion of one call by an GPS End User, and reception of the next call by the same GPS End User

5.4 Where ACD service is provided, TELUS will make available a hosted and managed ACD reporting service bureau as described in more detail in Attachment M3 to Schedule M (Reporting).

6. Service Support Features

6.1 TELUS will ensure that the following service support features are available to GPS Entities:

6.1.1 TELUS will provide the GPS Entities with a directory assistance service as described in Exhibit H3-A4.

6.1.2 TELUS will provide the GPS Entities with an operator assistance service as described in Exhibit H3-A4.

6.1.3 TELUS will be responsible for service delivery and installation of the Hosted Telephony Services to each premise demarcation point or desktop as directed by the GPS Entity ordering such Services.

6.1.4 TELUS will ensure that site visits in connection with the Hosted Telephony Services will be conducted by qualified technical Personnel to assess and confirm either entrance or in-building cabling availability.

6.1.5 With respect to the Centrex Services, TELUS will use industry standard connection hardware that is properly labelled and properly organized in accordance with industry standards.

6.1.6 TELUS will install either GPS Provided Equipment or TELUS' leased provided equipment and any other miscellaneous hardware with features as specified on the related Service Order.

6.1.7 TELUS will test and validate dial tone delivery for each Hosted Telephony Service installed and confirm that that local and network calls can be successfully completed.

6.1.8 TELUS will activate all features with respect to the Hosted Telephony Services included in the Service Order for such Services.

6.1.9 TELUS will accurately label all telephone sets with directory numbers and features.

6.1.10 TELUS will provide Centrex ACD queue information, on an exception case basis, upon request from GPS Entities.

6.1.11 TELUS will follow the Centrex Government of BC Standard Software Features Templates as jointly developed by the GPS Entities and TELUS and representing best practice standards.

7. Optional Features

7.1 Included Optional Features. TELUS will make each of the optional features with respect to the Hosted Telephony Services set out in Exhibit H3–A3 available to all GPS Entities at no additional cost to the GPS Entities. Where an optional feature has been selected by a GPS Entity in a Service Order or Service Change Order, then TELUS will provide such optional feature as a part of the Hosted Telephony Services ordered without any additional Fee in respect of such feature being payable.

7.2 Fee-Based Optional Features. TELUS will make each of the optional features with respect to the Hosted Telephony Services set out in the tables below available to all GPS Entities at the additional price stated for each of such features in the Price Book. Where an optional feature has been selected by a GPS Entity in a Service Order or Service Change Order, then TELUS will provide such optional feature as a part of such Services.

No.	Fee-Based Optional Feature for:	Optional Feature Title	Description
H3-A-Op75	Centrex Services	ACD (Automatic Call Distribution) Group	ACD (Automatic Call Distribution) Group provides a GPS Entity using Centrex Services with an equal distribution of incoming calls to a pre-designated set of call answering positions.

No.	Fee-Based Optional Feature for:	Optional Feature Title	Description
H3-A-Op76	Centrex Services	ACD agent/Supervisor Position	Each call-answer agent that will be responding to an incoming call to the ACD Group telephone number is defined as an ACD agent Position. An ACD station which has been provided with additional supervisory capabilities for monitoring GPS End User performance and ACD system operation is defined as a Supervisor position.
H3-A-Op77	Centrex Services	ACD MIS Data Port	ACD MIS Data Port enables Centrex ACD users access to their ACD partitioned information in TELUS' central office to enable monitoring and management of ACD functions on a real time basis.
H3-A-Op78	Centrex Services	ACD Service Bureau	ACD Service Bureau provides for a limited set of reports on the operation of each GPS Entity's ACD Service.
H3-A-Op79	Centrex Services	ACD Service Bureau – RTA	ACD Service Bureau – RTA Enables a user to access TELUS ACD Service Bureau using a computer to generate ACD reports.
H3-A-Op80	Centrex Services	ACD Usage Report	The ACD Usage Report provides the following information on a monthly basis. Night Service Calls, Offered Calls, Time Delay Calls Offered, Deflected Calls, Abandoned Calls, Answered Calls, Time Delay Calls Answered, Group Usage in CCS or Minutes and Average Call Time in CCS or Seconds. This report is not associated with ACD Service Bureau, and is generated by the group who conducts Traffic Studies.
H3-A-Op81	Centrex Services	Additional Directory Number (ADN)	Additional Directory Number (ADN) provides any number other than the Primary Directory Number (PDN) on a set, or an ACD primary DN.
H3-A-Op82	Centrex Services	Alternate Number Delivery (AND)	Alternate Number Delivery (AND) enables an alternate number selected by the GPS Entity to be displayed to a called party.
H3-A-Op83	Centrex Services	Audio Input on Hold (AIOH)	Audio Input on Hold (AIOH) provides for a port connection in the Centrex switch to connect a GPS Entity-selected music source.
H3-A-Op84	Centrex Services	Automatic Blocking	Automatic Blocking permanently suppresses the display of the name and telephone number on Call Display.
H3-A-Op85	Centrex Services	Centrex Data - Station	Centrex Data – Station provides 56Kbps data only service and has a 2 line station minimum. (Grandfathered)

No.	Fee-Based Optional Feature for:	Optional Feature Title	Description
H3-A-Op86	Centrex Services	Centrex Data – High Speed Data Unit	Centrex Data – High Speed Data Unit is the data unit which terminates the Centrex Data line. (Grandfathered)
H3-A-Op87	Centrex Services	Call Display	Call Display permits a user with a display telephone to view the telephone number and calling name (where available) of the calling party.
H3-A-Op88	Centrex Services	Call Forward Remote Activation (CFRA)	Call Forward Remote Activation (CFRA) enables a user with Call Forward, Universal capabilities to remotely activate or deactivate their call forwarding, or to change the number to which calls are being forwarded (requires subscription to Centrex Remote Feature Access Port).
H3-A-Op89	Centrex Services	Call Intercept	Call Intercept enables for Centrex telephone numbers which are being dropped by the GPS Entity to have an intercept message provided on them.
H3-A-Op90	Centrex Services	Centrex Dynamic Change (CDC)	Centrex Dynamic Change (CDC) enables a GPS Entity to assign or change the directory number of their Centrex telephone sets, and to add, change or delete Centrex features on their lines. (Grandfathered)
H3-A-Op91	Centrex Services	Combined VoiceMail	Combined VoiceMail provides a single point from which a Centrex users can retrieve their Standard Mailbox messages, and their TELUS Mobility cell phone mailbox messages
H3-A-Op92	Centrex Services	Digital Recorded Announcement Machine (DRAM)	Digital Recorded Announcement Machine (DRAM)enables GPS Entities to record a message for playing while their customers are on hold, for a 10 second time span. Additional time to a maximum of 7 seconds can be provided.
H3-A-Op93	Centrex Services	Enhanced Answering Position (EAP)	Enhanced Answering Position (EAP) provides Busy Lamp Field/ Direct Station Selection (BLF/DSS) and Transfer on Release Key functionality for the answering and transferring of incoming telephone calls

No.	Fee-Based Optional Feature for:	Optional Feature Title	Description

H3-A-Op94	Centrex Services	Enhanced Call Processing Services (ECP)	Enhanced Call Processing Services (ECP) is a network-based host and managed auto-attendants or IVR applications available to users of the Centrex Services. The ECP includes the following functionalities:
			• Call Menu Capability - the main component of an ECP application (i.e. Press 1 for Sales, Press 2 for Service, etc). ECP applications can be comprised of a single call menu or multiple call menu's linked together to form the following types of ECP applications:
			  • Auto-attendant;
			  • Dial by name and number; and
			  • Time of day routing and schedule;
			• Information only capability - listen-only access to a pre-recorded greeting and automatically disconnects the call after completion of the call or return to an auto-attendant caller menu;
			• Information centre capability - the ability to listen to multiple messages and respond appropriate to the message. TELUS will ensure that the information centre enables portions of the message to be re-recorded without the need to re-record the full message;
			• Voice form capability - the ability to offer questionnaire(s) and capture the responses via the phone network;
			• Bulletin distribution capability - the ability to send internal company-wide voicemail messages to all employees;
			• Redirect mailbox capability - this mailbox is only used in some unique dial by name and number applications which require a non-Centrex number to be part of the companies dial by name/number corporate directory;
			• Transfer functionality to route calls to a predetermined destination (i.e. an alternate number or voice mailbox); and
			• Additional simultaneous access - this feature enables the GPS Entity to purchase additional simultaneous access for their ECP/AA application, than the standard default of 10 simultaneous accesses.

No.	Fee-Based Optional Feature for:	Optional Feature Title	Description
H3-A-Op95	Centrex Services	Large Conference (for more than 6 conferees)	Large Conference (for more than 6 conferees) provides additional conferencing capability and permits expansion to the conference feature included with each Centrex line. (Grandfathered)
H3-A-Op96	Centrex Services	Message Waiting	For non-CMS compatible sets (M8000 series sets, old Unity sets, etc.) and sets without message waiting lamps, the standard indication will be an interrupted (stuttered) dial tone (160 ms of dial tone followed by 160 ms of silence). Visual message waiting indication (60 IPM) for non-CMS compatible sets with lamps may be provided by using an "E" line card, however, new installations of such cards are no longer permitted (i.e. Grandfathered). The standard message waiting indication on a CMS-compatible set (e.g. M9000, M5000, M6000 series sets) is a flashing lamp
H3-A-Op97	Centrex Services	Multiple Appearance Directory Number	Multiple Appearance Directory Number provides appearances of the same number on more than one business set, excluding appearances of the same number on key 1 of the sets
H3-A-Op98	Centrex Services	Number Reservation	Number Reservation provides reservation of numbers based on the GPS Entity's request
H3-A-Op99	Centrex Services	Remote Feature Access Port	Remote Feature Access Port enables the GPS Entity to activate/deactivate and use the Simultaneous Ring (SimRing) and Call Forward – Remote Activation features
H3-A-Op100	Centrex Services	Simplified Message Desk Interface (SMDI)	Simplified Message Desk Interface (SMDI) enables for the connection of a GPS Entity owned voice processing system to a Customer Group
H3-A-Op101	Centrex Services	Simultaneous Ring (SimRing)	Simultaneous Ring (SimRing) provides for ringing on telephone sets associated with a pre-determined group of up to five directory numbers when a specific directory number in this group is called
H3-A-Op102	Centrex Services	Speed Call 30/ 50/ 70/ Large	Speed Call 30/ 50/ 70/ Large is an additional Speed Call capability permits expansion to the base Speed Call feature included with each Centrex line.

No.	Fee-Based Optional Feature for:	Optional Feature Title	Description
H3-A-Op103	Centrex Services	Standard Mailbox	Standard Mailbox offers network-based voice mail service that enables a Centrex user to retrieve, listen to, and action (e.g. reply, forward, etc.) their voice mail message(s).Voice mailboxes will, at a minimum, have the following characteristics: • Greeting length = 30 seconds • Message storage = 25 messages • Message length = 3 minutes • Number of future delivery messages = 15 • Storage period – new messages = 14 days • Storage period - saved messages = 14 days • Number of distribution lists = 15 • Number of members in a distribution list = 25
H3-A-Op104	Centrex Services	Transfer Mailbox	Transfer Mailbox enables an incoming call or a message to be directed to a mailbox other than the one it would normally go to
H3-A-Op105	Centrex Services	IPM Standard Mailbox	• Centrex IPM Standard Mailboxes are provisioned on UTStarcom (UTSI) voice mail platform called Implicity (also known as IP Messaging), which is hosted and managed on TELUS property. • Greeting length = 60 seconds • Message storage = 50 messages • Message length = 5 minutes • Number of future delivery messages = 15 • Storage period – new messages = 21 days • Storage period - saved messages = 30 days • Number of distribution lists = 5 • Number of members in a distribution list = 25 • eMail Notification with Wav.file Attachment

No.	Fee-Based Optional Feature for:	Optional Feature Title	Description
H3-A-Op106	Centrex Services	IPM Voicemail Alias Transfer	The Alias feature is used to provision Centrex Multiline, or Centrex Hunt applications, or where one mailbox shared amongst multiple incoming lines, such as Combined Voicemail service. The Alias feature allows subscribers to define multiple numbers that point to their mailbox and multiple phone numbers directly associated with their mailbox. • This features allows the Implicity to know the subscriber's identity, even when they are calling from other phones. • The maximum number of aliases that can be used by a customer 6 and the end user would be charged for up to 6.
H3-A-Op107	Centrex Services	Trunk Termination	Trunk Termination enables connection of tie trunks, foreign exchange trunks, paging system interface lines, 800/900 service trunks, Foreign Exchange trunks, and other facilities to the Centrex Customer Group
H3-A-Op108	Centrex Services	TSR-eMAC	TSR – eMAC is a Service Order Request Tool that improves the submission of Moves, Adds, Changes, & Deletes (MACD) requests to TELUS. It also serves as an alternative to Centrex Dynamic Change (CDC). GPS Entities can access TSR-eMAC via the web with user id and password.
H3-A-Op109	Centrex Services	Virtual Network Link	Virtual Network Link provides for the connection via a Virtual Facility Group (VFG) of a Centrex Customer Group to a GPS Entity'sprivate network to control the number of simultaneous calls that may be passed to the GPS Entity's network
H3-A-Op110	Centrex Services	Intelliroute: ServiceSaver	Intelliroute: ServiceSaver is a feature of the TELUS Intelliroute service that provides the ability to maintain control during emergencies by instantly re-routing incoming calls and for the GPS Entity to maintain service levels by immediately redirecting calls to where they can be answered and handled in the shortest timeframe Can be activated and deactivated as required
H3-A-Op111	CallCentreAnywhere Services	Additional Interaction Subscriptions	Additional subscriptions for Lite or Multimedia; per Interaction

No.	Fee-Based Optional Feature for:	Optional Feature Title	Description
H3-A-Op112	CallCentreAnywhere Services	Disaster Recovery Planning (DRP)	Disaster Recovery Planning applies per GPS Entity with per GPS End User fee charges
H3-A-Op113	CallCentreAnywhere Services	Data Archiving	Data Archiving provided archive storage longer than 90 days, per login.
H3-A-Op114	CallCentreAnywhere Services	Geographic Hot Standby (GHS)	Geographic Hot Standby provides GPS Entities with an alternative CCA platform to use during maintenance windows or unscheduled outages and is rated per login
H3-A-Op115	CallCentreAnywhere Services	Admin Desk	Admin Desk is a fully managed option where TELUS performs all administrative changes and is rated per login.
H3-A-Op116	CallCentreAnywhere Services	Voice Inbound Access	Additional CCA Voice Inbound Access provides extra inbound accesses for call flows or reporting purposes.
H3-A-Op117	Directory Listing Services	Additional Directory Listings	See Exhibit H3-A4
H3-A-Op118	Directory Listing Services	Non-Published Numbers	See Exhibit H3-A4

8. Hosted Telephony Specific Term and Conditions

8.1 Centrex

8.1.1 Centrex standard features and optional features are only available in TELUS central offices where certain central office equipment and telecommunications network facilities are provisioned and, accordingly, not all Centrex standard features and Centrex optional features may be available for use by the GPS Entities at all TELUS central offices. A service availability check issued to TELUS by the GPS Entity will confirm availability.

8.1.2 The operation of Centrex standard features and optional features may vary due to differences in the switching equipment located in TELUS' central offices. Operational differences based on switching equipment is documented in the operational handbook.

8.1.3 Prequalification of local access loop condition is required prior to issuing a Service Order for a Centrex Line.

8.1.4 TELUS may charge the GPS Entity in accordance with section 3 (Move, Add, Change Fees) of Exhibit C3-A for providing the following:

8.1.4.1 the provisioning by TELUS of facilities for extensions to single line telephone sets or access facilities to extend ringing to a telephone number at a different location than the location to which the telephone number normally terminates; and

8.1.4.2 dial tone on a Centrex Line from a TELUS central office other than the central office that normally serves the GPS Entity site.

8.1.5 Telephone Numbers. Subject to any rights the GPS Entities may have under Applicable Laws, including any right to port a number to another carrier, the GPS Entity does not have any property rights in or other rights to any telephone number assigned to the GPS Entity whether or not the telephone number is in a telephone directory. TELUS may change a telephone number designated for the GPS Entity, without the consent of the GPS Entity:

8.1.5.1.1 if TELUS has mistakenly assigned the same number to two customers;

8.1.5.1.2 in the case of new number plan area introductions;

8.1.5.1.3 as required by Applicable Laws or Governmental Authority; or

8.1.5.1.4 as is otherwise reasonably necessary in order for TELUS to continue to deliver the Services to the GPS Entities.

For any such change, TELUS will give the GPS Entity reasonable advance notice stating the reason for and the anticipated date of such change, or in cases of emergency, give the GPS Entity verbal notice, followed by a written explanation as soon as is reasonably possible.

8.2 CallCentreAnywhere

8.2.1 On TELUS side of the CallCentreAnywhere Service Demarcation, TELUS will provide the voice and data network connectivity required to:

8.2.1.1 receive telephone calls routed to CallCentreAnywhere Service and place outgoing telephone calls from CallCentreAnywhere Service to GPS End User positions/locations and to other locations dialed by the GPS Entities; and

8.2.1.2 transmit data from and receive data transmitted to the CallCentreAnywhere Service.

8.2.2 The GPS Entity is responsible for:

8.2.2.1 all hardware, software and connectivity required on the GPS Entity's side of the point of CallCentreAnywhere Service Demarcation;

8.2.2.2 charges relating to the provisioning of all local telephone numbers including all service features;

8.2.2.3 long distance charges for calls to locations other than local calling area for the TELUS IDC and one (1) additional local calling area;

8.2.2.4 allocating user IDs and passwords to its GPS End-Users;

8.2.2.5 advising its GPS End-Users that calls to the 3-digit emergency telephone number 9-1-1 are not supported through CallCentreAnywhere Service;

8.2.2.6 in respect of a GPS Entity user position/location,

8.2.2.6.1 access to the PSTN to receive outbound calls from the CallCentreAnywhere Service platform (through a 7-digit or 10-digit telephone number as defined by the local area calling plan);

8.2.2.6.2 terminal equipment capable of making and receiving PSTN calls;

8.2.2.6.3 a personal computer, equipped with a web browser, capable of sending and receiving data over the Internet and compatible with CallCentreAnywhere Service; and

8.2.2.6.4 high speed access to the public Internet in order to facilitate interactions with CallCentreAnywhere Service.

For certainty, CallCentreAnywhere Service does not include private IP connectivity or connectivity to the PSTN or the public Internet or permit GPS user positions/locations to place calls to the 3-digit emergency telephone number 9-1-1.

8.2.3 For the purpose of sending and receiving telephone calls to and from the CallCentreAnywhere Service platform, the GPS Entities' user positions/locations must be located in Canada or the continental United States.

8.2.4 The number of GPS End Users that can concurrently access CallCentreAnywhere Service is limited and is dependent on the number of concurrent logins contracted by the GPS Entities. If the number of

concurrent users reaches the maximum number allowed, additional users will be unable to access CallCentreAnywhere Service until the number of concurrent users is less than the number of contracted concurrent logins.

8.2.5 GPS Entities usage of CallCentreAnywhere Service is subject to the number of interactions that can be consumed concurrently on the CallCentreAnywhere Service platform. Each activity on the CallCentreAnywhere Service platform consumes one (1) interaction. Activities include processing voice calls, transacting email, and placing or retrieving voice mail messages. If the number of interactions consumed reaches the maximum number allowed, additional interactions will not be allowed until the number of interactions is less than the maximum number allowed. The number of interactions is limited and is dependent on the concurrent usage ratio. A concurrent usage ratio of 1.5 (the concurrent usage ratio provided with CallCentreAnywhere Service as a service feature) provides a maximum number of interactions equal to 1.5 times the number of concurrent logins contracted by the GPS Entities (rounded up to the nearest whole number). Additional interactions may be purchased separately as long as the minimum number of concurrent logins remains contracted and the maximum concurrent usage ratio does not exceed 5.

8.2.6 The number of direct in dial ("DID") numbers used to route GPS Entities calls within the CallCentreAnywhere Service platform is limited. TELUS reserves the right to limit the number of DIDs available for call routing to the number of concurrent logins purchased by the GPS Entities (including additions and removals). Additional DID numbers can be provisioned by adding concurrent logins.

8.2.7 For each GPS Entity partition, CallCentreAnywhere Service accumulates historical data and, if activated by the GPS Entity, voice recordings. For each service bundle, historical data and, optionally, voice recordings associated with the GPS Entities'' partition will be retained for ninety (90) days. Any historical data records and voice recordings older than ninety (90) days will be deleted.

8.2.8 A GPS Entity may elect to provide a local telephone number (a telephone number for incoming calls in the same local exchange area as the point of origin of a call from the GPS Entity's customer) for the GPS Entity's customer to dial to initiate a call. Calls originating from the GPS Entity's customer to a local telephone number must still be routed to the TELUS IDC which hosts the CallCentreAnywhere Service web portal, and long distance charges may apply for routing the call from its original point of origin to the TELUS IDC.

8.2.9 At the request of the Province, TELUS will include as part of the Documentation for the CallCentreAnywhere Services a form of notice prepared by the Province in respect of FOIPPA considerations as they relate to the CallCentreAnywhere Services.

Exhibit H3-A1

Exhibit H3-A2

Supported GPS Provided Equipment List

As of the Effective Date, the Centrex Services will work with the following GPS Provided Equipment set out in the tables below, as such tables may be modified from time to time in accordance with section 4.12.6 of Attachment H3-A.

Existing Telephone Sets	Replacement Sets
M8009, Unity II, Unity II Plus , Mitel Analogue Set, M9009, any other analog set	Nortel M9316
M8314	Nortel M9316
M8417	Nortel M9417
Nortel M5209	Nortel M5209 or M5216
Nortel M5312	Nortel M5316
Nortel M518 and M536 add-ons	Nortel M518 and M536 add-ons
Nortel M 522 add-on	Nortel M522 add-on
Epic 4300 (Multiline, analog)	Epic 4300
Nortel M5216 and M5312	Nortel M5316
Polycom EX	Polycom EX

Existing Key Systems
Nortel Norstar 6/16, 128, 0x32, modular ics, compact ics, compact 308
Nortel BCM 50, 450

Exhibit H3-A3

Included Optional Features for Hosted Telephony Services

No.	Service or Feature	Brief Description
H3-A-Op 1	900 Service Call Blocking	900 Service Call Blocking prevents the outbound dialing of 900 Service telephone numbers from a Centrex telephone number.
H3-A-Op2	Abbreviated Dialing	Abbreviated Dialing enables a GPS End User to place intra-customer group calls, or calls to external Centrex or PBX systems, using 2 - 7 digits.
H3-A-Op3	Attendant Console Service	Attendant Console Service provides for attendant console operation.
H3-A-Op4	Authorization Codes	Authorization Codes provides switch verified codes (numbers) which allow the GPS End User access to specific long distance or private line facilities, tie lines and off-net dialing.
H3-A-Op5	Auto Answer Back	Auto Answer Back enables the automatic answering of an incoming call to the Primary Directory Number after 4 seconds without lifting the handset; conversation takes place through a handsfree unit.
H3-A-Op6	Automatic Dial	Automatic Dial enables a Meridian Business Set GPS End User or attendant console GPS End User to call a frequently dialed number by pressing an assigned feature key that has been programmed with that particular number.
H3-A-Op7	Automatic Line	Automatic Line provides an automatic connection between a GPS End User who goes off-hook and a GPS End User-predetermined location.
H3-A-Op8	Automatic Route Selection (ARS)	Automatic Route Selection (ARS) enables trunk route lists associated with a GPS Entity's private network to be searched for an idle trunk.
H3-A-Op9	Business Subgroups (GTD-5)	Business Subgroups (GTD-5) defines the calling and feature availability characteristics that are common to a set of devices on a GTD-5 switch.
H3-A-Op10	Busy Override	Busy Override enables a Meridian Business Set GPS End User to gain access to a busy station by pressing the Busy Override key; includes Executive Busy Override.
H3-A-Op11	Call Forward	Call Forward enables an incoming call to be automatically forwarded to a GPS End User-predetermined telephone number. Includes call forward busy, call forward no-answer, call forward all calls, call forward per key, etc. See Note 1.
H3-A-Op12	Business Set Call Forward on a Per Key Basis (CFK)	Business Set Call Forward on a Per Key Basis (CFK) enables each directory number on a Business Set to have calls forwarded to different directory numbers.
H3-A-Op13	Call Forward, All Calls (CFAC)	Call Forward, All Calls (CFAC) automatically forwards all calls while the feature is activated; includes Call Forward, Universal (CFU) and Call Forward, Intragroup (CFI)
H3-A-Op14	Call Forward, Busy (CFB)	Call Forward, Busy (CFB) automatically Forwards incoming calls while the station is busy on another call. Applies to both non-Business Sets and Business Sets.

No.	Service or Feature	Brief Description
H3-A-Op15	Call Forward Busy, Unrestricted (CBU)	Call Forward Busy, Unrestricted (CBU) enables Call Forward, Busy calls to be forwarded to remote stations inside and outside the customer group.
H3-A-Op16	Call Forward Busy/Don't Answer - Internal/External Split	Call Forward Busy/Don't Answer - Internal/External Split provides for GPS Entity control over the telephone numbers to which internal call forwards and external call forwards occur (different numbers are possible for each type of call forward).
H3-A-Op17	Call Forward Busy/ - Inhibit Make Busy/Line Busy	Call Forward Busy/ - Inhibit Make Busy/Line Busy enables for the creation of a Make Set Busy key that controls the call forwarding treatment for a maximum of 6 stations.
H3-A-Op18	Call Forward, No Answer (CFNA) or Call Forward, Don't Answer (CFD)	Call Forward, No Answer (CFNA) or Call Forward, Don't Answer (CFD) automatically forwards incoming calls that are not answered within a predetermined number of ringing cycles. Applies to both non-Business Sets and Business Sets.
H3-A-Op19	Call Forward Do Not Answer and Call Waiting Interaction	Call Forward Do Not Answer and Call Waiting Interactio enables the option of forwarding a call to a station with Call Waiting (triggering call waiting indication), or not forwarding the call but continuing to ring the base station until the call is answered or abandoned.
H3-A-Op20	Call Forward Don't Answer for MDC Hunt Groups (CFGDA)	Call Forward Don't Answer for MDC Hunt Groups (CFGDA) enables for calls placed to a member of an idle hunt group with CFD assigned to be forwarded if the call is not answered within a pre- designated length of time.
H3-A-Op21	Call Forward, Don't Answer, Unrestricted (CDU)	Call Forward, Don't Answer, Unrestricted (CDU) enables Call Forward, No Answer calls to be forwarded to remote stations inside and outside the customer group
H3-A-Op22	Call Forward Exempt Option	Call Forward Exempt Option provides that a line equipped with this option cannot have calls forwarded to it.
H3-A-Op23	Call Forward Fixed CO	Call Forward Fixed CO enables calls to a number (line) that is "parked" in a central office to be forwarded from that number to another local or long distance number.
H3-A-Op24	Call Forward Fixed Set	Call Forward Fixed Set enables calls to a number on a telephone set to be always forwarded to another telephone number requires TELUS Assignment and Activation work to add permanent call forwarding to the telephone number)
H3-A-Op25	Call Forward Indication	Call Forward Indication provides for a brief ring to occur on the telephone set to signify that a call has been forwarded from the set..
H3-A-Op26	Call Forwarding of Call Waiting Calls	Call Forwarding of Call Waiting Calls enables for calls incoming to a busy station and "waiting" to be forwarded to another pre-determined destination after a set period of time.
H3-A-Op27	Call Forward Reason Display	Call Forward Reason Display, on a Business Set, provides for a second line display of the reason the call has been forwarded (e.g. Fwd All Calls, Busy on a Call, Did Not Answer).

No.	Service or Feature	Brief Description
H3-A-Op28	Call Forward via Translations	Call Forward via Translations enables a non-Centrex GPS End User who is converting to Customized Centrex to have their listed directory numbers parked in the same central office as the new customer group is located, and to have calls forwarded from the parked numbers to other numbers in the new customer group. The parked listed directory numbers become Centrex numbers, and a Centrex line charge for each of the numbers that are parked is applicable. The value of this option has been minimized by the changes made to allow number porting into and out of the Centrex City Wide network in Vancouver and Victoria. This option cannot be substituted for Call Forward Fixed. Call Forward via Translations will not enable calls to be forwarded outside of the switch in which the customer group is located.
H3-A-Op29	Secondary MADN Call Forwarding	Secondary MADN Call Forwarding enables secondary members of a MADN group to activate and deactivate call forward.
H3-A-Op30	Station Activation of Call Forward, Busy/Call Forward, Don't Answer	Station Activation of Call Forward, Busy/Call Forward, Don't Answer enables a GPS End User to activate and deactivate Call Forward, Busy and Call Forward, No Answer from their sets using feature activation codes, and to change the remote station directory number.
H3-A-Op31	Call Hold	Call Hold enables a station to place an incoming call on hold. Includes listen on hold and malicious call hold.
H3-A-Op32	Call Park	Call Park enables a station to park a call against their telephone number, and for any station in the customer group to retrieve the call.
H3-A-Op33	Call Pickup	Call Pickup enables a station to answer incoming calls to another station within a defined call pickup group.
H3-A-Op34	Personal Call Screening for CFU/CFI	Personal Call Screening for CFU/CFI enables a remote station receiving a forwarded call to send the call back to the base station, regardless of the state of Call Forward activation.
H3-A-Op35	Call Trace	Call Trace permits a GPS Entity to initiate a request to investigate the identity of the last incoming call by dialing a code after receiving a call, or using a specific Call Trace key on a Meridian Business Set during the call.
H3-A-Op36	Call Transfer/Three Way Calling/Conference 3	Call Transfer/Three Way Calling/Conference 3 enables for the transfer of calls within the customer group and external to the customer group, and for three way calling/conferencing.
H3-A-Op37	Call Waiting	Call Waiting provides an audible indication to a busy station of a second call coming in.
H3-A-Op38	Code Call Access	Code Call Access provides for Centrex access to code calling equipment.
H3-A-Op39	Conferencing	Conferencing provides for conferencing within Centrex service. See Note 2.
H3-A-Op40	Customer Group Transparency	For selected Centrex features, the Customer Group Transparency feature allows transparency of feature operation among several TELUS customer groups within the same switch.

No.	Service or Feature	Brief Description
H3-A-Op41	Data Call Protection	Data Call Protection prevents the connection of test or busy verification circuits to the line while the line is busy. This option protects a data call on the line from interruption.
H3-A-Op42	Denied Incoming/Termination	Denied Incoming/Termination provides for outbound calling only from a line.
H3-A-Op43	Denied Origination	Denied Origination prevents calls from being originated (termination of calls only).
H3-A-Op44	Dictation Access and Control	Dictation Access and Control enables for Centrex access to dictation equipment.
H3-A-Op45	Direct Inward Dialing (DID)	Direct Inward Dialing (DID)enables calls from the PSTN to a Centrex GPS End User to ring at the GPS End User's telephone set without console attendant assistance in routing the call.
H3-A-Op46	Direct Inward System Access (DISA)	Direct Inward System Access (DISA) permits authorized callers access to the GPS Entity's private network facilities from the PSTN by dialing directly into the Customer Group without going through the Centrex Attendant.
H3-A-Op47	Direct Outward Dialing (DOD)	Direct Outward Dialing (DOD) enables a Centrex GPS End User to place a call to a station on the PSTN without console attendant assistance. Except for Abbreviated Dialing Inter-customer Group calls, all calls to PSTN stations require a PSTN access code to be dialed.
H3-A-Op48	Distinctive Ring	Distinctive Ring enables for distinguishing incoming calls by applying different ringing cadences to each call type. Types to which distinctive ringing can be applied are intra-customer group calls, inter-customer group calls, DID calls, recall calls, UCD calls, ACD calls, and Group Intercom calls.
H3-A-Op49	Flexible Call Intercept	Flexible Call Intercept enables for the automatic rerouting of calls that cannot be completed because of imposed restrictions, equipment, or dialing irregularities. Calls are routed to the attendant, tone, or announcement.
H3-A-Op50	Hunting	Hunting enables for incoming calls to a busy Centrex line to be routed to another non-busy Centrex line using one of three types of hunting.: Directory Number Hunting (DNH), Multilane Hunting (MLH), or Distributed Line Hunting (DLH).
H3-A-Op51	Intercom	Intercom enables a GPS End User to call a specific set by depressing the intercom key on the business set. Intercom also includes the variations.
H3-A-Op52	Last Number Redial	Last Number Redial enables a GPS End User to redial the last number called by pressing a single key.
H3-A-Op53	Line Music On Hold	Line Music On Hold enables multiple sources of music to be played to separate parts of a Customer Group See Note 1.
H3-A-Op54	Make Set Busy	Make Set Busy enables the GPS End User the option of making the line busy or available to incoming calls.

No.	Service or Feature	Brief Description
H3-A-Op55	Message Waiting Indication	With Message Waiting Indication, Depending on the type of telephone set and its capability, either an audible or visual indication is provided to a GPS End User for whom a message has been left. Audible indication in the form of interrupted dial tone is available to all Centrex sets. See Note 3.
H3-A-Op56	Music On Hold	Music On Hold enables TELUS provided background music to be played for customers on hold or in a queue.
H3-A-Op57	Name and Number Delivery	Name and Number Delivery provides for delivery of name and number to destinations on the PSTN who subscribe to Call Display.
H3-A-Op58	Network Class of Service (NCOS)	Network Class of Service (NCOS) provides that each Centrex telephone number can be assigned a Class of Service allowing control of the types of calls that can be initiated or received on that number (e.g. no restriction, restricted from calling stations on the PSTN, toll call restriction, etc.)
H3-A-Op59	Night Service	Night Service provides for the handling of incoming calls when the attendant is absent. It is usually activated after regular hours and on weekends.
H3-A-Op60	No Double Connection/Data-Call Protection	No Double Connection (NDC) option is assigned to lines which are not to be connected to a verification or test circuit when the line is busy. This option protects data calls from interruption.
H3-A-Op61	Number Blocking	Number Blocking prevents display of a calling party's telephone number and name to subscribers of Call Display.
H3-A-Op62	Number Porting	Number Porting enables the porting of numbers to another supplier or back to TELUS, between TELUS' switches, or between TELUS' services.
H3-A-Op63	On Hook Dialing	On Hook Dialing enables the GPS End User to originate calls without lifting the handset.
H3-A-Op64	Paging Access	Paging Access provides for Centrex access to paging systems.
H3-A-Op65	PSTN Access	PSTN Access permits one outbound and one inbound PSTN access per Centrex line.
H3-A-Op66	Query Busy Station	Query Busy Station enables groups of up to 128 Centrex Business sets to query the busy/idle status of one designated station within the group.
H3-A-Op67	Query Date and Time	Query Time and Date allows the GPS End User to view the time and date by depressing the QTD function key on the business set.
H3-A-Op68	Ring Again	Ring Again enables a Business Set GPS End User to monitor the status of a busy called number in the Customer Group and to alert the Business Set GPS End User when the called station becomes available.
H3-A-Op69	Simplified Dialing	Simplified Dialing allows a GPS Entity to adopt a destination code-based dialing plan for their private voice communications network.
H3-A-Op70	Speed Call	Speed Call enables the calling of other parties outside the customer group by using speed call lists ranging in size from 8/10 (8 speed call numbers on the GTD-5 platform and 10 speed call numbers on the DMS-100 platform) 8/10 to 10000. See Note 3.

No.	Service or Feature	Brief Description
H3-A-Op71	Station Message Waiting	Station Message Waiting permits a GPS End User to dial a code to access the GPS End User or attendant who has activated Message Waiting, and to activate Message Waiting on another station.
H3-A-Op72	Tandem Switching of Special Service Circuits	Tandem Switching of Special Service Circuits allows tandem connection of special service circuits dedicated to a customer group. Such trunk-to-trunk connections are controlled by the class-of-service restrictions of the trunk groups involved.
H3-A-Op73	Toll Restriction	Toll Restriction prevents the placement of outbound long distance calls from a Centrex telephone number.
H3-A-Op74	Uniform Call Distribution	Uniform Call Distribution enables incoming calls to a listed directory number to be queued and distributed evenly to answering stations in the UCD group.

Notes:

1. **Call Forward** and **Line Music On Hold** features are only available on DMS switches.

2. **Conferencing:** First Conference 3 or Conference 6 port is included in the line rate; additional ports to accommodate conference calls with more than 6 participants will incur additional port charges. First port only included in line rate; additional ports are chargeable. See H3-A-Op96 (Visual Message Waiting Service (non CMS compatible sets); software) in Exhibit C3-A – Hosted Telephony Services Pricing.

3. **Message Waiting Indication:** feature is non-chargeable on Call Management Service (CMS) compatible sets: Chargeable on non-CMS compatible sets. See H3-A-Op96 (Visual Message Waiting Service (non CMS compatible sets); software) in Exhibit C3-A – Hosted Telephony Services Pricing.

4. **Speed Call:** Speed Call 8/10 is included in line rate; all other forms of Speed Call are chargeable as identified in H3-A-Op102 (Speed Call) in Exhibit C3-A – Hosted Telephony Services Pricing.

Exhibit H3-A4

Operator and Directory Assistance for Voice Services

1. Directory Assistance Service

TELUS will, as part of each of the Exchange Services and the Hosted Telephony Services, provide the GPS Entities with a local free calling area directory assistance service, which will include the following:

1.1 TELUS will provide telephone number, address, and postal code information where available.

1.2 Directory assistance will be accessed by dialing '411', 1+NPA+555-1212, or 1-800-646-0000.

1.3 TELUS will ensure that any GPS Entity dialing "411" or 1+NPA-555-1212 can request up to three listings per call.

1.4 TELUS will ensure that any GPS Entity dialing 1+1-800-646-0000 can request one listing at a time.

1.5 TELUS will include automated call completion as an optional feature where GPS End Users who call directory assistance can be automatically connected to the requested number.

1.6 To ensure accurate directory assistance, TELUS will utilize carrier-grade listing databases for all Canada and U.S. listings.

1.7 TELUS will ensure that the directory assistance services will include business category search to enable directory assistance callers to search for the type of listing (e.g., "plumbers") versus a specific named company (e.g., Joe's Plumbing). The business category search will also support refined searches based on street locations and points of interest for all major Canadian cities.

2. Operator Assistance Service

TELUS will, a as part of each of the Exchange Services, the Hosted Telephony Services and the Long Distance Services, provide the GPS Entities with a local free calling area operator assistance service, which will provide dialing assistance, instructions or direct operator involvement to complete calls. Operator assistance will also include the provision of information about a call (i.e. time and charges) and assistance with international directory listings, international dialing, and calling cards where the call is routed on TELUS's long distance service. Operator Assistance will include the following:

2.1 Operator assistance will be assessable by dialing "0" within British Columbia and Alberta.

2.2 Assistance with billing questions, collect calls, calling cards, credit card calls, third party billing and arranging credit for cut off or other types of problem calls.

2.3 Assist in connection made to non-dialable points, such as radio telephones and/or connection to emergency agencies if required;

2.4 TELUS will ensure that the operator assistance services will include a single digit "0" operator assistance for any traveling GPS Entity members in BC and Alberta (with the exceptions of Prince Rupert (operated by CityWest) and Fort Nelson (operated by Northwestel). TELUS will also provide toll-free numbers to the GPS Entities that require the ability to call TELUS's operator assistance from Prince Rupert or Fort Nelson.

2.5 TELUS will ensure that calls to the operator assistant service provided by TELUS will not receive a busy tone and will be answered in 20 seconds or less 80% of the time.

2.6 TELUS will ensure that that the directory listings it provides will be without error 93.8% or more of the time.

3. Directory Listing Service for non-Toll Free Services

TELUS will, as part of both the Exchange Services and the Hosted Telephony Services, provide the GPS Entities with directory listing services, which will include the following:

3.1 TELUS will provide a process to enable GPS Entities to list business numbers in the local directories of the incumbent local exchange carriers if such a listing is requested by any GPS Entity.

3.2 One directory listing is included with each Service. The GPS Entities may select to list their one directory listing in the white pages or the blue pages.

3.3 TELUS will provide an optional fee based feature where a directory listing will not be published by TELUS in any print or electronic form by TELUS.

Exhibit H3-A5
Included CallCentreAnywhere Features

The design and configuration of each CallCentreAnywhere installation includes the services of a design specialist to work with the GPS Entities to configure the following features.

CCA Plans		Feature	Feature Description
Lite	Multimedia		
X	X	Standard ACD or Weighted Skills Based Routing	CallCentreAnywhere provides GPS Entity with full control, on a workgroup by workgroup basis, of how interactions are distributed to agents. GPS Entity may choose to have some workgroups use standard automatic call distribution and others to use weighted skills based routing to available agents. Standard automatic call distribution delivers interactions to agents based on the agent's idle time. This method of interaction distribution only requires that GPS Entity place the agent in the appropriate workgroup. Weighted skills based routing delivers interactions to agents based on the agents weighted score in the workgroup. The score is calculated based on the agent skill and workgroup skill weighting settings. Weighted skills based routing requires additional setup compared to the standard ACD distribution method. Distribution methods are configured on a workgroup by workgroup basis via the CallCentreAnywhere Administrator interface.
X	X	Inbound Voice Calls	All inbound voice calls into the CallCentreAnywhere system must be via toll free numbers that are switched via PSTN. If GPS Entity currently provides local numbers for any of its clients or services then calls to these local numbers must be redirected, through whatever means GPS Entity decides, to the toll free numbers associated with GPS Entity's CallCentreAnywhere service. GPS Entity is responsible for any and all costs associated with redirecting local numbers to toll free service. TELUS provides a switched toll free service meaning that there is a direct dial termination number (DNIS) associated with each toll free number. GPS Entity does not own these termination numbers and may not provide them to any of their clients under any circumstances. TELUS may, at its discretion and without notice, change or cancel these termination numbers. If GPS Entity's toll free provider isn't TELUS then it is possible that toll free calls might get blocked between GPS Entity's toll free provider and TELUS due to insufficient inter-machine toll free trunks. This is due to the fact that it's not common to have toll free service from provider A and terminate the calls on local lines from provider B. If this type of setup is required due to existing GPS Entity contracts, CallCentreAnywhere implementation may be delayed until there are sufficient inter-machine toll free trunks to handle the traffic. Inbound voice call handling options are configured on a DNIS by DNIS basis via the CallCentreAnywhere Administrator

CCA Plans		Feature	Feature Description
Lite	Multimedia		
			interface.
X	X	Interactive Voice Response (IVR) – Project Menus	Inbound calls can be directed to Project Menus in order to offer various menu choices to callers. Project Menus can be chained together to provide a multi-level IVR menu. Inbound voice call handling options are configured on a DNIS by DNIS basis via the CallCentreAnywhere Administrator interface
X	X	Interactive Voice Response (IVR) – Campaigns	Inbound calls can be directed to campaigns in order to offer various routing choices to callers. Campaigns may contain multiple steps to provide a multi-level IVR menus as well as perform various CallCentreAnywhere functions such as call recording, checking workgroup status, etc. Inbound voice call handling options are configured on a DNIS by DNIS basis via the CallCentreAnywhere Administrator interface
X	X	Customer Priority	Using the built in "GPS Entity Priority" database, GPS Entity will have the ability to define different priorities for client inbound calls based on a single phone number or client number. Supported priority levels are: - Standard - Bronze - Silver - Gold - Platinum There is only one GPS Entity Priority database in CallCentreAnywhere. Whether or not GPS Entity priority settings are used on a particular project is configured on a project by project basis via the CallCentreAnywhere Administrator interface. TELUS does not currently support any form of bulk loading of the GPS Entity Priority database. Interactions may also be assigned priority based on numerous other attributes such as number called, CLID, options chosen off a menu, type of interaction, etc.
X	X	ACD Voicemail	GPS Entity may configure the CallCentreAnywhere workgroups to allow callers to leave a voicemail message instead of remaining on hold. Via the administration manager, agents can be configured to listen to ACD Voicemail via email or over the phone. If email is chosen, the ACD Voicemail will be delivered as a file attachment to the agent email address stored in the agent profile. If phone is chosen, the agent will be able to listen to the voicemail over the phone. The voicemail will also be delivered as a file attachment to the agent email address stored in the agent profile. The ability to allow callers to leave a voicemail message is configured on a workgroup basis via the CallCentreAnywhere administrator interface

CCA Plans		Feature	Feature Description
Lite	**Multimedia**		
X	X	Personal Voicemail	GPS Entity may configure the CallCentreAnywhere system to allow users to have personal voicemail. Via the administration manager, users can be configured to listen to personal voicemail via email or over the phone. If email is chosen, the personal voicemail will be delivered as a file attachment to the agent email address stored in the agent profile. If phone is chosen, the personal voicemail will be stored on the CallCentreAnywhere servers and can be retrieved by dialling into the mailbox manager service. Personal voicemail is configured as part of the standard user configuration which is done via the CallCentreAnywhere administrator interface.
	X	Inbound Email Processing	All inbound email addresses to be processed by CallCentreAnywhere must reside in individual POP3 compliant email accounts on an Internet accessible POP3 (port 110), compliant server/service. Each user to which email will be distributed must have their own email address that can be reached via an Internet accessible SMTP (port 25) compliant server/service. Users also required an email client with which to read the email. GPS Entity is responsible for any and all aspects of supplying, servicing and maintaining all aspects of the POP3/SMTP compliant server/service. GPS Entity is responsible for any and all aspects of supplying, servicing and maintaining all aspects of the email client. Personal email addresses are configured as part of the standard user configuration which is done via the CallCentreAnywhere Administrator interface. It is not possible from within the CallCentreAnywhere administration mangement interface to configure the email client used by the agents. GPS Entity is responsible for performing this configuration on an agent by agent basis by logging into the agent's CallCentreAnywhere account and configuring the email client
	X	Web Chat Web Collaboration Web Callback	CallCentreAnywhere allows GPS Entity to enable a Web Chat or Web Callback link on their existing client facing web content. This link will allow GPS Entity's clients to chat, instant message style, with a CallCentreAnywhere agent or, to request that an agent call them at a specified time. Web Collaboration can be initiated by the agent once a client and agent are engaged in a Web Chat session. Once the necessary configuration has been completed in CallCentreAnywhere, an HTML file is generated that contains all the necessary HTML code to enable web chat or web callback. GPS Entity may modify this file to match the style used on their website. Web Chat and Web Callback features are configured via the CallCentreAnywhere Administrator interface. GPS Entity is responsible for troubleshooting any problems with their clients use of GPS Entity's website including the CallCentreAnywhere web chat and web callback features.

CCA Plans		Feature	Feature Description
Lite	Multimedia		
X	X	Music on Workgroup Hold	The CallCentreAnywhere system includes a sixty (60) second instrumental “System Music” file of royalty free music. GPS Entity may provide their own music on workgroup hold files which will be played while a caller is waiting to be answered. If GPS Entity elects to provide their own music on workgroup hold files, GPS Entity is responsible for ensuring that all copyright restrictions are adhered to and that all royalty fees are paid. Music on Workgroup Hold is configured on a workgroup by workgroup basis via the CallCentreAnywhere Administrator interface
X	X	CallCentreAnywhere Voice and Music Prompts	GPS Entity is responsible for sourcing the voice talent and providing all voice recordings that will be defined in the detailed interaction flow specification. This talent can be professional voice talent or GPS Entity employee. TELUS recommends a consistent voice throughout the CallCentreAnywhere application, so it is important to consider the possibility for additional recordings or recording changes when choosing professional voice talent. Should GPS Entity elect to engage a professional voice talent agency, TELUS can make recommendations on reputable experienced agencies, however, the contract for professional voice talent will be between GPS Entity and the chosen agency. TELUS will provide the proper voice recording naming conventions to GPS Entity and to the professional voice recording agency as applicable. All recorded prompts and music must be encoded as CCITT u-law 8.000 KHz, 8 bit, mono (7 kb/sec) WAV files
X	X	Outbound Standard Calling	Users will be able to make outbound calls to most direct dial phone numbers through the CallCentreAnywhere system provided the user profile allows for the call to take place. Any long distance outbound calls made via the CallCentreAnywhere service are eligible to be billed to GPS Entity at the existing long distance rate in effect for GPS Entity with TELUS. If the outbound call volume is 25% or less than the inbound call volume, the outbound calls will not be billed. Dialing restrictions are configured as part of the standard user configuration which is done via the CallCentreAnywhere Administrator interface
X	X	Outbound Calling Line Identification (CLID)	GPS Entity may control the Calling Line Identification (CLID) that is sent to callers when a call is placed through CallCentreAnywhere (agent call, ACD Call back, Web Call back)
X	X	Real Time Displays	The types of Real Time Displays available in CallCentreAnywhere are described in the features description document. Numerical data shown on the displays is based on the current twenty-four (24) hour period (0000-2359 hrs) that is local to where the CallCentreAnywhere servers are located. This data is reset at the start of every twenty-four (24) hour period (at 0000 hrs). This reset is not configurable

CCA Plans		Feature	Feature Description
Lite	**Multimedia**		
X	X	Historical Reporting	The types of historical reports available in CallCentreAnywhere are listed in the features description document. These are the only types of reports that are available. CallCentreAnywhere provides some configuration options, within the user interface, for each type of report. This is the only type of report configuration that is supported by CallCentreAnywhere. The CallCentreAnywhere solution being delivered to GPS Entity by TELUS will utilize these standard, default reporting tools and data. TELUS will ensure that the standard reporting data is being collected and available to run reports. No report customization of any kind will be performed by TELUS. GPS Entity is responsible for any and all aspects of historical report generation.
X	X	Access Raw Historical Data and Call Recording	Storage on the CallCentreAnywhere data archiving service past ninety (90) calendar days is available at an additional per user per month charge. GPS Entitys may subscribe to the long term storage option at any time during their CallCentreAnywhere contract. Long term storage on the CallCentreAnywhere data archiving service is coterminus with the Agreement.

Attachment H3-B

Exchange Services

Service Title:	Exchange Services
Service Number:	H3-B

1. Service Title and Number

1.1 The Service Title and the Service Number of this specific Available Service are set out in the above table.

1.2 Where a Service Order or Service Change Order, in each case entered into in accordance with the terms of this Agreement, references such Service Title or such Service Number TELUS will provide such GPS Entity with Exchange Services which include all of the attributes, features, characteristics, components and service parameters described in this Attachment H3-B, unless expressly excluded or modified in the Service Order or Service Change Order.

2. Service Description

2.1 The Exchange Services include:

2.1.1 The provision of telecommunications connections from Sites and GPS Provided Equipment to the PSTN as well as the provision of connections to extend service from one Site to another with various telecommunications connections including the following services described in following table;

Analogue Private Line Services (see section 2.3.1)	Off Premise Service
	Analogue Tie Trunk
	Local Private Line
	IX – IntraProvincial Private Line
	Signal Transmission Service
Digital Private Line Services (see section 2.3.2)	Digital Network Access (DNA)
	Digital Private Line Inter-Exchange (IX)
	Digital Channel Services (DCS)
Direct In Dial (DID Services) (see section 2.3.3)	Active DID Numbers
	Reserved DID Numbers
	Direct Inward Local Access (DILA) Line

Local Business Line Services (see section 2.3.4)	Business Single Line (SL)
	Business Multi-line (ML)
	Information System Access (ISA) Line
Switched Data Services (see section 2.3.5)	ISDN-PRI
	ISDN-BRI
	Datadial
	Digital Exchange Access (DEA)

2.1.2 The provision of public switch automatic location identification (PSALI) services to enable GPS Entities to enter their own DID 911 records ("**Emergency Location Identification Numbers**");

2.1.3 the provision of voice management services such as call routing features, call restriction, telephone number administration, voice mail services for business lines, directory listing services, local operator services and direct in dial number management, as described herein; and

2.1.4 the provision of the consulting, operations and administration services required to support and deliver the other Services included in the Exchange Services, as described herein.

2.2 The parties acknowledge that the services provided by Northwestel are initially out-of-scope. If during the Term TELUS begins offering the Exchange Services in the territory operated by Northwestel, TELUS will notify the GPS Entities, and the GPS Entities may request such Exchange Services through the Change Process.

2.3 The Exchange services described in Table 2.1.1 are more particularly described as follows:

2.3.1 "**Analogue Private Line Service**" provides non-switched voice-grade communication on a point-to-point or multipoint basis between GPS Entity locations not on continuous property and is comprised of the following Services:

2.3.1.1 "**Off Premise Service**" provides the extension of a working line or trunk or the extension of a PBX local to a GPS Entity location different from the primary location;

2.3.1.2 "**Analogue Tie Trunk**" provides for direct non-switched voice-grade communication between two PBX's;

2.3.1.3 "**Local Private Line**" provides local private line services offered from the same central office or different central offices in a Point-to-Point or Multipoint configuration. Both Off-Premise Extension (OPX) and Tie Trunk services are rated in ¼ mile increments; and

2.3.1.4 "**IX- IntraProvincial Private Line**" provides interprovincial private line services offered on a 2-wire or 4-wire basis and are rated per mile with 2-wire or 4-wire local loops.

2.3.1.5 "**Signal Transmission Service**" provides channels to support transmission of signal pulses between GPS Entity equipment and TELUS for the following purposes:

- remote reading of electric, water, gas meters;
- remote operation of electric, water, traffic and rail switching; or
- operation of GPS Entity signalling devices such as alarms and clocks.

2.3.2 "**Digital Private Line Services**" provide GPS Entity's with the ability to connect two or more locations via a point - to - point network, with bandwidth options ranging from 56Kbps (DS-0) to 10 Gbps (OC-192) and includes the following Services:

2.3.2.1 "**Digital Network Access (DNA)**" provides a dedicated "access" facility used to connect a GPS Entity's site to the nearest serving central office and supports simultaneous, two-way digital transmission of voice, data, video and image information. Bandwidth options range from 56Kbps (DS-0) to 10 Gbps (OC-192);

2.3.2.2 "**Digital Private Line IX**" provides a dedicated "Inter-Exchange" facility used to connect two serving central offices and supports simultaneous, two-way digital transmission of voice, data, video and image information. Bandwidth options range from 56Kbps (DS-0) to 10 Gbps (OC-192); and

2.3.2.3 "**Digital Channel Service (DCS)**" provides for point-to-point digital data transmission at asynchronous speeds of up to 19.2 Kbps, or synchronous speeds of up to 56.0 Kbps, between service points in the same serving area. DCS consists of the following service components:

- Access - Provides the GPS Entity with a digital local loop from the GPS Entity's premises to the serving central office.
- Link - Provides the central office equipment required to connect access loops within the same central office or between central offices. The optional multi-point feature provides the central office equipment required to connect access loops in a multi-point configuration within the same central office or between central offices.

- Network - Provides the digital transmission between central offices required to connect accesses whenever they are located in different central offices.

2.3.3 "**Direct In Dial (DID) Service**" enables telephone calls originated on the public switched telephone network to be directly dialled to stations within the GPS Entity's terminal communications system and includes the following Services:

2.3.3.1 "**Active DID Numbers**" provides blocks of actively used DID numbers.

2.3.3.2 "**Reserved DID Numbers**" provides blocks of DID numbers reserved for future use / growth.

2.3.3.3 "**Direct Inward Local Access (DILA)**" provides a DID equivalent service, created under special assembly, to be used with the BC Province's CS2100 Private Branch Exchange and ISDN-PRI Services.

2.3.4 "**Local Business Line Service**" provides the GPS Entity with business line access to the PSTN for single telephones, fax machines, multiline telephones, key systems and PBXs and provides one bi-directional PSTN access for each business line and includes the following Services:

2.3.4.1 "**Business Single Line**" provides a single business line;

2.3.4.2 "**Business Multi-line**" provides a business multi-line; and

2.3.4.3 "**Business Information System Access (ISA) Line**" provides a business information system access line.

2.3.5 "**Switched Data Services**" provides access to the PSTN and to other networks for voice and data communications using TELUS' digital Access Services and includes the following Services:

2.3.5.1 "**ISDN-PRI Service**" provides a high speed digital facility between the GPS Entity's serving wire center and the GPS Entity Site that provides access to the PSTN and other networks using a single configuration of PRI service (voice/data DS-1 PRI (23B+D)), which supports incoming and outgoing voice and data calls.

2.3.5.2 "**ISDN-BRI Service**" provides a digital facility between the GPS Entity's serving wire centre and the GPS Entity site that provides access to the PSTN and other networks using either:

- two 64 Kbps local digital access channels (i.e., B-Channels, for circuit-switched digitized voice, data, or image communications to the PSTN); and

- one 16 Kbps local digital channel (i.e., D-channel, for signalling and call control).

2.3.5.3 "**Datadial Service**" provides a single 10-digit directory number and dial up data communications between a GPS Entity's terminal equipment and the PSTN / Digital Switched Network (DSN) with each line able to carry one connection at 56 Kbps (other speeds are not supported). Datadial Service is a Grandfathered service.

2.3.5.4 "**Digital Exchange Access (DEA) Service**" provides the GPS Entity with digital access between the GPS Entity's premises and the PSTN using a 1.544 Mbps DS-1 facility (T-1) that is subdivided into 24 DS-0 channels at TELUS' serving central office.

2.4 Exchange Services that are not forborne are subject to applicable CRTC approved tariffs.

3. Service Availability

3.1 Subject to sections 3.2 and 3.5, the Exchange Services will be available to Sites throughout British Columbia, unless otherwise noted or amended, provided that such Sites have Facilities that have the capability and capacity to provision the Exchange Services. Where such Facilities do not exist at a Site, the applicable GPS Entity requiring Exchange Services may request TELUS to undertake the necessary construction to be able to receive the Exchange Services by issuing a Service Order in accordance with Service Order process set out in the Agreement.

3.2 TELUS will ensure that Switched Data Services are available, at a minimum, at the locations set out in Exhibit H3-B1.

3.3 TELUS will ensure that expansion of Switched Data Services to Sites beyond the Sites at which Switched Data Services are delivered as of the Effective Date will be possible contingent upon TELUS having the appropriate switching Facilities available at the Site; and the Site being within a specific distance of approximately 4.5 km from the switching equipment.

3.4 If the GPS Entity requests Switched Data Services at a location not equipped to provide it then TELUS will provide a quotation to expand the Services in accordance with the Service Order process set out in the Agreement.

3.5 TELUS will provide PSALI services throughout British Columbia excluding only areas serviced by CityWest and Northwestel.

3.6 The Exchange Services will be made available by TELUS in accordance with the availability-related Service Levels for the Exchange Services set out in Schedule J.

4. Service Standards

4.1 TELUS will provide Exchange Services on 5ESS, GTD-5 and DMS-100 platforms in British Columbia and, except as otherwise provided in this Attachment, can be treated as transparent for the majority of situations that would otherwise trigger significant additional administrative, workarounds or provisioning

4.1.1 With respect to the ISDN-PRI Service, the DMS-100, GTD-5 and the 5ESS switches support the NI 2 protocol, but only the DMS-100 switch supports the older NI 1 protocol. NI protocols establish the method of communications between GPS Entity-owned Private Branch Exchange (PBX) Sites and TELUS' serving office sites. This exception has the following feature ramifications for GPS Entities:

4.1.1.1 Only NI-2 supports station level billing and name display;

4.1.1.2 Release link transfer requires NI-1;

4.1.1.3 2B channel transfer requires NI-2;

4.1.1.4 Switches operate slightly differently with the screening tables removed if that is required; and

4.1.1.5 When adding blocks of numbers to an ISDN PRI, the GTD5 has a limitation of accommodating a maximum of 4 NXX's. The DMS-100 does not have a limit.

4.1.2 With respect to the ISDN BRI Service, both the DMS-100 and GTD5 switches support ISDN BRI Service and both have the same distance limitation for provisioning. The line functionality is the same between the two switch types. ISDN-BRI Service is not offered on 5ESS.

4.2 The GPS Entities will not be required to undertake any additional provisioning or workaround steps between the switch types.

4.3 For the Exchange Services, TELUS will comply and remain compliant with the following international standards, as such standards may be amended, supplemented or replaced from time to time:

ANSI/TIA-464-C-2002, Requirements for PBX Switching Equipment

ANSI/TIA-464-C-1-2004, Addendum, Requirements for PBX Switching Equipment

ANSI/TIA-470.110-C-2004, Handset Acoustic Performance Requirements for Analogue Telephones

ANSI/TIA/EIA-810-A-2000, Transmission Requirements for Narrowband Voice over IP and Voice over PCM Digital Wireline Telephones

ANSI/TIA-912-A-2004, Voice Gateway Transmission Requirements

ANSI/IEEE 743-1995, Standard equipment requirements and measurement techniques for analogue transmission parameters for telecommunications

ATSI-T1.508-2003, Loss Plan for Digital Networks

TIA/EIA/TSB-122-A-2001, Telephone - IP Telephony Equipment - Voice Router/Gateway Loss and Level Plan Guidelines

ITU-T Rec. G.101, Transmission plan

ITU-T Rec. G.107, The E-model, a computational model for use in transmission planning

ITU-T Rec. G.108, Application of the E-model: A planning guide

ITU-T Rec. G.108.1, Guidance for assessing conversational speech transmission quality effects not covered by the E-model

ITU-T Rec. G.108.2, Transmission planning aspects of echo cancellers

ITU-T Rec. G.109, Definition of categories of speech transmission quality

ITU-T Rec. G.111, Loudness ratings (LRs) in an international connection

ITU-T Rec. G.113, Transmission impairments due to speech processing

ITU-T Rec. G.114, One-way transmission time

ITU-T Rec. G.121, Loudness ratings (LRs) of national systems

ITU-T Rec. G.122, Influence of national systems on stability and talker echo in international connections

ITU-T Rec. G.126, Listener echo in telephone networks

ITU-T Rec. G.131, Talker echo and its control

ITU-T Rec. G.136, Application rules for automatic level control devices

ITU-T Rec. G.164, Echo suppressors

ITU-T Rec. G.165, Echo cancellers

ITU-T Rec. G.167, Acoustic echo controllers

ITU-T Rec. G.168, Digital network echo cancellers

ITU-T Rec. G.169, Automatic level control devices

ITU-T Rec. G.172, Transmission plan aspects of international conference calls March 2007 TELUS Confidential Page 31 of 32

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ITU-T Rec. G.173, Transmission planning aspects of the speech service in digital public land mobile networks

ITU-T Rec. G.173, Transmission planning aspects of the speech service in digital public land mobile networks

ITU-T Rec. G.174, Transmission performance objectives for terrestrial digital wireless systems using portable terminals to access the PSTN

ITU-T Rec. G.174, Transmission performance objectives for terrestrial digital wireless systems using portable terminals to access the PSTN

ITU-T Rec. G.175, Transmission planning for private/public network interconnection of voice traffic

ITU-T Rec. G.176, Planning guidelines for the integration of ATM technology into networks supporting voice band services

ITU-T Rec. G.177, Transmission planning for voice band services over hybrid Internet/PSTN connections

4.4 TELUS will ensure that its new IP trunking service will be fully ITU E.164 compliant.

4.5 TELUS will manage testing and acceptance practices to ensure standards for Exchange Services provisioning, installation, testing and performance comply with their standards policy and the Service Level commitments set out in Schedule J (Service Levels), Schedule S (Installation Standards), and Schedule F (Service Order). For example, TELUS will work with a GPS Entity to ensure that a newly installed PRI is stable and can access incoming and outgoing B-channels to ensure that GPS End Users can make and receive calls including 1+, 0+, 011+, 911 and local calls from the GPS Entity (PBX) side of the PRI.

4.6 Voice Quality and Call Performance.

4.6.1 TELUS will monitor and assure the voice quality of the Exchange Services through use of its QoS technologies. TELUS will use QoS technologies to continuously test, monitor and measure voice quality, call completion, MOS (PESQ VQ per ITU P.862), round trip delay, post dial delay, call answer time, echo attenuation, loss level, and DTMF s.

4.6.2 TELUS will periodically test, monitor and measure voice traffic to produce IP metrics such as packet loss, jitter, delay, and calculated voice quality to ensure optimal voice quality levels.

4.6.3 TELUS will enable QoS functions within its voice gateways to report via operational measurements any IP parameters that exceed preset quality thresholds as set out in this Agreement with respect to the Data Services.

4.6.4 TELUS will employ proactive and constant testing of voice quality. TELUS agrees to use an objective measurement tool such as Perceptual Evaluation of Speech Quality (PESQ) as defined in the ITU-T Recommendation P.862 for the evaluation of transmission quality. TELUS further agrees to benchmark VoIP service quality, verify availability across the network and detect service degradation before it impacts GPS End Users.

4.6.5 TELUS will ensure that the end-to-end delay in the voice circuit paths of Exchange Services will be consistent with established international standards as defined by ITU-T G.114 and that the delay will be less than 125ms one-way or 250ms for a round trip.

4.6.6 TELUS will ensure that speech transmission loss and noise performance of the Exchange Services will perform within accepted industry standards as established by ITU G-T G101 and ANSI T1.509.

4.6.7 TELUS will ensure that the Exchange Services will perform within accepted industry standards for talker and listener echo control. TELUS will utilize echo cancellation on toll voice circuits on long haul trunks. On its managed layer 3 network, TELUS will utilize echo cancellation (inherent in media gateways) on all voice circuits, but will automatically disable upon detection of data tones such as modems and faxes.

4.6.8 TELUS will ensure that the Exchange Services will permit end-to-end transmission of DTMF signals with minimum distortion.

4.6.9 TELUS will use R-Factor (which is a numeric expression of voice quality as determined by an E-model calculation) as a metric for measuring the quality of voice conversation in the IP Network part of its Exchange Services using the E-model (which is the metric, as defined in ITU G.107, used to predict call quality in data networks and to determine if a data network is ready to carry VoIP calls) to provide calculation of QoS as an R-Factor, based on inputs such as jitter, packet loss, and delay.

4.6.10 TELUS will utilize ITU G.711 μ-law companding for voice compression in its delivery of the Exchange Services.

4.7 TELUS' access Facilities will, without loss of quality or functionality, connect to all GPS Entity line and trunk interfaces on common commercially available telephone systems capable of terminating PSTN Access Services including all of the following line and trunk types:

4.7.1 Analogue Line: Two-Wire 4 kHz Bandwidth Line-Loop Signaling;

4.7.2 Analogue Line: Four-Wire 4 kHz Bandwidth Line-Loop Signaling;

4.7.3 Analogue Trunk: Two-Wire 4 kHz Bandwidth Trunk-Loop Signaling (loop and ground start);

4.7.4 Analogue Trunk: Four-Wire 4 kHz Bandwidth Trunk–Wink Start Signaling;

4.7.5 Analogue Trunk: Four-Wire 4 kHz Bandwidth Trunk-E&M Signaling;

4.7.6 Digital Trunk: T1 Up to 1.536 Mbps Robbed-Bit Signaling;

4.7.7 Digital Trunk: ISDN-PRI Service Up to 1.536 Mbps; and

4.7.8 Digital: T3 Channelized Up to 43.008 Mbps Robbed-Bit.

4.8 TELUS' digital trunks will meet the following requirements:

4.8.1 All DS1 circuits should be provided with ANSI ESF framing, B8ZS code signalling with D-channel utilization, and no line power;

4.8.2 DS1 circuits should be Primary PRI with “23B + D” channels. The first 23 “B” channels should be usable for trunks, data or videoconferencing channels. The 24th “D” channel should be provided as “out-of-band” signalling;

4.8.3 Dynamic allocation on PRIs so that the “B” channels on DS1 circuits are dynamically allocated on a call-by-call basis;

4.8.4 ISDN PRI Service will have a line rate of 1.544 Mbps and information-payload data rate of 1.472 Mbps for 23B + D and 1.536 Mbps for 24B (Standard: ANSI T1.607 and 610; National ISDN-1 and National ISDN-2 [Bellcore Pub. SR-NWT-1937]);

4.8.5 DS1 circuits will comply with the applicable sections for DS1 service of EIA/TIA standard 547, Network Channel Terminal Equipment for DSI Service, latest issue, American National Standard ANSI T1.107, Digital Hierarchy Format Specifications and American National Standard ANSI T1.102, Digital Hierarchy Electrical Interfaces and applicable standards referenced therein (e.g., ANSI T1.101);

4.8.6 PRI D- channel back-up to improve reliability will be available. TELUS will ensure that the Exchange Services will be provisioned to automatically switch to the back-up D-channel if a signalling link failure occurs on the primary D-channel span;

4.8.7 All DS1 circuits will have a line rate of 1.544 Mbps and information-payload data rate of 1.536 Mbps (Standard: Bellcore Notes on the BOC Intra-LATA Network [TR-NPL-000275] NWT-2120].);

4.8.8 The DS1 clock rates will be based on a stratum 1 clock reference, 1.544 +/- 10E(-11) Mbps;

4.8.9 All digital transmission parameters will satisfy the values and ranges set forth in the high capacity digital special Access Service – transmissions parameter limits and interface combinations (Standard: Bellcore Pub: TR-INS-342); and

4.8.10 In a single PRI system group with one BTN with more than one access, it will be possible to provision multiple ISDN PRI Service groups with over flow between PRI groups. Assuming they are separate system groups with separate BTNs and in the same central office, it will be possible to provide overflow as well (Call forward busy-one way or 2-way). If the configuration is separate PRI system groups with separate BTNs in separate central offices, then overflow will go to an analogue line, that is either fixed or remote call forwarded to a BTN or DID associated with the other PRI service.

4.9 TELUS will provide the Exchange Services with the following capabilities to ensure the proper termination/release of a connection:

4.9.1 Flexible disconnect/release when either and/or both parties hang up;

4.9.2 Off –hook time-out;

4.9.3 Release with howler; and

4.9.4 Release without howler.

4.10 The types of Switched Data Services to be provided will be:

4.10.1 ISDN-PRI Service with 23 B-channels (voice trunks) and one 64 Kbps D-channel (data) conforming to the ITU-T specifications;

4.10.2 ISDN-BRI Service with two 64 Kbps B channels and one 16 Kbps D channel conforming to the ITU-T specifications; and

4.10.3 Datadial providing dependable data connectivity at a clock speed of 56,000 bits per second.

4.11 In the event any GPS Entity acquires long distance or toll-free services from a service provider other than TELUS, TELUS will ensure that the Exchange Services will connect to and interoperate with such services. TELUS will support an equal ease of access or equivalent process to provide long distance traffic to the GPS Entity's designated service provider, except where the designated service provider does not support equal access.

4.12 TELUS will ensure that the trunks and lines offering local access will carry and switch all 911 and E911 calls to the appropriate PSAP on all lines and trunks capable of out dialling 911. The physical address/location information as recorded in TELUS' facility management system will be forwarded to public safety answering point (PSAP).

4.13 When a 911 call is made from a GPS Entity business switch (PBX) utilizing a PRI connection and the main billing number for that PRI is sent with the call, TELUS will ensure that the address of the PRI demarcation will be sent to the PSAP. If the 911 call is sent with a DID number provided by TELUS, the DID number will be related to the main billing number of the PRI and the address of the PRI demarcation will be sent to the PSAP.

4.14 TELUS will ensure that the Exchange Services will support the transparent transmission of industry standard facsimile calls, including Group 3 and Group 4 calls.

4.15 The Exchange Services will support local calling within the PSTN free calling area including free calling areas with multiple exchanges.

4.16 The Exchange Services will comply with the NANP including interchangeable central office codes, interchangeable numbering plan areas, and dialling procedure changes.

4.17 Subject to section 4.18, the Exchange Services will support the access facility types set out in the table:

Access Facility Type	Brief Description
Access line (Individual)	Switched individual loop start circuit.
Analogue trunk	Switched loop or ground start analogue circuit with analogue voice transmission.
DS0 digital access	Single switched DS0 trunk.
DS1 digital access	Up to 24 channels with a combined speed of 1.544 Mbps.
DS3 digital access	Up to 672 channels with a combined speed of 44.736 mbps.
FX	Foreign exchange service connects calls to a non-local exchange as if it were a local exchange.
ISDN-BRI Service	ISDN-BRI Service is made up of two 64 Kbps B-channels and one 16 Kbps D channel for voice, data, video. Bonding together the two B channels can provide a data rate up to 128 Kbps.
ISDN-PRI Service	ISDN-PRI Service access provides 23 B-channels (voice trunks) and one 64 Kbps D-channel (data). Bonding together the 23 B channels can provide a data rate up to 1.544 Kbps.
ISA line	A line conditioned to support data transmission over unloaded twisted pair.
Multiline	Supports over-line capability on loop start business lines.
Datadial service	Digital access data communications at speeds up to and including 56 Kbps. (Grandfathered)

4.18 The Exchange Services may include Datadial Service and FX provided, however, that TELUS, rather than install new Datadial Service may offer to the GPS Entities a suitable alternative, such as ISDN-BRI Service, ISDN-PRI Service, and ADSL to replace the Datadial service. The appropriate product offered by TELUS will be dependent upon the application, location, volume of use, type of equipment and quantity of lines.

5. Service Features

5.1 TELUS will ensure the following features are available to GPS Entities with respect to the Exchange Services on a per call basis:

5.1.1 Number Blocking. The ability to deliver and to block calling number information will be available to the GPS Entities on a per-call basis free of charge by dialing *67 before the number, an indicator of PRIVATE will be displayed rather than a name and number, which will include the following features: no effect of automatic blocking/per line blocking, busy call return, call display, call return, call screen, call trace, name that number BC, personal voice mail, and toll restriction bypass. Notwithstanding the

foregoing, the number blocking feature may not work as described above in the following circumstances:

5.1.1.1 Incorrect dialling or failure to dial the activation code will result in display of the name and telephone number.

5.1.1.2 When the following calls are placed, the name and number may display or be provided by the Exchange Service to the terminating device or service for billing purposes:

5.1.1.2.1 Collect call;

5.1.1.2.2 Calling card call;

5.1.1.2.3 800, 900 or 310 call (310 calls are treated like an 800 call); and

5.1.1.2.4 Cellular phone call.

5.1.1.3 The name and number may also be provided by the Exchange Service to the terminating device or service if:

- A message is left on TELUS provided voice mail service;
- If the caller is serviced by a local service provider that does not adhere to privacy-related Applicable Laws that are applicable to TELUS;
- A long distance call is placed through an alternate long distance provider that does not adhere to privacy-related Applicable Laws that are applicable to TELUS; and
- The call terminates outside of Alberta or British Columbia.

5.1.2 **Call Return.** Allows the end user to receive the number of the last incoming call, whether answered or not, by using a 2 digit activation code, and to return the call by pressing '1'. This feature can be activated on a per-call basis free of charge by dialing *69 and deactivated by dialing *89.If the line is busy, Busy Call Return can be activated at no extra charge to Call Return clients. It will automatically keep trying the busy number every 30 seconds for up to 30 minutes and will ring back with a distinctive ring when the busy line is free.

5.1.3 **Busy Call Return.** Allows the end user to try a busy number every 30 seconds for up to 30 minutes and will ring back with a distinctive ring when the busy number becomes free. When the receiver is lifted, the line will be ringing. The distinctive ring is two short rings and one long ring.

This feature can be activated on a per-call basis free of charge by dialing *66 and deactivated by dialing *86.

5.2 TELUS will retain existing numbers and reserved number blocks, at all Sites. TELUS is responsible for the administration of existing and new telephone numbers.

5.3 TELUS will make available number portability throughout TELUS' exchanges.

5.4 TELUS will ensure that the Exchange Services will not require GPS End User to enter an access code to connect to any long distance service provider of a GPS Entity.

5.5 TELUS with include the following baseline functions with the Exchange Services:

Exchange Service or Feature	Brief Description
Call Display	Call Display enables the ability to display a phone number from outside the GPS Entity on a party's telephone's LCD display.
Call Display Blocking	Call Display Blocking prevents a GPS Entity phone number from being displayed.
Call Forwarding-Busy	Call Forwarding-Busy automatically forwards incoming calls to a predetermined number only if a line is busy.
Call Forwarding-No Answer	Call Forwarding-No Answer automatically forwards incoming calls to a predetermined number only if the line is not answered.
Call Forwarding-Fixed	Call Forwarding-Fixed automatically forwards incoming calls to a single, predetermined number.
Calling Line ID (CLID)	Calling Line ID (CLID) refers to the number, or numbers, that are delivered on outbound calls from the PRI as Calling Line Identification (CLID). This is the number that the called party sees displayed on their equipment on incoming calls. It is part of the PRI configuration and is not a feature. There are two ways for TELUS to configure Calling Line ID (CLID): • TELUS controlled, whereby we program the central office switch to control CLID on outbound calls, ensuring only valid numbers are sent to the network; and • CPE controlled, whereby TELUS removes Calling Line ID (CLID), allowing the GPS Entity to send any CLID they choose from its CPE.
Call Removal (CLID)	Call Removal (CLID) enables the GPS End Users to display any number they want when calling out.
Call Guardian	Call Guardian provides the ability to restrict the types of incoming telephone calls placed to or outgoing telephone calls placed from a telephone line.
Call Restriction / 900 Blocking	Call Restriction / 900 Blocking provides the ability to block calls to all or to specific 900 numbers, including for specific country or NPA code.
Call Routing and Screening	Call Routing and Screening, also known as IntelliRoute, enables automatic routing or screening of incoming or outgoing calls, or monitoring of all incoming or outgoing telephone traffic.

Exchange Service or Feature	Brief Description
Call Waiting	Call Waiting enables a called party to suspend a current call and switch to a new incoming call. This provides an audible signal to the called party.
Call Intercept	Call Intercept provides for the intercept of a voice call to a telephone number that is no longer in use by a party and an audible delivery of an alternate telephone number to the caller.
Call Trace	Call Trace, based on a security requests, provides real time notification of incoming or outgoing calls.
CLID Screen Removal	CLID Screen Removal enables the GPS Entity to display an alternate number when calling out regardless of the PRI used for the outgoing call.
Direct In Dial	Direct In Dial enables callers to dial directly into an extension directly behind a PBX. The exchange usually passes the last four digits to the PBX.
DID Number Management	DID Number Management, together with Reserve Number Block (see below), manages DID number allocation and assignment for GPS Entities.
Direct Outward Dial	Direct Outward Dial dedicates exchange trunks for outgoing calls only.
Directory Services	Directory Services provides an optional process to ensure GPS Entity name, address and telephone number can be published in the public telephone directory and listed in the Community pages, White Pages, Yellow Pages or Government Blue Pages. Note, a GPS Entity may manage this process itself.
Routing Service Saver	Routing Service Saver provides the ability to have incoming calls redirected from one location to another, upon encountering a particular condition.
ISDN Loop Extension	ISDN Loop Extension provides the ability to boost the signal on ISDN service where the service location is slightly out of range.
Off-Hook Service	Off-Hook Service provides a local exchange circuit equipped to automatically dial a GPS Entity's predetermined telephone number, (local or long distance).
PSTN Toll Restriction	PSTN Toll Restriction restricts long distance calling on a business line.
Reserve Number Block	Reserve Number Block provides contiguous telephone numbers ranges for future use by a GPS Entity.
Ring Down – Automatic Line	Ring Down – Automatic Line, also known as a taxi line, automatically calls a predetermined location. (Grandfathered)
Smart Ring	Smart Ring provides the ability for two phone lines to share one terminating phone set. Each line has its own distinctive ring.
Traffic Reporting	Provides common usage reports on lines and trunks and trunk groups.

5.6 TELUS agrees to develop the Exchange Services to encompass new technologies and services such as SIP, VoIP services, wireless exchange based services, and enhanced call management features. As new services become available for inclusion in the Exchange Services, TELUS will notify the GPS Entities of such services so that the GPS Entities can determine whether such

services should be added to the Exchange Services in accordance with the Change Process.

5.7

5.8 TELUS will utilize open standards-based solutions as part of the Exchange Services to ensure interoperability with both Cisco Call Manager and Nortel CS2k/1k solutions.

5.9 TELUS will ensure that 911 calls are not impaired by technical changes, and that calls are routed to the PSAP in instances where the SIP PSTN is at a fixed location, and to TELUS' operator services when Services are being used in a nomadic nature.

5.10 TELUS will ensure the Exchange Services retain traditional PRI features, including facility groups, direct in dial, emergency call forwarding, call display, call block, call waiting, international calling, billing and reporting.

5.11 TELUS will ensure that the Exchange Services will provide for answer supervision to ensure the proper billing of calls.

5.12 TELUS will support existing in-service point-to-point Facilities and, on written request by a GPS Entity, will install and support new point-to-point Facilities subject to the following limitations:

5.12.1 Analogue private line and off premise extension will be provided subject to the availability of equipment and Facilities that have the capability and capacity to provision the requested service, with the exceptions of Grandfathered configurations.

5.12.2 The following Grandfathered configurations are not available for new installations, and existing Services will be supported as installed without change to the existing Services:

5.12.2.1 Multipoint analogue private line in 2-wire configuration (multipoint 4-wire configuration is still available); and inter-exchange off premise Extension, such as off premise extension with primary and secondary locations in different exchanges.

5.12.2.2 Intra-exchange off premise extension within an exchange will be available;

5.12.2.3 With respect to unloaded copper Facilities, analogue private line and off premise extension can be provided over various transmission media at TELUS' discretion, but metallic (copper) continuity is not guaranteed;

5.12.2.4 Analogue tie trunks have been Grandfathered by TELUS since 2004, with new installations and moves and other changes to existing Services not permitted;

5.12.2.5 Digital tie trunks/digital network accesses will be provided subject to the availability of suitable equipment and Facilities; and

5.12.2.6 Additional Fees may apply if it is necessary for TELUS to install special equipment or to incur an unusual expense to restore Service with Grandfathered configurations.

6. Service Support Features

6.1 TELUS will ensure that the following service support features are available to GPS Entities with respect to the Exchange Services:

6.1.1 TELUS will provide the GPS Entities with a directory assistance service as described in Exhibit H3-A4.

6.1.2 TELUS will provide the GPS Entities with an operator assistance service as described in Exhibit H3-A4.

6.2 TELUS will provision and install Exchange Services to GPS Entity premise or station demarcation point where applicable. TELUS will be responsible for managing the relationship with any of its Affiliates or Subcontractors required to supply the Service.

6.3 With respect to PSTN connections within the CityWest territory of Prince Rupert, the GPS Entities will be required to deal directly with CityWest in order to obtain any such connections, provided, however, that if requested by a GPS Entity, TELUS will act as agent for such GPS Entity for purposes of obtaining such services from CityWest and managing such services. Any such agency arrangement with be subject to mutual agreement of TELUS and the applicable GPS Entity and be documented by agent letter designating TELUS to act as agent for such GPS Entity.

6.4 TELUS will be responsible for the administration of all existing and new telephone numbers as directed by each GPS Entity. TELUS will:

6.4.1 keep records of numbers assigned to each GPS Entity;

6.4.2 notify each GPS Entity when agreed DID number thresholds have been reached; and

6.4.3 work with the GPS Entities to communicate operational practices covering agreed telephone number management.

6.5 Direct in Dial Number Management.

6.5.1 TELUS will manage GPS Entity Direct In Dial (DID) reserved and active numbers. Each reserved and active DID number will be assigned within TELUS' billing system under the Access Service being used by the GPS Entity.

6.5.2 If additional reserved or DID numbers are required, TELUS will assign a new block of numbers to the same Access Service. There will be no restriction to the quantity of numbers the GPS Entities can request. TELUS will process GPS Entity number requests in such a way as to ensure that the number blocks are consistent with the dialing plan for the Access Service being used.

6.5.3 TELUS will ensure that for DID numbers each reserved and active DID number will be assigned within TELUS' system under the Access Service being used by a GPS Entity. Numbers can be converted from reserved to active and if additional reserved or DID numbers are needed. TELUS will assign a new block of numbers to the same Access Service. There is no restriction to the quantity of numbers the GPS Entities can request. The GPS Entities are responsible for determining the quantity and type of numbers they need for each Access Service. TELUS will process the number request to ensure that the number block is consistent with the dialing plan for the Access Service being used.

6.5.4 TELUS will report on reserved and assigned DID numbers in accordance with Schedule M (Reporting).

6.6 TELUS will provision all access Facilities existing as of the Effective Date to the in-place premise demarcation point and all new access Facilities to a common building demarcation point.

6.7 In multi-tenant and multi-floor buildings, TELUS will manage the provision of Exchange Services to the common equipment location designated to serve the GPS Entity. TELUS will ensure that Access Services will be available using consistent industry connection hardware that is well labelled and well organized.

6.8 TELUS will terminate and support Exchange Services, such as individual business lines, at station outlets. In such cases, TELUS will work with existing premise distribution systems, or on request, to place cable in order to provide Services at station locations.

6.9 TELUS will provide proactive notification in writing to the GPS Entities of NANP changes that may impact CPE systems.

6.10 TELUS will provide proactive monitoring and reporting on the health and performance of the Exchange Services network. TELUS will continually identify, monitor, manage, diagnose and resolve all Incidents and Problems arising from the degradation or interruption of the Exchange Services.

6.11 Traffic Reporting. TELUS will provide the GPS Entities with traffic usage studies giving data on the usage of the network access lines in accordance with Attachment M3.

7. Optional Features

7.1 Included Optional Features. TELUS will make each of the optional features with respect to the Exchange Services set out in the table below available to all GPS Entities at no additional cost to the GPS Entities. Where an optional feature has been selected by a GPS Entity in a Service Order or Service Change Order, then TELUS will provide such optional feature as a part of the Exchange Services ordered without any additional Fee in respect of such feature being payable.

No.	Included Optional Feature Title	Description
Business Single Line / Business Multiline : Calling Features		
H3-B-Op1	Anonymous Call Block	Anonymous Call Block is an included optional feature for GPS Entities that select Call Display (see H3-B-OP8). It enables GPS Entity's to reject 'PRIVATE' callers, which prevents the name and number from being displayed. Calls from 'UNKNOWN' numbers will not be blocked. It is activated using the code *77 and deactivated using the code: *87. The calling party will hear: "The party you are trying to reach does not accept anonymous calls. If calling from a cellular phone, you may be able to display your number by pressing *82, then the number you are calling. For other callers, you may wish to redial without blocking your call, or place your call from another line. Thank you."
H3-B-Op2	Call Trace	Call Trace enables a GPS End User to immediately activate a trace of the last incoming call, in the event of threatening, harassing, or obscene phone calls, by hanging up, lifting the handset, then pressing *57.
H3-B-Op3	Per Line Blocking	Per Line Blocking enables GPS Entities to suppress the display of their name and telephone number on all calls. No activation code required All calls placed from a line equipped with PLB are automatically blocked. To remove the blocking for one call, the code *82 is entered prior to dialling the telephone number.

7.2 Fee-Based Optional Features. TELUS will make each of the optional features with respect to the Exchange Services set out in the table below available to all GPS Entities at the additional price stated for each of such features in the Price Book. Where an optional feature has been selected by a GPS Entity in a Service Order or Service Change Order, then TELUS will provide such optional feature as a part of such Services.

No.	Fee Based Optional Feature Title	Description
	Business Single Line / Business Multiline : Calling Features	
H3-B-Op4	Advanced Call Forwarding*	Advanced Call Forwarding enables GPS End Users to forward all or just specific incoming calls to another location. This can be done from home or a remote location, after the initial set up has been completed from the line. The GPS End Users can turn the feature ON/OFF, create and change schedules and create caller lists.
H3-B-Op5	Anonymous Caller ID	Anonymous Caller ID enables GPS Entities that select Call Display (see H3-B-OP8) to identify the caller's name or number on most incoming calls and provides the option to: • accept the call; • send the call to Voice Mail (if selected by GPS Entity); or • send the call to a network announcement.
H3-B-Op6	Answer Supervision	Answer Supervision Service provides a signal from the central office to the GPS Entity's premise on local and long distance (1+) calls, to indicate that the called party has answered.
H3-B-Op7	Automatic Blocking	Automatic Blocking permanently suppresses the display of the name and telephone number on Call Display. No code is required to activate it and it is deactivated using the code: *82. Use of the deactivation code on a line equipped with Automatic Blocking will suspend Automatic Blocking for the duration of one call, which will allow the name/number to display.
H3-B-Op8	Call Display	Local Business Line Call Display provides the name and telephone number of the calling party on a compatible display device. Name and number are delivered immediately following the first full ring. TELUS will provide name and telephone number display (where available) for all telephone numbers excluding “Non Pub” numbers. Non Pub display telephone number only, unless the GPS End User has specifically asked to have his or her name displayed.

No.	Fee Based Optional Feature Title	Description
H3-B-Op9	Call Forwarding (Variable, Fixed, Busy, No Answer)	Call Forwarding Fixed automatically forwards incoming calls to a number programmed in the switch. Incoming calls cannot be answered but outgoing calls may be placed. A single ring will indicate when a call has been forwarded Call Forwarding Variable automatically forwards incoming calls to a number that the GPS End User can vary at any time. Incoming calls cannot be answered but outgoing calls may be placed. A single ring will indicate when a call has been forwarded Call Forward Busy and Call Forward No Answer are Grandfathered features. For verification purposes the GPS End User must answer the destination number for about five seconds or repeat the activation procedure within two minutes. This feature can only be activated / deactivated by the GPS End User from the GPS Entity's premises.
H3-B-Op10	Call Forwarding Fixed Central Office	Call Forwarding Fixed Central Office automatically forwards all incoming calls from the GPS Entity's old number to their new number, in the same local calling area. Call Forwarding Fixed Central Office may also be used to forward the GPS Entity's telephone number into a voice mail box parked within the Central Office.
H3-B-Op11	Call Gate	Call Gate permits restriction of selected outbound calls through the creation of a code so only authorized users can call numbers that have been blocked. The following may be restricted: • All long distance calls, except (1-800) toll free; • 1-900 numbers; • 411 and Long Distance Directory; • Operator assisted calls [0+]; and • Up to 25 numbers selected by the GPS End User.
H3-B-Op12	Call Guardian	Call Guardian Restricts long distance calling on a business line
H3-B-Op13	Call Intercept	Call Intercept provides the following recording: "The number you dialled, 555-1234, has been changed. The new number is 555-5678." Calls to a TELUS number that is no longer in service (dead line) are intercepted by a recording or an operator and provided the new number. Calls are not actually transferred or forwarded to the new number. The caller must hang up and redial the correct number. This forces callers to update their personal contact lists.
H3-B-Op14	Call Screen	Call Screen enables GPS Entities to automatically route calls from up to 12 telephone numbers (on a designated screening list which can be turned ON and OFF) to the following recording: "The party you are trying to reach is not accepting calls at this time. Thank you and goodbye."

No.	Fee Based Optional Feature Title	Description
H3-B-Op15	Call Transfer	Call Transfer enables a GPS Entity to conduct a three way call and then transfer the call to the two remaining parties. With 3 Way Calling (see H3-B-OP27), when the originator hangs up all 3 parties are disconnected. With Call Transfer, the two remaining parties are still connected.
H3-B-Op16	Call Waiting	Call waiting enables a GPS Entity to answer a second call when they are already on the phone. They are alerted to the incoming call by a short "beep" tone or click.
H3-B-Op17	Off Hook Service	Off Hook Service provides GPS Entities with an automatic connection to a predetermined telephone number (local, long distance or toll-free) as soon as the handset is lifted from the telephone at the originating location. Off Hook Service consists of an individual business access line provisioned with an off-hook feature that is programmed at the central office to automatically ring the predetermined telephone number when the handset is lifted.
H3-B-Op18	Remote Call Forward	Remote Call Forward enables a GPS Entity to receive long distance calls at no charge to the calling party. The GPS Entity obtains a local number in the central office of the city it wants to serve. All incoming calls to the Remote Call Forward number are forwarded to a designated telephone number at the GPS Entity's location.
H3-B-Op19	Smart Ring	Smart Ring enables the GPS Entity to have a second telephone number with a distinctive double or triple ring on existing individual line service.
H3-B-Op20	Visual Call Waiting	Visual Call Waiting provides visual display of the call waiting caller's name and number and requires Visual Call Waiting compatible equipment.

No.	Fee Based Optional Feature Title	Description
	Voice Mail Services:	
H3-B-Op21	TELUS Voice Mail	TELUS Voice Mail automatically forwards incoming calls to a personalized voice mailbox on a Busy or No-Answer condition. The caller will hear a greeting that the GPS End User chooses and will be given the option of leaving a voice message. TELUS Voice Mail includes: • message storage capacity: 40 messages; • message storage period: 40 days; • email notification & web access to messages and settings; • 24 hour undelete; • call sender rebound: GPS End Users can call back to the sender of the message – anywhere in North America – for 30 minutes; and • toll saver : GPS End Users can remotely identify if they have new messages without incurring long distance charges.
H3-B-Op22	TELUS Voice Mail – Central Office	TELUS Voice Mail – Central Office automatically forwards incoming calls to a voice mail box parked within the central office.
H3-B-Op23	TELUS Voice Mail – Multiline	TELUS Voice Mail – Multiline provides the mailbox only for a multiline.
	Voice Mail Features:	
H3-B-Op24	Call forward to mailbox : TELUS Voice Mail – Multiline	Call forward to mailbox : TELUS Voice Mail – Multiline automatically forwards incoming calls to a mailbox and is used in conjunction with TELUS Voice Mail – Multiline (see H3-B-Op23)
H3-B-Op25	Combined Voice Mail	Combined Voice Mail enables GPS End Users to: • Forward one TELUS landline service and one TELUS Mobility cellular service or two landline services to the same IP messaging voice mailbox • Have a single greeting for both phone numbers or a unique greeting for each one • Only have to check one mailbox for messages Combined Voice Mail provides stutter dial tone and VMWI on both the landline and cellular phones.
H3-B-Op26	Zero Out	Zero Out enables callers to press ‘0’ to redirect the call to another telephone number

No.	Fee Based Optional Feature Title	Description
	Business Single Line / Business Multiline: Grandfathered/Expired Features	
H3-B-Op27	3 Way Calling	3 Way Calling enables a GPS End User to add a third party to their existing call. It permits private consultation with the third party prior to establishing the three-way conference call. When the third party disconnects, the original two party connection is re-established. (Grandfathered)
H3-B-Op28	Do Not Disturb	Do Not Disturb enables the GPS End User to stop incoming calls, so his or her telephone does not ring. It Is activated and deactivated by the GPS End User and includes an authorization list to enable selected callers to ring through and an authorization code the GPS End User can provide to select callers to allow the caller to get through no matter where they call from. (Grandfathered)
H3-B-Op29	Speed Call 30*	Speed Call 30 enables a GPS End User to place calls to a list of frequently called numbers by dialling a one or two digit code instead of the directory number. (Grandfathered)
	ISA Line GPS Entity Premise Equipment	
H3-B-Op30	Data Control Unit	Data Control Unit is an optional feature with the ISA line that is used to terminate the ISA line at the GPS Entity premise.
	ISDN - PRI Features	
H3-B-Op31	2B Channel Transfer	2B Channel Transfer provides for more efficient use of PRI B channels on incoming calls. When multiple call forwarding or transferring, each forward or transfer uses another B channel in addition to the initial inbound channel 2B Channel Transfer releases the B channels and holds the call in the central office, allowing these channels to be used for other calls. Without 2B Channel Transfer, these channels would be unavailable for the duration of the call.
H3-B-Op32	Automatic Blocking	Automatic Blocking prevents the GPS Entity's name and number from displaying on outbound calls.
H3-B-Op33	Back-Up D-Channel	Back-Up D-Channel provides the capability of having a standby D channel on the second DS-1 to take over in the event that the primary D channel goes out of service. Is in “hot standby” state and is not used unless the primary D channel is out of service. Occupies a B channel on a full-time basis (channel 24 on the second DS-1), and cannot be used as a B channel when idle. Available only on PRI configurations involving more than one access.

No.	Fee Based Optional Feature Title	Description
H3-B-Op34	PRI Call Display	PRI Call Display enables the GPS Entity to see the name and the 10 digit telephone number of incoming callers (CLID) on its equipment, whenever that information is delivered to TELUS switches. GPS Entity's may choose to have only the number displayed and not the name of the incoming caller. This would be provisioned via a custom configuration. The default configuration is to provide both name and number display.
H3-B-Op35	Call Forward Busy – One Way	Call Forward Busy – One Way automatically forwards incoming calls to a pre-determined destination/number when all B channels on a PRI are busy. It directs calls between PRI services belonging to the same GPS Entity configured in the same central office.
H3-B-Op36	Call Forward Busy – Two Way	Call Forward Busy – Two Way provides two-way call forwarding between the GPS Entity's two pre-defined PRI service locations. When all PRI accesses are busy at either one of the two service locations, calls will be forwarded to the other service location. The call forward busy "from" and "to" service locations must be served by the same switch.
H3-B-Op37	CLID Screening Removal	CLID Screening Removal refers to the removal of numbers normally delivered on outbound calls from the PRI as CLID. This feature is used when the GPS Entity premise equipment is programmed to send the CLID to the PSTN.
H3-B-Op38	Inward 10 Digit Number	Inward 10 Digit Number permits GPS Entity's to select additional 10-digit directory numbers in addition to Direct-In-Dial (DID) numbers. The first 10-digit number (pilot number) is available at no extra charge.
H3-B-Op39	Name Display Outbound (add/change name in TELUS database)	Name Display Outbound associates a GPS Entity's name which is typically what is seen in the directory listing to the BTN of the PRI service. This name can in most cases be seen by the called party and is stored in TELUS' database. The name can only be sent outbound if the Outbound Calling Line ID (see H3-B-Op40) is also being sent: "name always follows number." .
H3-B-Op40	Outbound Calling Line ID	Outbound Calling Line ID refers to the number, or numbers, that are delivered on outbound calls from the PRI as Calling Line Identification (CLID). This is the number that the called party sees displayed on their equipment on incoming calls.
H3-B-Op41	PRI 900 Blocking	PRI 900 Blocking prevents outbound calls to 900 numbers from a PRI serviced from GTD-5 exchanges.
H3-B-Op42	PRI Emergency Call Completion	PRI Emergency Call Completion enables the GPS Entity to dictate where mission-critical numbers associated with its PRI service will route to if their PRI or PBX fails. It directs inbound calls on the PRI service to an alternate number/location and will automatically be invoked whenever there is a D channel signal loss on the PRI.

No.	Fee Based Optional Feature Title	Description
H3-B-Op43	PSALI – Public Switch Automatic Location Identification	PSALI – Public Switch Automatic Location Identification provides private switch operators (e.g. a PBX operator) with the ability to enter their own Emergency Location Identification Numbers (ELINs) along with their choice of Customer Name and Address Information (CNAI) into the 911 database. ELINs are valid North American Number Plan format telephone numbers (i.e. Direct in Dial (DID) telephone numbers) that are used as the Automatic Number Identification (ANI) to point to GPS Entity records in the 911 database in order to identify the location of individual telephone stations on 911 dialled calls.
H3-B-Op44	Screening Table with Foreign DID number	Screening Table with Foreign DID number enables a GPS Entity to request to have DID numbers from one PRI included in the screening table of another. This would enable the GPS Entity to display these "foreign" DID numbers when it has employees moving between two locations, for example, or when two locations, each with its PRI system group, are linked together via a private network. The following rules must be followed: • both PRI circuits must terminate in the same central office switch; and • both PRI circuits must belong to the same GPS Entity.
H3-B-Op45	Service Extension Feature	Service Extension Feature enables the provisioning of PRI from a central office other than the GPS Entity's usual central office. Typically used for a GPS Entity who: • is currently on a non-PRI capable switch; • is currently on a remote switch homing to a PRI-capable host switch; or • wants to retain a current telephone number when moving to a different rate centre (telephone numbers cannot be ported between rate centres) Can be provided on an intra-exchange basis (local) or on a foreign-exchange basis (long distance).

No.	Fee Based Optional Feature Title	Description
H3-B-Op46	Station Level Billing	Station Level Billing enables the billing of 411, 900, LD directory assistance and long distance services to the Originating Station (currently all charges are to a ISDN-PRI BTN) Prerequisite to offering Station Level Billing is: • the feature Call Number Screening must be activated in the switch; • GPS Entity's CPE version must be at least NI-2 platform Charges are per ISDN PRI System Group. GPS Entity can have Station Level Billing provisioned on all of its DID numbers if the numbers are all in one sequential block, or the GPS Entity can choose to have only some of the DID/Inward numbers provisioned with Station Level Billing. For those DID numbers that are not provisioned with Station Level Billing, the outbound CLID will be GPS Entity's PRI pilot/main billing telephone number. Limitations on switch type are considered and can be qualified with TELUS.
H3-B-Op47	Type A Link (per link)	Type A Links provides dedicated inbound toll or dedicated outbound toll by linking B channels directly to the toll network. The options are: • toll-free (inbound from North America); • toll-free international or toll-free global; or • outbound toll only.
H3-B-Op48	Intelliroute: Service Saver	Intelliroute: Service Saver: • provides ability to maintain control during emergencies by instantly re-routing incoming calls; • enables GPS Entities to maintain service levels by immediately redirecting calls to where they can be answered and handled in the shortest timeframe; and • can be activated and deactivated as required.
H3-B-Op49	Intelliroute: Service Finder	Intelliroute: Service Finder enables the routing of calls to multiple GPS Entity locations based on information on the caller. For example, GPS Entity A selects to have all calls routed to the appropriate department based on postal code routing. All departments are located throughout BC. The GPS Entity is taking a 310 number that enables calls from across BC as a free calling area.
	ISDN - BRI Features	
H3-B-Op50	Loop Extension	Loop Extension provides a loop extension service for GPS Entities beyond normal ISDN BRI loop reach, subject to the availability of suitable facilities.
	DID	
H3-B-Op51	DID Reserved	DID Reserved are DID reserved numbers reserved for the future use of one GPS Entity.

No.	Fee Based Optional Feature Title	Description
H3-B-Op52	DILA (Direct In Local Address) – per request	DILA is a Direct In Local Address number used specifically for the BC Province's SL-100 and is equivalent in function to a DID. For each DILA number stored, an associated 911 GPS Entity record is saved in TELUS' database.
	DEA Features	
H3-B-Op53	Multi Frequency Signalling (DTMF / MF)	Multi Frequency Signalling makes each DS-0 time slot associated with an outgoing or 2-way PSTN connectivity or to an outbound link subject to a DTMF/MF charge.
H3-B-Op54	Answer Supervision	Answer Supervision provides a signal from the central office to the GPS Entity's premise on local and long distance (1+) calls, to indicate that the called party has answered.
H3-B-Op55	Hunting Arrangements	Hunting Arrangements enables GPS Entities with DEA with optional hunting arrangements for idle members when a busy circuit is encountered. Hunting is available on a DS-0 basis. Typical hunting arrangements in equipped DMS 100 and GTD-5 offices provide circular, hunt to last, most idle and reverse sequential. Hunting arrangements are central office switch dependent.
H3-B-Op56	Inward 10-Digit Number	Inward 10-Digit Number enables GPS Entities with DEA to select additional 10-digit directory numbers in addition to DID numbers. The first 10-digit number (pilot number) is free.
H3-B-Op57	Assured Digital Switched Network (DSN) Routing	Assured Digital Switched Network (DSN) Routing enables data traffic to be routed over digital facilities DSN within the PSTN. This feature ensures digital transmission between central offices.
	Directory Listing Services	
H3-B-Op58	Additional Directory Listings	Additional Directory Listings provides additional listings beyond the one included with the service offering. A charge applies for each additional listing.
H3-B-Op59	Non-Published Numbers (BC)	Non-Published directory listing ensures that the directory listing will not be published by TELUS in any print or electronic form.

8. Exchange Specific Terms and Conditions

8.1 Exchange Services

8.1.1 Service Demarcation. The GPS Entity is responsible for all equipment, including telephone sets, and connectivity required on the GPS Entities side of the Exchange Service Demarcation, except to the extent such GPS Entity side services are otherwise procured from TELUS, including under this Agreement.

8.1.2 TELUS Long Distance Charges. For certainty, if in using the Exchange Services, the GPS Entity is not then receiving the Long Distance Services provided under this Agreement, but is instead using other long distance services provided by TELUS, such other long distance services will be governed by the agreement between GPS Entity and TELUS in respect of those services.

8.1.3 Unlisted Directory Numbers. Any unlisted telephone number in a TELUS directory listing from which a call is originated using Exchange Services is provided on calls to end users who subscribe to Call Display and to TELUS for Call Trace, unless such originated call is subject to number blocking, as described in section 5.1.1, per line blocking, as described in H3-B-Op3 of section 7.1, automatic blocking, as described in H3-B-Op7 and H3-B-Op32 in section 7.2, or such similar feature.

8.1.4 Telephone Numbers. Subject to any rights the GPS Entities may have under Applicable Laws, including any right to port a number to another carrier, the GPS Entity does not have any property rights in or other rights to any telephone number assigned to the GPS Entity whether or not the telephone number is in a telephone directory. TELUS may change a telephone number designated for the GPS Entity, without the consent of the GPS Entity:

8.1.4.1 if TELUS has mistakenly assigned the same number to two customers;

8.1.4.2 in the case of new number plan area introductions;

8.1.4.3 as required by Applicable Laws or Governmental Authority; or

8.1.4.4 as is otherwise reasonably necessary in order for TELUS to continue to deliver the Services to the GPS Entities.

For any such change, TELUS will give the GPS Entity reasonable advance notice stating the reason for and the anticipated date of such change, or in cases of emergency, give the GPS Entity verbal notice, followed by a written explanation as soon as is reasonably possible.

8.1.5 GPS Entity Responsibilities. The GPS Entity is responsible to provide compatible terminal equipment (including hardware and any required software) for use with the Exchange Services on the GPS Entity side of the Exchange Service Demarcation; provided that if such GPS Entity provided facilities and equipment connected to TELUS' network adhere to applicable Industry Canada standards, it will be deemed compatible for the purposes of this Agreement.

Exhibit H3-B1

Attachment H3-C

Hosted IVR Services

Service Title:	Hosted IVR Services
Service Number:	H3-C

1. Service Title and Number

1.1 The Service Title and the Service Number of this specific Available Service are set out in the above table.

1.2 Where a Service Order or Service Change Order, in each case entered into in accordance with the terms of this Agreement, references such Service Title or such Service Number TELUS will provide the Province with Hosted IVR Services which include the attributes, features, characteristics, components and service parameters described in this Attachment H3-C as implemented through such Service Order or Service Change Order.

2. Service Description

2.1 The Hosted IVR Services include:

2.1.1 A TELUS hosted a multi-tenant, multi-modal interactive voice response platform (the "**Hosted IVR Platform**") that:

2.1.1.1 utilizes the PSTN and the Internet to provide an IVR capable of Self-service Transactions;

2.1.1.2 enables call-flows utilizing DTMF or speech recognition features to access specified Applications;

2.1.1.3 permits the Province to be defined, partitioned and configured by TELUS for the Province or group of ministries for their usage of the Hosted IVR Platform;

2.1.1.4 runs Applications for the Province; and

2.1.1.5 is maintained, monitored and supported by TELUS.

2.1.2 Requirements gathering and design exercises to determine the requirements of the Province or group of ministries and the corresponding attributes, features, characteristics, components and service parameters of the Hosted IVR Services to be delivered by TELUS to the Province or those ministries.

2.1.3 The design, development, configuration, testing, implementation, deployment, maintenance and support of Applications for the Province or as shared by ministries, which Applications remain TELUS Intellectual

Property for the purposes of this Agreement, unless a Service Order or Service Change Order expressly designates or identifies the Application or components of an Application as being New Materials (i.e. the Intellectual Property of the Province).

2.1.4 The integration by TELUS of telephone call processing, voice recordings and, if required, data interexchanges between the Hosted IVR Platform and GPS Provided Equipment of the Province utilizing the Internet to implement an Application which facilitates call-flows.

2.1.5 The delivery of the Service features set out in section 5 that are identified in a Service Order or Service Change Order or that are otherwise inherent, necessary or customarily included as part of any such Service features, Specifications or requirements specifically set out therein.

3. Service Availability

3.1 The Hosted IVR Services will be made available from within Canada and will be available to GPS End Users of the Province in and outside of Canada through local and toll free access numbers and through the Internet via web-based interfaces.

3.2 The Hosted IVR Services will be made available by TELUS in accordance with the availability-related Service Levels for the Hosted IVR Services set out in Schedule J.

4. Service Standards

4.1 The Hosted IVR Platform is designed, built and will be developed in accordance with generally accepted, open, non-propriety industry standards (e.g. VXML, CCXML).

4.2 TELUS will ensure the Hosted IVR Platform and Applications connect to and interoperate with associated telephony services being received by the Province, including the long distance services (including toll-free services) being received by the Province and will support dedicated access line (DAL) and SIP origination and termination, and equal ease of access or both to provide long distance traffic to all service providers providing long distance services (including toll-free services) to the Province at all locations without any limitations and using industry standard interface connections and SIP.

4.3 Subject to section 4.4, the Hosted IVR Platform and Applications will run on Voxeo Prophecy.

4.4 TELUS may change the technology used by it to provide the Hosted IVR Platform and run the Applications subject to:

4.4.1 complying with and remaining compliant with the provisions of this Agreement, including the Applicable Service Orders and Change Orders, this section 4, Schedule R, Schedule Q, Schedule RR and all other provisions of this Agreement;

4.4.2 except with the prior approval of the Province, providing uninterrupted performance of the Hosted IVR Services without such Services, including any Applications of the Province, becoming inaccessible, unusable, inoperative or degraded, or without the loss of features or functionality specified in the applicable IVR SOW (or that are otherwise inherent, necessary or customarily included as part of any such Service features, Specifications or requirements specifically set out therein) during or after the transition to the replacement technology, and

4.4.3 such technology changes will be at no cost to the Province and TELUS will pay to the Province, including by way of credit, any costs incurred by the Province that are required to implement changes to the Province's systems used to access the Hosted IVR Services (which costs the parties will identify as part of the migration planning exercise) in order to transition from the existing technology to the new technology (including, for example, updating data interexchanges between the Hosted IVR Platform and GPS Provided Equipment of the Province, but excluding such costs not required to receive a service equivalent to the prior service); provided that (a) such costs are (i) actually incurred and (ii) are demonstrably related to such technology changes, and (b) if the Province is required to engage a third party in order to implement such changes to the Province's systems, such third party costs are subject to the prior mutual agreement of the parties as to such costs, acting reasonably, as part of the migration planning exercise.

4.5 The Hosted IVR Platform and Applications will perform in accordance with their Specifications, including as set out in the applicable IVR SOW.

5. Service Features

5.1 General Feature Availability. TELUS will make available to the GPS Group all the features of its Hosted IVR Service that TELUS has the rights and permissions from third parties necessary to permit the GPS Group to license or otherwise use such features (whether or not expressly set out in this section 5) which will be included, subject to section 5.2, as part of the corresponding usage Fees set out in the Price Book or, if not set out in the Price Book, in a Service Order or Service Change Order, without any additional Fee in respect of such feature being payable.

5.2 Specific Feature Implementation. The specific features of the Hosted IVR Services received by a GPS as contemplated by this section 5 will depend on one or more Applications procured by the Province in accordance with a Service Order or Service Change Order to implement such service features. The pricing for the design, development and implementation phases of such Applications, including with respect to all of the service features set out in this section 5, will be at the professional services Fees set out in the Price Book as may comprise a fixed quote for such services, while the pricing of the ongoing monitoring, maintenance and delivery phases of such Applications, once in production, will be included as part of the corresponding usage Fees set out in the Price Book.

5.3 Application Development. TELUS will provide to the GPS Entities when requested in accordance with a Service Order or Service Change Order the following design and development services:

5.3.1 IVR business requirements definition;

5.3.2 design specifications including timelines, call flows, reporting, and other requirements that the GPS Entities must sign off on;

5.3.3 Application requirements, specifications and design;

5.3.4 Application development;

5.3.5 Application review;

5.3.6 Application modification and programming; and

5.3.7 Application Testing, including Application load testing.

5.4 Platform Enabled Features. TELUS will ensure the following non-exhaustive list of features are available to the Province with respect to the Hosted IVR Platform along with all other features supported by the then current Hosted IVR Platform:

5.4.1 English and French DTMF (touch tone);

5.4.2 English speech recognition;

5.4.3 combination of English and French DTMF (touch tone) and English speech recognition in a single Application;

5.4.4 bilingual support in a single (DTMF) Application;

5.4.5 TTS and prompts;

5.4.6 text-to-speech rendering of output data;

5.4.7 text-to-audio rendering of output segment;

5.4.8 text-to-speech using either predefined male or female voice;

5.4.9 failback to text-to-speech if prompt is not available;

5.4.10 support of custom prompts (prompts may only be uploaded by TELUS);

5.4.11 Province recording of custom prompts via phone;

5.4.12 Directed Speech;

5.4.13 IVR personalization;

5.4.14 alphanumeric input;

5.4.15 Self-service Transactions (e.g. payments, account updates);

5.4.16 Broadcast Messages;

5.4.17 alert conditions/outbound notifications (e.g. notification that account balance is below a certain level);

5.4.18 Call Back functionality;

5.4.19 inbound capability, including the capability to direct callers to specific Applications that prompts, gathers inputs, and transfers callers to other phones/agents;

5.4.20 outbound capability including the delivery, gathering, and/or confirmation of information for appointments, events, and activities;

5.4.21 pay for use capacity and scalability;

5.4.22 integration to external databases via WSDL calls;

5.4.23 transfer to an external number;

5.4.24 call routing via PSTN and SIP to SIP transfers; and

5.4.25 VoIP peering and SIP interoperability with Nortel Avaya and Cisco, and Microsoft Lync.

5.5 Prompt Recording. Prompts may be supplied by TELUS, using professional voice talent, or the Province may opt to supply their own prompts. If the Province supplies prompts, TELUS will provide the proper voice recording naming conventions to the Province and, if applicable, the service providers designated by the Province.

5.6 Tuning and Optimization.

5.6.1 TELUS will provide IVR speech tuning for the period set out in the project plan in the applicable Service Order.

5.6.2 The Province may also engage TELUS for the Fees set out in Attachment C3-C to: (a) analyze data and make recommendations to improve the IVR experience; and (b) provide additional tuning or conduct a study using hosted IVR analyzer tools. The GPS Entities will not have access to utterance files recorded by the system.

5.7 PSTN.

5.7.1 Inbound DID. TELUS will assign to the Province inbound DIDs in various area codes for its Application, terminating on the Hosted IVR Platform. The DIDs remain the property of TELUS and the Province will not transfer or resell such DIDs.

5.7.2 External Transfers. The Province's Application may include functionality to transfer to an external E164 number, such as a call centre. Where such transfers are made to toll-free numbers, the toll-free numbers are not included as part of the Hosted IVR Service. The Hosted IVR Services Platform will support VoIP peering and SIP to SIP transfers.

5.8 Connectivity to External Data Sources.

5.8.1 The Hosted IVR Platform will be capable of:

5.8.1.1 connecting with GPS Entity owned and hosted back-end database and Application servers to retrieve records and information required by the caller during the call using FTP, Web Services, and XML data exchange, and

5.8.1.2 retrieving data from external data sources, such as GPS Entity hosted databases, to allow self-service IVR functions.

5.8.2 Connectivity between the Hosted IVR Platform and the Province's hosted data source may be supplied by dedicated network link, by VPN or directly over the Internet. Depending on requirements, two links may be required: one between the TELUS production system and the Province's production systems and one between the TELUS development system and the Province's test data.

5.9 Data Storage. TELUS will retain Province data for Hosted IVR Services as described in, and for the time periods set out in, Attachment R-3C, and TELUS will make such data available to the Province via a secure FTP site.

5.10 Optional Features. The following service features set out in this section 5.10 are available for the Hosted IVR Services in accordance a Service Order or Service Change Order:

5.10.1 IVR and Speech functions:

5.10.1.1 French speech recognition

5.10.1.2 Natural Language Speech

5.10.1.3 call steering

5.10.1.4 Voice/speaker authentication

5.10.1.5 Other languages available through third party ASR & TTS engines

5.10.1.6 TELUS will provide technology enabled with industry standard ASR and TTS engines. TELUS acknowledges the Province may request the option to support particular Applications with alternative leading third party speech products and services.

In such circumstances, alternative technology requirements will be set out in the Service Order or Service Change Order.

5.10.2 External Integration:

5.10.2.1 Computer-telephony integration (CTI)

5.10.2.2 Voice over IP interoperability or connectivity to Customer sites

5.10.2.3 Integration to external data sources using non-standard services connectivity

5.10.3 Call Management:

5.10.3.1 Conferencing

5.10.3.2 Whisper or supervised delivery

5.10.3.3 Call transfer

5.10.4 Other:

5.10.4.1 TDD/hearing impaired support

5.10.4.2 Fax back or fax on demand

5.10.4.3 Outbound dialing

5.10.4.4 Incoming access for messages

5.11 Optional Applications. TELUS is capable of providing and will provide at the request of the Province in accordance with a corresponding Service Order or Service Change Order:

5.11.1 a web-based portal/administrative tool that may include, but is not limited to, such functions as:

5.11.1.1 management information reporting;

5.11.1.2 administrative functions;

5.11.1.3 reporting (including inbound and outbound call progress analysis); and

5.11.1.4 security audits activity tracking (within service portal),

which access to will be restricted to designated Province portal administrators with certain rights and limits to control, access, etc., as mutually agreed to by the Province and TELUS in a Service Order; and

5.11.2 a call back functional capability that includes, but is not limited to, such functions as Call Back capability where a caller is given the option of

leaving his or her name, call back number, and preferred call back time, which is not to be confused with standard available Contact Centre queuing technology that allows callers to elect to receive a return call rather than waiting on hold, without losing their place in line where the feature is restricted to the Contact Centre technology.

6. Service Support Features

6.1 Problem and Incident Management.

6.1.1.1 TELUS will perform the support services with respect to Incident and Problems relating to Hosted IVR Services in accordance with Schedule N (Problem and Incident Management Procedures).

6.1.1.2 For certainty, any Incident or Problem in respect of an Application hosted by TELUS will be addressed as a Problem or Incident in respect of the Hosted IVR Services, including the corresponding Fees contemplated by section 7.7 of Schedule N for such Services.

6.1.1.3 In addition to its obligations in Schedule N. TELUS will supply the Province with a care guide.

6.2 Acceptance Testing. TELUS will ensure that:

6.2.1 before their implementation, all Applications go through the Acceptance Testing set out in the applicable Service Order or Service Change Order, and

6.2.2 any new or changed Application will function properly and not negatively impact other running Applications before its implementation.

6.3 Capacity Management.

6.3.1 TELUS will

6.3.1.1 manage capacity requirements for Applications based on the volume estimated in Service Order up to an overage variance of 25%. If the Province requires additional capacity above such overage variance, a Change Request is required (TELUS's standard procedure on requests for significant additional capacity (i.e. greater than 25%) require a minimum 90 days written notice prior to capacity increase);

6.3.1.2 advise the Province when an upgrade is available or if capacity expansion is required; and

6.3.1.3 determine if the upgrade or capacity expansion is Service impacting and will work with the Province on planning and testing the upgrade or capacity expansion on a test system prior to such upgrade or expansion on the Hosted IVR Platform.

6.4 Support for Changes in Hosted IVR Services.

6.4.1 Subject to section 6.4.2, any technical or operational change to the configuration or functionality of the Hosted IVR Platform and Applications residing on the TELUS side of the IVR Service Demarcation may only be made by TELUS.

6.4.2 The Province may make such a change to the Hosted IVR Platform and Applications residing on the TELUS side of the IVR Service Demarcation to the extent such change is enabled through an Application, portal, interface or other mechanism or process expressly agreed to in a Service Order or Service Change Order for the purposes of permitting the Province to make such change, including the interface contemplated in section 5.11.1.

6.4.3 Any Ordinary Course Change to the Hosted IVR Services ordered by the Province will not require a Service Change Order or Change Order but will require that the request be made by an employee of the Province with appropriate authority, and, for greater certainty, any work required by TELUS to implement such change will be inclusive within the monthly usage Fee for the Hosted IVR Services impacted by the change**.**

7. Additional Terms Regarding Hosted IVR Services

7.1 Shared Development / Third Party Applications.

7.1.1 The Province may request that third party applications or code be included into a specific Application by way of a Change Request or Service Order and their inclusion will be subject to the following additional procedures:

7.1.1.1 TELUS will review such Change Request or Service Order against TELUS' standard protocols and processes regarding the use of non-TELUS developed applications or code on the TELUS side of the IVR Service Demarcation from a risk review and security perspective; and

7.1.1.2 TELUS will use commercially reasonable efforts to identify a risk mitigation strategy/plan (such as a separate dedicated environment) to accommodate the inclusion of such third party applications or code. If such risk mitigation plan/strategy is not viable, TELUS, in its sole and absolute discretion, has the right to refuse the inclusion of such third party applications or code.

7.1.1.3 For certainty, nothing in this section 7.1 will restrict the Province from selecting or using any applications or code on the Province side of the IVR Service Demarcation, including engaging another service provider or hosted environment for any third party applications or code that TELUS refuses to permit on the TELUS side of the IVR Service Demarcation.

7.2 Notification. The Province will not use the IVR notification service for any illegal or inappropriate messages, broadcasts and/or notifications. It is the Province's responsibility in the generation of Campaign and Campaign contact lists to ensure Campaign complies with Applicable Laws, including but not limited to "do not call" legislation.

7.3 Inbound Toll-free Numbers and Redirection The Province is responsible to purchase and redirect toll-free or local numbers required for use with the Hosted IVR Services.

7.4 Server Requirements. Either HTTP or HTTPS may be used for external data retrieval. All requests will be initiated by the Hosted IVR Services system to the Province web server. If the Province uses HTTPS, it is responsible for ensuring SSL certificates are up to date and obtained from a recognized issuing authority.

7.5 Application Requirements. The Province willl supply TELUS with a WSDL file describing the data calls that will be used by the Application. During initial Application development and to accommodate requested changes, the Province will make test data available to TELUS. The test data must be accessible from the Hosted IVR Services development system. The Province will supply production test data at TELUS request to accommodate investigation of production incidents, problems and testing.

Attachment H5

Data Services Listing and Availability

1. Data Services Listing

1.1 TELUS will provide to GPS Entities the following Data Services with their related features:

Table 1: Initial Data Services

Service Name	Attachment or Exhibit
Initial Data Services	Attachment H5-A
NBC ATM MAN to WAN Gateway Service	Exhibit H5-A1
NBC EB-1 Telecommunications Service	Exhibit H5-A2
NBC L2 Metro – WAN Gateway Service	Exhibit H5-A3
NBC GigE L2 Metro Service	Exhibit H5-A4
NBC L2 MAN Service	Exhibit H5-A5
NBC L2 MAN – Metro Gateway Service	Exhibit H5-A6
NBC Enhanced LAN/WAN Option	Exhibit H5-A7
NBC L2 Managed Enterprise Access (MEA) Service	Exhibit H5-A8
NBC Metro L3 VPN Service	Exhibit H5-A9
NBC Metro L3 VPN Gateway Service	Exhibit H5-A10
NBC Private Network Gateway (PNG) Service	Exhibit H5-A11
NBC IP Quality of Services (QoS)	Exhibit H5-A12
NBC WAN L3 VPN Service	Exhibit H5-A13
NBC Ethernet Bridged ADSL Service	Exhibit H5-A14

Table 2: Internet and Security Services

Service Name	Attachment or Exhibit
Internet and Security Services	Attachment H5-B
Custom Carrier Internet Direct Service	Exhibit H5-B1
Business Internet Access Service	Exhibit H5-B2
Business Internet Gateway Service	Exhibit H5-B3
Managed Network Intrusion Prevention Service	Exhibit H5-B7
Managed Web Security Service	Exhibit H5-B8
Managed Firewall Service	Exhibit H5-B10

Table 3: Optical Ethernet Service

Service Name	Attachment or Exhibit
Optical Ethernet Service	Attachment H5-C

Table 4: STS WAN L3 VPN Services and Features

Service Name and Features	Attachment or Exhibit
STS WAN L3 VPN Services	Attachment H5-E
Ethernet Interfaces	Exhibit H5-E2
Wireless Standby Service	Exhibit H5-E4
STS Extranet Service	Exhibit H5-E5
QoS Details and Marking Schema	Exhibit H5-E7
IP Addressing	Exhibit H5-E8
Multicast Service	Exhibit H5-E9
Secure IP Anywhere Service	Exhibit H5-E10
Technical Service Performance	Exhibit H5-E11

Fixed Broadband Wireless WAN Service	Exhibit H5-E12
Description of ‘Standard’, ‘Enhanced’ and ‘Premium’ Classifications	Exhibit H5-E13

Table 5: Future Services

Service Name	To be Created as Attachment or Exhibit
Fully Meshed Internet Gateway Service	Exhibit H5-B4
Internet Caching Service	Exhibit H5-B6
Network Behaviour and Anomaly Detection Service	Exhibit H5-B9
Security Consulting Services	Exhibit H5-B12
Data Loss Prevention Service	Exhibit H5-B13
STS WAN L3 VPN Satellite Service	Exhibit H5-E6

2. Data Services Availability

2.1 The following Data Services will be available as of the Effective Date of the Agreement:

2.1.1 NBC ATM MAN to WAN Gateway Service;

2.1.2 NBC EB-1 Telecommunications Service;

2.1.3 NBC L2 Metro – WAN Gateway Service;

2.1.4 NBC GigE L2 Metro Service;

2.1.5 NBC L2 MAN Service;

2.1.6 NBC L2 MAN – Metro Gateway Service;

2.1.7 NBC Enhanced LAN/WAN Option;

2.1.8 NBC L2 Managed Enterprise Access (MEA) Service;

2.1.9 NBC Metro L3 VPN Service;

2.1.10 NBC Metro L3 VPN Gateway Service;

2.1.11 NBC Private Network Gateway (PNG) Service;

2.1.12 NBC IP Quality of Services (QoS);

2.1.13 NBC WAN L3 VPN Service;

2.1.14 NBC Ethernet Bridged ADSL Service;

2.1.15 Custom Carrier Internet Direct Service;

2.1.16 Business Internet Access Service;

2.1.17 Business Internet Gateway Service;

2.1.18 Managed Network Intrusion Prevention Service;

2.1.19 Managed Web Security Service;

2.1.20 Managed Firewall Service; and

2.1.21 Optical Ethernet Service.

2.2 The following Data Services, which are not currently available as of the Effective Date, will be available when added to the Agreement as Available Services:

2.2.1 Fully Meshed Internet Gateway Service;

2.2.2 Internet Caching Service;

2.2.3 Network Behaviour and Anomaly Detection Service;

2.2.4 Security Consulting Services; and

2.2.5 Data Loss Prevention Service.

2.3 The STS WAN L3 VPN Services will be available when TELUS will make a Site available for receipt of the STS WAN L3 VPN Services as part of the CE Transition. The STS WAN L3 VPN Services include the following Services:

2.3.1 Wireless Standby Service;

2.3.2 STS Extranet Service;

2.3.3 STS WAN L3 VPN Satellite Service;

2.3.4 Multicast Service;

2.3.5 Secure IP Anywhere Service; and

2.3.6 Fixed Broadband Wireless WAN Service.

3. Changes to Data Services

3.1 Any changes to the Data Services will be made through a Service Change Order pursuant to section 7.6 of the Agreement.

Attachment H5-A
Initial Data Services

Service Title:	Initial Data Services
Service Number:	H5-A

1. Service Title And Number

1.1 The Service Title and the Service Number of this specific Available Service are set out in the above table.

1.2 Where a Service Order or Service Change Order, in each case entered into in accordance with the terms of this Agreement, references such Service Title or such Service Number, TELUS will provide such GPS Entity with Initial Data Services which include all of the attributes, features, characteristics, components and service parameters described in this Attachment H5-A (including all Exhibits to this Attachment), unless expressly excluded or modified in the Service Order or Service Change Order.

2. Introduction

2.1 This document describes the various Initial Data Services. Details specific to these distinct Services are found in separate Exhibits to this Attachment. Initial Data Services are categorized into the following 12 distinct Services:

2.1.1 NBC ATM MAN to WAN Gateway Service (Exhibit H5-A1);

2.1.2 NBC EB-1 Telecommunications Service (Exhibit H5-A2);

2.1.3 NBC L2 Metro – WAN Gateway Service (Exhibit H5-A3);

2.1.4 NBC GigE L2 Metro Service (Exhibit H5-A4);

2.1.5 NBC L2 MAN Service (Exhibit H5-A5);

2.1.6 NBC L2 MAN – Metro Gateway Service (Exhibit H5-A6);

2.1.7 NBC L2 Managed Enterprise Access (MEA) Service (Exhibit H5-A8);

2.1.8 NBC Metro L3 VPN Service (Exhibit H5-A9);

2.1.9 NBC Metro L3 VPN Gateway Service (Exhibit H5-A10);

2.1.10 NBC Private Network Gateway (PNG) Service (Exhibit H5-A11);

2.1.11 NBC WAN L3 VPN Service (Exhibit H5-A13); and

2.1.12 NBC Ethernet Bridged ADSL Service (Exhibit H5-A14).

2.2 There are also two optional features that relate to the Initial Data Services, which are:

2.2.1 NBC Enhanced LAN/WAN Option (Exhibit H5-A7); and

2.2.2 NBC IP Quality of Services (QoS) (Exhibit H5-A12).

Exhibit H5-A1

NBC ATM MAN to WAN Gateway Service

Service Title:	NBC ATM MAN to WAN Gateway Service
Service Number:	H5-A1

1. Service Title And Number

1.1 The Service Title and the Service Number of this specific Available Service are set out in the above table.

1.2 Where a Service Order or Service Change Order, in each case entered into in accordance with the terms of this Agreement, references such Service Title or such Service Number, TELUS will provide such GPS Entity with the NBC ATM MAN to WAN Gateway Service which includes all of the attributes, features, characteristics, components and service parameters described in this Exhibit H5-A1, unless expressly excluded or modified in the Service Order or Service Change Order.

1.3 The Service terms and conditions in this Exhibit apply only to the NBC ATM MAN to WAN Gateway Service – 100 Mbps.

2. Service Description

2.1 The NBC ATM MAN to WAN Gateway Service is a managed network service, provisioned from the TELUS Data Network, used for interconnection of geographically disparate LANs using the Internet Protocol (IP) for routing between Sites in a unique Wide Area Network (WAN) plan. The NBC ATM MAN to WAN Gateway Service provides virtual private network access that allows IP packets to transit the gateway and go to and from the Metropolitan Area Network (MAN) and WAN services, but prevents all other IP packets from entering or leaving the gateway to the interconnected MAN or WAN services except through GPS Entity authorization.

2.2 The NBC ATM MAN to WAN Gateway Service is equipped with a CIU located within a Central Office for connection to other managed Data Services, bringing any or all of managed enterprise accesses, MAN accesses and Internet Data Centre (IDC) accesses together.

2.3 The CIU will be equipped with one port (see table below for port types) for connection to the equipment. The Service Demarcation will be at the LAN interface port on the CIU. The port type used for the NBC MAN to WAN Gateway Service is described in the following table:

Port type	ATM MAN to WAN Gateway Service Bandwidth
100BaseT-FDX	NBC ATM MAN to WAN Gateway 100Mbps

3. GPS Entity Responsibilities

3.1 The NBC ATM MAN to WAN Gateway Service will be provisioned in accordance with IP addressing and routing standards and the GPS Entities will be responsible to ensure non-conflicting protocol address practices are maintained within the network plan. If a GPS Entity provides the IP addresses, such GPS Entity will assign one IP address for use as the IP address of the CIU, and will also set that address as the default gateway for every device at that Site. The GPS Entities will be responsible for any equipment or facilities required to complete the connection between the Service Demarcation and the GPS Entities' LAN.

4. Service Locations

4.1 This Service will be grandfathered as a unique custom solution. New Service Locations will not be available.

Exhibit H5-A2

NBC EB-1 Telecommunications Service

Service Title:	NBC EB-1 Telecommunications Service
Service Number:	H5-A2

1. Service Title And Number

1.1 The Service Title and the Service Number of this specific Available Service are set out in the above table.

1.2 Where a Service Order or Service Change Order, in each case entered into in accordance with the terms of this Agreement, references such Service Title or such Service Number, TELUS will provide such GPS Entity with the NBC EB-1 Telecommunications Service which includes all of the attributes, features, characteristics, components and service parameters described in this Exhibit H5-A2, unless expressly excluded or modified in the Service Order or Service Change Order.

2. Service Description

2.1 The NBC EB-1 Telecommunications Service is a managed routed network service used for interconnection of geographically disparate LANs using the IP for routing between Sites. This Service is provisioned from the TELUS Data Network, enabling LAN interconnection between any number of other Sites in a unique Wide Area Network (WAN) plan based on specific networking requirements.

2.2 This Service will be provisioned using a dedicated TELUS-provided Digital Network Access (DNA) facility from the POP to the Site, and terminating on a CIU located in the master telephone room at the Site. Optionally, the CIU may be located elsewhere within the building using a GPS Entity's provided in-building facilities.

2.3 The CIU will be equipped with one port for connection to the GPS Entity's LAN equipment. The Service Demarcation will be at the LAN interface port on the CIU. The port type used for the NBC EB-1 Telecommunications Service is described in the following table:

Port type	
10BaseT-FDX	NBC EB-1 Telecommunications Service

2.4 The GPS Entities will have full access to the CIU and will be responsible for the configuration of the CIU.

3. GPS Entity Responsibilities

3.1 This Service will be provisioned in accordance with IP addressing and routing standards, and as such, the GPS Entities will be responsible to ensure non-conflicting protocol address practices are maintained within the network plan for connections to the network. If a GPS Entity provides the IP addresses, such GPS Entity will assign one of the IP addresses for use as the IP address of the CIU, and will also set that address as the default gateway for every device at that Site.

4. Service Locations

4.1 Notwithstanding any other provision of this Agreement, this Service is available only to the Province.

4.2 This Service will be grandfathered as a unique custom solution. New Service Locations will not be available.

Exhibit H5-A3

NBC L2 Metro – WAN Gateway Service

Service Title:	NBC L2 Metro – WAN Gateway Service
Service Number:	H5-A3

1. Service Title And Number

1.1 The Service Title and the Service Number of this specific Available Service are set out in the above table.

1.2 Where a Service Order or Service Change Order, in each case entered into in accordance with the terms of this Agreement, references such Service Title or such Service Number, TELUS will provide such GPS Entity with the NBC L2 Metro – WAN Gateway Service which includes all of the attributes, features, characteristics, components and service parameters described in this Exhibit H5-A3, unless expressly excluded or modified in the Service Order or Service Change Order.

1.3 The Service terms and conditions in this Exhibit apply only to the NBC L2 Metro – WAN Gateway Service, which consists of the following bandwidths:

NBC L2-Metro – WAN Gateway - 10 Mbps;
NBC L2-Metro – WAN Gateway - 100 Mbps;
NBC L2-Metro – WAN Gateway - 200 Mbps; and
NBC L2-Metro – WAN Gateway - 400 Mbps.

2. Service Description

2.1 The NBC L2 Metro – WAN Gateway Service is provisioned from the TELUS Data Network. The NBC L2 Metro – WAN Gateway Service provides a gateway between:

2.1.1 a GPS Entity's Sites interconnected by the NBC GigE L2 Metro Service within a single metropolitan area ("**GPS Entity L2 MAN**") and a GPS Entity's Sites interconnected by TELUS' WAN services in different metropolitan areas ("**GPS Entity WAN**"); or

2.1.2 a GPS Entity L2 MAN in one metropolitan area and GPS Entity L2 MANs in other metropolitan areas.

2.2 A GPS Entity must obtain an NBC L2 Metro – WAN Gateway Service for each GPS Entity L2 MAN that such GPS Entity wishes to interconnect. The city or other metropolitan area specified in a Site address for an NBC

L2 Metro – WAN Gateway Service identifies the location of the GPS Entity L2 MAN being interconnected and otherwise, that Site address is for information only and does not define or limit the NBC L2 Metro – WAN Gateway Service.

2.3 The NBC L2 Metro – WAN Gateway Service provides a virtual network access that allows IP packets to transit the gateway and go to and from the metro and WAN services, but prevents all other IP packets from entering or leaving the gateway to the interconnected metro or WAN services except through GPS Entity authorization.

2.4 The NBC L2 Metro – WAN Gateway Service is Quality of Service enabled. "Basic - Assured Forwarding" Quality of Service and "Premium – Expedited Forwarding" Quality of Service are described in Exhibit H5-A12.

3. Service Locations

3.1 Notwithstanding any other provision of this Agreement, this Service is available only to the Province.

3.2 This Service will be grandfathered as a unique custom solution. New Service Locations will not be available. Existing Projects will continue in order to provide continuity until the Transition is completed in accordance with this Agreement.

Exhibit H5-A4

NBC GigE L2 Metro Service

Service Title:	NBC GigE L2 Metro Service
Service Number:	H5-A4

1. Service Title And Number

1.1 The Service Title and the Service Number of this specific Available Service are set out in the above table.

1.2 Where a Service Order or Service Change Order, in each case entered into in accordance with the terms of this Agreement, references such Service Title or such Service Number, TELUS will provide such GPS Entity with the NBC GigE L2 Metro Service which includes all of the attributes, features, characteristics, components and service parameters described in this Exhibit H5-A4, unless expressly excluded or modified in the Service Order or Service Change Order.

1.3 The Service terms and conditions in this Exhibit apply only to the NBC GigE L2 Metro Service, which consists of the following bandwidths:

NBC GigE L2 Metro – 10 Mbps;
NBC GigE L2 Metro – 100 Mbps;
NBC GigE L2 Metro – 200 Mbps;
NBC GigE L2 Metro – 300 Mbps;
NBC GigE L2 Metro – 400 Mbps;
NBC GigE L2 Metro – 500 Mbps; and
NBC GigEL2 Metro – 1000 Mbps.

2. Service Description

2.1 The NBC GigE L2 Metro Service is a grandfathered custom solution that provides very high bandwidth services that utilize Gigabit Ethernet technologies to provide this Service. The NBC GigE L2 Metro Service provides virtual private network access that prevents routing of IP packets into or out of the VPN created by the Service, except through GPS Entity authorized gateway services or through GPS Entity-provided equipment connected to the Service.

2.2 This Service will scale in bandwidth from 10Mbps to 1000Mbps (or 1 Gbps) of bandwidth. The bandwidth associated with this Service will be available end-to-end across a particular GigE metropolitan network.

2.3 Interconnection of GPS Entity Sites between different GigE metropolitan networks requires a GPS Entity to obtain the NBC L2 Metro – WAN Gateway

Service. The NBC L2 Metro – WAN Gateway Service is a custom solution service provisioned from the TELUS Data Network, used for interconnection of this Service to the ATM WAN network using the IP for routing between Sites in a unique WAN plan.

2.4 In-building Service components required to install the NBC GigE L2 Metro Service at a GPS Entity Site will be included to a maximum of $2,000. Optionally, the CIU may be located elsewhere within the building using GPS Entity-provided in-building Service components.

2.5 The CIU will be equipped with one port for connection to the GPS Entity's LAN equipment. The Service Demarcation will be at the LAN interface port on the CIU. The port types used for the NBC GigE L2 Metro Service are described in the following table:

Port type	**NBC GigE L2 Metro Service Bandwidths**
10BaseT-FDX	NBC GigE L2 Metro – 10 Mbps
100BaseT-FDX	NBC GigE L2 Metro – 100 Mbps
1000Base-SX MMF/ 1000Base-LX SMF	NBC GigE L2 Metro – 100 Mbps NBC GigE L2 Metro – 200 Mbps NBC GigE L2 Metro – 300 Mbps NBC GigE L2 Metro – 400 Mbps NBC GigE L2 Metro – 500 Mbps NBC GigE L2 Metro – 1000 Mbps

2.6 The NBC GigE L2 Metro Service may be Quality of Service (QoS) enabled. "Basic - Assured Forwarding" Quality of Service and "Premium – Expedited Forwarding" Quality of Service are described in Exhibit H5-A12.

3. GPS Entity Responsibilities

3.1 The GPS Entities will be responsible for any equipment or facilities required to complete the connection between the Service Demarcation and the GPS Entities' LAN.

4. Service Locations

4.1 Notwithstanding any other provision of this Agreement, this Service is available only to the Province.

4.2 This Service will be grandfathered as a unique custom solution. New Service Locations will not be available. Existing Projects will continue in order to provide continuity until the Transition is completed in accordance with this Agreement.

Exhibit H5-A5

NBC L2 MAN Service

Service Title:	NBC L2 MAN Service
Service Number:	H5-A5

1. Service Title And Number

1.1 The Service Title and the Service Number of this specific Available Service are set out in the above table.

1.2 Where a Service Order or Service Change Order, in each case entered into in accordance with the terms of this Agreement, references such Service Title or such Service Number, TELUS will provide such GPS Entity with the NBC L2 MAN Service which includes all of the attributes, features, characteristics, components and service parameters described in this Exhibit H5-A5, unless expressly excluded or modified in the Service Order or Service Change Order.

1.3 The Service terms and conditions in this Exhibit apply only to the NBC L2 MAN Service, which consists of the following bandwidths:

NBC L2 MAN – 10Mbps; and
NBC L2 MAN – 100Mbps.

2. Service Description

2.1 The NBC L2 MAN Service is a stand-alone single Central Office managed network service, provisioned from the TELUS Data Network used for interconnection of geographically disparate LANs in a metropolitan area network (MAN) plan, using MAC layer bridging between Sites. Interconnection to Sites outside of those served from the assigned POP used for the NBC L2 MAN Service requires a GPS Entity to obtain the NBC ATM MAN to WAN Gateway Service or the NBC L2 MAN – Metro Gateway Service in order to integrate the MAN into such GPS Entity's metropolitan network.

2.2 The NBC L2 MAN Service will be provisioned using a fibre service facility from the POP to a GPS Entity Site, terminating on a CIU located in the master telephone room at such GPS Entity Site. In-building Service components required to install the NBC L2 MAN Service at that Site will be included to a maximum of $2,000. Optionally, the CIU may be located elsewhere within the building using GPS Entity-provided in-building Service components.

2.3 The CIU will be equipped with one port (see table below for port types) for connection to the equipment. The Service Demarcation will be at the LAN interface port on the CIU. The port types used for the NBC L2 MAN Service are

described in the following table:

Port type	NBC L2 MAN Service Bandwidths
10BaseT-FDX	NBC L2 MAN – 10Mbps
100BaseT-FDX	NBC L2 MAN – 100Mbps

3. Service Locations

3.1 Existing NBC L2 MAN Service serving areas will be grandfathered and no new NBC L2 MAN Service serving areas will be established.

4. GPS Entity Responsibilities

4.1 The NBC L2 MAN Service will be provisioned in accordance with IP addressing and routing standards and the GPS Entities will be responsible to ensure non-conflicting protocol address practices are maintained within the network plan.

4.2 If a GPS Entity provides the IP addresses, such GPS Entity will assign one IP address for use as the IP address of the CIU, and will also set that address as the default gateway for every device at that Site.

4.3 The GPS Entities will be responsible for any equipment or facilities required to complete the connection from the Service Demarcation and the GPS Entities' LAN in accordance with this Agreement.

Exhibit H5-A6

NBC L2 MAN – Metro Gateway Service

Service Title:	NBC L2 MAN – Metro Gateway Service
Service Number:	H5-A6

1. Service Title And Number

1.1 The Service Title and the Service Number of this specific Available Service are set out in the above table.

1.2 Where a Service Order or Service Change Order, in each case entered into in accordance with the terms of this Agreement, references such Service Title or such Service Number, TELUS will provide such GPS Entity with the NBC L2 MAN – Metro Gateway Service which includes all of the attributes, features, characteristics, components and service parameters described in this Exhibit H5-A6, unless expressly excluded or modified in the Service Order or Service Change Order.

1.3 The Service terms and conditions in this Exhibit apply only to the NBC L2 MAN – Metro Gateway Service, which consists of the following bandwidths:

NBC L2 MAN – Metro GW – 100 Mbps;
NBC L2 MAN – Metro GW – 200 Mbps;
NBC L2 MAN – Metro GW – 300 Mbps;
NBC L2 MAN – Metro GW – 400 Mbps;
NBC L2 MAN – Metro GW – 500 Mbps; and
NBC L2 MAN – Metro GW – 1000 Mbps.

2. Service Description

2.1 The NBC L2 MAN – Metro Gateway Service is a managed network service used for interconnection of the NBC L2 GigE Metro Service to the NBC L2 MAN Service and will be provided to the Province only.

2.2 The NBC L2 MAN – Metro Gateway Service provides virtual private network access that allows IP packets to transit the gateway and go to and from the MAN and metro VPN services, but prevents all other IP packets from entering or leaving the gateway to the interconnected MAN or metro services, except through GPS Entity authorization.

2.3 The NBC L2 MAN – Metro Gateway Service will be equipped with a CIU located within a Central Office for connection to the metropolitan network.

2.4 The CIU will be equipped with one port (see table below for port types) for

connection to the NBC L2 MAN Service. The port type used for the NBC L2 MAN – Metro Gateway Service is described in the following table:

Port type	**NBC L2 MAN - Metro Gateway Service Bandwidths**
1000Base-SX MMF	NBC L2 MAN – Metro GW – 100 Mbps NBC L2 MAN – Metro GW – 200 Mbps NBC L2 MAN – Metro GW – 300 Mbps NBC L2 MAN – Metro GW – 400 Mbps NBC L2 MAN – Metro GW – 500 Mbps NBC L2 MAN – Metro GW – 1000 Mbps

3. Service Locations

3.1 Notwithstanding any other provision of this Agreement, this Service is available only to the Province.

3.2 The Service Locations are any locations where both the NBC L2 MAN Service and the NBC GigE L2 Metro Service are available.

Exhibit H5-A7

NBC Enhanced LAN/WAN Option

1. Introduction

The NBC Enhanced LAN/WAN Option will be applicable to the Managed CPE Option.

2. Description

The following NBC Enhanced LAN/WAN Option will be available for use in conjunction with certain Data Services, and will be integrated into the GPS Entities' network plans. The Managed CPE Option will be selected and applied on a Site-by-Site and Service-by-Service basis.

3. Managed CPE Option

Under this option, optional CPE LAN components used to construct a GPS Entity's LAN infrastructure will be supplied and managed within a Site that is to be interconnected to other Sites using the associated Data Services. All optional CPE components will be integrated into the overall network plan. The Service Demarcation for each component will be at the LAN port(s) used to connect to a GPS Entity's equipment.

4. Service Levels

Service Levels for the associated Data Services will not be extended to include the Managed CPE Option**.**

Exhibit H5-A8

NBC Managed Enterprise Access (MEA) Service

Service Title:	NBC Managed Enterprise Access (MEA) Service
Service Number:	H5-A8

1. Service Title And Number

1.1 The Service Title and the Service Number of this specific Available Service are set out in the above table.

1.2 Where a Service Order or Service Change Order, in each case entered into in accordance with the terms of this Agreement, references such Service Title or such Service Number, TELUS will provide such GPS Entity with the NBC Managed Enterprise Access (MEA) Service which includes all of the attributes, features, characteristics, components and service parameters described in this Exhibit H5-A8, unless expressly excluded or modified in the Service Order or Service Change Order.

1.3 The Service terms and conditions in this Exhibit apply only to the NBC Managed Enterprise Access (MEA) Service, which consists of the following bandwidths:

NBC MEA – 56 Kbps;
NBC MEA – 128 Kbps;
NBC MEA – 256 Kbps;
NBC MEA – 512 Kbps;
NBC MEA - 1.5 Mbps;
NBC MEA – Asymmetric;
NBC MEA – 10 Mbps;
NBC MEA – 30 Mbps; and
NBC MEA – 100 Mbps.

2. Service Description

2.1 The NBC Managed Enterprise Access (MEA) Service is applicable to Sites that have high bandwidth requirements. Using the TELUS Data Network, this Service can deliver a GPS Entity's WAN connectivity between Service Locations. The NBC Managed Enterprise Access (MEA) Service provides virtual private network access that prevents routing of IP packets into or out of the VPN created by this Service, except through GPS Entity authorized gateway services or through GPS Entity-provided equipment connected to this Service.

2.2 The NBC Managed Enterprise Access (MEA) Service provides connectivity between the Site and the TELUS Data Network. The TELUS Data Network then

provides WAN connectivity between Service Locations. In addition, Internet connectivity can be delivered to the WAN network by adding an Internet gateway service.

2.3 The NBC Managed Enterprise Access (MEA) Service will be provisioned on a Site-by-Site basis, using a service facility from the POP to a GPS Entity Site, terminating on a CIU located in the master telephone room at such GPS Entity Site. In-building Service components required to install the NBC Managed Enterprise Access (MEA) Service at that GPS Entity Site will be included to a maximum of $2,000. Optionally, the CIU may be located elsewhere within the building using GPS Entity-provided in-building Service components.

2.4 The CIU will be equipped with one port for connection to the GPS Entity's LAN equipment. The Service Demarcation will be at the LAN interface port on the CIU. The port types used for the NBC Managed Enterprise Access (MEA) Service are described in the following table:

Port type	**NBC Managed Enterprise Access (MEA) Service Bandwidths**
10BaseT-HDX	NBC MEA– 56 Kbps NBC MEA– 128 Kbps NBC MEA– 256 Kbps NBC MEA– 512 Kbps NBC MEA– ASYMMETRIC NBC MEA– 1.5 Mbps
10BaseT-FDX	NBC MEA– 10 Mbps
100BaseT-FDX	NBC MEA– 30Mbps
100BaseT-HDX	NBC MEA– 100 Mbps

3. Service Locations

3.1 This Service will be available in locations, communities or cities where the Service is currently being delivered by TELUS.

Exhibit H5-A9

NBC Metro L3 VPN Service

Service Title:	NBC Metro L3 VPN Service
Service Number:	H5-A9

1. Service Title And Number

1.1 The Service Title and the Service Number of this specific Available Service are set out in the above table.

1.2 Where a Service Order or Service Change Order, in each case entered into in accordance with the terms of this Agreement, references such Service Title or such Service Number, TELUS will provide such GPS Entity with the NBC Metro L3 VPN Service which includes all of the attributes, features, characteristics, components and service parameters described in this Exhibit H5-A9, unless expressly excluded or modified in the Service Order or Service Change Order.

1.3 The Service terms and conditions in this Exhibit apply only to the NBC Metro L3 VPN Service, which consists of the following bandwidths:

NBC METRO L3 VPN – 10 Mbps;
NBC METRO L3 VPN – 30 Mbps;
NBC METRO L3 VPN – 100 Mbps;
NBC METRO L3 VPN – 200 Mbps;
NBC METRO L3 VPN – 300 Mbps;
NBC METRO L3 VPN – 400 Mbps;
NBC METRO L3 VPN – 500 Mbps; and
NBC METRO L3 VPN – 1000 Mbps.

2. Service Description

2.1 The NBC Metro L3 VPN Service is provisioned from the TELUS Data Network and used for interconnection of geographically disparate LANs using the IP for routing between Sites. The NBC Metro L3 VPN Service interconnects a GPS Entity's Sites within a single metropolitan area (a metropolitan area network of the GPS Entity or a GPS Entity MAN). The NBC Metro L3 VPN Service provides virtual private network access that prevents routing of IP packets into or out of the VPN created by this Service, except through GPS Entity authorized gateway services or through GPS Entity-provided equipment connected to this Service.

2.2 Interconnection of a GPS Entity's Sites between different metropolitan areas requires such GPS Entity to obtain the NBC Metro L3 VPN Gateway Service. Interconnection of a GPS Entity's Sites using the NBC Metro L3 VPN Service

and a GPS Entity's Sites using the NBC WAN L3 VPN Service for WANs also requires such GPS Entity to obtain the NBC Metro L3 VPN Gateway Service. The NBC Metro L3 VPN Service is provisioned on a Site-by-Site basis, using a service facility from the POP to a GPS Entity Site, terminating on a CIU located in the master telephone room at such GPS Entity Site.

2.3 In-building Service components required to install the NBC Metro L3 VPN Service at a GPS Entity Site will be included to a maximum of $2,000. Optionally, the CIU may be located elsewhere within the building using GPS Entity-provided in-building Service components.

2.4 The CIU will be equipped with one port for connection to a GPS Entity's LAN equipment. The Service Demarcation will be at the LAN interface port on the CIU. The port types used for the NBC Metro L3 VPN Service are described in the following table:

Port type	**NBC Metro L3 VPN Service Bandwidths**
10BaseT-FDX	NBC Metro L3 VPN – 10 Mbps
100BaseT-FDX	NBC Metro L3 VPN – 30 Mbps NBC Metro L3 VPN – 100 Mbps
1000Base-SX MMF/ 1000Base-LX SMF	NBC Metro L3 VPN – 100 Mbps NBC Metro L3 VPN – 200 Mbps NBC Metro L3 VPN – 300 Mbps NBC Metro L3 VPN – 400 Mbps NBC Metro L3 VPN – 500 Mbps NBC Metro L3 VPN – 1000 Mbps

2.5 The NBC Metro L3 VPN Service is Quality of Service enabled. "Basic - Assured Forwarding" Quality of Service and "Premium - Expedited Forwarding" Quality of Service are described in Exhibit H5-A12.

3. GPS Entity Responsibilities

3.1 The NBC Metro L3 VPN Service will be provisioned in accordance with IP addressing and routing standards and the GPS Entities will be responsible to ensure non-conflicting protocol address practices are maintained within the network plan. If a GPS Entity provides the IP addresses, such GPS Entity will assign one IP address for use as the IP address of the CIU, and will also set that address as the default gateway for every device at that Site.

3.2 The GPS Entities will be responsible for any equipment or facilities required to complete the connection from the Service Demarcation and the GPS Entities' LAN.

4. Service Locations

4.1 A location is or becomes a Service Location for this Service if one or more GPS Entities are receiving this Service in that Service Location.

Exhibit H5-A10

NBC Metro L3 VPN Gateway Service

Service Title:	NBC Metro L3 VPN Gateway Service
Service Number:	H5-A10

1. Service Title And Number

1.1 The Service Title and the Service Number of this specific Available Service are set out in the above table.

1.2 Where a Service Order or Service Change Order, in each case entered into in accordance with the terms of this Agreement, references such Service Title or such Service Number, TELUS will provide such GPS Entity with the NBC Metro L3 VPN Gateway Service which includes all of the attributes, features, characteristics, components and service parameters described in this Exhibit H5-A10, unless expressly excluded or modified in the Service Order or Service Change Order.

1.3 The Service terms and conditions in this Exhibit apply only to the NBC Metro L3 VPN Gateway Service, which consists of the following bandwidths:

NBC Metro L3 VPN Gateway – 10 Mbps;
NBC Metro L3 VPN Gateway – 30 Mbps;
NBC Metro L3 VPN Gateway – 100 Mbps;
NBC Metro L3 VPN Gateway – 200 Mbps;
NBC Metro L3 VPN Gateway – 300 Mbps;
NBC Metro L3 VPN Gateway – 400 Mbps;
NBC Metro L3 VPN Gateway – 500 Mbps; and
NBC Metro L3 VPN Gateway – 1000 Mbps.

2. Service Description

2.1 The NBC Metro L3 VPN Gateway Service is provisioned from the TELUS Data Network. The NBC Metro L3 VPN Gateway Service provides a gateway between: (a) a GPS Entity's Sites interconnected by the NBC Metro L3 VPN Service within a single metropolitan area (a metropolitan area network of the GPS Entity or a GPS Entity L3 MAN) and a GPS Entity's Sites interconnected by the NBC WAN L3 VPN Service in different metropolitan areas (a wide area network of the GPS Entity or a GPS Entity WAN); or (b) a GPS Entity L3 MAN in one metropolitan area and GPS Entity L3 MANs in other metropolitan areas. A GPS Entity will obtain the NBC Metro L3 VPN Gateway Service for each GPS Entity L3 MAN that such GPS Entity wishes to interconnect. The city or other metropolitan area specified in a Service address for an NBC Metro L3 VPN

Gateway Service identifies the location of the GPS Entity L3 MAN being interconnected and otherwise, that Service address is for information only and does not define or limit the NBC Metro L3 VPN Gateway Service.

2.2 The NBC Metro L3 VPN Gateway Service provides virtual private network access that allows IP packets to transit the gateway and go to and from the MAN and WAN services, but prevents all other IP packets from entering or leaving the gateway, except through GPS Entity authorization.

2.3 The NBC Metro L3 VPN Gateway Service is Quality of Service enabled. "Basic - Assured Forwarding" Quality of Service and "Premium - Expedited Forwarding" Quality of Service are described in Exhibit H5-A12.

3. Service Locations

3.1 A location is or becomes a Service Location for this Service if one or more GPS Entities are receiving this Service in that Service Location.

Exhibit H5-A11

NBC Private Network Gateway (PNG) Service

Service Title:	NBC Private Network Gateway (PNG) Service
Service Number:	H5-A11

1. Service Title And Number

1.1 The Service Title and the Service Number of this specific Available Service are set out in the above table.

1.2 Where a Service Order or Service Change Order, in each case entered into in accordance with the terms of this Agreement, references such Service Title or such Service Number, TELUS will provide such GPS Entity with the NBC Private Network Gateway (PNG) Service which includes all of the attributes, features, characteristics, components and service parameters described in this Exhibit H5-A11, unless expressly excluded or modified in the Service Order or Service Change Order.

2. Service Description

2.1 The NBC Private Network Gateway (PNG) Service is composed of two elements: the Service and the access used for the interconnection of the networks of separate TELUS customers.

2.2 The NBC Private Network Gateway (PNG) Service is provisioned through the TELUS Data Network, enabling GPS Entity interconnection with any number of other NBC Private Network Gateway (PNG) Service customers. TELUS will provide a virtual connection using a GPS Entity's access service from a GPS Entity Site, to a redundant Private Network Gateway core infrastructure. The Service Demarcation is at the Private Network Gateway core infrastructure router. Once connected to the core infrastructure, a GPS Entity will have the ability to connect to the networks of other TELUS customers with the NBC Private Network Gateway (PNG) Service, as long as both parties have expressed their intention to establish a connection by submitting a private network gateway interconnection request form.

2.3 Where two or more GPS Entities have conflicting IP address number ranges, TELUS will work with the GPS Entities to ensure that any and all conflict issues are resolved.

3. GPS Entity Responsibilities

3.1 A signed private network gateway interconnection request form must be submitted with the Service Order to TELUS before any requests for the NBC Private Network Gateway (PNG) Service are processed and provided. The

submitted form described the specifics of the interconnection, including the third party with whom the GPS Entity intends to interconnect, and the degree of interconnection requested. The form must be completed by each party requesting the interconnection.

4. Restrictions and Termination

4.1 A GPS Entity must subscribe to the NBC Managed Enterprise Access (MEA) Service in order to subscribe to the NBC Private Network Gateway (PNG) Service.

4.2 Either a GPS Entity or the party being connected to may terminate the interconnection of their respective networks and the NBC Private Network Gateway (PNG) Service at any time by submitting a private network gateway interconnection request form with the termination section completed. Following receipt of the form requesting termination, TELUS will terminate the interconnection without notice to either the GPS Entity or the party being connected to. The GPS Entity and the party being connected to must provide notification of termination to the other party. The termination of an individual interconnection does not terminate the NBC Private Network Gateway (PNG) Service as a whole and does not result in any liability for termination fees.

4.3 This Service will be grandfathered as a unique custom solution. No new PNG core instances will be created.

Exhibit H5-A12

NBC IP Quality of Service (QoS)

1. Introduction

The terms and conditions in this Exhibit apply only to the following QoS options:

NBC IP QoS Basic – included with all QOS enabled Data Services;
NBC IP QoS Premium – EF WAN Mbps option; and
NBC IP QoS Premium – EF Metro Mbps option.

2. Feature Description

2.1 Basic - Assured Forwarding

2.1.1 "Basic - Assured Forwarding" Quality of Service allows a GPS Entity to separate and prioritize its network traffic among three different traffic priority classes. Traffic will be prioritized according to weightings for each AF class in order to manage network congestion and performance. The operation of AF is different for 'Full Speed Access' and 'Fractional Speed Access'.

2.1.2 *Full Speed Access*

2.1.2.1 'Full Speed Accesses' use the full bandwidth of the access interface (i.e. 10, 100 and 1000 Mbps Ethernet). These accesses are assigned weights of 85% for AF3, 12% for AF2 and 3% for AF1. These weights indicate the maximum percentage of available bandwidth for that AF class in the event of network congestion. The assigned weights per class are not changeable. During congestion, bandwidth not consumed by one AF class will be distributed among the other AF classes.

2.1.3 *Fractional Speed Access*

2.1.3.1 'Fractional Speed Accesses' offer bandwidth below the native speed of the access interface (i.e. 30 Mbps, 200 Mbps, 300 Mbps, 400 Mbps and 500 Mbps). A GPS Entity defines the amount of bandwidth for each AF class. Each AF class is fixed and cannot be exceeded or shared if it is unused. A GPS Entity defines the amount of bandwidth in increments of 1 Mbps for 30 Mbps accesses and 10 Mbps for 200 Mbps, 300 Mbps, 400 Mbps and 500 Mbps accesses. For all fractional speed accesses, the aggregate bandwidth for all AF classes cannot exceed the bandwidth of the access service.

2.2 Premium - Expedited Forwarding

2.2.1 'QoS Premium' options are provided and used only in conjunction with QoS enabled Data Services. QoS options allow a GPS Entity the ability to separate and prioritize its traffic when sent across the TELUS Data Network, using the associated QoS enabled Data Service(s), between GPS Entity Sites to which a 'QoS Premium' option applies.

2.2.2 A GPS Entity must select and subscribe to the minimum number of bandwidth increments to support its volume of traffic in the applications identified by such GPS Entity as its highest priority applications ("**EF QoS Traffic**"). EF QoS Traffic exceeding the subscribed amount of bandwidth will be dropped. In the TELUS Data Network, the EF class of traffic receives priority over AF and all lower classes of traffic.

2.2.3 A GPS Entity will select and subscribe to, and TELUS will provide and charge for, QoS options on a Site-by-Site and Service-by-Service basis, (where "Service-by-Service" means a QoS enabled Data Service), and a GPS Entity will select and subscribe to a QoS option at a minimum of two of its GPS Entity Sites. The specific QoS option subscribed to by a GPS Entity will be dependent on the type of QoS enabled Data Service associated with the QoS option at the GPS Entity Site. The fixed monthly charge will be dependent on the amount of bandwidth increments subscribed to by a GPS Entity, and if a GPS Entity increases or decreases the number of bandwidth increments, TELUS will adjust the fixed monthly charge accordingly. A GPS Entity may add QoS options at additional GPS Entity Sites.

2.2.4 A GPS Entity will subscribe to EF priority bandwidth in specific increments. The increments that can be subscribed for a QoS enabled MEA are dependent on the MEA type. For the ADSL-based and circuit-based MEAs, EF priority bandwidth increments available for subscription have been documented in their respective service descriptions. EF priority bandwidth increments that can be subscribed for fiber-based MEAs are shown in Table 1 below. For extended fiber-based MEAs, only E-10 HDX, E-10 FDX, E-30 HDX and E-30 FDX would apply.

Table 1

IP Networks Access Type	EF Bandwidth Increments
WAN/Metro VPN 10 Mbps	1, 2, 3 or 5
WAN/Metro VPN 30 Mbps	1, 2, 3, 5, 10 or 20
WAN/Metro VPN 100 Mbps	1, 2, 3, 5, 10, 20, 30 or 50
WAN/Metro VPN 200 Mbps	10, 20, 30, 50 or 100
WAN/Metro VPN 300 Mbps	10, 20, 30, 50 or 100
WAN/Metro VPN 400 Mbps	10, 20, 30, 50, 100 or 200
WAN/Metro VPN 500 Mbps	10, 20, 30, 50, 100 or 200
WAN/Metro VPN 1000 Mbps	10, 20, 30, 50, 100, 200 or 300

2.2.5 The operation of EF is different for 'Full Speed Access' and 'Fractional Speed Access'.

2.2.6 *Full Speed Access*

2.2.6.1 'Full Speed Accesses' use the full bandwidth of the access interface (i.e. 10 Mbps, 100 Mbps and 1000 Mbps Ethernet). For full speed accesses, EF priority bandwidth that is not used is available to AF priority queues.

2.2.7 *Fractional Speed Access*

2.2.7.1 'Fractional Speed Accesses' subscribe to bandwidth below the native speed of the access interface (i.e. 30 Mbps, 200 Mbps, 300 Mbps and 400 Mbps accesses). For fractional speed accesses, EF priority bandwidth that is not used is not available to AF priority queues. The aggregate bandwidth for EF and AF classes cannot exceed the bandwidth for the underlying Data Service.

3. Packet Classification and Marking

3.1 IP packets from a GPS Entity's network are classified by TELUS in the CIU for QoS treatment. TELUS configures the CIU to classify traffic on the basis of certain criteria, arranged for on a GPS Entity-specific basis. Packet classification can be implemented based on a number of criteria, including:

3.1.1 value of the Type of Service (ToS) field in the IP packet incoming from a GPS Entity 's LAN;

3.1.2 input Ethernet interface (only if a separate Ethernet interface is dedicated for a GPS Entity's priority EF traffic); and

3.1.3 source IP address, destination IP address, UDP port numbers, and/or TCP port numbers (a maximum of five (5) entries or matching criteria per traffic class is allowed for this option).

3.2 A combination of these classification criteria may be employed on a CIU for a Data Service.

3.3 This marking capability can be performed on both the ingress and egress direction from the TELUS Data Network. This means that packets that have been marked going into the TELUS Data Network (ingress) can then be remarked leaving the TELUS Data Network at the destination (egress). For GPS Entities wishing to use their own IP Precedence Marking within their network, marking on the ingress and egress can be used to ensure transparency from the GPS Entities' perspectives as well as meeting TELUS Data Network QoS marking requirements.

3.4 TELUS employs the 3-bit IP Precedence Marking in the ToS field within a GPS Entity's IP packet to carry TELUS specified values that effect relative priority treatment within the TELUS Data Network. After classification, the ToS field of a

GPS Entity's IP packets is marked by TELUS with TELUS specified values. The ToS IP Precedence Marking will be between the range of 5 and 2. GPS Entities already marking the ToS field of their IP packets outside of this range will have their packets remarked to conform with TELUS standards. The following table provides the ToS value for each QoS option type:

Table 2

TELUS IP Traffic Class	ToS IP Precedence Marking	Actual IP Precedence Bit Value
EF Expedited Forwarding	5	101
AF3 Urgent Data	4	100
AF2 Routine Data	3	011
AF1 Non-urgent Data	2	010

3.5 The following table provides the remarked ToS values for GPS Entity marked ToS field values out of specified range:

Table 3

ToS (IP Precedence) in GPS Entity's IP Packet	Remark ToS (IP Precedence) As	TELUS IP Traffic Class
7	4	AF3 Urgent Data
6	4	AF3 Urgent Data
1	2	AF1 Non-urgent Data
0	2	AF1 Non-urgent Data

3.6 Table 3 above provides a general policy of how packets can be remarked from a GPS Entity's network. Out-of-range IP Precedence Marking rules can be negotiated on a per GPS Entity basis. For GPS Entities that do not subscribe to the 'QoS Premium' option (EF class), out-of-range packets will only be remarked to AF traffic classes. However, care should be taken with any GPS Entities that mark their own IP ToS fields to ensure that they comply with TELUS standards. There is a risk of unexpected traffic behaviours for GPS Entities that choose to mark their IP ToS fields with values outside of the specified range. In addition, the out-of-range ToS values will be remarked and lost as the IP packets traverse through the TELUS Data Network. However, the packet can then be remarked at the destination end according to the marking criteria outlined above.

Exhibit H5-A13

NBC WAN L3 VPN Service

Service Title:	NBC WAN L3 VPN Service
Service Number:	H5-A13

1. Service Title And Number

1.1 The Service Title and the Service Number of this specific Available Service are set out in the above table.

1.2 Where a Service Order or Service Change Order, in each case entered into in accordance with the terms of this Agreement, references such Service Title or such Service Number, TELUS will provide such GPS Entity with the NBC WAN L3 VPN Service which includes all of the attributes, features, characteristics, components and service parameters described in this Exhibit H5-A13, unless expressly excluded or modified in the Service Order or Service Change Order.

1.3 The Service terms and conditions in this Exhibit apply only to the NBC WAN L3 VPN Service, which consists of the following bandwidths:

NBC WAN L3 VPN – 56 Kbps;
NBC WAN L3 VPN – 128 Kbps;
NBC WAN L3 VPN – 256 Kbps;
NBC WAN L3 VPN – 512 Kbps;
NBC WAN L3 VPN – ASYMMETRIC;
NBC WAN L3 VPN – 1.5 Mbps;
NBC WAN L3 VPN – 10 Mbps;
NBC WAN L3 VPN – 30 Mbps;
NBC WAN L3 VPN – 100 Mbps;
NBC WAN L3 VPN – 200 Mbps;
NBC WAN L3 VPN – 300 Mbps;
NBC WAN L3 VPN – 400 Mbps;
NBC WAN L3 VPN – 500 Mbps; and
NBC WAN L3 VPN – 1000 Mbps.

2. Service Description

2.1 The NBC WAN L3 VPN Service is provisioned from the TELUS Data Network and is used for interconnection of geographically disparate LANs using the Internet Protocol (IP) for routing between Sites in a unique WAN plan. The NBC WAN L3 VPN Service interconnects a GPS Entity's Sites in different metropolitan areas. The NBC WAN L3 VPN Service provides virtual private network access that prevents routing of IP packets into or out of the VPN created by this Service, except through GPS Entity authorized gateway services or through GPS Entity-provided equipment connected to this Service.

2.2 The NBC WAN L3 VPN Service is provisioned on a Site-by-Site basis, using a service facility from the POP to a GPS Entity Site, terminating on a CIU located in the master telephone room at such GPS Entity Site. In-building Service components required to install the NBC WAN L3 VPN Service at a GPS Entity Site will be included to a maximum of $2,000. Optionally, the CIU may be located elsewhere within the building using GPS Entity-provided in-building Service components.

2.3 The CIU will be equipped with one port for connection to a GPS Entity's LAN equipment. The Service Demarcation will be at the LAN interface port on the CIU. The port types used for the NBC WAN L3 VPN Service are described in the following table:

Port type	**NBC WAN L3 VPN Service Bandwidths**
10BaseT-HDX	NBC WAN L3 VPN – 56 Kbps* NBC WAN L3 VPN – 128 Kbps NBC WAN L3 VPN – 256 Kbps NBC WAN L3 VPN – 512 Kbps NBC WAN L3 VPN – ASYMMETRIC NBC WAN L3 VPN – 1.5 Mbps
10BaseT-FDX	NBC WAN L3 VPN – 10 Mbps
100BaseT-FDX	NBC WAN L3 VPN – 30 Mbps NBC WAN L3 VPN – 100 Mbps
1000Base-SX MMF/ 1000Base-LX SMF	NBC WAN L3 VPN – 100 Mbps NBC WAN L3 VPN – 200 Mbps NBC WAN L3 VPN – 300 Mbps NBC WAN L3 VPN – 400 Mbps NBC WAN L3 VPN – 500 Mbps NBC WAN L3 VPN – 1000 Mbps

*Note: * QoS is not available.*

2.4 The NBC WAN L3 VPN Service is Quality of Service enabled. "Basic - Assured Forwarding" Quality of Service and "Premium - Expedited Forwarding" Quality of Service are described in Exhibit H5-A12.

3. GPS Entity Responsibilities

3.1 The NBC WAN L3 VPN Service will be provisioned in accordance with IP addressing and routing standards and the GPS Entities will be responsible to ensure non-conflicting protocol address practices are maintained within the network plan. If a GPS Entity provides the IP addresses, such GPS Entity will assign one IP address for use as the IP address of the CIU, and will also set that address as the default gateway for every device at that Site.

3.2 The GPS Entities will be responsible for any equipment or facilities required to complete the connection from the Service Demarcation and the GPS Entities' LAN.

4. Availability and Degradation - NBC WAN L3 VPN – ASYMMETRIC

4.1 If TELUS determines during installation at a GPS Entity Site that the telephone line loop is unsuitable for any asymmetric Services, those asymmetric Services will be terminated, the termination charge waived and any installation Fees returned to the GPS Entity. If a GPS Entity experiences Service degradation subsequent to installation, even where the telephone line has been qualified, TELUS will investigate the cause of the degradation and will attempt to provide a suitable workaround. If a suitable workaround cannot be found or reasonably implemented, then the GPS Entity will have the option to terminate the affected asymmetric Services without incurring any termination charge.

5. Service Locations

5.1 A location is or becomes a Service Location for this Service if one or more GPS Entities are receiving this Service in that Service Location.

Exhibit H5-A14

NBC Ethernet Bridged ADSL Service

Service Title:	NBC Ethernet Bridged ADSL Service
Service Number:	H5-A14

1. Service Title And Number

1.1 The Service Title and the Service Number of this specific Available Service are set out in the above table.

1.2 Where a Service Order or Service Change Order, in each case entered into in accordance with the terms of this Agreement, references such Service Title or such Service Number, TELUS will provide such GPS Entity with the NBC Ethernet Bridged ADSL Service which includes all of the attributes, features, characteristics, components and service parameters described in this Exhibit H5-A14, unless expressly excluded or modified in the Service Order or Service Change Order.

2. Service Description & Demarcation

2.1 TELUS provides ADSL technology over an existing (or new) copper-based individual business line, terminating on a DSLAM in the Central Office. ADSL is rate adaptive with specified minimums of 128 Kbps upstream and 640 Kbps downstream. Typically, this Service access is bridged to the NBC L2 Managed Enterprise Access (MEA) Service at a designated regional network center within the same wide area zone.

2.2 An ADSL modem will be installed as a CIU in a Site's master telephone room. The CIU will be equipped with one port for connection to a GPS Entity's LAN. The Service Demarcation will be at the LAN interface port on the CIU as described in the following table:

Port type	
10BaseT-HDX	NBC Ethernet Bridged ADSL Service

3. Availability and Degradation

3.1 If TELUS determines during installation at a GPS Entity Site that the telephone line loop is unsuitable for this Service, the Service Order associated with this Service will be terminated. The termination charge will be waived by TELUS and any installation Fees will not be charged to such GPS Entity.

3.2 If a GPS Entity experiences service degradation subsequent to installation, even where the telephone line has been qualified, TELUS will investigate the cause of the degradation and will attempt to provide a suitable workaround. If a suitable

workaround cannot be found or reasonably implemented, then the GPS Entity will have the option to terminate the affected this Service without incurring any termination charge.

4. Service Locations

4.1 A location is or becomes a Service Location for this Service if one or more GPS entities are receiving this Service in that Service Location.

Attachment H5-B
Internet and Security Services

Service Title:	Internet and Security Services
Service Number:	H5-B

1. Service Title And Number

1.1 The Service Title and the Service Number of this specific Available Service are set out in the above table.

1.2 Where a Service Order or Service Change Order, in each case entered into in accordance with the terms of this Agreement, references such Service Title or such Service Number, TELUS will provide such GPS Entity with Internet and Security Services which include all of the attributes, features, characteristics, components and service parameters described in this Attachment H5-B (including all Exhibits to this Attachment), unless expressly excluded or modified in the Service Order or Service Change Order.

2. Introduction

2.1 This document describes the common features of the Internet Services and optional features and services available for the Internet and Security Services. Details specific to distinct services are found in separate Exhibits to this Attachment. Internet Services are categorized into the following three distinct Services:

2.1.1 Custom Carrier Internet Direct Service (Exhibit H5-B1);

2.1.2 Business Internet Access Service (Exhibit H5-B2); and

2.1.3 Business Internet Gateway Service (Exhibit H5-B3).

2.2 There are also optional services that relate to the security of the Internet and Security Services, which are:

2.2.1 Managed Network Intrusion Prevention Service (H5-B7);

2.2.2 Managed Web Security Service (H5-B8); and

2.2.3 Managed Firewall Service (H5-B10).

3. Service Description

3.1 Custom Carrier Internet Direct Service

The Custom Carrier Internet Direct Service provides GPS Entities with high speed Internet access in excess of 1 Gbps in an arrangement where TELUS and the GPS Entity exchange Border Gateway Protocol (BGP) routing information and access is provided within a Rate Band 0 location.

Further detail can be found in Exhibit H5-B1 (Custom Carrier Internet Direct Service).

3.2 Business Internet Access Service

The Business Internet Access Service delivers Internet access to a GPS Entity via a TELUS-managed CPE router. Diverse pathways are used to provide network resiliency. The Business Internet Access Service does not share facilities with STS WAN L3 VPN Services.

Further detail can be found in Exhibit H5-B2 (Business Internet Access Services).

3.3 Business Internet Gateway Service

The Business Internet Gateway Service delivers Internet access to a GPS Entity via an existing STS WAN L3 VPN Service, leveraging a separate VPN for Internet traffic.

Further detail can be found in Exhibit H5-B3 (Business Internet Gateway Service).

4. Common Features for Internet Services

4.1 Internet Services are interoperable with the Internet.

4.2 Connectivity is provided via TELUS' Internet distribution routers.

4.3 Service availability will be provided in accordance with Schedule J to this Agreement.

4.4 TELUS will provide an Internet Service interface with one port in accordance with Exhibit H5-E2 (Ethernet Interfaces).

4.5 Internet traffic will be marked and classified with a ToS bit = 0 and a CoS bit = 0.

4.6 To prevent advertising of false IP routes to the Internet, all dynamically learned routes will be filtered at TELUS' distribution routers before being advertised to the Internet.

4.7 TELUS will support the Classless Inter-Domain Routing (CIDR) blocks feature for assignment to GPS Entities. When IP addressing at a particular Site is provided entirely by the GPS Entity, TELUS will route a single, GPS Entity-provided IP network number for that Site.

4.7.1 CIDR block addresses will be provided to the GPS Entity for the term during which TELUS provides the Service to the GPS Entity. A GPS Entity-provided network number is and will remain the property of the GPS Entity.

4.8 TELUS will maintain complete control of the Internet routing of GPS Entity-provided IP addresses.

4.9 TELUS may have to limit the number of network numbers that can be acquired at any given time or during a time interval (such as one year) based on TELUS' or Internet limitations.

4.10 The following table is a feature comparison of the three Internet Services:

Feature	**Business Internet Access Service**	**Business Internet Gateway Service**	**Custom Carrier Internet Direct Service**
Dedicated Facility	**Yes**	**No**	**Yes**
CPE	**Yes**	**Included as part of the STS WAN L3 VPN Services**	**No**
Maintenance Access Line	**Yes**	**Included as part of the STS WAN L3 VPN Services**	**No**
OSPF	**Yes**	**Yes**	**No**
RIP	**Yes**	**Yes**	**No**
BGP	**Yes**	**Yes**	**Yes**
EIGRP	**Yes**	**Yes**	**No**
HSRP	**Yes**	**Yes**	**No**
IPv4	**Yes**	**Yes**	**Yes**
IPv6	**Yes**	**Yes**	**Yes**

5. Service Standards

5.1 TELUS will ensure that the Internet Services listed in section 4.10 comply with the following published standards as applicable:

5.1.1 RFC 2328 for IPv4 (OSPF);

5.1.2 RFC 4271 BGP;

5.1.3 RFC 2453 Routing Information Protocol (RIP) version 2;

5.1.4 Enhanced Interior Gateway Routing Protocol (EIGRP);

5.1.5 RFC 2281 Cisco Hot Standby Router Protocol (HSRP) or equivalent;

5.1.6 IPv6 RFC 5340, 2460 unicast, 4291 and 4659; and

5.1.7 IPv4 RFC 791, 1918 (optional), 3022 / NAT.

6. GPS Entity Responsibilities

6.1 TELUS will provide the Internet Services in accordance with TELUS IP addressing and routing standards, and the GPS Entities will ensure that non-conflicting LAN address practices are maintained within the network plan.

6.2 If a GPS Entity provides the IP addresses, such GPS Entity will assign one IP address for use by the CPE, and will also set that address as the default gateway for every device at that Site. If TELUS provides the IP addresses to a GPS Entity, those addresses will be provided in accordance with TELUS' internal practices.

6.3 The GPS Entities will be responsible for any equipment, facilities or any necessary Site preparation required to complete the connection between the Service Demarcation and the GPS Entities' LAN for the applicable Internet Service.

7. Included Optional Features

7.1 TELUS will make each of the optional features of the Internet Services set out in the table below available to all GPS Entities at no additional cost to the GPS Entities. Where an optional feature has been selected by a GPS Entity in a Service Order or Service Change Order, then TELUS will provide such optional feature as part of the Internet Services ordered without any additional Fee for such feature.

No.	Optional Feature Title	Description	Special Terms and Conditions
1	OSPF Option	This option provides a GPS Entity network with the OSPF dynamic routing protocol. GPS Entity traffic is transmitted to the Internet via TELUS' Internet Services. The CPE at the GPS Entity's Site is enabled with OSPF on the side facing the GPS Entity's LAN.	This option is not a feature of the Custom Carrier Internet Direct Service.
2	RIP v2 Option	This option provides a GPS Entity network with the RIP v2 dynamic routing protocol. GPS Entity traffic is transmitted to the Internet via TELUS' Internet Services. The CPE at the GPS Entity's Site is enabled with RIP v2 on the side facing the GPS Entity's LAN.	This option is not a feature of the Custom Carrier Internet Direct Service. This option is not available with service bandwidths lower than 10 Mbps.
3	NAT Option	The Network Address Translation (NAT) option enables network address translation so that a GPS Entity's private network that uses private IP address spaces can communicate with other GPS Entity networks over the Internet. The address translation is required if the GPS Entity is employing RFC 1918 private IP addresses. A "many-to-two translation" is used, in which only two public (Internet) IP addresses are assigned to business Internet ADSL GPS Entities. The GPS Entity's private IP addresses are translated into two global (Internet) IP addresses by using NAT with Port Address Translation (PAT) of global addressing in order to communicate with the Internet.	This option is not a feature of the Custom Carrier Internet Direct Service. The NAT option is not available on Internet Services at bandwidths greater than 100 Mbps. The NAT option is provided via the request for quote process pursuant to section 7.3 of the Agreement. CPE upgrade charges may apply. This option cannot be used in conjunction with IPSec traffic. For IPSec traffic, GPS Entities will need to use their own NAT outside of the Internet Services.
4	GPS Entity Filter Option	This option provides up to five GPS Entity specific filters acting on network level addresses for routed protocols to prevent delivery of undesirable traffic.	This option is not a feature of the Custom Carrier Internet Direct Service.

No.	Optional Feature Title	Description	Special Terms and Conditions
5	Primary and Secondary DNS Option	TELUS will, upon request of the GPS Entity, provide primary and secondary DNS services.	
6	Reverse Domain Name Server (DNS)	Reverse DNS involves determining the host and domain name which belongs to a given IP address.	
7	Routing	Both static and OSPF routing are available, but only one type can be used with a particular Internet Service.	This option is not a feature of the Custom Carrier Internet Direct Service.
8	Classless Inter-Domain Routing (CIDR)	TELUS supports the CIDR blocks feature for assignment to GPS Entities. When IP addressing at a particular Site is provided entirely by the GPS Entity, TELUS will route a single, GPS Entity-provided IP network number for that Site.	CIDR block addresses are provided to the GPS Entity for the period during which TELUS provides the Internet Services to the GPS Entity. A GPS Entity-provided network number is and will remain the property of the GPS Entity. TELUS will have sole discretion as to the Internet routing of GPS Entity-provided IP addresses. Network number availability may be periodically adjusted by TELUS. TELUS may have to limit the number of network numbers that can be acquired at any given time or during a time interval (such as one year) based on CIDR with respect to TELUS' and/ or Internet limitations.
9	BGP Routing	The GPS Entity will use Border Gateway Protocol (BGP) routing.	BGP is included in the Fees associated with the Custom Carrier Internet Service.

Any special terms and conditions with respect to an optional feature set out in the table above will apply with respect to such optional feature.

8. Fee-Based Optional Services and Features

TELUS will make each of the fee-based optional Services or features for Internet and Security Services set out in the table below available to all GPS Entities at the additional price stated for each of the Services/features in the Price Book. Where a fee-based optional Service or feature has been selected by a GPS Entity in a Service Order or

Service Change Order, then TELUS will provide such fee-based optional Service or feature as part of the Internet and Security Services ordered.

No.	Optional Feature Title	Description	Special Terms and Conditions
1	BGP Routing	The GPS Entity may select Border Gateway Protocol (BGP) routing.	BGP is a fee-based optional feature for Business Internet Access Service and Business Internet Gateway Service. The BGP routing option is available for Internet Services with bandwidths of 10 Mbps and above.
2	Managed Network Intrusion Prevention Service	TELUS' Managed Network Intrusion Prevention Service protects network infrastructure and critical systems against the constantly evolving threats facing organizations today, detecting and blocking known and unknown attacks.	This Service is described in Exhibit H5-B7.
3	Managed Web Security Service	The Managed Web Security Service is a gateway (e.g. network perimeter) capability that allows the GPS Entities to proactively protect their networks by analyzing, managing and reporting on metrics	This Service is described in Exhibit H5-B8.
4	Managed Firewall Service	TELUS' Managed Firewall Service is a subscription-based managed service.	This Service is described in Exhibit H5-B10.

Any special terms and conditions with respect to an optional Service or feature set out in the table above will apply with respect to such optional Service or feature.

Exhibit H5-B1
Custom Carrier Internet Direct Service

Service Title:	Custom Carrier Internet Direct Service
Service Number:	H5-B1

1. Service Title And Number

1.1 The Service Title and the Service Number of this specific Available Service are set out in the above table.

1.2 Where a Service Order or Service Change Order, in each case entered into in accordance with the terms of this Agreement, references such Service Title or such Service Number, TELUS will provide such GPS Entity with a Custom Carrier Internet Direct Service which includes all of the attributes, features, characteristics, components and service parameters described in this Exhibit H5-B1, unless expressly excluded or modified in the Service Order or Service Change Order.

2. Service Description

2.1 This Service provides an Internet Protocol (IP) transit service at bandwidths of 1, 2, 4, 5 and 10 Gbps as noted in the table in section 2.4. This Service provides connectivity to the Internet from the GPS Entity's network via an ethernet connection at a TELUS POP, in accordance with section 3.4 of this Exhibit.

2.2 The Service availability is limited to Rate Band 0 locations for bandwidths in excess of 1 Gbps.

2.3 This Service provides connectivity to the Internet via TELUS' IP network AS 852.

2.4 Available bandwidth options are described in the following table (some options may not be available at certain locations):

Custom Carrier Internet Direct Services	Description
Custom Carrier Internet Direct 1 Gbps	1 Gbps full-duplex connectivity to the Internet.
Custom Carrier Internet Direct 2 Gbps	2 Gbps full-duplex connectivity to the Internet.
Custom Carrier Internet Direct 4 Gbps	4 Gbps full-duplex connectivity to the Internet.
Custom Carrier Internet Direct 5 Gbps	5 Gbps full-duplex connectivity to the Internet.
Custom Carrier Internet Direct 10 Gbps	10 Gbps full-duplex connectivity to the Internet.

3. Components of the Custom Carrier Internet Direct Service

The Custom Carrier Internet Direct Service is composed of:

3.1 A connection to an Ethernet port on the TELUS core Internet gateway router located in a POP.

3.2 If the GPS Entity's Site is within the POP's serving area, an optional dual single mode fibre from the POP to the GPS Entity Site.

3.3 If the option in section 3.2 cannot be provided by TELUS, then an Optical Ethernet Service (Attachment H5-C) will be provided.

3.4 The demarcation for the Custom Carrier Internet Direct Service will be an optical interconnection providing an IEEE 802.3ae-2002 optical path to the Internet gateway router in the TELUS POP or the Ethernet Interface of the Optical Ethernet Service.

4. Service Support Features

4.1 There are no service support features with this Service.

Exhibit H5-B2
Business Internet Access Service

Service Title:	**Business Internet Access Service**
Service Number:	H5-B2

1. Service Title And Number

1.1 The Service Title and the Service Number of this specific Available Service are set out in the above table.

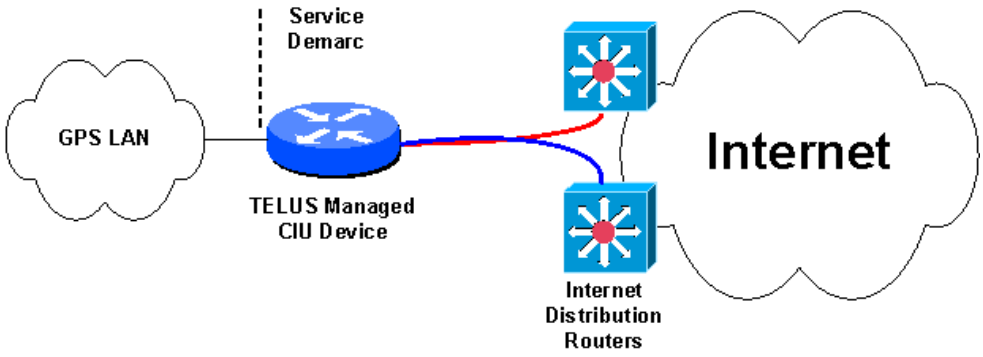
1.2 Where a Service Order or Service Change Order, in each case entered into in accordance with the terms of this Agreement, references such Service Title or such Service Number, TELUS will provide such GPS Entity with the Business Internet Access Service, which includes all of the attributes, features, characteristics, components and service parameters described in this Exhibit H5-B2, unless expressly excluded or modified in the Service Order or Service Change Order.

2. Service Description

2.1 The Business Internet Access Service is a managed network service for LAN interconnection to the Internet using the Internet Protocol. The Business Internet Access Service is provisioned from TELUS Data Network and includes access to the GPS Entity's Site. The Business Internet Access Service is suited to GPS Entities requiring dependable access to the Internet with network resiliency capability.

2.2 Internet traffic is routed over dual diverse paths to TELUS' Internet distribution routers (as shown in Figure 1 below) at separate Internet peering points. Internet traffic may be routed to any Internet connection point.

Figure 1: Business Internet Access Architecture



3. Components of the Business Internet Access Service

3.1 The Business Internet Access Service is provisioned using a dedicated facility from TELUS' Point of Presence to the GPS Entity's Site that terminates on a CPE located in a Site Demarcation.

3.2 Moving a Service Demarcation at a GPS Entity Site, or inter-connecting between a Service Demarcation and another location at a GPS Entity Site, will be subject to additional fees and charges. Such additional charges will be agreed to by both parties in writing. The GPS Entity will be responsible for Site preparation, including but not limited to the civil engineering, permits and other activities associated with such work.

3.3 Maintenance Access Line.

3.3.1 For all STS WAN L3 VPN Services provided to Sites, with the exception of STS WAN L3 VPN Satellite Services, TELUS will provide, at its expense, an analog telephone line (a "Maintenance Access Line") between each Site and the TELUS Data Network facilities, for TELUS' use in maintaining the STS WAN L3 VPN Services being provided to such GPS Entity Sites.

3.3.2 The GPS Entities will be responsible for ensuring that the applicable Maintenance Access Line is always connected to the STS WAN L3 VPN Services specified by TELUS and for ensuring that no other devices, such as telephones, facsimile machines, or modems, are connected to the Maintenance Access Line at any time.

3.3.3 The GPS Entities will not use, at any time and for any purpose, the Maintenance Access Line provided pursuant to this section 3.3. Any long distance calls that are originated from any Maintenance Access Line provided by TELUS, by any person other than TELUS, will be billed to the GPS Entity at a rate of not less than $1.00 per minute or part thereof. The GPS Entity will also be responsible for any other charges incurred from the use of such Maintenance Access Line.

3.3.4 For STS WAN L3 VPN Satellite Services, the provision by TELUS of a Maintenance Access Line will be dependent on the availability of suitable facilities at the Site. TELUS will provide STS WAN L3 VPN Satellite Services without a Maintenance Access Line if suitable facilities are not present.

3.3.5 Notwithstanding any other terms and conditions in this Attachment, if the Maintenance Access Line at any GPS Entity Site is disconnected from the STS WAN L3 VPN Services specified by TELUS at any time during a calendar month, or if the Maintenance Access Line is used for any purpose by any person other than TELUS during a calendar month, then TELUS will not be required to issue any Service Level Credits with respect to the STS WAN L3 VPN Services at that Site for that calendar month.

4. Bandwidth Options

4.1 The bandwidth options available to GPS Entities who purchase the Business Internet Access Service are listed in the table below. Some bandwidth options may not be available at GPS Entity's Sites where facilities or network transport capacity are not in place (e.g. 10Gbps Services are only available in Rate Band 0 locations).

Business Internet Access Services	Description
Business Internet ADSL	ADSL-based full-duplex connectivity to the Internet.
Business Internet 1.5 Mbps	1.5 Mbps full-duplex connectivity to the Internet.
Business Internet 3.0 Mbps	3.0 Mbps full-duplex connectivity to the Internet.
Business Internet 10.0 Mbps	10.0 Mbps full-duplex connectivity to the Internet.
Business Internet 20 Mbps	20 Mbps full-duplex connectivity to the Internet.
Business Internet 30 Mbps	30 Mbps full-duplex connectivity to the Internet.
Business Internet 100 Mbps	100 Mbps full-duplex connectivity to the Internet.
Business Internet 200 Mbps	200 Mbps full-duplex connectivity to the Internet.
Business Internet 300 Mbps	300 Mbps full-duplex connectivity to the Internet.
Business Internet 1 Gbps	1 Gbps full-duplex connectivity to the Internet.
Business Internet 2 Gbps	2 Gbps full-duplex connectivity to the Internet.
Business Internet 10 Gbps	10 Gbps full-duplex connectivity to the Internet.

4.2 TELUS will provide 2 and 10 Gbps bandwidths as Available Services no later than the end of September 2011. A GPS Entity may request an earlier available date for either of these bandwidths by making a request for quote to TELUS under section 7.3 of the Agreement.

5. Service Features

5.1 The CPE is included with the Business Internet Access Service. The Service Demarcation will be at the LAN interface port on the CPE.

5.2 Common features of the Internet Services are detailed in Attachment H5-B (Internet and Security Services). In addition to those features detailed in Attachment H5-B, the following features will be available for the Business Internet Access Service:

5.2.1 Anti-spoofing will be provided at the CPE to confirm the source address of incoming IP packets and to prevent outgoing Internet traffic from the GPS Entity's premises from using those source addresses.

5.2.2 TELUS will engineer and manage the Business Internet Access Service to limit the impact of Internet Control Message Protocol (ICMP) or other Distributed Denial of Service (DDoS) attacks.

5.2.3 The CPE will be configured to restrict access by Telnet/SSH only from the NOC network management stations.

6. Service Support Features

6.1 TELUS will provide Nethealth reporting on this Service.

6.1.1 A single license will be provided for each GPS Entity.

6.2 TELUS will provide SMIS on this Service.

6.2.1 QoS reporting is not available.

Exhibit H5-B3

Business Internet Gateway Service

Service Title:	Business Internet Gateway Service
Service Number:	H5-B3

1. Service Title And Number

1.1 The Service Title and the Service Number of this specific Available Service are set out in the above table.

1.2 Where a Service Order or Service Change Order, in each case entered into in accordance with the terms of this Agreement, references such Service Title or such Service Number, TELUS will provide such GPS Entity with the Business Internet Gateway Service, which includes all of the attributes, features, characteristics, components and service parameters described in this Exhibit H5-B3, unless expressly excluded or modified in the Service Order or Service Change Order.

2. Service Description

2.1 The Business Internet Gateway Service is a managed network service used for LAN interconnection to the Internet using the Internet Protocol. It provides a managed Internet access that is suited to GPS Entities requiring dependable access to the Internet.

2.2 The Business Internet Gateway Service delivers Internet connectivity to a single Site using an existing STS WAN L3 VPN Service.

3. Bandwidth Options

3.1 The bandwidth options available to GPS Entities who purchase the Business Internet Gateway Service are listed in the table below, subject to Service availability.

3.2 The Business Internet Gateway Service uses a portion of the STS WAN L3 VPN Service to deliver Internet traffic to a GPS Entity's Site (see figure 1 below). The required accesses for the Internet bandwidth options are contained in this table.

Internet Gateway Service Bandwidth Increments	
Internet Gateway 1.5 Mbps	Available on 10+ Mbps accesses
Internet Gateway 3.0 Mbps	Available on 10+ Mbps accesses
Internet Gateway 10 Mbps	Available on 30+ Mbps accesses

Internet Gateway Service Bandwidth Increments	
Internet Gateway 20 Mbps	Available on 30+ Mbps accesses
Internet Gateway 30 Mbps	Available on 100+ Mbps accesses
Internet Gateway 100 Mbps	Available on 200+ Mbps accesses
Internet Gateway 200 Mbps	Available on 300+ Mbps accesses
Internet Gateway 300 Mbps	Available on 400+ Mbps accesses

4. Service Features

4.1 In addition to the common features described in Attachment H5-B (Internet and Security Services), TELUS will ensure the following features are available to GPS Entities:

4.1.1 Anti-spoofing will be provided at the CPE to confirm the source address of incoming IP packets and to prevent outgoing Internet traffic from the GPS Entities' premises from using those source addresses.

4.1.2 TELUS will engineer and manage the Business Internet Access Service to limit the impact of Internet Control Message Protocol (ICMP) or other Distributed Denial of Service (DDoS) attacks.

4.1.3 The CPE will be configured to restrict access by Telnet/SSH only from the NOC network management stations.

5. Service Support Features

5.1 There are no service support features with this Service.

Exhibit H5-B7

Managed Network Intrusion Prevention Service

Service Title:	Managed Network Intrusion Prevention Service
Service Number:	H5-B7

1. Service Title And Number

1.1 The Service Title and the Service Number of this specific Available Service are set out in the above table.

1.2 Where a Service Order or Service Change Order, in each case entered into in accordance with the terms of this Agreement, references such Service Title or such Service Number, TELUS will provide such GPS Entity with the Managed Network Intrusion Prevention Service, which includes all of the attributes, features, characteristics, components and service parameters described in this Attachment H5-B7, unless expressly excluded or modified in the Service Order or Service Change Order.

2. Service Description

2.1. TELUS will provide the Managed Network Intrusion Prevention Service via an on-premise appliance for the protection of a particular network zone or zones. The Service will also be available using a redundant pair of appliances in a high availability (active/standby) configuration.

2.2. The Service and specifications will be agreed to by TELUS and the GPS Entity following the request for quote process under section 7.3 of the Agreement and in accordance with the Security Obligations. The typical Service specifications are described in section 2.4 below and additional Service options are described in section 3 below.

2.3. TELUS will provide a project coordinator to oversee the installation using a defined project methodology and to act as the single point of contact during the installation. TELUS will also provide a senior security engineer to perform the detailed design, configuration and cut-over of the Service. The GPS Entity will provide resources to perform the physical installation of equipment required for the Service at the GPS Entity's Site.

2.4. The typical Service includes the following:

2.4.1. Appliance: Hardware, Software and any required licenses for subscribed features chosen by the GPS Entities;

2.4.2. 24 x 7 x 365 monitoring of the appliance by TELUS;

2.4.3. support infrastructure levels:

- Help desk;
- Technical support and triage; and
- Security engineering and incident response;

2.4.4. An SLA based on the performance levels;

2.4.5. A change management process for technical security policy changes on the appliance;

2.4.6. Access to the Managed Security Services Portal;

2.4.7. Appliance Hardware maintenance and Software updates and patches;

2.4.8. Critical event notification;

2.4.9. Quarterly configuration review; and

2.4.10. Defective Hardware replacement.

3. Service Options

3.1. The following options may be available for the Service:

3.1.1. An additional appliance for redundancy;

3.1.2. Custom logging;

3.1.3. Enhanced monitoring;

3.1.4. Customized incident response;

3.1.5. Security consultation for security policy creation in support of filtering;

3.1.6. Security consultation for migration of existing filtering rules;

3.1.7. Security consultation for optimizing of existing filtering rules;

3.1.8. Management via out-of-band or separate management zone;

3.1.9. External network bypass module; and

3.1.10. DC power supply.

4. Service Limitations

4.1. The Service is designed to inspect unencrypted traffic and does not include SSL decryption. The GPS Entity may deploy SSL decryption (and re-encryption) equipment to augment the Managed Network Intrusion Prevention Service appliance. This arrangement provides the GPS Entity with greater flexibility and control over SSL certificates.

4.2. GPS Entities may need to provide physical installation resources.

5. Pricing

5.1. There is no pricing in the Price Book for the Managed Network Intrusion Prevention Service. Pricing will be agreed to for the Service pursuant to the request for quote process under section 7.3 of the Agreement.

Exhibit H5-B8

Managed Web Security Service

Service Title:	Managed Web Security Service
Service Number:	H5-B8

1. Service Title And Number

1.1 The Service Title and the Service Number of this specific Available Service are set out in the above table.

1.2 Where a Service Order or Service Change Order, in each case entered into in accordance with the terms of this Agreement, references such Service Title or such Service Number, TELUS will provide such GPS Entity with the Managed Web Security Service which includes all of the attributes, features, characteristics, components and service parameters described in this Attachment H5-B8, unless expressly excluded or modified in the Service Order or Service Change Order.

2. Service Description

2.1. TELUS will provide the Managed Web Security Service for the protection of an Internet gateway using a proxy appliance located on a GPS Entity's Site.

2.2. The Service and specifications will be agreed to by TELUS and the GPS Entity following the request for quote process under section 7.3 of the Agreement and in accordance with the Security Obligations. The typical Service specifications are described in section 2.4 below and additional Service options are described in section 3 below.

2.3. TELUS will provide a project coordinator to oversee the installation using a defined project methodology and to act as the single point of contact during the installation. TELUS will also provide a senior security engineer to perform the detailed design, configuration and cut-over of the Service. The GPS Entity will provide resources to perform the physical installation of equipment required for the Service at the GPS Entity's Site.

2.4. The typical Service includes the following:

2.4.1. Appliance: Hardware, Software and any required licenses for subscribed features chosen by the GPS Entities;

2.4.2. 24 x 7 x 365 monitoring of the appliance by TELUS;

2.4.3. support infrastructure levels:

- Help desk;

- Technical support and triage; and
- Security engineering and incident response;

2.4.4. An SLA based on the performance levels;

2.4.5. A change management process for user profiles and technical security policies on the appliance;

2.4.6. Access to the Managed Security Services Portal;

2.4.7. Appliance Hardware maintenance and Software updates and patches;

2.4.8. Critical event notification;

2.4.9. Quarterly configuration review; and

2.4.10. Defective Hardware replacement.

3. Service Options

3.1. The following options may be available for the Service:

3.1.1. An additional appliance for redundancy;

3.1.2. Web reputation filtering to identify Sites affiliated with malware and botnets;

3.1.3. Anti-virus scanning to enable an anti-virus scanning engine;

3.1.4. Anti-spyware scanning to enable an anti-spyware scanning engine;

3.1.5. HTTPS proxy and inspection to decrypt and inspect SSL traffic;

3.1.6. Traffic monitoring of non-Web TCP ports for “call home” attempts;

3.1.7. NT LAN Manager (NTLM) or Lightweight Directory Access Protocol (LDAP) integration to support user or group policies;

3.1.8. High availability topology: custom design for multiple appliances with load balancing;

3.1.9. Dedicated reporting server;

3.1.10. External data leakage/loss prevention integration;

3.1.11. Security consultation for customized configurations, such as notification methods, end user pages, logos, white lists, black lists, custom Web category, etc.;

3.1.12. Custom logging;

3.1.13. Enhanced monitoring;

3.1.14. Customized incident response;

3.1.15. Security consultation for security policy creation in support of filtering;

3.1.16. Security consultation for migration of existing filtering rules;

3.1.17. Security consultation for optimizing of existing filtering rules; and

3.1.18. Management via out-of-band or separate management zone.

4. Service Limitations

4.1. Hardware will need to be sized appropriately based on requirements associated with throughput, number of ports required and number of policies implemented, as well as other technical considerations.

5. Future Features

5.1. Future features may be added as a part of the request for quote process under section 7.3 of the Agreement to assist GPS Entities in planning Service evolution.

6. Pricing

6.1. There is no pricing in the Price Book for the Managed Web Security Service. Pricing will be agreed to for the Service pursuant to the request for quote process under section 7.3 of the Agreement.

Exhibit H5-B10

Managed Firewall Service

Service Title:	Managed Firewall Service
Service Number:	H5-B10

1. Service Title And Number

1.1 The Service Title and the Service Number of this specific Available Service are set out in the above table.

1.2 Where a Service Order or Service Change Order, in each case entered into in accordance with the terms of this Agreement, references such Service Title or such Service Number, TELUS will provide such GPS Entity with the Managed Firewall Service, which includes all of the attributes, features, characteristics, components and service parameters described in this Attachment H5-B10, unless expressly excluded or modified in the Service Order or Service Change Order.

2. Service Description

2.1. TELUS will provide the Managed Firewall Service via an on-premise appliance for the protection of a particular network zone or zones. The Service is also available using a redundant pair of appliances in a high availability (active/standby) configuration.

2.2. The Service and specifications will be agreed to by TELUS and the GPS Entity following the request for quote process under section 7.3 of the Agreement and in accordance with the Security Obligations. The typical Service specifications are described in section 2.4 below and additional Service options are described in section 3 below.

2.3. TELUS will provide a project coordinator to oversee the installation using a defined project methodology and to act as the single point of contact during the installation. TELUS will also provide a senior security engineer to perform the detailed design, configuration and cut-over of the Service. The GPS Entity will provide resources to perform the physical installation of equipment required for the Service at the GPS Entity's Site.

2.4. The Service includes the following:

2.4.1. Appliance: Hardware, Software and any required licenses for subscribed features chosen by the GPS Entities;

2.4.2. 24 x 7 x 365 monitoring of the appliance by TELUS;

2.4.3. support infrastructure levels:

- Help desk;
- Technical support and triage; and
- Security engineering and incident response;

2.4.4. An SLA based on the performance levels;

2.4.5. A change management process for technical security policy changes on the appliance;

2.4.6. Access to the Managed Security Services Portal;

2.4.7. Appliance Hardware maintenance and Software updates and patches;

2.4.8. Critical event notification;

2.4.9. Quarterly configuration review; and

2.4.10. Defective Hardware replacement.

3. Service Options

3.1. The following options may be available for the Service:

3.1.1. ISP dual homing that allows failover to a second Internet service provider;

3.1.2. Custom logging;

3.1.3. Enhanced monitoring;

3.1.4. Customized incident response;

3.1.5. Security consultation for security policy creation in support of filtering;

3.1.6. Security consultation for migration of existing filtering rules;

3.1.7. Security consultation for optimizing of existing filtering rules;

3.1.8. An additional appliance for redundancy;

3.1.9. Additional interfaces;

3.1.10. Additional throughput;

3.1.11. Additional policies complexity; and

3.1.12. Additional security zones.

4. Service Limitations

4.1. Hardware will need to be sized appropriately based on requirements associated with throughput, number of ports required and number of policies implemented, as well as other technical considerations.

5. Pricing

5.1. There is no pricing in the Price Book for the Managed Firewall Service. Pricing will be agreed to for the Service pursuant to the request for quote process under section 7.3 of the Agreement.

Attachment H5-C

Optical Ethernet Service

Service Title:	Optical Ethernet Service
Service Number:	H5-C

1. Service Title And Number

1.1. The Service Title and the Service Number of this specific Available Service are set out in the above table.

1.2. Where a Service Order or Service Change Order, in each case entered into in accordance with the terms of this Agreement, references such Service Title or such Service Number TELUS will provide such GPS Entity with the Optical Ethernet Service, which includes all of the attributes, features, characteristics, components and service parameters described in this Attachment H5-C, unless expressly excluded or modified in the Service Order or Service Change Order.

2. Service Description

2.1 The Optical Ethernet Service is an unmanaged point-to-point network service, interconnecting geographically disparate GPS Entities' LANs. The Optical Ethernet Service is provisioned from a specific platform within the TELUS optical infrastructure, using a fibre facility from the TELUS Point of Presence to the GPS Entity's Site that terminates on a TELUS-provided optical interconnection panel located in a Site Demarcation at the GPS Entity's Site. In-building Service components required to install the Optical Ethernet Service at a GPS Entity Site will be included to a maximum value of $2,000.

2.2 Moving a Service Demarcation at a GPS Entity Site, or connecting a Service Demarcation and another location at a GPS Entity Site, will be subject to additional Fees agreed to by both parties in writing. The GPS Entity will be responsible for Site preparation, including but not limited to the civil engineering, permits, etc. associated with such work.

2.3 The Optical Ethernet Service is available in 1 Gbps bandwidth increments, starting at 1 Gbps, up to a maximum of 10 Gbps.

3. Components of the Optical Ethernet Service

3.1 The Optical Ethernet Service is composed of:

3.1.1 Transport via subscribed Ethernet bandwidth between the two GPS Entity Sites.

3.1.2 Local optical loop at both end points. These loops transport the subscribed Ethernet bandwidth from the POP to the Service Demarcation at the GPS Entity's Site.

3.1.3 An optical interconnection panel at each end of the local optical loops is the Service Demarcation.

4. Service Availability

4.1 The Optical Ethernet Service availability will be in accordance with Schedule J to this Agreement.

5. Service Standards

5.1 TELUS will ensure that the Optical Ethernet Service provided to GPS Entities meets the following service standards:

- ITU G.652 standard for single-mode optical fibre;
- ITU G.695 standard for 'Coarse Wave Division Multiplexing'; and
- IEEE 802.3ae, 802.3z and 802.3ah.

5.2 The Optical Ethernet Service will be transparent and will not reorganize or change bits that conform to the interface standard.

6. Service Interface

6.1 The Service Demarcation for the Optical Ethernet Service is located at the optical interconnection panel at each end of the point-to-point Service.

6.2 For connection to the GPS Entity's LAN equipment, the optical interconnection panel will be equipped with one port.

6.3 All new fibre optic interfaces will use LC or SC simplex or duplex connectors, provided that existing fibre patch panels and fibre transceivers have FC connectors.

7. Service Features

7.1 TELUS will ensure the following features are available to GPS Entities with respect to the Optical Ethernet Service:

7.1.1 Transportation of tagged (802.1q) frames;

7.1.2 Transportation of both tagged and untagged frames; and

7.1.3 Jumbo frames with a Maximum Transmission Unit size of 9600 bytes.

8. Service Support Features

8.1 This Service is a Reactive Service. TELUS NOC monitors the TELUS Data Network, but not the end circuits (not the end fibre circuit). The NOC will generate trouble tickets and manage the restoration of GPS Entity reported troubles.

9. Infrastructure

9.1 The GPS Entity will be responsible for any equipment or facilities required to complete the connection between the Service Demarcation and the GPS Entity's LAN, to add or connect the Optical Ethernet Service to the GPS Entity's LAN media, or to extend the Service Demarcation beyond the master telephone room.

9.2 The Optical Ethernet Service will be provisioned on a Site-by-Site basis, using a fibre connection from the Point of Presence to the Site, terminating on an optical interconnection panel located in a Site Demarcation. In-building Service components required to install the Optical Ethernet Service at that Site will be included to a maximum defined in the Price Book.

9.3 Moving a Site Demarcation, or connecting a Site Demarcation to a different physical location within a Site, will be subject to additional Fees and such move will be described in a Service Change Order approved by the GPS Entity. The GPS Entity will be responsible for Site preparation, including but not limited to the civil engineering, permits and other activities associated with such work.

10. List of Ethernet Interfaces Supported

10.1 Set out in the table below are the supported Ethernet interfaces for the Service:

Data Rates Required:	Interfaces
1 Gbps	ANSI/IEEE 802.3ah 1000 BASE-LX10-SMF ANSI/IEEE 802.3z 1000 BASE-ZX-SMF*
2–10 Gbps	ANSI/IEEE 802.3ae-2002 10G Base-LR-SMF ANSI/IEEE 802.3ae-2002 10G Base-ZR-SMF*

*The extended range modules will only be provisioned for optical loops that require longer reach modules.

10.2 During the Term of the Agreement, some of these interface standards will become obsolete and new standards will evolve. TELUS will provide future standard interfaces in speed ranges commensurate with Services provided to the GPS Entities.

10.3 If the interface, as listed in the table under section 10.1 above, does not meet the GPS Entity's requirements, TELUS will, if requested by the GPS Entity, provide a custom interface. Additional Fees may apply.

11. Optional Features

There are no optional features available with this Service.

Attachment H5-E

STS WAN L3 VPN Services

Service Title:	STS WAN L3 VPN Services
Service Number:	H5-E

1. Service Title and Number

1.1 The Service Title and the Service Number of this specific Available Service are set out in the above table.

1.2 Where a Service Order or Service Change Order, in each case entered into in accordance with the terms of this Agreement, references such Service Title or such Service Number, TELUS will provide such GPS Entity with STS WAN L3 VPN Services, which include all of the attributes, features, characteristics, components and service parameters referenced in this Attachment H5-E (including all Exhibits to this Attachment), unless expressly excluded or modified in the Service Order or Service Change Order.

2. Services Description

TELUS will provide to GPS Entities the STS WAN L3 VPN Services.

STS WAN L3 VPN Services will be provisioned on the TELUS Data Network and used for interconnection of geographically disparate local area networks (LANs) using the Internet Protocol (IP) for routing between Sites in a unique wide area network (WAN) plan.

2.1 STS WAN L3 VPN Services may be provided as point-to-point connections or multi-point connections. The STS WAN L3 VPN Services will be provided by the TELUS Data Network. These Services will include Multi-Protocol Label Switching (MPLS) and will give a GPS Entity the ability to create virtual private networks (VPNs), allowing the GPS Entity to create secure connections between each of, or groups of, its Sites.

2.2 Each Site will be associated with one or more VPNs when it is provisioned using a VPN identifier. The MPLS network will track which Sites belong to which VPNs. Paths across the MPLS network will track which Sites belong to which VPNs. Paths across the MPLS network between Sites will be set up and managed automatically via routing.

2.3 Traffic entering the MPLS network will be marked with a VPN identifier to keep it separated from other VPNs. This will allow any Site to communicate with any other Site that is within the same VPN. The Virtual Routing and Forwarding (VRF) and route capabilities will be determined by TELUS in the lab to ensure that the CPE device properly functions when performing the entire Service for the included optional features described in section 6.1 below. If additional features

are enabled outside the included optional features, then the number of VPNs may be reduced.

The following limits have been established for the STS WAN L3 VPN Services.

Table 1: TELUS CPE Device Specifications.

Device	Minimum Routes Supported	Minimum VRFs Supported
Copper[1]	2000	8
Fibre	4000	8
Custom Fibre	5000	8

2.4 For the service transition to the TELUS Data Network, new CPE routers will be certified and these route and VRF capabilities will be documented. Caveats for copper-based services (see footnote 1) will remain in place until the frame, ATM and legacy ADSL networks are fully retired. TELUS will support more than one VPN where ADSL2+ or newer xDSL access technology is available.

2.5 The STS WAN L3 VPN Services provide VPN access security that prevents routing of IP packets into or out of the VPN created by these Services, except through a GPS Entity authorized STS Extranet Service or through GPS Entity provided equipment connected to these Services.

2.6 As part of the STS WAN L3 VPN Services, a VRF instance, which is a unique network identifier assigned to an individual GPS Entity's network to guarantee the isolation of a GPS Entity's network and the fully meshed connectivity of the MPLS network, can be selectively restricted to create a number of topologies.

2.7 By default, the STS WAN L3 VPN Services provide a single VRF per Site. Additional VRFs may be included through use of the multi-VRF option.

2.8 STS WAN L3 VPN Services will be provisioned on a Site-by-Site basis, using an Access Connection from the Point of Presence to the Site, terminating on a CPE located in a Site Demarcation. In-building Service components required to install STS WAN L3 VPN Services at that Site will be included to a maximum defined in the Price Book.

2.9 Moving a Site Demarcation, or inter-connecting the Site Demarcation to CPE located in a different physical location, will be subject to additional Fees and such

[1] Table 1 lays out the limitations of the CPE, but the Services themselves further reduce the number of VPNs as follows: Frame related T1 services are limited to one (1) VPN; DNA T1 services can have two (2) VPNs; and ADSL services can have one (1) VPN.

move will be described in a Service Change Order approved by a GPS Entity. The GPS Entities will be responsible for Site preparation, including but not limited to the civil engineering, permits, and other activities associated with such work.

2.10 The CPE will be equipped with one port for connection to a GPS Entity's LAN equipment. The Service Demarcation will be at the LAN interface port on the CPE.

2.11 TELUS will manage its core network to ensure that it is not over subscribed such as to constrain the subscribed GPS Entity bandwidths, transit delay or packet loss in accordance with Schedule J to the Agreement.

2.12 STS WAN L3 VPN Asymmetric Services.

2.12.1 STS WAN L3 VPN Asymmetric Services have the same service description as the STS WAN L3 VPN Services with the following exceptions:

2.12.1.1 TELUS will use a 5Mbps ADSL profile on all ADSL based Sites and allow the ADSL to train up to 5Mbps maximum bandwidth per Site.

2.12.1.2 ADSL based services are rate adaptive with minimum ADSL levels of 192Kbps upstream and 1024Kbps downstream.

2.12.1.3 ADSL may degrade over time from the measured rate at time of acceptance. GPS Entities may initiate a trouble ticket at any time GPS Entities feel the Service has degraded. TELUS will attempt to restore the Service to acceptable levels as determined by the GPS Entities. If speeds have degraded, but are still above minimum ADSL levels as described in section 2.12.1.2, GPS Entities will be able to upgrade, without termination charges, to one of TELUS' other Services at such new Service's Fees.

2.12.1.4 If TELUS determines, during installation at a Site, that the telephone line loop is unsuitable for any STS WAN L3 VPN Asymmetric Services due to limitations of the technology and will not meet the minimum ADSL levels as described in section 2.12.1.2, TELUS will be able to terminate those STS WAN L3 VPN Asymmetric Services. The termination charge will be waived by TELUS and any installation Fees paid by a GPS Entity with respect to such attempted install will be refunded by TELUS to such GPS Entity.

2.13 GPS Entity Responsibilities for STS WAN L3 VPN Services.

2.13.1 The GPS Entities will be responsible to ensure non-conflicting protocol address practices are maintained across the GPS Entities' LANs and other networks not provided by TELUS pursuant to this Agreement.

2.13.2 If a GPS Entity provides the IP addresses to TELUS, such GPS Entity will reserve at least one IP address for use as the IP address of the CPE interface to act as the gateway to the WAN services.

2.13.3 The GPS Entities will be responsible for any equipment or facilities required to complete the connection from the Service Demarcation to the GPS Entities' LANs.

3. Service Standards and Features

3.1 TELUS will ensure that all STS WAN L3 VPN Services available to GPS Entities meet the service standards as detailed below and in the Exhibits that are part of this Attachment H5-E.

3.2 There are two scenarios for routing loops, which are a TELUS-only routing environment and a mixed routing environment.

3.2.1 With respect to the TELUS-only routing environment, TELUS will ensure that it does not introduce any routing loops with respect to the STS WAN L3 VPN Services.

3.2.2 In the mixed routing environment, where there are router(s) of GPS Entities or other network providers used by GPS Entities in the routing path, then the GPS Entities being provided with STS WAN L3 VPN Services will be responsible for ensuring loop free service of other network providers, but TELUS will work with the GPS Entities to ensure a loop free design and will work with the GPS Entities to eliminate any routing loops that may occur. Notwithstanding the foregoing, TELUS will ensure that: (a) there are no routing loops within the core of the TELUS Data Network; (b) there is no asymmetric routing within the TELUS Data Network; and (c) IP transmit/ receive data is not split between different accesses or interfaces.

3.2.3 TELUS technical details on controlling routing loops and asymmetric routing are described in the technical documentation located in TELUS' Service Management Information System (SMIS) or other applicable electronic facility (see section 5.2).

3.2.4 The prefixes injected from a GPS Entity's Site LAN into the VPN should not be redistributed back to the same GPS Entity's Site LAN. TELUS will work with each GPS Entity to engineer a configuration that will allow a mutually agreed number of prefixes to enter the VPN from the GPS Entities' Sites.

3.2.5 TELUS will not summarize or aggregate any GPS Entities' routes within the MPLS network or on the CPE.

3.2.6 TELUS will not use static routes within the MPLS services, unless requested by a GPS Entity. TELUS will not inject any routes (i.e. default), unless requested by a GPS Entity.

3.3 TELUS may utilize applicable standards to provide increased bandwidth on links between network elements or where traffic shaping of higher speed interfaces is not possible. TELUS' preferred approach is to use a higher speed interface and shape down. In the event that this cannot be achieved, TELUS will discuss the situation with a GPS Entity prior to using EtherChannel and, where that is not possible, TELUS will provide the Services in accordance with IEEE 802.3ad.

3.4 As part of service acceptance for Services where IEEE 802.3ad (link aggregation) is used, TELUS will provide a single capacity test report as part of the standard service acceptance process to show that the EtherChannel is load balancing the data traffic properly. If a bandwidth altering Service Change Order occurs, TELUS will provide a new report.

3.5 TELUS will ensure that the STS WAN L3 VPN Services will pass all higher level OSI protocols transparently.

3.6 As a minimum, TELUS will be compliant with and support the following protocols:

3.6.1 RFC 4271 Border Gateway Protocol;

3.6.2 RFC 2453 Routing Information Protocol Version 2;

3.6.3 RFC 2328 OSPF Version 2;

3.6.4 RFC 5340 OSPF for IPv6, as aligned with TELUS' general IPv6 availability;

3.6.5 RFC 791 for IPv4;

3.6.6 IEEE 802.1Q Virtual LANs (as described in further detail in Exhibit H5-E2); and

3.6.7 RFC 2281 Hot Standby Router Protocol (HSRP) or Virtual Router Redundancy Protocol (VRRP).

3.7 When there are redundant routers between Sites, TELUS will support the use of HSRP or VRRP as required on GPS Entities' LANs. GPS Entities will be responsible for setting their LAN devices to use the virtual IP HSRP/VRRP address as the default gateway.

3.8 TELUS will ensure that the STS WAN L3 VPN Services will support public IP addresses (including addresses provided by GPS Entities), between TELUS' CPE device and GPS Entity-provided routers. TELUS will not translate public IP addresses, unless requested by a GPS Entity. TELUS will ensure that the STS

WAN L3 VPN Services will support the IPv4 (RFC 791) and the IPv6. Please refer to Exhibit H5-E8 for details of IP addressing.

3.9 TELUS will provide the STS WAN L3 VPN Services with GPS Entities separation using VRFs in accordance with RFC 4364. TELUS will not use the Generic Routing Encapsulation (GRE) and IPIP tunneling protocols in the TELUS Data Network to provide isolation. GPS Entities may use these protocols in their networks, however there may be fragmentation (and re-assembly) of the frames within the TELUS Data Network in accordance with Exhibit H5-E2 as the "do not fragment" bit cannot be set.

3.10 TELUS will ensure that the STS WAN L3 VPN Services will support multiple and shared broadcast domains on each interface provided to GPS Entities. TELUS will ensure that each such interface will support multiple subnets in one of the following three configurations:

3.10.1 Single interface with multiple VLANs (802.1Q trunk);

3.10.2 Single interface with a single VLAN (routed interface); and

3.10.3 Multiple interfaces, with a single VLAN (multiple routed interfaces).

The GPS Entities will not mix routed and trunked ports on the same CPE device when using multiple LAN ports.

3.11 Each STS WAN L3 VPN Service interface provided by TELUS will support multiple subnets per VLAN, if required by a GPS Entity, and the number of interfaces will be within the limits of the CPE router. By default, all connected subnets will be routed and will stop broadcast and multicast storms.

3.12 TELUS will design its MPLS VPNs in accordance with RFC 4364 or subsequently ratified RFC for BGP/MPLS IP VPNs.

4. STS WAN L3 VPN Redundant Services

4.1 TELUS will offer a redundant access service that will allow a secondary STS WAN L3 VPN Service to act as a failover for a designated primary STS WAN L3 VPN Service.

4.2 TELUS will offer both HSRP and OSPF for LAN routing configuration. The secondary Service will become active if the primary Service fails.

4.3 The Service parameters related to the STS WAN L3 VPN Redundant Services are:

4.3.1 The GPS Entities secondary access can be of the same bandwidth or of lesser bandwidth than the primary access.

4.3.2 The GPS Entities must locate both the primary and secondary Services and CPE in the same subnet space.

4.3.3 The redundant access service does not allow for load balancing.

5. Service Support Features

5.1 STS WAN L3 VPN Services Troubleshooting and Monitoring.

5.1.1 *SNMP Polling Service*

TELUS will develop an SNMP read only service providing access to the MIB data on the CPE.

The SNMP Polling Service will have at a minimum, the following features:

- access to MIB data on the CPE either directly or through a relay device providing control and security functions;
- SNMP standard protocol implementation will be used;
- SNMP encryption will be enabled;
- SNMP authentication will be enabled;
- full access to GPS Entity SNMP variables, without branch restrictions;
- TELUS will filter variables, removing non GPS Entity variable data;
- permitted list of GPS Entity polling devices with authentication or other security controls; and
- minimum GPS Entity polling interval as designated by TELUS.

Further details and requirements of the SNMP Polling Service will be documented and communicated after the completion of the SNMP Polling Service development prior to the delivery of that Service.

For clarity, SNMP direct read access is only available for STSP WAN L3 VPN Services.

5.1.2 *SNMP Event Forwarding Service*

5.1.2.1 This Service will forward normalized SNMP traps from the CPE to the GPS Entity NMS.

5.1.2.2 Normalization modifies any equipment manufacturer's specific format to a generalized service format. TELUS will supply a normalized MIB to the GPS Entities to allow appropriate mapping of data in GPS Entity NMS. All data is in SNMP v3 format.

5.1.2.3 Forwarded events are filtered by TELUS to ensure that a GPS Entity receives only events that affect this Service.

5.1.3 *Syslog Forwarding Service*

5.1.3.1 TELUS will provide near real-time Syslog data from the CPE routers to GPS Entity Syslog servers from TELUS' Syslog forwarding server over a dedicated VPN.

5.1.3.2 TELUS will use standard Syslog protocols.

5.1.4 *Flow Forwarding Data Service*

5.1.4.1 TELUS will provide near real-time raw Netflow data over a dedicated VPN to specified GPS Entity Sites. The raw Netflow data will be captured at all Provider Edge (PE) devices in the British Columbia and Alberta portions of the TELUS Data Network, thus ensuring all flow data will be captured if such flow data originates or terminates in British Columbia or Alberta. Only raw data Netflows for requested VPNs will be captured and forwarded to a GPS Entity Site. To protect network performance and scalability, the raw Netflow data is sampled at a rate that provides sufficiently accurate Netflow data without degrading network performance.

5.1.4.2 The GPS Entities will be responsible for purchasing the STS WAN L3 VPN Service that delivers the Netflow data VPN and the additional bandwidth generated by the Netflow data.

5.1.5 *GPS Entity CPE Configuration Portal*

5.1.5.1 TELUS will provide a tool or an interface that will provide GPS Entities with a view of CPE router configurations.

5.1.5.2 The tool or interface will allow a GPS Entity to specify the target CPE router and then present the specified router's current configuration.

5.1.5.3 The tool or interface will remove any configuration information that is not related specifically to a GPS Entity's service.

5.1.6 *CLI Portal*

5.1.6.1 TELUS will provide a mechanism to initiate Command Line Interface (CLI) like commands and receive responses from CPE routers.

5.1.6.2 Initial capabilities will include route and ARP cache display commands delivered through an asynchronous mechanism enabling near real-time responses.

5.1.6.3 Additional future capabilities will include commands and a synchronous mechanism that will enable near real-time responses.

5.1.6.4 All command responses will be filtered to remove any information not related to a GPS Entity's service.

5.1.6.5 TELUS will not support CDP or 802.1ab standards on any STS WAN L3 VPN Services.

5.1.7 *Event View and Topology View Service*

5.1.7.1 TELUS will provide a mechanism for near real-time event and topology view of CPE used in the delivery of managed services. GPS Entity service visibility will include segmentation by geographical location and GPS Entity departmental organization.

5.1.7.2 The GPS Entity event view will include near real-time passive hardware and service events generated by managed CPE and active polling of CPE which will reflect loss of connectivity. Events will be classified by severity, logically grouped together and correlated with duplicate events removed in order to avoid false positive notification of service incidents. Historical reporting capability of recent events will be made available by TELUS through this interface.

5.1.7.3 The topology view will provide a near real-time graphical representation of current CPE status. Functionality related to the topology view will include color coding to represent Service status and drill-down capability to view a limited subset of service object identifiers (OID) which directly reflect a GPS Entity's Service.

5.2 SMIS and Network Documentation.

TELUS will provide to each GPS Entity an overview of the VPN design, in the form of a document, for the STS WAN L3 VPN Services as well as an engineering diagram of each Site. The Site diagrams will show TELUS' VPN design and connections to the PE VPN and include Site address, IP addressing, interface MAC and other normal TELUS design documentation. TELUS will provide such diagrams in a Microsoft Visio format, or other format as mutually agreed to, and store such diagrams within the Service Management Information System (SMIS), or other applicable electronic facility. Documents will be secure and segmented by GPS Entity.

SMIS enables GPS Entities to query the performance of their networks for the purposes of monitoring the Services, trend reporting, Site activity, and serves as a document repository.

5.3 Network Monitoring.

5.3.1 *Trace Route and Ping*

TELUS will ensure that the GPS Entities have the ability to trace route and ping through the TELUS Data Network. Trace route will not be suppressed by TELUS. The core of the TELUS Data Network will appear as a single hop in the hop list.

5.3.2 *NTP: Source of Clock Information*

TELUS will provide a carrier grade network time protocol (NTP) service that the GPS Entities may use for clock synchronization. TELUS will provide the NTP service in a centralized hierarchical architecture, utilizing a direct connection between GPS Entity NTP servers and TELUS' reference NTP servers.

5.3.3 *STS Extranet Service*

TELUS will provide the STS Extranet Service in accordance with Exhibit H5-E5.

5.3.4 *Maintenance Access Line*

5.3.4.1 For all STS WAN L3 VPN Services provided to Sites, with the exception of STS WAN L3 VPN Satellite Services, TELUS will provide, at TELUS' expense, an analog telephone line (a "Maintenance Access Line") between each Site and the TELUS Data Network facilities, for TELUS' use in maintaining other STS WAN L3 VPN Services being provided to such GPS Entity Sites.

5.3.4.2 The GPS Entities will be responsible for ensuring that the applicable Maintenance Access Line is always connected to the STS WAN L3 VPN Services specified by TELUS and for ensuring that no other devices, such as telephones, facsimile machines, or modems, are connected to the Maintenance Access Line at any time.

5.3.4.3 The GPS Entities will not use, at any time and for any purpose, the Maintenance Access Line provided pursuant to this section 4.3.4, whether provided by TELUS or by the GPS Entities. Any long distance calls that are originated from any Maintenance Access Line provided by TELUS, by any person other than TELUS, will be billed to a GPS Entity at a rate of not less than $1.00 per minute or part thereof. The GPS Entity will

also be responsible for any other charges incurred from the use of such Maintenance Access Line.

5.3.4.4 For STS WAN L3 VPN Satellite Services, the provision by TELUS of a Maintenance Access Line will be dependent on the availability of suitable facilities at the Site. TELUS will provide STS WAN L3 VPN Satellite Services without a Maintenance Access Line, if suitable facilities are not present.

5.3.4.5 Notwithstanding any other terms and conditions in this Attachment, if the Maintenance Access Line at any GPS Entity Site is disconnected from the STS WAN L3 VPN Services specified by TELUS at any time during a calendar month, or if the Maintenance Access Line is used for any purpose by any person other than TELUS during a calendar month, then TELUS will not be required to issue any Service Level Credits with respect to the STS WAN L3 VPN Services at that Site for that calendar month.

6. Optional Services/Features

6.1 Optional Services/Features included in Service Fees.

TELUS will make each of the included optional Services or features with respect to the STS WAN L3 VPN Services set out in the table below available to all GPS Entities at no additional cost to the GPS Entities. Where an included optional Service or feature has been selected by a GPS Entity in a Service Order or Service Change Order, then TELUS will provide such included optional Service or feature as part of the STS WAN L3 VPN Services ordered without any additional Fee in respect of such optional Service or feature being payable.

Optional Feature Title	Description	Special Terms and Conditions
QoS Details and Marking Schema	For only the standard QoS AF 1, 2 and 3 as described in Exhibit H5-E7.	See Exhibit
IP Addressing	TELUS will support IP addressing as described in Exhibit H5-E8.	See Exhibit
Description of 'Standard', 'Enhanced' and 'Premium' Classifications	For only 'Standard' Service as described in Exhibit H5-E13.	See Exhibit

Optional Feature Title	Description	Special Terms and Conditions
Multi-VRF/VPN	As described in section 2 above.	See section 2 above
SNMP Polling Service	TELUS will provide the SNMP Polling Service as described in section 5.1.1 above.	See section 5.1.1 above
SMIS	As described in section 5.2 above.	See section 5.2 above
Network Time Service (NTP)	TELUS will provide NTP services to GPS Entities as described in section 5.3.2 above.	See section 5.3.2 above
SNMP Event Forwarding Service	TELUS will provide SNMP trap forwarding as described in section 5.1.2 above.	See section 5.1.2 above.

Any special terms and conditions with respect to an optional feature set out in the table above will apply with respect to such optional feature.

6.2 Optional Services/Features for additional Fees.

TELUS will make each of the fee-based optional Services or features with respect to STS WAN L3 VPN Services set out in the table below available to all GPS Entities at the additional price stated for each of such features in the Price Book. Where a fee-based optional Service or feature has been selected by a GPS Entity in a Service Order or Service Change Order, then TELUS will provide such fee-based optional Service or feature as part of the STS WAN L3 VPN Services ordered.

Optional Feature Title	Description	Special Terms and Conditions
STS WAN L3 VPN Redundant Services	As described in section 4 above. It is a redundant access service for a designated STS WAN L3 VPN Service.	As outlined in Table 8 of Attachment C5. This Service has to be attached to a designated primary Service.

Optional Feature Title	Description	Special Terms and Conditions
QoS Details and Marking Schema	For only the standard QoS EF as described in Exhibit H5-E7.	Ordered per Access Connection
Description of 'Standard', 'Enhanced' and 'Premium' Classifications	For only 'Enhanced' and 'Premium' Services as described in Exhibit H5-E13.	Custom pricing per Site and per configuration
Wireless Standby Service	As described in Exhibit H5-E4.	Custom pricing and terms per Site and configuration
STS Extranet Service	As described in Exhibit H5-E5.	Order per Site or per VPN
STS WAN L3 VPN Satellite Service	Future Service.	
Multicast Service	As described in Exhibit H5-E9.	Ordered per Site
Secure IP Anywhere Service	WAN gateway to TELUS' cellular network and the TELUS Data Network as described in Exhibit H5-E10.	Gateway and user pricing
Internet Caching Service	Future Service.	
Flow Forwarding Data Service	Near real-time Netflow data over a dedicated VPN to specified GPS Entity Sites.	Ordered per VPN and Site
1000baseZX interfaces	As described in section 3.2 of Exhibit H5-E2.	

Any special terms and conditions with respect to an optional feature set out in the table above will apply with respect to such optional feature

Exhibit H5-E2

Ethernet Interfaces

1. Maximum Ethernet Frame Sizes Supported

Set out in the table below are the maximum Ethernet frame sizes that will be supported by the TELUS Data Network:

No.	Interface	Max	Payload	Max
1.	Ethernet/Fast Ethernet	1536	Unicast	1486
2.	Ethernet/Fast Ethernet	1536	Multicast	1482
3.	Gigabit Ethernet	4472	Unicast	4444
4.	Gigabit Ethernet	4472	Multicast	4440

Jumbo frames will not be supported by TELUS during the Term of the Agreement.

2. Packet Fragmentation

TELUS will ensure that the STS WAN L3 VPN Services are transparent services by ensuring fragmented packets are reassembled prior to egress from the Service Demarcation. TELUS will not change or re-order GPS Entity bits or packets.

The proposed Data Services will support MTU 1500 byte packet size with no fragmentation, and up to 64KB with fragmentation.

3. List of Ethernet Interfaces Supported

3.1 TELUS will support, as a minimum, the following 802.3 standards on the GPS Entities' interfaces on the CPE as follows:

3.1.1 Accesses < 10Mbps: 10BaseT or 10/100BaseT;

3.1.2 Accesses = 10Mbps: 10BaseT or 10/100BaseT;

3.1.3 Accesses = 100Mbps: 10/100BaseT or 10/100/1000BaseT; and

3.1.4 Accesses = 1000Mbps: 10/100/1000BaseT and small form-factor pluggable (SFP) with 10/100/1000BaseT, 1000BaseSX and 1000BaseLX module options.

3.2 TELUS will provide 1000BaseZX interfaces for an additional Fee as described in the Price Book. In GPS Entities' Sites, TELUS will terminate its fibre with 1000BaseLX interfaces in its CPE equipment and will provide the GPS Entities with a 1000BaseTX demarcation interface or a 1000BaseSX demarcation interface, where required.

4.

Exhibit H5-E4

Wireless Standby Service

Service Title:	Wireless Standby Service
Service Number:	H5-E4

1. Service Title And Number

1.1 The Service Title and the Service Number of this specific Available Service are set out in the above table.

1.2 Where a Service Order or Service Change Order, in each case entered into in accordance with the terms of this Agreement, references such Service Title or such Service Number, TELUS will provide such GPS Entity with the Wireless Standby Service, which includes all of the attributes, features, characteristics, components and service parameters described in this Exhibit H5-E4, unless expressly excluded or modified in the Service Order or Service Change Order.

2. Service Description

2.1 TELUS will offer the Wireless Standby Service as part of the Converged Edge availability.

2.2 The Wireless Standby Service will provide wireless back up for STS WAN L3 VPN Services and Internet Services to a maximum of 100 Mbps through the TELUS cellular network.

2.3 This Service provides a redundant link to reduce the risk of network outages for GPS Entities. Dependent on engineering and specifications, the Wireless Standby Service will mitigate risk of failures at various points in the primary service path. Applicable points of failure may include, but are not limited to, building entrance facilities, access path, physical link (support), aggregator (CO equipment – e.g. DSLAM, IP Edge port, etc.) and portions of the TELUS Data Network.

2.4 The Wireless Standby Service has the following characteristics:

2.4.1 fully managed;

2.4.2 automatic failover and failback of traffic for traffic policies defined by the GPS Entities;

2.4.3 up to 100 Mbps bandwidth capabilities; and

2.4.4 availability is limited to TELUS' HSPA+ (or future) high speed wireless network.

3. GPS Entity Requirements

3.1 The GPS Entities will:

3.1.1 work with TELUS to define strict application policing policies (not all bandwidths and circuits will be eligible for the Wireless Standby Service);

3.1.2 jointly discuss and agree with TELUS on reduced feature sets that may be required on the failover link (reduced feature sets may include, but are not limited to, QoS, multi-VRF and multi-cast);

3.1.3 provide in-building conduit for cabling if a wireless modem is not in proximity to TELUS' managed CPE router; and

3.1.4 ensure that all necessary infrastructure permits and permissions are in place to establish outside antenna and associated power facilities.

Exhibit H5-E5

STS Extranet Service

Service Title:	STS Extranet Service
Service Number:	H5-E5

1. Service Title And Number

1.1 The Service Title and the Service Number of this specific Available Service are set out in the above table.

1.2 Where a Service Order or Service Change Order, in each case entered into in accordance with the terms of this Agreement, references such Service Title or such Service Number, TELUS will provide such GPS Entity with the STS Extranet Service, which includes all of the attributes, features, characteristics, components and service parameters described in this Exhibit H5-E5, unless expressly excluded or modified in the Service Order or Service Change Order.

2. Service Description and Demarcation

2.1 The STS Extranet Service is an optional Available Service through the STS WAN L3 VPN Service.

2.2 The STS Extranet Service provides a virtual interconnection between two or more L3 VPN Sites operating in separate MPLS VPNs. The function of the STS Extranet Service is to provide network connectivity between distinct MPLS VPNs where all parties subscribe to TELUS' Extranet service, whether or not such parties are GPS Entities.

2.3 The Service Demarcation for the STS Extranet Service is at the LAN interface of TELUS' edge router that connects to a GPS Entity's underlying STS WAN L3 VPN Service.

2.4 TELUS will establish a connection between the relevant networks once it receives a Service Order, with any additional technical and administrative information to be provided in TELUS' Extranet form.

3. Extranet Packet Classification

3.1 Depending on a GPS Entity's requirements, extranet packets may not be distinguished from enterprise packets for QoS treatment. In this case, the same criteria may be used to classify a GPS Entity's extranet and enterprise packets on ingress to TELUS' CPE.

4. Multiple VPNs Option

5. NAT and Extranet

5.1 While not a standard configuration, the parties acknowledge and accept that NAT (Network Address Translation) may be required by the STS Extranet Service in certain circumstances to mitigate IP addressing conflicts.

5.2 TELUS currently does not supply NAT services except as part of a custom design. Standard NAT will be available upon migration to the Converged Edge. Depending on NAT requirements, a CPE upgrade may be required and Fees for the upgrade will be the responsibility of the GPS Entities. Fees for CPE upgrades are set out in the Price Book.

6. GPS Entity interconnection requirements and obligations

6.1 The STS Extranet Service is a service where the interconnection of separate VPNs is achieved through the use of VRFs.

6.2 Impacts of establishing STS Extranet Service interconnection are as follows:

6.2.1 AF QoS is shared between the participating GPS Entity's respective VPN's.

6.2.2 A single GPS Entity must be established on TELUS' Extranet form as the 'Requesting Customer' and is responsible for and authorized to:

6.2.2.1 pay all Fees associated with the STS Extranet Service;

6.2.2.2 communicate with other parties that use the STS Extranet Service with respect to performance, outages, threat releases or any other information deemed relevant by the participating parties; and

6.2.2.3 report issues or problems to TELUS through the Problem and Incident Management Procedures described in Schedule N to the Agreement.

6.2.3 A GPS Entity must be the 'Requesting Customer'. The STS Extranet Service can, however, be set up with other GPS Entities or other parties that are not parties to this Agreement.

7. Route Target Import and Export Configuration

7.1 IPv4 and, when available, IPV6 routes are exchanged between different VPN Sites through a process of tagging the routes with an assigned route target (RT). RTs are then imported and exported between the different VPNs for the route exchange.

7.2 Through the process of tagging, specified IP routes are exchanged between extranet Sites using MP-BGP as specified in RFC 2547bis in the PEs and through route reflectors in the TELUS Data Network. The applicable Extranet routes will be tagged on the PE with a unique RT assigned to each Extranet. Importing and exporting of the RTs will be controlled in the Extranet VRFs to create the desired interconnection.

7.3 All STS Extranet Services will be enabled in a redundant configuration, excluding architectures where there is only a single RE available (e.g. STS WAN L3 VPN Services greater than 1 Gbps).

General STS Extranet Service Configuration[1]

Exhibit H5-E7

Quality of Service (QoS) Details and Marking Schema

1. General Description

1.1 TELUS will support four (4) levels of QoS.

1.2 TELUS will configure the CPE to classify incoming packets into the appropriate traffic classes based on the DSCP (L3) or CoS (L2) markings in the packets. The DSCP (L3) markings will conform to those shown in Table 1 below.

Table 1: TELUS Supported Levels of QoS markings

TELUS Traffic Type	DSCP	DSCP Class Name	P-Bits (CoS)
EF	46 (101110)	ef	6 (110)
	40 (101000)	cs5	
AF3	34 (100010)	af41	4 (100)
	36 (100100)	af42	
	38 (100110)	af43	
	32 (100000)	cs4	
AF2	26 (011010)	af31	3 (011)
	28 (011100)	af32	
	30 (011110)	af33	
	24 (011000)	cs3	
	18 (010010)	af21	
	20 (010100)	af22	
	22 (010110)	af23	
AF1	16 (010000)	cs2	1 (001)
Internet	0 (000000)		1 (001)

1.3 Conforming packets are considered in-profile and will be forwarded in the appropriate traffic class across the TELUS Data Network. Non-conforming or

out-of-profile packets will be mapped to the lowest subscribed AF class for forwarding across the TELUS Data Network.

2. DSCP Bit Transparency across TELUS Data Network

2.1 Whether a GPS Entity's packet is in-profile or out-of-profile, TELUS will not alter the DSCP marking, in the packet when the packet traverses the TELUS Data Network.

2.2 There are two types of non-conforming packets:

2.2.1 packets marked with a DSCP (L3) or CoS (L2) value that is not specified in the above Table 1; and

2.2.2 packets marked with a valid DSCP (L3) or CoS (L2) value specified in the above Table 1, but which are in a traffic class that is not part of the subscribed service.

2.3 Both types of non-conforming packets will be mapped to the lowest or default AF class.

3. Multi VPN QoS Behaviours

3.1 At the CPE, if more than one VPN exists, the following will apply:

3.1.1 Per VPN, Expedited Forwarding (EF) will be strictly policed and no over-subscription will be allowed.

3.1.2 For all three AF classes, the egress bandwidth will be shared between the VPNs and unused bandwidth may be used by any of the AF class in any VPN. TELUS will not provide AF QoS per VPN. AF QoS will be shared among VPNs for a given circuit.

3.1.3 Unused EF bandwidth will be available for use by the AF queues.

4. Expedited Forwarding: QoS Service Details

4.1 GPS Entities can purchase EF as a Fee-based optional feature as identified in Attachment H5-E (STS WAN L3 VPN Services). EF QoS is not available on Satellite Services.

4.2 The GPS Entities will be responsible for determining the amount of EF bandwidth required and will select such bandwidth as per Table 2 “Supported EF Subscription Rates” below. EF traffic exceeding the amount of bandwidth subscribed for by the GPS Entities will be dropped.

4.3 EF traffic not exceeding the bandwidth subscribed for by the GPS Entities will be sent across the TELUS Data Network with a higher priority than traffic of all GPS Entities in AF 1, 2 and 3 classes between circuits to which an EF QoS option applies.

4.4 The GPS Entities will select and subscribe for, and TELUS will provide and charge for, EF QoS options on a circuit-by-circuit basis, which will be QoS-enabled.

4.5 The GPS Entities may select and subscribe for an EF QoS option at a minimum of two of their circuits.

4.6 EF QoS may not be available for low speed copper-based services that are delivered off-net, on a third party’s infrastructure. Examples of potential off-net circuits are serving areas including NWTel, Bell Ontario.

5. Assured Forwarding QoS Service Details

5.1 Assured Forwarding (AF) QoS will allow the GPS Entities to separate and prioritize their network traffic among three different traffic priority classes, as described in Table 1 above, and determine a weighting for each AF class.

5.2 Traffic on the Access Connection will be prioritized according to the weighting for each AF class determined by the GPS Entities, except where technical limitations, determined by TELUS, will require the use of a standard weighting.

5.3 The STS WAN L3 VPN Services include AF1, 2 and 3 as included optional features, as noted in Attachment H5-E (STS WAN L3 VPN Services).

Table 2: Supported EF Subscription Rates

Service Name	AF Levels Included standard	Supported EF Subscription
STS WAN L3 VPN 128Kbps	1,2,3	64Kbps
STS WAN L3 VPN Asymmetric[1]	1,2,3	64, 128, 192, 256 Kbps
STS WAN L3 VPN 1.5Mbps	1,2,3	64, 128, 192, 256, 320, 384, 448, 512, 576, 640, 704, 768, 832, 896, 960, 1024, 1088, 1152, 1216, 1280, 1344 Kbps
STS WAN L3 VPN 10Mbps	1,2,3	1, 2, 3, 4, 5, 6, 7, 8, 9 Mbps
STS WAN L3 VPN 20Mbps	1,2,3	1 ,2 ,3 ,4 ,5, 10, 15 Mbps
STS WAN L3 VPN 30Mbps	1,2,3	1 ,2 ,3 ,4 ,5, 10, 20, 25 Mbps
STS WAN L3 VPN 40Mbps	1,2,3	1 ,2 ,3 ,4 ,5, 10, 20, 30 Mbps
STS WAN L3 VPN 50Mbps	1,2,3	1 ,2 ,3 ,4 ,5, 10, 20, 30,40 Mbps
STS WAN L3 VPN 60Mbps	1,2,3	1 ,2 ,3 ,4 ,5, 10, 20, 30,40,50 Mbps
STS WAN L3 VPN 70Mbps	1,2,3	1 ,2 ,3 ,4 ,5, 10, 20, 30,40,50,60 Mbps
STS WAN L3 VPN 80Mbps	1,2,3	1 ,2 ,3 ,4 ,5, 10, 20, 30,40,50,60,70 Mbps
STS WAN L3 VPN 90Mbps	1,2,3	1 ,2 ,3 ,4 ,5, 10, 20, 30,40,50,60,70,80 Mbps
STS WAN L3 VPN 100Mbps	1,2,3	1 ,2 ,3 , 4 ,5, 10, 20, 30, 40, 50, 60, 70, 80, 90 Mbps
STS WAN L3 VPN 200Mbps	1,2,3	5, 10, 15, 20, 25 ,50, 100, 150 Mbps
STS WAN L3 VPN 400Mbps	1,2,3	5, 10, 15, 20, 25, 50, 100, 150, 200, 250, 300 Mbps
STS WAN L3 VPN 500Mbps	1,2,3	5, 10, 15, 20, 25, 50, 100, 150, 200, 250, 300 Mbps
STS WAN L3 VPN 1Gbps	1,2,3	5, 10,15, 20, 25, 50, 100, 150, 200, 250, 300 Mbps
STS WAN L3 VPN 2Gbps	1,2,3	5, 10,15, 20, 25, 50, 100, 150, 200, 250, 300 Mbps
STS WAN L3 VPN 10Gbps	1,2,3	5, 10,15, 20, 25, 50, 100, 150, 200, 250, 300 Mbps
STS WAN L3 VPN Satellite	1 2/3 available on symmetric option only.	None

[1] Available On Net only

Exhibit H5-E8

IP Addressing

1. Internet Protocol Standards for STS WAN L3 VPN Services

1.1 IPv6 functionality will be available upon the delivery of the Converged Edge.

1.2 TELUS will be responsible for ensuring non conflicting address practices.

1.3 TELUS will align the Services with the following IPv4 standards:

1.3.1 RFC 791 – Internet Protocol;

1.3.2 RFC 1918 – Address Allocation for Private Internets; and

1.3.3 RFC 3022 – Traditional IP Network Address Translation.

1.4 TELUS will align the Services with the following IPv6 standards:

1.4.1 RFC 2460 – Internet Protocol version 6 Specifications;

1.4.2 RFC 4659 – BGP-MPLS IP VPN Extension for IPv6 VPN;

1.4.3 All services will support GPS Entity-owned global unicast addressing (2000::/3) [RFC 3587] and unique local unicast addressing (FC00::/7) [RFC 4193] using modified EUI-64 interface identifiers [RFC 4291]; and

1.4.4 IPv6 routing will be provided with an OSPFv3 [RFC 5340] instance with protocol adjacencies built on link-local unicast addresses (FE80::/10) [RFC 4291].

2. IPv6 Service Limitations

2.1 TELUS' planned implementation of IPv6 will be subject to the following:

2.1.1 IPv6 may not be provided natively on all CPE models;

2.1.2 IPv6 may require a dedicated demarcation interface on some CPE models;

2.1.3 IPv6 may not be supported for more than one (1) VPN on some CPE models; and

2.1.4 IPv6 AH/ESP [RFC 4302/4303] for OSPFv3 authentication [RFC 4552] may not be supported in all instances.

3. Address Translations

3.1 Unless requested by a GPS Entity, TELUS will not perform any Network Address Translations (NAT) on the GPS Entities' IP addressing.

3.2 Unless requested by a GPS Entity, TELUS will not perform any Port Address Translations (PAT) on the GPS Entities' traffic.

3.3 If a GPS Entity requests NAT or PAT, then such transalation services will be developed following the request for quote process under section 7.3 of the Agreement and additional Fees will be mutually agreed to by the parties in writing.

4.

5. GPS Entities Responsibilities

5.1 The GPS Entities will ensure that their internal IP address ranges do not conflict with TELUS' reserved IP addresses outlined above. If a GPS Entity currently uses any of these IP address ranges, TELUS will work with such GPS Entity to either develop a solution following the request for quote process under section 7.3 of the Agreement or migrate the GPS Entity to a different IP address range.

5.2 The GPS Entities will assign an appropriate number of their public IP addresses to TELUS for CPE LAN or VLAN interfaces per Site.

Exhibit H5-E9
Multicast Service

Service Title:	Multicast Service
Service Number:	H5-E9

1. Service Title And Number

1.1 The Service Title and the Service Number of this specific Available Service are set out in the above table.

1.2 Where a Service Order or Service Change Order, in each case entered into in accordance with the terms of this Agreement, references such Service Title or such Service Number, TELUS will provide such GPS Entity with the Multicast Service, which includes all of the attributes, features, characteristics, components and service parameters described in this Exhibit H5-E9, unless expressly excluded or modified in the Service Order or Service Change Order.

2. Service Description

2.1 TELUS will deploy the Multicast Service for STS WAN L3 VPN Services only as a Fee based optional feature as detailed in Attachment H5-E. The Fees associated with the Multicast Service are detailed in Table 9 of Attachment C5 (Data Services Pricing).

2.2 TELUS will support the Multicast Service natively and will not require encapsulation or an overlay network.

2.3 For low speed services like ASDL and T1, underlying factors related to the specific circuit will determine whether the Multicast Service can be provisioned, and in what manner.

3. Subscription Rates for Multicast Service

3.1 A multicast source node can be subscribed at 512 Kbps, or at 1 Mbps, 2 Mbps, 3 Mbps to 10 Mbps in increments of 1 Mbps. Pricing for these subscriptions are detailed in Table 9 of Attachment C5 (Data Services Pricing).

4.

5. Multicast Service Technical Specifications

5.1 RFC 4601 Protocol Independent Multicast - Sparse Mode: Protocol Specification.

In the Multicast Service design, PIM-SM will be running between CPE and PE as a C-PIM instance for building a Multicast Service forwarding tree. PIM state changes in a C-PIM instance on a PE may interact with the BGP MCAST-VPN, which ends up with a BGP C-MCAST route update. Only certain types of PIM state change can trigger an MCAST-VPN BGP update. PIM-SM needs to be enabled on the CPE LAN interface. This interface will be put into global context, instead of a VRF.

5.2 RFC 3569 and overview of source-specific multicast.

PIM Source Specific Mode (PIM-SSM, RFC 3569) will not be enabled on either PE or CPE. PIM-SSM is a special mode of PIM-SM, and only requires that it be enabled on the FHR (First Hop Router) to receivers. In the Multicast Service design, PE and CPE are not expected to have any Multicast Service receiver connected directly, making RFC 3569 unnecessary.

Exhibit H5-E10
Secure IP Anywhere Service

Service Title:	Secure IP Anywhere Service
Service Number:	H5-E10

1. Service Title and Number

1.1 The Service Title and the Service Number of this specific Available Service are set out in the above table.

1.2 Where a Service Order or Service Change Order Change, in each case entered into in accordance with the terms of this Agreement, references such Service Title or such Service Number, TELUS will provide such GPS Entity with the Secure IP Anywhere Service, which includes all of the attributes, features, characteristics, components and service parameters described in this Exhibit H5-E10, unless expressly excluded or modified in the Service Order or Service Change Order.

2. Service Description

2.1 The Secure IP Anywhere (SIPA) Service consists of two components, a wireless data service and an STS WAN L3 VPN Access Connection.

2.2 The SIPA Service provides a wireless connection from a GPS Entity's cellular devices through TELUS' cellular network and the TELUS Data Network to the GPS Entity's local area network or networks.

2.3 The SIPA Service is only available with wireless data services using TELUS' 1x/EVDO, HSPA+ or future high speed cellular network.

2.4 The connection from a GPS Entity's LAN to the TELUS Data Network uses the Internet Protocol (IP) for routing between Sites in a unique wide area network (WAN) plan. The Secure IP Anywhere Service uses IP addressing and routing standards and supports routing to TELUS provided IP addresses, public IP addresses, or GPS Entity provided public or private IP addresses. HSPA+ SIPA (or future cellular network) supports GPS Entity public IP addresses, but the CDMA version of SIPA does not support GPS Entity public IP addresses.

3. SIPA STS WAN L3 VPN Access Connection

3.1 The STS WAN L3 VPN Access Connection will provide a 10 Mbps maximum speed per VRF instance for EVDO. Maximum speeds for the HSPA+ SIPA Service have not been determined by TELUS.

3.2 STS WAN L3 VPN Access Connections will be provisioned on a Site-by-Site basis, using a facility from the POP that will terminate on the CPE at the Site.

3.3 TELUS will equip the STS WAN L3 VPN Access Connection CPE with either a 100BaseT-FDX port or 802.1Q trunking for connection to the GPS Entities' LAN equipment. The Service Demarcation for the STS WAN L3 VPN Access Connection will be at the LAN interface port on the CPE.

3.4 STS WAN L3 VPN Services are QoS enabled as described in Exhibit H5-E7. QoS is not currently available on the cellular component of the network.

4. Mobile Authentication

4.1 Once the mobile device is granted access by the Radio Access Network (RAN), the data is transcoded from its native protocol to IP packets by the packet control function. The mobile data traffic must be authenticated and authorized to access TELUS' cellular network, based on the SIPA Service profile.

4.2 The mobile device must also be authenticated by TELUS' cellular network through the CDMA or HSPA key exchange mechanisms.

5. Private Secure Mobile WAN

5.1 Traffic from mobile devices that will be provisioned with the SIPA Service profile will be routed from the virtual home agent through the SIPA Service in an MPLS-based VPN tunnel directly to the GPS Entities through a STS WAN L3 VPN Service.

5.2 Only GPS Entity data traffic will traverse the VPN tunnel that will be implemented via the GPS Entities' specific VRF instance and VLAN trunking isolation, completely bypassing TELUS' Internet zone.

5.3 Wireless and wireline VRF instances will employ a unique MD5 authentication key to use the SIPA Service.

6. Closed User Groups

6.1 A Closed User Group (CUG) is a private group of mobile device users that share a common data access policy on TELUS' cellular network. TELUS will activate access rules for a particular CUG for subscribers.

6.2 A single SIPA Service gateway can support multiple CUGs for a GPS Entity.

6.3 GPS Entities requesting a CUG must specify the source and destination of their communications.

6.4 TELUS will support the following CUGs:

6.4.1 WAN CUG, which will limit mobile traffic to a static list of application servers that will be reachable via the STS WAN L3 VPN Access Connection. Traffic from the Internet will be routed, via a GPS Entity's network firewalls, based on GPS Entity's policies.

6.4.2 Mobile-to-mobile CUG, which will enable or deny mobile-to-mobile traffic paths, in accordance with a GPS Entity's policies.

7. Mobile Security Policies

7.1 The SIPA Service will support a GPS Entity's internal network security by extending its policies to mobile devices.

7.2 Changes to a GPS Entity's internal network security policies will extend to mobile devices.

8. Fees

8.1 There are three components for the Fees related to the SIPA Service:

8.1.1 the STS WAN L3 VPN Access Connection component, which is described in Attachment H5-E and priced in Table 6 of Attachment C5;

8.1.2 a one-time Fee per project or per implementation as described in Table 11 of Attachment C5; and

8.1.3 the monthly cost for the SIPA Service, which is described in Table 11 of Attachment C5.

Exhibit H5-E11

Underlying Infrastructure Performance

This Exhibit identifies the general performance characteristics associated with the underlying infrastructure used to deliver Data Services to the GPS Entities. This information is solely intended to be used for general informational purposes only. The metrics referenced in this document do not constitute a commitment or guarantee by TELUS either with respect to anticipated service parameters or expected service performance. Additionally, it is important to note that these metrics are based on measures of the underlying infrastructure (typically delivered over Ethernet, OC3 or DS3), not the overlying Data Service (e.g. STS WAN L3 VPN Services) which may have little or no relation to these metrics. Table 1 outlines the capacity targets associated with the infrastructure.

1. STS WAN L3 VPN Full-duplex Services

Table 1 indicates the forwarding capacity objectives for the different types of underlying infrastructures for Data Services.

Table 1

	Forwarding Capacity Objective for 64-byte Packets		Typical Forwarding Capacity (50% 64-byte + 50% 1500-byte Packets)
Infrastructure Bandwidth	Both Directions (packets per second)	One Direction (packets per second)	Both Directions (Mbps)
ADSL		220 upstream 1200 downstream	
10 Mbps	20,000	10,000	18
20 Mbps	40,000	20,000	36
30 Mbps	60,000	30,000	54
50 Mbps	100,000	50,000	90
100 Mbps	200,000	100,000	180
200 Mbps	400,000	200,000	360
300 Mbps	600,000	300,000	540
400 Mbps	800,000	400,000	720
500 Mbps	1,000,000	500,000	900
1000 Mbps	2,000,000	1,000,000	1800

Exhibit H5-E12

Fixed Broadband Wireless WAN Service

Service Title:	Fixed Broadband Wireless WAN Service
Service Number:	H5-E12

1. Service Title and Number

1.1 The Service Title and the Service Number of this specific Available Service are set out in the above table.

1.2 Where a Service Order or Service Change Order, in each case entered into in accordance with the terms of this Agreement, references such Service Title or such Service Number, TELUS will provide such GPS Entity with the Fixed Broadband Wireless WAN Service, which includes all of the attributes, features, characteristics, components and service parameters described in this Exhibit H5-E12, unless expressly excluded or modified in the Service Order or Service Change Order.

2. Service Description

2.1 The Fixed Broadband Wireless WAN Service uses a fixed broadband transport model to provide last mile network access services.

2.2 STS WAN L3 VPN Services can be provided across fixed broadband wireless WAN underlying infrastructure as a fully custom priced solution. Pricing is provided on a per Site basis due to differing geographic parameters.

2.3 The characteristics of this Service are as follows:

2.3.1 supports the STS WAN L3 VPN Service parameters;

2.3.2 connectivity for 1 to 8 full and fractional T1 TDM links or higher if facilities are available;

2.3.3 supports simultaneous transport of mixed IP and T1/E1 traffic streams for GPS Entities' Sites that may need both voice and data delivered via this Service;

2.3.4 802.1p can be used for traffic prioritization; and

2.3.5 licensed spectrum may be available. Service Levels are dependent on factors including the use of licensed or unlicensed spectrum. Please refer to Schedule J for additional details.

3. Fixed Broadband Wireless WAN Service Frequencies

3.1 The use of unlicensed spectrum, as a component of the Fixed Broadband Wireless WAN Service, is best used in rural areas or areas with lower population density (minimal chance of interference).

3.2 For deployment of the Fixed Broadband Wireless WAN Service in urban or more heavily populated areas, licensed spectrum may be the preferred method.

4. Security Features of the Fixed Broadband Wireless WAN Service

4.1 The following security features will be available with the Service:

4.1.1 point-to-point unique authentication for radio pairs;

4.1.2 strong encryption as a part of the Service, either in the radio infrastructure or as an overlay to the L3 systems; and

4.1.3 other technical security standards as described in Attachment R5 appropriate for the delivery of the STS WAN L3 VPN Services.

5. Service Limitations

5.1 Service limitations will be identified as part of the request for quote process under section 7.3 of the Agreement.

5.2 The request for quote process may be extensive and time consuming and may

require a Site survey to establish whether additional facilities are required to deliver the Service. Site surveys may include aerial surveys, surveys of physical plant/ infrastructure, land surveys, or such other surveys as may be required for the potential Site selected for the Service.

5.3 GPS Entities may incur additional costs for Site surveys. All costs will be identified as part of the request for quote process under section 7.3 of the Agreement and will be mutually agreed to by both parties as part of the acceptance of such quote.

Exhibit H5-E13
Description of 'Standard', 'Enhanced' and 'Premium' Classifications

1. General Description

1.1. There are distinct characteristics related to 'Standard', 'Enhanced' and 'Premium' service classifications as related to STS WAN L3 VPN service architectures. This document outlines the general architectural factors required to achieve differentiated classification of service.

1.2. For 'Enhanced' and 'Premium' service classifications, Fees associated with delivering a compatible architecture would be part of the request for quote process under section 7.3 of the Agreement.

1.3. The classification of Data Services as 'Standard', 'Enhanced' or 'Premium' is limited to STS WAN L3 VPN Services.

2. Service Classifications

2.1. Standard Classification

2.1.1 The conventional manner used by TELUS to deliver Data Services to a GPS Entity is identified as the 'Standard' service architecture. 'Standard' classifications of Data Services provide a single access and router facility with no significant undertakings to eliminate single points of failures. Figure 1 is an example of the architecture for a 'Standard' Data Service, and is provided for informational purposes only.

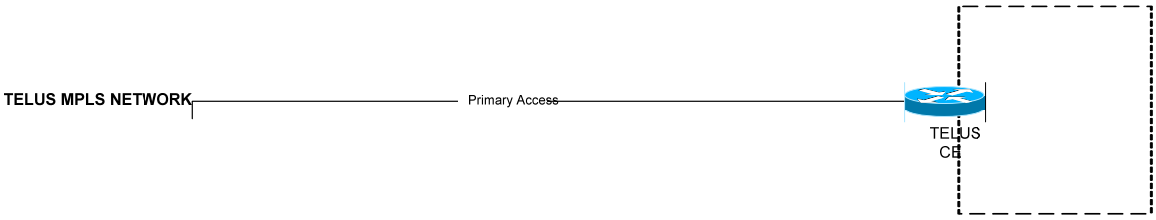


FIGURE 1

2.2. Enhanced Classification

2.2.1 'Enhanced' classifications of Data Services introduce additional access and/ or router facilities that help mitigate common points of failure and introduce additional redundancy. Despite the additional redundancy, the 'Enhanced' service does not completely eliminate the presence of single points of failure. Backup facilities used to establish 'Enhanced' classification will not necessarily provide bandwidth equal to the primary facility's bandwidth.

2.2.2 An example of the architecture of an 'Enhanced' classification of the STS WAN L3 VPN Service is shown in Figure 2, and is provided for informational purposes only.

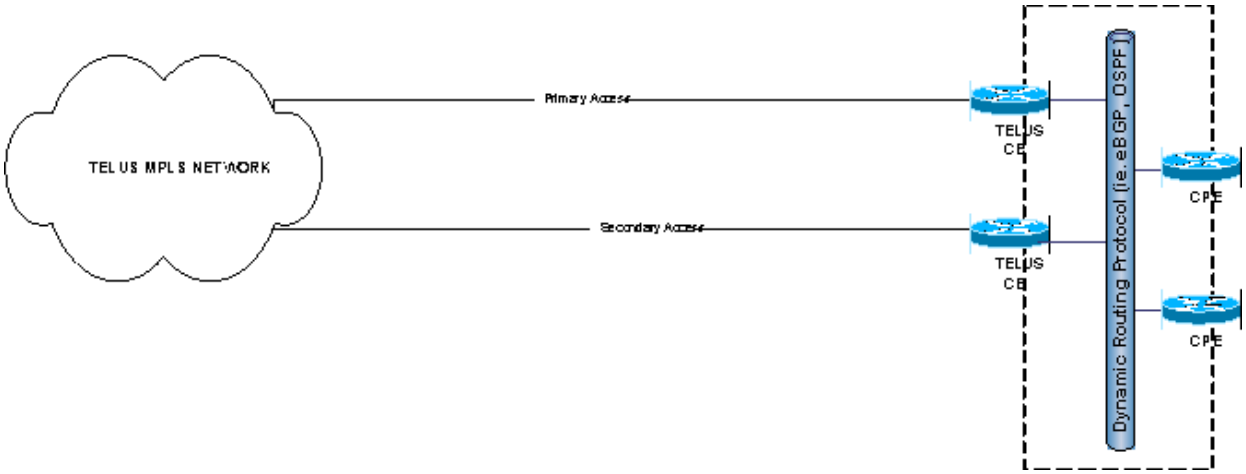


FIGURE 2

2.3. Premium Classification

2.3.1 The ‘Premium’ classification of Data Services provides for complete redundancy, including dual diverse accesses, distinctly separate router facilities and an elimination of all single points of failure. Backup access facilities will be engineered to provide bandwidth equal to the primary facility. The preferred design for this classification of service is triple diverse access with one access being high-bandwidth wireless.

2.3.2 An example of the architecture of a ‘Premium’ classification of the STS WAN L3 VPN Service is shown in Figure 3, and is provided for informational purposes only.

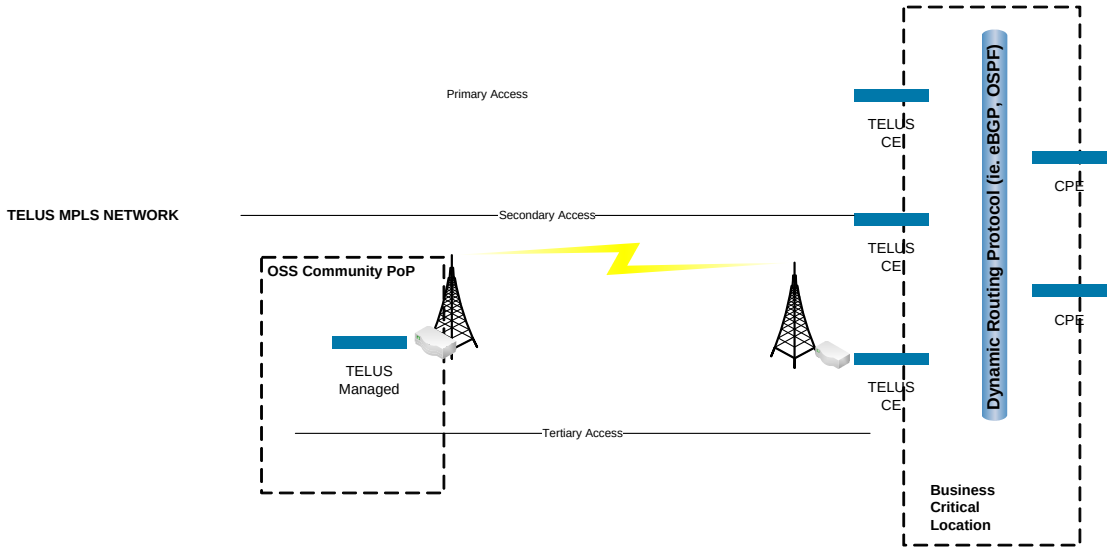


FIGURE 3

3. Measurement and Monitoring Limitations – 'Premium' Classification of Service

3.1. The 'Premium' architecture is designed to provide five 9s availability.[1] Notwithstanding, the capability to measure the 'Premium' Data Service's availability in thousandths of a percent is not available; hence the maximum measure is three 9s availability.[2]

3.2. Other factors that may impact the feasibility of this classification include, but are not limited to the following:

3.2.1. polling times and routing protocol convergence may not give a true indication of availability;

3.2.2. polling packets use a significant amount of the link bandwidth; and

3.2.3. the complexity of the design can be a contributing factor in outages.

4. Important Considerations to achieving 'Premium' and 'Enhanced' Class Architectures

4.1. Diversity.

4.1.1. For 'Enhanced' and 'Premium' Data Services, there will be diverse circuits from the POP to the Site.

4.1.2. The GPS Entities will work with TELUS to ensure diversity at their Sites for any 'Enhanced' Data Service.

4.1.3. 'Premium' Services will have full physical diversity.

4.2. Dynamic Routing for automated circuit failover.

4.2.1. The use of dynamic routing protocols such as eBGP or OSPF is required to ensure network connectivity if an access fails. These protocols allow faster route convergence, resulting in better failover in the event of a failure.

[1] Generally understood to be 99.999% uptime, excluding scheduled downtimes.
[2] Generally understood to be 99.9% uptime, excluding scheduled downtimes.

4.3. Customer Participation.

4.3.1. Working in conjunction with TELUS, the GPS Entities' network design engineers play a critical role in the development of a business critical site configuration. It is essential that the GPS Entities actively participate to create the necessary diversity for their physical and LAN environments. Creating a diverse physical infrastructure includes, but is not limited, to the following factors and considerations:

4.3.1.1 redundant/ back-up power supplies;

4.3.1.2 separate physical infrastructure and pathways; and

4.3.1.3 separate and secure physical spaces for interconnection.

4.3.2. The GPS Entities play a critical operational role as they must exchange routing information with TELUS edge routers. The 'Premium' Data Service design requires a minimum of two CPE routers to ensure high availability. Dynamic routing between the GPS Entities and TELUS provides the failover mechanism if a TELUS access fails or if a GPS Entity's CPE router fails. Creating diverse operational processes includes, but is not limited to, processes related to contact and communications support.

4.4. Failover.

4.4.1. If an Access Connection in a 'Premium' or an 'Enhanced' Data Service fails, TELUS estimates that failover to the next available access would take 40 to 45 seconds because of routing protocol convergence. TELUS does not consider routing protocol re-convergence time to be a service outage. This delay is inherent in the protocol stack and cannot be avoided.

Attachment H9

Cellular Services

In accordance with this Agreement, TELUS will as of the Effective Date make available to the GPS Entities the following separate types of Cellular Services:

- Standard Cellular Services, as described in Attachment H9-A; and
- iDEN Network (Mike) Services, as described in Attachment H9-B.

Attachment H9-A

Standard Cellular Services

Service Title:	Standard Cellular Services
Service Number:	H9-A

1. Service Title and Number

1.1 The Service Title and the Service Number of this specific Available Service are set out in the above table.

1.2 Where a Service Order or Service Change Order, in each case entered into in accordance with the terms of this Agreement, references such Service Title or such Service Number TELUS will provide such GPS Entity with Standard Cellular Services which include all of the attributes, features, characteristics, components and service parameters described in this Attachment H9-A, unless expressly excluded or modified in the Service Order or Service Change Order.

2. Service Description

2.1 The Standard Cellular Services may be used for both voice and data communication and are provided by a terrestrial radio-based service providing two-way communications by dividing the serving area into a regular pattern of sub-areas or cells, each with a base station having a low-power transmitter and receiver. As of the Effective Date, the Standard Cellular Services are based on the CDMA and HSPA wireless standards. During the Term, TELUS may replace or supplement such standards with new or additional standards as part of its overall wireless network evolution in accordance with the technology currency obligation contained in section 8.1 of the main body of the Agreement provided that TELUS complies with its obligation in section 9.1 of this Attachment and the GPS Entities have the benefit of the termination rights and related adjustments as contemplated in section 9.2 of this Attachment. Potential future wireless standards may include GSM, WIMAX and LTE. As and when wireless standards evolve, TELUS will update the Standard Cellular Services as applicable in accordance with its obligations under this Agreement.

2.2 The availability, standards and features of the Standard Cellular Services vary depending on whether the Standard Cellular Services are being used for Cellular Voice Services or Cellular Data Services.

2.3 The Standard Cellular Services are further described in the Cellular Service Plans and Additional Cellular Service Plan Features. Cellular Service Plans for the Standard Cellular Services facilitate the access of the Cellular User Equipment to TELUS' cellular network and determine the features and characteristics which will be available to Cellular End Users, including Cellular Data Services and Cellular Voice Services.

2.4 The Standard Cellular Services include:

2.4.1 The provision of Cellular User Equipment described in this Attachment as, if and when requested in accordance with this Agreement by a GPS Entity for their Cellular End Users;

2.4.2 The other components of the Standard Cellular Services described in section 5.1.1; and

2.4.3 The provision of the support services described in this Attachment and Schedule N (Problem and Incident Management Procedures)

3. Service Availability

3.1 As of the Effective Date, the Standard Cellular Services will be available within British Columbia in the areas set out in the coverage map in the attached Exhibit H9-A1. Access to such Cellular Services will also be available within Canada in the areas set out in the coverage map in attached Exhibit H9-A2 and through roaming in the United States of America as set out in the coverage map in the attached Exhibit H9-A3. After the Effective Date, TELUS will make its coverage maps for such jurisdictions available to the GPS Entities, in reasonable detail, at the Cellular TELUS GPS Entity Portal. If after the Effective Date, TELUS reduces the areas where the Standard Cellular Services are available under this section 3.1 (which for certainty will exclude any temporary outages), the Subscriber Commitment and the Revenue Commitment will be adjusted accordingly through the Change Process to remove, as applicable, the corresponding, affected Cellular End Users or Fees from their calculation so that the GPS Group is not adversely affected (from a Fee perspective) from the reduction in the area of availability of such Cellular Services.

3.2 Standard Cellular Services will be made available by TELUS in accordance with the availability-related Service Levels for Standard Cellular Services set out in Schedule J (Service Levels).

3.3 In the event that any GPS Entity requests from TELUS additional Cellular Services coverage, including within building coverage, within British Columbia during the Term, the following terms and conditions will apply:

3.3.1 if TELUS can provide the additional requested Service coverage for no cost or nominal cost, TELUS will make the appropriate changes at no cost to the GPS Entity within a time period mutually agreed to by such GPS Entity and TELUS, each party acting reasonably, such time period commencing on the date upon which the GPS Entity requested that TELUS provide such additional Service coverage; and

3.3.2 if TELUS cannot provide the additional requested Service coverage for no cost or nominal cost, but TELUS will be adding such coverage in order to provide services to its other customers, TELUS will make the appropriate

changes at no cost to the GPS Entity within the time period for which TELUS has scheduled such changes.

3.3.3 if TELUS notifies the GPS Entity that it cannot provide the additional requested Service coverage for no cost or nominal cost and TELUS will not otherwise be adding such coverage, the GPS Entity may, in accordance with section 9 of the main body of the Agreement, issue a Change Request to TELUS describing the work required, including:

3.3.3.1 whether a project manager is required;

3.3.3.2 the date by which the work is to be completed;

3.3.3.3 other applicable terms for the work; and

3.3.3.4 the period for which the Proposal is to be valid.

3.3.4 TELUS will respond, in accordance with section 9 of the main body of the Agreement, to each such Change Request issued by a GPS Entity with a Proposal which will include (in addition to information required under section 9.2.3 of the main body of this Agreement):

3.3.4.1 a detailed itemization of each appropriate component of the work;

3.3.4.2 the deployment plan;

3.3.4.3 the firm pricing to complete the work, in accordance with section 16.8 of the main body of this Agreement and any applicable fees set out in the Price Book; and

3.3.4.4 the estimated time period to complete the work.

3.3.5 Within the period for which the Proposal is valid, the GPS Entity will either notify TELUS in writing of which (if any) of the components in the Proposal the GPS Entity wishes TELUS to provide to the GPS Entity or request that the time period for the Proposal to remain valid be extended to a mutually agreeable date. If the GPS Entity notifies TELUS that it Approves of one or more of the components described in the Proposal, TELUS will proceed with the Approved components within the committed to time period for implementation set out in the Approved Proposal and, upon receipt of an appropriate detailed invoice, the GPS Entity will pay to TELUS the Fees set out in the Change Order.

4. Technical Standards

4.1 TELUS will provide Standard Cellular Services that:

4.1.1 are supported by CDMA network standards and 3G and 4G standards for Standard Cellular Services defined by the International Telecommunication Union, which includes CDMA2000;

4.1.2 allow simultaneous use of Cellular Voice Services and Cellular Data Services on HSPA networks; and

4.1.3 provide commercially available data transfer rates as are offered by TELUS to its other customers without such data transfer rates being selectively restricted for any GPS Entity.

4.2 TELUS will ensure that Secure IP Anywhere (SIPA) and the circuits used to provide such Cellular LAN Services are compliant with the technical standards specified in Attachment H5 (Data Services).

4.3 TELUS will ensure that Cellular User Equipment on the GPS Entity Approved Cellular User Equipment List that supports WiFi networking technology will:

4.3.1 use a minimum encryption level of AES 256-bit;

4.3.2 ensure strong wireless authentication using IEEE 802.1X. 802.11; and

4.3.3 use WPA2 enterprise.

5. Service Features

5.1 General Features.

5.1.1 The specific components of the Standard Cellular Services are as follows:

5.1.1.1 Cellular Service Plans for Cellular Voice Services in two categories:

5.1.1.1.1 Cellular Service Plans - Low Usage Voice, as described further in section 5.2; and

5.1.1.1.2 Cellular Service Plans - High Usage Voice, as described further in section 5.2.

5.1.1.2 In addition to the features included in the Cellular Service Plans (including the optional features described in section 7.1), the billable features include the Additional Cellular Service Plan Features for Cellular Voice Services, including such features as described in section 7.2.

5.1.1.3 Cellular Service Plans for Cellular Data Services in two categories:

5.1.1.3.1 Cellular Service Plans for BlackBerry data; and

5.1.1.3.2 Cellular Service Plans for mobile data.

5.1.1.4 In addition to the features included in the Standard Cellular Service Plans for BlackBerry® data and mobile data, the billable features include the Additional Cellular Service Plan Features for Cellular Data Services, including such features as described in section 7.2.

5.1.1.5 The provision by TELUS of Cellular User Equipment, in the five following categories, on the terms and conditions set out in this Attachment as such categories may evolve or be superseded over the Term:

5.1.1.5.1 mobile phones which are primarily designed for Cellular Voice Services;

5.1.1.5.2 BlackBerry Cellular User Equipment (in both QWERTY keyboard and Suretype keyboard models, subject to manufacturer availability), designed for use primarily with the BlackBerry Enterprise Server and Cellular Voice Services;

5.1.1.5.3 smart phones which are designed for both Cellular Voice Services and Cellular Data Services; and

5.1.1.5.4 data modems which are primarily designed for Cellular Data Services; and

5.1.1.5.5 tablets, slates and similar devices with capabilities to use the Cellular Data Services.

5.1.1.6 the Cellular LAN Services and Machine-to-Machine Services described in section 5.3, as may change from time to time pursuant to section 5.11; and

5.1.1.7 the provision of the following two categories of Cellular Software and Custom Applications:

5.1.1.7.1 general Cellular Software and Custom Applications, including wireless work orders, Mobile VPN Plus as described in section 2 of Exhibit H9-A4, TELUS MobileCare as described in section 3 of Exhibit H9-A4, Alert and Assist as described in Exhibit H9-A5, and GPS tracking and dispatch solutions as described in Exhibit H9-A6; and

5.1.1.7.2 BlackBerry® device-related Cellular Software and Custom Applications, which includes all software to enable the BlackBerry suite of applications on BlackBerry brand Cellular User Equipment

(including BlackBerry- BlackBerry Enterprise Server (BES) and BlackBerry – Client Access License (CAL)).

5.2 General Characteristics of Cellular Service Plans.

5.2.1 Throughout the Term, TELUS will offer the following types of Cellular Service Plans for the Standard Cellular Services:

5.2.1.1 minimum 1 (one) Cellular Service Plan for Low Usage Voice (as defined in Table 1 below);

5.2.1.2 minimum 1 (one) Cellular Service Plan for High Usage Voice (as defined in Table 1 below);

5.2.1.3 a range of Cellular Data Services plans from less than 1 MB up to, and including, unlimited monthly data usage; and

5.2.1.4 a range of BlackBerry Services plans up to, and including, unlimited monthly data usage.

5.2.2 TELUS will provide Cellular Service Plans with the general characteristics set out in Table 1 below.

Table 1

Category	Voice Minutes Included	Voice Pooling	Data Kilobytes Included	Data Pooling	LD and Voice Restrict	Notes
Cellular Voice Services –Low Usage						
Low Usage Voice #1	Nil	Optional	N/A	N/A	Upon request	
Cellular Voice Services –High Usage						
High Usage Voice #1	200	Optional	N/A	N/A	Upon request	
High Usage Voice #2	350	Optional	N/A	N/A	Upon request	
Cellular Data Services – Mobile Data						
Mobile Data – 1 MB (See section 5.2.3 and 5.2.4)	Nil	N/A	1MB	N/A	Upon request	
Mobile Data-100 MB (See section 5.2.3 and 5.2.4)	Nil	N/A	100 MB	N/A	Upon request	
Mobile Data - 500 MB	Nil	N/A	500MB	Optional	Upon request	
Mobile Data - 1 GB	Nil	N/A	1GB	Optional	Upon request	
Mobile Data - 10 GB	Nil	N/A	10GB	N/A	Upon request	
Mobile Data – Unlimited	Nil	N/A	Unlimited	N/A	Upon request	CDMA Only

Category	Voice Minutes Included	Voice Pooling	Data Kilobytes Included	Data Pooling	LD and Voice Restrict	Notes
Cellular Data Services – BlackBerry Services Data						
Unlimited email & Internet browsing	Nil	N/A	Unlimited	N/A	Upon request	Internet Browsing via the BES; Tethering is available for an additional Fee set out in the Price Book.
Unlimited email & data	Nil	N/A	Unlimited	N/A	Upon request	Tethering is available for an additional Fee set out in the Price Book
500 MB email & data	Nil	N/A	500 MB	N/A	Upon request	Tethering is available for an additional Fee set out in the Price Book

5.2.3 The 1 MB and 100 MB Cellular Service Plans for Cellular Data Services described in Table 1 above must be ordered from and supplied directly by TELUS only. They are not available through Retailers.

5.2.4 Except in respect of periods to which a Subscriber Commitment Shortage applies, GPS Entities may migrate a Cellular Service Plan for Cellular Data Services between the 1MB and 100MB Cellular Service Plans and between 500 MB and unlimited Cellular Service Plans (described in the Table 1 above) without any penalty, provided, however, that migrations are not permitted to Cellular Service Plans for Cellular Data Services from 500MB or greater to 100MB or less.

5.2.5 Optional features of Cellular Service Plans for the Standard Cellular Services both included in the base price and available for an additional Fee are described in section 7.

5.2.6 Cellular User Equipment will not be used for the purpose of Tethering unless the GPS Entity has subscribed for a Cellular Service Plan that permits Tethering. If Cellular User Equipment subject to any other type of Cellular Service Plan is used for Tethering, TELUS will notify the GPS Entity of such Tethering and may change, with the approval of the GPS Entity, the Cellular Service Plan applicable to that Cellular User Equipment to the lowest monthly charge plan posted on the TELUS Public Web Site that permits Tethering at that time or such other plan that permits Tethering as agreed by TELUS and the GPS Entity.

5.3 General Characteristics of Cellular LAN Services and Machine-to-Machine Services.

5.3.1 TELUS will provide the types of Cellular LAN Services and respective components described in Table 2 below.

Table 2

Cellular LAN Service Name		**Notes**
Secure IP Anywhere (SIPA)		
1.	Installation	One time Fee charged per implementation.
2.	IP Address Reservation	One time Fee charged per implementation only if IP reservation is required.
3.	SIPA Plan	Monthly Fee for each Cellular User Equipment which requires access to this Service. Includes custom Cellular Service Plan for Cellular Data Services and Software for encryption and compression.
4.	Circuit	A circuit may be required if the GPS Entity purchasing SIPA does not currently subscribe to Cellular Data Services.
VPN		
1.	IP Address Reservation	One time Fee charged per implementation only if IP reservation is required.
2.	VPN Service Gateway	Monthly Fee for each implementation.
3.	Public IP Address	If a Public IP Address is required , it may be ordered as an Additional Cellular Service Plan Feature. See Table 5 set out in section 7.2 for a more detailed description of this component.
4.	Static IP Address	If a Static IP Address is required, it may be ordered as an Additional Cellular Service Plan Feature. See Table 5 set out in section 7.2 for a more detailed description of this component.
5.	Cellular Service Plan for Data Services	A Cellular Service plan for Data Services is required for Cellular User Equipment to access the TELUS VPN service. See Table 1 set out in section 5.2.2 for a more detailed description of this component.
VPN+		
1.	VPN access with	VPN access is provided by ordering an

Cellular LAN Service Name		Notes
	QoS and link optimization	Additional Cellular Service Plan Feature. See Table 5 set out in section 7.2 for a more detailed description of this component.
2.	Public IP Address	If a Public IP Address is required , it may be ordered as a an Additional Cellular Service Plan Feature. See Table 5 set out in section 7.2 for a more detailed description of this component.
3.	Static IP Address	If a Static IP Address is required, it may be ordered as an Additional Cellular Service Plan Feature. See Table 5 set out in section 7.2 for a more detailed description of this component.
4.	Cellular Service Plan for Data Services	A Cellular Service plan for Data Services is required for Cellular User Equipment to access the TELUS VPN service. See Table 1 set out in section 5.2.2 for a more detailed description of this component.

5.3.2 A description of SIPA and VPN+ Cellular LAN Services is set out in Exhibit H9-A4 and are further described in Attachment H5.

5.3.3 TELUS will provide the wireless services that allow both wireless and wired systems to communicate with other devices of the same ability ("**Machine-to-Machine Services**"), including permitting a device (such as a sensor or meter) to capture an event (such as temperature, inventory level, etc.), which is relayed through a network (wireless, wired or hybrid) to an application (software program), that translates the captured event into meaningful information (for example, items need to be restocked). Machine-to-Machine Services must be ordered from and supplied directly by TELUS only. They are not available through Retailers.

5.4 Eligibility to Purchase Standard Cellular Services.

5.4.1 Subject to section 5.4.2, TELUS will only sell Standard Cellular Services under this Agreement to GPS Entities. Any Fees for such Services will be payable by the GPS Entity that ordered such Service and billed by TELUS to the applicable Designated Entity Unit.

5.4.2 Standard Cellular Services will not be sold by TELUS under this Agreement to individuals, provided, however, that, if TELUS is authorized in writing by the Administrator, TELUS will offer through TELUS' website, and employees of a GPS Entity may purchase, Standard Cellular Services pursuant to an Employee Purchase Plan. Employees of a GPS Entity will be personally liable for all fees and charges payable in respect of such

services provided pursuant to an Employee Purchase Plan and the GPS Entity will have no obligation to support such plan. TELUS will bill employees of a GPS Entity receiving services under an Employee Purchase Plan independently of the GPS Entity. For greater certainty, any such services purchased by an employee of a GPS Entity will be purchased pursuant to a separate agreement between TELUS and employee, and such services will not be considered Services under this Agreement. Availability of the Standard Cellular Services to contractors of a GPS Entity pursuant to an Employee Purchase Plan is subject to the Approval of TELUS.

5.5 General Conditions for the Purchase of Standard Cellular Services.

5.5.1 TELUS will, with respect to the Standard Cellular Services, provide Cellular Voice Services and Cellular Data Services and their components under the following general conditions:

5.5.1.1 Cellular voice services and cellular data services that are advertised on the TELUS Public Web Site will not be withheld by TELUS if any GPS Entity requests that they be included in the Standard Cellular Services in accordance with the process set out in section 5.11.

5.5.1.2 Except as set out in section 6.1.2, no Cellular Services or Software to access such services will be added to Cellular User Equipment by TELUS without prior consultation with the Administrator and without the ability for a GPS Entity to restrict the addition of such services or Software on to such equipment.

5.5.1.3 No Cellular Service Plans purchased (including renewed) under this Agreement will have a term that extends past the end of the Term.

5.5.1.4 Subject to section 5.5.1.14, if a Cellular End User cancels his or her Cellular Service Plan, such Cellular End User will not be entitled to keep the telephone number used to deliver the Standard Cellular Services under such Cellular Services Plan. For greater certainty, and subject to section 5.5.1.7, a Cellular End User may suspend a Cellular Service Plan pursuant to section 5.5.1.6 without losing any entitlement to the telephone number used to deliver the Standard Cellular Services under such Cellular Services Plan. For clarity, any entitlement of a Cellular End User to a telephone number shall at all times be subject to Applicable Laws.

5.5.1.5 The Parties agree that, pursuant to section 7.2.1 of the main body of this Agreement all service agreements between the GPS Entities and TELUS with respect to Standard Cellular Services that are in force and effect as of the Effective Date

will be superseded and replaced by this Agreement upon the issuance of an Initial Service Order for such Cellular Services. Notwithstanding the foregoing, in the event that:

5.5.1.5.1 a plan currently subscribed to by a GPS Entity is not available pursuant to this Agreement; and

5.5.1.5.2 there is no similar or better plan available pursuant to this Agreement in the reasonable opinion of the GPS Entity,

a GPS Entity may request that TELUS review the plans currently subscribed to by such GPS Entity with the Cellular Service Plans to determine if the plans currently subscribed to by a GPS Entity may be grandfathered, or to determine if a replacement plan is available to address the GPS Entity's concerns. TELUS may, in its sole discretion, determine whether or not to grandfather a plan or to create a new plan. In the event that TELUS does not grandfather the plan and no Cellular Service Plan hereunder is satisfactory to the GPS Entity as a replacement plan, the GPS Entity may elect not to roll its existing service agreement into this Agreement.

5.5.1.6 Cellular Service Plans purchased or renewed under this Agreement by a GPS Entity may be suspended by the GPS Entity for a period of up to 90 days without payment of a Fee for such suspension or for a period of more than 90 days for the applicable Fee specified in the Price Book (which is inclusive of all charges for the Services or features that are not accessed during such suspension) by delivering written notice of suspension to TELUS.

5.5.1.7 A suspended Cellular Service Plan that is resumed within 180 consecutive days of each such suspension will have the same attributes (e.g. phone number, service plan, and functionality), except IP address, domain name and e-mail i.d., as at the time of suspension, unless otherwise requested by the GPS Entity in writing. Suspended Cellular Service Plans that are resumed following such 180 consecutive day period may not have the same attributes as at the time of suspension.

5.5.1.8 A GPS Entity may pursuant to a Service Change Order authorize the move of one or more Cellular End Users from one Cellular Service Plan to another Cellular Service Plan.

5.5.1.9 Unless otherwise specified in a Change Order, all Cellular Service Plan changes requested by a GPS Entity will, for billing purposes, be effective the date the request made by the GPS Entity is received by TELUS.

5.5.1.10 In accordance with section 33.5 of the main body of this Agreement, if any Cellular Service Plan purchased by a GPS Entity under this Agreement is affected by a Regulatory Event, then such GPS Entity may terminate any part of the plan that is affected by such change or the whole plan without payment of any termination or other similar Fees.

5.5.1.11 TELUS will not charge any early cancellation Fees on Cellular Service Plans if they are cancelled prior to the end of the Term unless:

5.5.1.11.1 a Subscriber Commitment Shortage occurs in respect of the period to which the early cancellation Fees are applicable; or

5.5.1.11.2 the early cancellation Fees are associated with Cellular Service Plans added in accordance with section 5.11 which were then offered on a promotional pricing basis and not otherwise ordinarily offered by TELUS on such basis or which were bundled with a specific Cellular User Equipment and not otherwise ordinarily offered except in connection with such Cellular User Equipment.

5.5.1.12 TELUS is only permitted to provide, either directly or through its Retailers that are Subcontractors, Standard Cellular Services to a GPS Entity if it receives a Service Order or Service Change Order from such GPS Entity for Standard Cellular Services and only to the extent specified in such order.

5.5.1.13 New Standard Cellular Services ordered pursuant to a Service Order or Service Change Order will be deemed initially activated upon the cellular telephone number for such Service being activated by TELUS.

5.5.1.14 TELUS will ensure Wireless Number Portability is available to GPS Entities such that a cellular telephone number may be transferred from TELUS to another cellular carrier, and vice versa, without additional charge when:

5.5.1.14.1 the cellular telephone number has an active Cellular Service Plan attached; and

5.5.1.14.2 Wireless Number Portability is available.

5.5.1.15 TELUS will ensure that cellular telephone numbers may be retained and transferred without additional charge when

migrating from Standard Cellular Services to iDEN Network (Mike) Services, and vice versa, with TELUS.

5.5.1.16 Where the time for the doing of a thing by TELUS or a Subcontractor through a Retailer under this Agreement falls outside of Business Hours, but within the hours for which the Retailer is open to the public for business, the reference to Business Hours will be deemed to include such additional hours the Retailer is open to the public for business.

5.6 General Conditions for the Provision of Cellular User Equipment.

TELUS will provide Cellular User Equipment to the GPS Group on the following terms and conditions:

5.6.1 Models of the Cellular User Equipment will be available to the GPS Entities under this Agreement when the respective model is advertised on the TELUS Public Web Site or through Subcontractors and has been approved by the Administrator in accordance with section 6.1.4.

5.6.2 Available BlackBerry® Cellular User Equipment will, subject to availability from the manufacturer, include both QWERTY keyboard and Suretype keyboard models.

5.6.3 Mobile phones, BlackBerry® devices, data modems and smart phones will be available under this Agreement.

5.6.4 Cellular User Equipment that is advertised on the TELUS Public Web Site or through Subcontractors will be available to the GPS Entities under this Agreement, unless a manufacturer's notice of discontinuance has been issued with respect to any such equipment.

5.6.5 TELUS will have no obligation to notify the Administrator or any GPS Entity when Cellular User Equipment that is not identified as being available on the Cellular TELUS GPS Entity Portal is discontinued.

5.6.6 The categories and subcategories of Cellular User Equipment available for purchase from TELUS by GPS Entities, including their respective prices, are set out in Exhibit H9-A8 and Exhibit C9-A7 and are subject to change in accordance with section 5.11.

5.6.7 TELUS will provide new and not previously used Cellular User Equipment unless approved in writing by the GPS Entity to which it is proposed such equipment will be provided.

5.6.8 TELUS will accept, for a full refund and at its expense, any Cellular User Equipment that is returned by a GPS Entity if such Cellular User Equipment provided by TELUS differs from what was ordered by the GPS Entity pursuant to a Service Order or Service Change Order.

5.6.9 GPS Entities may purchase Cellular User Equipment from vendors other than TELUS, and use such equipment with Cellular Service Plans and Additional Cellular Service Plan Features provided by TELUS subject to the following terms and conditions:

5.6.9.1 if the equipment is listed on the TELUS Approved Cellular User Equipment List, it may be activated on TELUS' cellular network, provided that TELUS will have no obligation to subsidize the purchase of any such equipment;

5.6.9.2 if the equipment is an HSPA device not listed on TELUS Approved Cellular User Equipment List, it may be activated on TELUS' cellular network, provided that TELUS will have (a) no obligation to subsidize the purchase of such equipment, (b) no obligation to support such equipment, and (c) not otherwise be liable for such equipment, including any liability arising from a Service Level to the extent applicable to such equipment; and

5.6.9.3 if TELUS otherwise provides its Approval, which may be subject to conditions, the equipment may be activated on TELUS' cellular network.

5.6.10 TELUS will provide a link to the TELUS Approved Cellular User Equipment List on the Cellular TELUS GPS Entity Portal.

5.6.11 If a GPS Entity chooses not to purchase Cellular User Equipment from TELUS, the GPS Entity will still be entitled to TELUS' Cellular Service Plan rates set out in the Price Book with respect to the Cellular User Equipment it purchases from third parties and, subject to section 5.6.9, activates on TELUS' cellular network.

5.6.12 TELUS will not substitute different Cellular User Equipment for Cellular User Equipment ordered by a GPS Entity unless such GPS Entity agrees to the substitution in writing.

5.6.13 A GPS Entity will have the right to inspect and approve of any Cellular User Equipment requested by it pursuant to a Service Order. Inspection by the GPS Entity of advance samples will not constitute final acceptance.

5.6.14 Except for loaner Cellular User Equipment (other than Self-Managed Loaners) or demonstration Cellular User Equipment, title to Cellular User Equipment, requested pursuant to a Service Order, including for Self Managed Loaners, will pass from TELUS to a GPS Entity upon delivery to the GPS Entity.

5.6.15 Except for loaner Cellular User Equipment (other than Self-Managed Loaners) or demonstration Cellular User Equipment, Cellular User Equipment (including SIM cards) to be supplied by TELUS to a GPS Entity at any time during the Term will be transferred and assigned by TELUS free and clear of all charges, liens and encumbrances of every nature and kind

whatsoever at the time of transfer and assignment to the GPS Entity. The GPS Entities will and may, from time to time, and at all times hereafter, peaceably and quietly have, hold, possess and enjoy the Cellular User Equipment (including SIM cards) transferred and assigned to and for its own benefit pursuant to a Service Order and without any manner of hindrance, interruption, claim or demand whatsoever of, from or by TELUS, or any person whomsoever claiming through TELUS, or any person claiming title paramount to TELUS.

5.6.16 The minimum number of types and models of Cellular User Equipment available to Cellular End Users at all times during the Term (including for new activations and refreshes) will be:

5.6.16.1 four (4) general usage mobile phones, including a minimum one (1) bar style model and a minimum one (1) $0 CDMA and one (1) $0 HSPA+ model;

5.6.16.2 two (2) BlackBerry® devices, including at least one (1) $0 CDMA and one (1) $0 HSPA+ model with a full keyboard;

5.6.16.3 two (2) smartphone handsets; and

5.6.16.4 two (2) data modems, including at least one (1) $0 CDMA and one (1) $0 HSPA+ model.

5.6.17 If mobile phones become unavailable from TELUS during the Term, a minimum of four (4) smart phones, including a minimum one (1) $0 model that operates with TELUS' then most current standards (including the standards implemented for the most recent Wireless Network Evolution), will be made available to Cellular End Users for the remainder of the Term.

5.6.18 A GPS Entity may return any Cellular User Equipment to TELUS within 30 days from the date of purchase for a full refund and may deactivate the Cellular Service Plan attached to such Cellular User Equipment provided the Cellular User Equipment has, as applicable, less than 30 minutes of voice usage and 30 MB of data usage and the Cellular User Equipment has been received by TELUS in complete and like new condition.

5.6.19 If a GPS Entity fails to accept or reject Cellular User Equipment within 30 days from the receipt by the GPS Entity of the Cellular User Equipment in accordance with the applicable Service Order, the GPS Entity will be deemed to have accepted such Cellular User Equipment unless the GPS Entity and TELUS agree otherwise, provided that such deemed acceptance will not override any warranties which, for certainty, will commence on the date of possession.

5.7 Cellular User Equipment Refresh.

5.7.1 TELUS will ensure that Cellular User Equipment provided to any GPS Entity is available for refresh on the following terms and conditions:

5.7.1.1 The GPS Group may require TELUS to refresh (upgrade or replace) a third of all Cellular User Equipment being used by the GPS Group every year without any additional administration or other Fees being payable by any GPS Entity.

5.7.1.2 The number of Cellular User Equipment available for refresh pursuant to section 5.7.1.1 will be based on the average subscriber base of the GPS Group over a rolling three year period calculated at the beginning of the third year of each three year period by adding together the total number of subscribers receiving Standard Cellular Services from TELUS as of the first day of each of the three years during such period and dividing by three. For purposes of this section 5.7, the measurement of years will commence on the Effective Date. For greater certainty, the number of Cellular User Equipment available for refresh pursuant to section 5.7.1.1 will only first be determinable as of the first day of the third year. Notwithstanding the foregoing, the GPS Group will be able to exercise its refresh rights under this section 5.7 prior to such day based on its reasonable estimate of the number of Cellular User Equipment that will be available for refresh and a true up reconciliation will occur upon the number of Cellular User Equipment available for refresh pursuant to section 5.7.1.1 becoming first determinable.

For example, if the total subscribers receiving Cellular Services from TELUS for three years is as follows:

Effective Date	*20,000*
1st anniversary of the Effective Date	*19,000*
2nd anniversary of the Effective Date	*24,000*

Then, the number of Cellular User Equipment available for refresh pursuant to section 5.7.1.1 will be 21,000 ((20,000 + 19,000 + 24,000) ÷ 3).

5.7.1.3 The distribution of the refresh and the selection of the specific Cellular User Equipment to be refreshed will be determined by the GPS Group. If required, the GPS Group may use a portion of the following year's quota ahead of the end of the current year or may carry forward any 'unused refresh room' into the following year provided, however, that no more than 40% of the subscriber base receiving Standard Cellular Services as of the Effective Date will be refreshed within 12 months of such date pursuant to this *section* 5.7.1.

5.7.1.4 If a GPS Entity requires that any Cellular User Equipment be refreshed and such refresh is not covered by the GPS Group refresh rights set out above in this *section* 5.7.1, then such refresh will be done through a new purchase of Cellular User Equipment at the consumer rate for such equipment on a month to month term Cellular Service Plan as set out in the Price Book.

5.8 User Equipment Warranty.

5.8.1 TELUS will ensure that all Cellular User Equipment provided by TELUS to a GPS Entity pursuant to this Agreement is warranted as follows:

5.8.1.1 Cellular User Equipment will carry the manufacturer's warranty provided, however, that in addition to any other limitations or exclusions specified in the manufacturer's warranty, the manufacturer's warranty will not cover:

5.8.1.1.1 Defects or damage due to improper use of the Cellular User Equipment;

5.8.1.1.2 Defects or damage due to misuse, accident or neglect;

5.8.1.1.3 Defects or damage due to improper testing, operation, maintenance, installation, alteration, modification or adjustment;

5.8.1.1.4 Cellular User Equipment that has had its Mechanical Serial Number (MSN) label removed or rendered illegible;

5.8.1.1.5 Defects or damage due to food, liquid or foreign-substance spills;

5.8.1.1.6 Scratches or damage caused to plastic surfaces and other externally exposed parts due to normal use; and

5.8.1.1.7 Defects or damage cause by ancillary equipment or accessories not manufactured by the original equipment manufacturer.

5.8.1.2 Irrespective of any manufacturer's warranty, the Cellular User Equipment will be of merchantable quality and free of defects in labour and parts for at least one year after the GPS Entity takes possession of such equipment. If any defects in labour and parts are identified by the GPS Entity in the first year (commencing from the date of possession) and such defect is not covered by the manufacturer's warranty, then TELUS will be responsible for remedying such defect in accordance with section 5.8.1.4.

5.8.1.3 All manufacturers' warranties will be assigned to the individual Cellular User Equipment and the GPS Entity will be considered to be the device owner for the purposes of warranty validation.

5.8.1.4 For 12 months after the date of possession of any Cellular User Equipment provided by TELUS, TELUS will promptly repair or replace defective Cellular User Equipment at its cost without any charges (including charges for parts, labour, shipping and taxes) to the applicable GPS Entity or Cellular End User unless the damage or defect is of a type described in section 5.8.1.1.1 to 5.8.1.1.7 above or if the Cellular User Equipment is not returned to TELUS.

5.8.1.5 A Cellular End User will have the right to inspect and approve the Cellular User Equipment ordered by or for such Cellular End User in order to ensure the Cellular User Equipment is the correct equipment ordered, is new and is not damaged, deficient or broken and such initial acceptance will not override any warranties.

5.9 Self-Managed Loaner Cellular User Equipment.

5.9.1 In addition to the loaner Cellular User Equipment available at no charge under section 6.1.2.2.5, TELUS will make available loaner Cellular User Equipment (such loaners together with loaners set out in section 5.9.1 of Attachment H9-B, "**Self-Managed Loaners**") to GPS Entities for self-managed loaner purposes subject to the following terms and conditions:

5.9.1.1 TELUS will make available at no charge to the GPS Entities, the following types and quantities of Self-Managed Loaners as set out in Table 3 below.

Table 3

Cellular User Equipment	Network Technology	Quantity
Mobile Phone	CDMA or HSPA	301
BlackBerry	CDMA, HSPA or Mike	158
Smart Phone	CDMA or HSPA	1
Mobile Phone	Mike	12
Data Modem	CDMA or HSPA	81
	Total Pool	554

5.9.1.2 The GPS Entities will be responsible for managing the use of the total pool of available Self-Managed Loaners delivered by TELUS.

5.9.1.3 Once TELUS has delivered to the Administrator the total pool of available Self-Managed Loaners, TELUS may charge GPS Entities for any further loaner Cellular User Equipment requested by GPS Entities (other than the loaner Cellular User Equipment provided during repairs or demonstration Cellular User Equipment) at $100 less than the applicable month to month price advertised on the TELUS Public Web Site at the time of such request.

5.9.1.4 The models of each type of Cellular User Equipment available to the GPS Entities for self managed loaners will be the lowest price model for each type of Cellular User Equipment as advertised on the Celluar TELUS GPS Entity Portal at the time of ordering, based on a three year Cellular Service Plan (which lowest price model may include previously used or refurbished devices). In the case where there is more than one lowest price alternative, the GPS Entity may choose which model it prefers to be provided. For clarification purposes, sections 5.6.7 of this Attachment will not apply to Self-Managed Loaners where the lowest price model is a refurbished device.

5.9.1.5 TELUS will refresh without the payment of any additional Fees by the GPS Entities the Self-Managed Loaners as set out in Table 3 within 30 days of the third anniversary of the Effective Date and the end of each consecutive three year period thereafter during Term. Prior to each such refresh, TELUS and the Administrator will meet to determine if any adjustments as to the types and quantities of Self-Managed Loaners in the pool are required based on the usage by the GPS Entities during the prior three year period and expected usage by the GPS Entities for the next three year period.

5.9.1.6 If the Administrator and TELUS agree to any such adjustments pursuant to section 5.9.1.5, Table 3 above will be deemed to be amended to reflect such adjustment for the subsequent three year period and such agreement will be recorded in accordance with section 9.7 of the main body of this Agreement.

5.10 Documentation.

5.10.1 All Cellular User Equipment provided by TELUS under this Agreement will include manufacturer's documentation on the features of the equipment.

5.10.2 TELUS will provide a welcome package of Documentation in the form provided by the Administrator with each new Cellular User Equipment acquired directly from TELUS and will ensure that such Documentation is also offered in connection with the purchase of new Cellular User Equipment through a Retailer.

5.10.3 TELUS will ensure that:

5.10.3.1 Cellular End Users will have access to Documentation with respect to the available user support services for the Standard Cellular Services, such as fulfillment, problem reporting, and Incident Ticket tracking (a) online through the Cellular TELUS GPS Entity Portal, (b) from TELUS directly, and (c) from Retailers;

5.10.3.2 reference material on the cellular network features, documentation and contact information will be available both online from TELUS on the Cellular TELUS GPS Entity Portal and from Retailers and will ensure there are no materials on or accessed through the Cellular TELUS GPS Entity Portal relating to equipment and services not available for use or ordering under this Agreement;

5.10.3.3 all processes for fulfillment, problem reporting and Incident Ticket tracking will be documented and available online through the Cellular TELUS GPS Entity Portal; and

5.10.3.4 GPS Entities and Cellular End Users will be able to access information on Cellular User Equipment, features and services that are available to them for ordering under this Agreement.

5.10.4 TELUS will, upon request of a GPS Entity, provide such GPS Entity with current Documentation (such as technical, product, and service manuals from manufacturers of Cellular User Equipment and bulletins regarding Cellular User Equipment) that is provided from TELUS to Retailers in respect of the applicable Cellular User Equipment.

5.10.5 Documentation required to be provided by TELUS under this section 5.10 will be provided by TELUS without additional Fees.

5.11 Changes to Plans, Equipment, Services and Software.

5.11.1 The parties acknowledge and agree that following components of the Standard Cellular Services (each a "**Cellular Dynamic Component**") are subject to constant changes in the ordinary course as result of dynamic nature of cellular services ("**Cellular Service Market Additions**"):

5.11.1.1 Subject to compliance with the requirements set out in sections 5.6, the models of Cellular User Equipment available for purchase by GPS Entities;

5.11.1.2 Cellular Service Plans;

5.11.1.3 Additional Cellular Service Plan Features;

5.11.1.4 Cellular LAN Services; and

5.11.1.5 Cellular Software and Custom Applications.

5.11.2 Notwithstanding section 9 of the main body of this Agreement, Cellular Service Market Additions may be effected using the following procedures:

5.11.2.1 The Administrator may initiate a Cellular Service Market Addition to add a new Cellular Dynamic Component, whether in addition to the existing Cellular Dynamic Components or in substitution of an existing Cellular Dynamic Component, by providing a written request to TELUS describing the requested Cellular Dynamic Component, provided:

5.11.2.1.1 such new Cellular Dynamic Component is at the time advertised on the TELUS Public Web Site; and

5.11.2.1.2 such new Cellular Dynamic Component is not based on promotional pricing not otherwise ordinarily offered by TELUS, or if based on such promotional pricing, TELUS is not subsidizing the requested new Cellular Dynamic Component through a requirement that it may only be purchased together with other Cellular Dynamic Components in order to receive such promotional pricing or Service.

5.11.2.2 Notwithstanding section 9.2.3 of the main body of this Agreement, TELUS will not be obligated to provide a Proposal in response to any request made pursuant to section 5.11.2.1 and will not be entitled to reject the request;

5.11.2.3 A request for a Cellular Service Market Addition made pursuant to section 5.11.2.1 will immediately become a Change Order for purposes of this Agreement upon issuance by the GPS Group and such Change Order will constitute an amendment to this Agreement as described in section 5.11.2.4;

5.11.2.4 A new Cellular Dynamic Component requested in accordance with section 5.11.2.1 will be deemed added to the Service Description of the Standard Cellular Services and the Price Book and thereafter such service shall be deemed to be part of the Standard Cellular Services;

5.11.2.5 The pricing for a new Cellular Dynamic Component added pursuant to a Change Order will be consistent with section 16.8 of the main body of this Agreement and the pricing for similar Cellular Dynamic Components set out in the Price Book and will not be higher than the pricing offered on a three year or longer term basis by TELUS to its largest customers.

5.11.2.6 Subject to section 5.5.1.9, TELUS will implement a Cellular Service Market Addition within ten Business Days after receiving a request for such change made pursuant to section 5.11.2.1;

5.11.2.7 TELUS may make Cellular Service Market Additions to the available Cellular User Equipment in accordance with section 6.1.4.

5.11.2.8 Any Cellular User Equipment added to this Attachment and the Price Book at the request of the GPS Group pursuant to this section 5.11.2 will be deemed added to the GPS Entity Approved Cellular User Equipment List and TELUS will update such list to reflect such change.

5.11.2.9 The GPS Group and TELUS will jointly maintain an accurate and complete record of all Cellular Service Market Additions. Such record may be maintained in such form as the parties may agree pursuant to the Governance Process, including by way of a server-based record accessible by all parties (e.g. a record accessible on the Cellular TELUS GPS Portal). Each party will cooperate to make corrections to such records as any other party may reasonably request to ensure that the record of all changes is accurate and complete, in all material respects, at all times throughout the Term.

5.11.3 Changes to Equipment through Re-categorization.

5.11.3.1 Notwithstanding section 9 of the main body of this Agreement, Cellular Service Market Additions for Cellular User Equipment may be effected by using, in the alternative to the procedures set out in section 5.11.2 of this Attachment, the procedures set out in this section 5.11.3.

5.11.3.2 Not less than once every six month period during the Term, the Administrator and TELUS will review and jointly determine in writing the pricing category of the models of Cellular User Equipment available for purchase by GPS Entities, including the introduction of new models and removal of old models for such categories, as such categories are then set out in Attachment H9-A8 based on:

5.11.3.2.1 TELUS' obligation under section 5.2.1 to make a certain number of types and models of Cellular User Equipment available to Cellular End Users;

5.11.3.2.2 the pricing of such models of Cellular User Equipment sold with a three year or longer Cellular Service Plan as-then advertized on the TELUS' Public Web Site, excluding such pricing offered only on a promotional pricing basis and not otherwise ordinarily offered by TELUS on such basis or bundled with a specific Cellular Service Plan and not otherwise ordinarily offered except in connection with such Cellular Service Plan; and

5.11.3.2.3 the features, functionality and currency (including proximity to end of life) of such models of Cellular User Equipment as they relate to the latest Cellular User Equipment then offered by TELUS.

5.11.3.3 Not less than once every three years during the Term, or at the time of a Cellular Price Review, whichever is earlier, the Administrator and TELUS will review and jointly determine in writing the applicable pricing categories and the price points or ranges for each such pricing categories set out in Exhibit Exhibit C9-A7 based on, as applicable, the Cellular Price Review, or,

5.11.3.3.1 the then current requirements of the GPS Entities, a survey of the types and models and pricing of such models of Cellular User Equipment sold with a three year or longer Cellular Service Plan and on a month-to month basis, as-then advertized on TELUS' Public Web Site excluding such pricing offered only on a promotional pricing basis and not

otherwise ordinarily offered by TELUS on such basis or bundled with a specific Cellular Service Plan and not otherwise ordinarily offered except in connection with such Cellular Service Plan;

5.11.3.3.2 pricing then offered by TELUS to its largest customers, and

5.11.3.3.3 the relevant pricing factors previously used to determine such price-points and categories.

5.11.3.4 Any joint determination in writing by Administrator and TELUS pursuant to section 5.11.3.2 or 5.11.3.3 will:

5.11.3.4.1 immediately become a Change Order for purposes of this Agreement and will be deemed to amend this Attachment and the Price Book accordingly; and

5.11.3.4.2 be implemented by TELUS within 20 Business Days after such determination.

5.11.3.5 Any Cellular User Equipment added or removed from this Attachment and the Price Book pursuant to this section 5.11.3 will be:

5.11.3.5.1 be deemed added or removed from the GPS Entity Approved Cellular User Equipment List and the Contract or will update such list to reflect such change; and

5.11.3.5.2 if added, added in accordance with section 6.1.4.

5.11.3.6 The GPS Group and TELUS will jointly maintain an accurate and complete record of all changes made pursuant to this section 5.11.3 in accordance with section 5.11.2.9 as if such change where a Cellular Service Market Addition under section 5.11.2.

5.11.3.7 If Administrator and TELUS are unable to make a joint determination in writing pursuant to section 5.11.3.2 or 5.11.3.3 then such failure will be resolved in accordance with the Dispute Resolution Process.

6. Service Support Features

6.1 General Service Support from TELUS.

6.1.1 The following service support features will be available to GPS Entities with respect to Standard Cellular Services:

6.1.1.1 All components of Cellular Voice Services and Cellular Data Services will be available both directly from TELUS and through Retailers.

6.1.1.2 Cellular End Users and GPS Entities will be able to make changes in Cellular User Equipment, including Cellular User Equipment refresh, directly with TELUS and, except with respect to loaner Cellular User Equipment through Retailers.

6.1.1.3 TELUS will not, nor will any Subcontractor, make any request to return damaged or defective Cellular User Equipment owned by the Province for repair.

6.1.1.4 The GPS Entities may retain Cellular User Equipment that is replaced through a repair or refresh without incurring any additional Fees.

6.1.2 Support for Changes in Standard Cellular Services.

6.1.2.1 Cellular End Users may order Standard Cellular Services in accordance with the Service Order and Service Change Order processes for the Standard Cellular Services set out in section 5.5 and Attachment F9.

6.1.2.2 When TELUS is in receipt of a Service Order or Service Change Order for Standard Cellular Services, it will perform, either directly or through a Retailer, support functions described in this Attachment, as applicable, including:

6.1.2.2.1 activation of Cellular User Equipment;

6.1.2.2.2 exchanging Cellular User Equipment;

6.1.2.2.3 repairing Cellular User Equipment;

6.1.2.2.4 refreshing Cellular User Equipment;

6.1.2.2.5 providing loaner Cellular User Equipment during repairs and demonstration Cellular User Equipment; and

6.1.2.2.6 adding, removing and changing Cellular Service Plans and Additional Cellular Service Plan Features.

6.1.2.3 Any Ordinary Course Change to the Standard Cellular Services ordered by a GPS Entity (which for certainty is a change that does not affect the cost of the Standard Cellular Service) will not require a Service Change Order or Change Order but will require that the request be made by an employee of the GPS Entity with appropriate authority, and, for greater certainty, any work required by TELUS to implement such change will be inclusive within the monthly service Fee for the Service impacted by the change**.**

6.1.2.4 TELUS will provide to the GPS Entities, at no charge the GPS Entities, an online tool within the Cellular TELUS GPS Entity Portal to allow each GPS Entity to make specified changes (e.g. feature changes, suspension and reinstatements) to the Standard Cellular Services being provided to such GPS Entity.

6.1.3 Service Support for the Approval of New Cellular User Equipment Models.

6.1.3.1 Prior to new Cellular User Equipment being added to the GPS Entity Approved Cellular User Equipment List, the GPS Group may request and receive up to a total of six demonstration units of such new Cellular User Equipment with associated demonstration service plans, (with long distance blocked) at no charge for a 60 day testing period. The GPS Group will be responsible for all risk of loss or damage to any such demonstration units (normal wear and tear excepted) while on loan to the GPS Entities pursuant to this section 6.1.3.1.

6.1.3.2 If such proposed new Cellular User Equipment is added to the GPS Entity Approved Cellular User Equipment List, one or more GPS Entities may purchase such demonstration units for the applicable Fee specified in the Price Book. If such equipment is not added to such list the GPS Group will promptly return such equipment to TELUS.

6.1.4 Communication of Changes in Available Cellular User Equipment.

6.1.4.1 TELUS will ensure that Cellular User Equipment information is communicated to Cellular End Users and changes to Cellular User Equipment models approved for purchase by the GPS Entities are handled as follows:

6.1.4.1.1 Within the time period set out in Schedule II of this Agreement, the Cellular TELUS GPS Entity Portal will go-live and thereafter will be provided and maintained by TELUS during the Term. The GPS Entity Approved Cellular User Equipment List will be available on the Cellular TELUS GPS Entity Portal and any Cellular User Equipment described on such list will be deemed available for purchase

by GPS Entities under this Attachment. Prior to the go-live date of the Cellular TELUS GPS Entity Portal GPS, TELUS will circulate at the request of the Administrator the Entity Approved Cellular User Equipment List to the GPS Group.

6.1.4.1.2 TELUS may make the following changes to such list: (a) TELUS may remove from the list any Cellular User Equipment that is discontinued by the manufacturer provided that TELUS has no further stock of such equipment; (b) TELUS may remove from the list any Cellular User Equipment that no longer meets the requirements for such equipment set out in this Agreement; or (c) TELUS may add to the list any new Cellular User Equipment that has been approved by the Administrator for inclusion in accordance with section 6.1.4.1.3.

6.1.4.1.3 TELUS will provide advance notice in writing to each of the GPS Entities and the Administrator of any new Cellular User Equipment models being introduced by TELUS (such notice to be the Confidential Information of TELUS). Once approved in writing by the Administrator, TELUS will update the GPS Entity Approved Cellular User Equipment List on the Cellular TELUS GPS Entity Portal and will update its billing system to implement the pricing for such equipment. Once these tasks are completed by TELUS, the newly added Cellular User Equipment may be ordered by a GPS Entity through the Cellular TELUS GPS Entity Portal and through Retailers.

6.1.4.1.4 If TELUS is notified by a manufacturer or otherwise becomes aware that any Cellular User Equipment is nearing end of life (EOL) or is being discontinued, TELUS will notify each of the GPS Entities and the Administrator through the Cellular TELUS GPS Entity Portal or otherwise in writing.

6.1.4.1.5 TELUS will provide the Administrator and certain GPS Entities designated by the Administrator with advance bulletins regarding Cellular User Equipment at the same time any such advance bulletins are provided by TELUS to its Retailers.

6.1.5 Cellular User Equipment Repair Requirements

6.1.5.1 GPS Entities may have Cellular User Equipment that is purchased under this Agreement repaired through TELUS. If

a GPS Entity submits Cellular User Equipment to TELUS for non-warranty repair pursuant to this section, then the following terms and conditions will apply:

6.1.5.1.1 A GPS Entity may choose whether the Cellular User Equipment is replaced rather than repaired;

6.1.5.1.2 TELUS will provide to the GPS Entity a written (paper, fax or email) quote for the repair of the Cellular User Equipment showing the costs for parts, labour, shipping and taxes before repairing equipment that is no longer under warranty;

6.1.5.1.3 The GPS Entity may either approve the repairs, request that TELUS securely dispose of the equipment or request the return of the equipment;

6.1.5.1.4 If proceeding with the repairs, the Cellular End User of the equipment to be repaired may request that a loaner device be provided, in which case, subject to the terms and conditions of this Agreement (which for greater certainty does not include section 5.9) TELUS' standard commercial terms and conditions with respect to the provision of loaner equipment for its largest customers will apply unless otherwise agreed by the GPS Entity and TELUS; and

6.1.5.1.5 TELUS will be responsible for all risk of loss or damage to the Cellular User Equipment while it is in the possession or control of TELUS or its Subcontractors. The GPS Entities will be responsible for all risk of loss or damage to any Cellular User Equipment loaned to the GPS Entities pursuant to section 6.1.5.1.4 while it is in the possession or control of the GPS Entities to the maximum of its depreciated value of such loaner.

6.1.5.2 The GPS Entity may choose to have the problems with Cellular User Equipment tracked either through Incident Tickets for specific types of problems or through periodic reporting.

6.1.5.3 In the event that TELUS receives Cellular User Equipment from the Province or its Cellular End Users and determines that such equipment contains Province data, TELUS, in accordance with its obligations set out in Schedule R, will ensure the complete erasure or secure destruction of all data of any GPS Entity contained on any Cellular User Equipment delivered to TELUS or its designated Subcontractor for replacement and repair.

6.1.6 Changes to Retailers and their Location.

6.1.6.1 Without limiting the terms and conditions with respect to Subcontractors set out in Article 15 of the main body of this Agreement, TELUS will ensure that service support from Retailers is provided, communicated and maintained as follows:

6.1.6.1.1 TELUS will promptly inform the GPS Entities in writing of all discontinued Retailers, changes to the elements of Cellular Services supported by Retailers, and changes to Retailer locations.

6.1.6.1.2 The addition of any Retailer and the retention of any Subcontractor that is a Retailer where there is any change in control of the Subcontractor are subject to the prior written approval of the Administration in order for such Retailer to be eligible or continue to be eligible to supply Standard Cellular Services to the GPS Entities.

6.1.6.1.3 The Administrator may at its sole discretion direct TELUS to cease using a Retailer for the supply of Standard Cellular Services to one or more GPS Entities by giving notice to TELUS of the circumstances giving rise to the direction, in which event TELUS will cease using the Retailer for the provision of Standard Cellular Services under this Agreement (a) immediately if such circumstances are incurable or relate to a breach or potential breach of this Agreement by the Retailer, or, otherwise, (b) thirty days after such notice unless TELUS or Retailer has remediated to the satisfaction of the Administrator within such thirty-day period the circumstance giving rise to the direction.

6.1.7 Problem and Problem Resolution.

6.1.7.1 TELUS will perform the support services with respect to Incident and Problems relating to the Standard Cellular Services in accordance with Schedule N (Problem and Incident Management Procedures).

6.1.7.2 Cellular End Users with Incidents involving Cellular User Equipment will be directed by TELUS' dedicated support team to the Retailer from which the equipment was purchased or if that Retailer is not available, to the Retailer located nearest to such user for the resolution and repair of such Equipment.

7. Optional Features

7.1 Included Optional Features. TELUS will make each of the optional features with respect to the Standard Cellular Services set out in Table 4 below available to all GPS Entities at no additional cost to the GPS Entities. Where an optional feature has been selected by a GPS Entity in a Service Order or Service Change Order, then TELUS will provide such optional feature as a part of the Standard Cellular Services ordered without any additional Fee in respect of such feature being payable.

Table 4

No.	Cellular Service Component Included Optional Feature for:	Optional Feature Title	Description	Special Terms and Conditions
H9-A-Op1	Cellular Voice Services	Three-way calling	Where the Cellular End User and two or more other parties will be able to participate in a voice call.	None
H9-A-Op2	Cellular Voice Services	Call forward busy	Where incoming calls will be automatically transferred to another phone number if the receiving party is already on a call.	None
H9-A-Op3	Cellular Voice Services	Call forwarding	Where the Cellular End User will be able to direct incoming phone calls to another phone number prior to receiving a call.	None
H9-A-Op4	Cellular Voice Services	Caller ID	Where the Cellular End User will be able to see the incoming caller's telephone number and potentially the caller's name.	None
H9-A-Op5	Cellular Voice Services	Mobile-to-mobile calling	Where Cellular End Users who are on the same cellular network will be able to place and receive calls from others on the same network without incurring minute charges or charges to the minute buckets.	None
H9-A-Op6	Cellular Voice Services	No answer forwarding	Where incoming calls will automatically be transferred to another phone number after a predetermined number of rings.	None
H9-A-Op7	Cellular Voice Services	SMS	Where a user will be able to send a maximum of 1500 text messages to another user without charge.	SMS messages sent over the 1500 per month limit will be

No.	Cellular Service Component Included Optional Feature for:	Optional Feature Title	Description	Special Terms and Conditions
				subject to additional charges as set out in the Price Book. All incoming SMS will be received by the user without charge.
H9-A-Op8	Cellular Voice Services	Call waiting	Notifies Cellular End Users another call is waiting to be answered.	None
H9-A-Op9	Cellular Voice Services	Detailed billing	Provides a detailed review of all call activity.	None
H9-A-Op10	Cellular Voice Services	Voicemail	Allows a maximum of 10 telephone calls to be routed for recording, saving and relaying messages.	Voicemail with additional functionality will be subject to additional charges as set out in the Price Book.
H9-A-Op11	Cellular Data Services	911 service	Cellular End User can access the 911 emergency service operated by a municipality or community.	None
H9-A-Op12	Cellular Voice Services	Unlimited evening calling	Local calls provided without a per second charge or deducted from monthly allowance (beginning at 6:00 pm, Pacific Time, Monday through Thursday, and ending at 8:00 am, Pacific Time the next day) and weekends (beginning at 8:00 pm, Pacific Time, on a Friday and ending at 8:00 am, Pacific Time, on a Monday).	None
H9-A-Op13	Cellular Voice Services	Per second billing	Fees for local calls will be calculated and billed per second and Fees for long distance calls will be on a per minute basis	None
H9-A-Op14	Cellular Voice Services	Call Blocking	Outgoing call number blocking where Users will be able to permanently or on a call-by-call basis	None

No.	Cellular Service Component Included Optional Feature for:	Optional Feature Title	Description	Special Terms and Conditions
			block his or her cellular telephone number from being viewed by the receiving party.	

Any special terms and conditions with respect to an optional feature set out in Table 4 above will apply with respect to such optional feature.

7.2 Fee-Based Optional Features. TELUS will make each of the optional features with respect to the Standard Cellular Services set out in Table 5 below available to all GPS Entities at the additional price stated for each of such features in the Price Book. Where an optional feature has been selected by a GPS Entity in a Service Order or Service Change Order, then TELUS will provide such optional feature as a part of such Services.

Table 5

No.	Cellular Service Component Additional Cellular Service Plan Feature for:	Optional Feature Title	Description	Special Terms and Conditions
H9-A-Op15	Cellular Voice Services and Cellular Data Services	Overage	Minute rate charged for daytime minutes in excess of amount included per month or MB rate charged for data in excess of amount included per month	None
H9-A-Op16	Cellular Voice Services	Canada to Canada LD	Long distance calling within Canada.	None
H9-A-Op17	Cellular Voice Services	Canada to USA LD	Long distance calling from Canada to the lower 48 States (i.e. the continental U.S., excluding Alaska and Hawaii).	None
H9-A-Op18	Cellular Voice Services	Canada to International LD	Long distance calling from Canada to International locations.	None
H9-A-Op19	Cellular Voice Services	US to US/ US to Canada voice rate	Extension of voice service connectivity into the U.S.A.	None
H9-A-Op20	Cellular Voice Services	Voice roaming – International	Extension of voice service connectivity into other countries, excluding the U.S.A.	None
H9-A-Op21	Cellular Voice Services	Recurring Voice Roaming Fee	Discounted international voice roaming rate associated with an additional monthly fee.	None
H9-A-Op22	Cellular Voice	Voice Pooling	Each User contributes to	None

No.	Cellular Service Component Additional Cellular Service Plan Feature for:	Optional Feature Title	Description	Special Terms and Conditions
	Services		the pool so that unused capacity from one user can be applied to the overage of another user.	
H9-A-Op23	Cellular Voice Services	411	Canada and USA directory assistance.	None
H9-A-Op24	Cellular Voice Services	Voicemail 25	Greater mailbox and storage capacity than basic voicemail.	None
H9-A-Op25	Cellular Voice Services	Visual Voicemail	Visual voicemail where users will be able to view voice messages by converting to text and will be able to view the messages in the order of the users' choice.	None
H9-A-Op26	Cellular Voice Services and Cellular Data Services	SMS	1500 sent SMS messages and all incoming SMS received by the user per month are included in Cellular Service Plan for Cellular Voice Services without charge. Rate applies to overage and Cellular User Equipment without Cellular Service Plans for Cellular Voice Services.	None
H9-A-Op27	Cellular Voice Service and Cellular Data Services	International SMS	In addition to applicable domestic SMS fee.	None
H9-A-Op28	Cellular Voice Services	Web Browsing for mobile phone	Same as title.	None
H9-A-Op29	Cellular Voice Services	MMS	Provides multimedia capabilities on mobile phone.	None
H9-A-Op30	Cellular Voice Services	Anytime Voice Minutes (for Blackberry, Smartphone or data modems)	Minute rate charged for anytime minutes on Cellular User Equipment without Cellular Service Plan for Voice Services.	None
H9-A-Op31	Cellular Voice Services	US to US// US to Canada voice rate	Minute rate charged for anytime minutes on Cellular User Equipment without Cellular Service Plan for Cellular Voice Services	
H9-A-Op32	Cellular Voice Services	Canada to Canada or US LD	Minute rate charged for long distance minutes on Cellular User Equipment without Cellular Service Plan for Cellular Voice Services	

No.	Cellular Service Component Additional Cellular Service Plan Feature for:	Optional Feature Title	Description	Special Terms and Conditions
H9-A-Op33	Cellular Data Services	Data roaming – U.S.A.	Extension of data service connectivity into the U.S.A.	None
H9-A-Op34	Cellular Data Services	Data roaming – International	Extension of data service connectivity into other countries, excluding the U.S.A.	None
H9-A-Op35	Cellular Data Services	Recurring Data Roaming Fee	Discounted international data roaming rate associated with an additional monthly fee	None
H9-A-Op36	Cellular Data Services	Data Pooling	Each user contributes to the pool so that unused capacity from one user can be applied to the overage of another user.	None
H9-A-Op37	Cellular Data Services	Public IP address	An IP address that is designated for use in a public domain, such as the Internet.	None
H9-A-Op38	Cellular Data Services	Static IP address	Assignment of the same IP address each time the Cellular User Equipment connects to TELUS' cellular network.	None
H9-A-Op39	Cellular Data Services	VPN access with QoS and link optimization	Use of TELUS' cellular data network to conduct private data communications through the use of tunneling on TELUS VPN+ service.	None
H9-A-Op40	Cellular Data Services	Navigator	An application download which provides a navigation tool on a smart phone and Includes: 2D/3D mapping, address book navigation, weather and show times.	None
H9-A-Op41	Cellular Voice Services and Cellular Data Services	Device Protection Plan	Monthly fee provided insurance against loss, theft or damage to Cellular User Equipment	See Exhibit H9-A7

Any special terms and conditions with respect to an optional feature set out in Table 5 above will apply with respect to such optional feature. The optional feature H9-A-Op41 (Device Protection Plan) (a) will only be offered by TELUS or its Subcontractors to the extent and manner approved in writing by the GPS Entity having selected such optional feature, and (b) will not be offered to the Province and TELUS will reimburse the Province for any payment made by the Province to TELUS or a Subcontractor in respect of such a plan. The Province

will not facilitate the purchase of optional feature H9-A-Op41 (Device Protection Plan) by its purchasing representatives or its GPS End Users, including advertising the availability of such optional feature to such Persons.

8. Additional Terms Regarding the Standard Cellular Services

8.1 Monitoring. TELUS will use commercially reasonable efforts to ensure the security of all data and telephone calls within the Standard Cellular Services. TELUS has the right, but not the obligation, to monitor or log any TELUS Internet site or use of the Standard Cellular Services. Subject to the Privacy Obligations and the Security Obligations, the GPS Entities consent to any such monitoring and logging that is necessary to satisfy any law, regulation or other government request, or to enhance operating efficiencies, improve service levels, assess customer satisfaction, or protect TELUS or its customers from unwanted use of certain services or applications. TELUS reserves the right to delete, remove or block access to any Internet capability, content, information or third party products or services available or transmitted through the Standard Cellular Services that TELUS reasonably believes to be unacceptable or in violation of the terms set out in this section 8.

8.2 Rights in Numbers and Addresses. Subject to any rights the GPS Entities may have under Applicable Laws, including any right to port a number to another carrier, the GPS Entities do not own or have any property rights in any phone number, IP address, domain name or e-mail i.d. assigned to the GPS Entities or Cellular End Users for use with the Standard Cellular Services, and, except as otherwise specified in this Attachment, TELUS may change such phone numbers, IP addresses, domain names or e-mail i.d.s without the consent of the GPS Entity:

8.2.1 if TELUS has mistakenly assigned the same to two customers;

8.2.2 in the case of new number plan area introductions for phone numbers;

8.2.3 as required by Applicable Laws or Governmental Authority; or

8.2.4 as is otherwise reasonably necessary in order for TELUS to continue to deliver the Services to the GPS Entities.

For any such change, TELUS will give the GPS Entity reasonable advance notice stating the reason for and the anticipated date of such change, or in cases of emergency, give the GPS Entity verbal notice, followed by a written explanation as soon as is reasonably possible.

8.3 GPS Entity Cellular Content. The GPS Entities are solely responsible for all information, data, software or other material or content transmitted, stored or received by the GPS Entities or Cellular End Users using the Standard Cellular Services (the "**GPS Entity Cellular Content**"). TELUS exercises no control whatsoever over the content, accuracy or quality of any GPS Entity Cellular

Content. TELUS is not responsible for detecting errors or anomalies or for recreating or re-transmitting data.

8.4 Roaming. When roaming outside of TELUS' coverage area, the GPS Entities are responsible for all applicable charges, and are subject to the terms and conditions of service (including limitations of liability) imposed by the wireless service provider providing the roaming services. Charges for roaming calls may be billed in the months after the calls were made, but GPS Entities are not responsible for roaming charges that are not billed within 180 days from the date the roaming charges were incurred. At the request of a GPS Entity, TELUS will pre-configure the GPS Entity's Cellular User Equipment prior to delivery, or provide to its GPS End Users the information necessary to configure their Cellular User Equipment, to avoid unintended roaming. Notwithstanding any such pre-configuration, the GPS Entity will remain liable for any roaming charges it may incur subject always to the right of such GPS Entity to dispute Fees incurred in respect of inadvertent roaming outside of TELUS' coverage area while the applicable Cellular User Equipment is located in TELUS' coverage area.

8.5 Pricing Caps. The Fees payable in respect of the Standard Cellular Services during the Term will be in accordance with the prices set out in the Price Book and, subject to section 6.2 of C9-A and section 5.11 of this Attachment, all prices for Standard Cellular Services during the Term will be capped at the prices set out in the Price Book as of the Effective Date.

8.6 Comprehensive Pricing. TELUS agrees that the prices appearing in the Price Book in respect of the Standard Cellular Services are correct, inclusive of all costs associated with transitioning to and accessing the Standard Cellular Services, activation of the Standard Cellular Services, shipping of Cellular User Equipment and Incident resolution, administration fees, service management and service maintenance with respect to the Standard Cellular Services (other than costs with respect to in-building service coverage enhancements) and constitute the total per unit expenditure required to be made by the GPS Entity to receive the Standard Cellular Services.

8.7 No Termination Fees for Cellular Services upon Expiration. Notwithstanding anything to the contrary in this Agreement, no termination fees or other similar fees (including ECFs) will be payable by a GPS Entity in respect of the Cellular Services as a result of the expiration of this Agreement.

9. Wireless Network Evolution

9.1 If during the Term TELUS proposes to replace or supplement the CDMA and HSPA wireless standards with new or additional standards, which may include GSM, WiMAX and LTE, or otherwise evolve its wireless network to a next generation technology, (each a "**Wireless Network Evolution**"), TELUS will:

9.1.1 provide the GPS Entities written notice of the date of TELUS implementation of Wireless Network Evolution (the "**Wireless Network Evolution Date**") not less than 18 months prior to such date;

9.1.2 when and to the extent that such information becomes available, advise the GPS Entities in writing of each of the following (the "**Wireless Network Evolution Requirements**"):

9.1.2.1 the technical standards applicable to the Wireless Network Evolution;

9.1.2.2 any Cellular User Equipment, Cellular Software and Custom Applications or Cellular Service Plans or related products (collectively, the "**Orphaned Cellular Products**") then used by the GPS Entities in connection with the existing Standard Cellular Services that will no longer be provided, actively supported or compatible with, or will have degraded performance with, the Wireless Network Evolution upon its implementation;

9.1.2.3 alternative or successor products to the Orphaned Cellular Products provided by TELUS that offer equivalent functionality to the Orphaned Cellular Products and the corresponding costs for acquiring such products; and

9.1.2.4 to enable continued and uninterrupted receipt of the Standard Cellular Services by the GPS Entities during and for the Wireless Network Evolution in an efficient manner that minimizes any adverse affect on the GPS Entities any:

9.1.2.4.1 planning, testing and any other activities TELUS believes the GPS Entities will have to perform in connection with the Wireless Network Evolution, and

9.1.2.4.2 transformed or future state services and or other services required by the GPS Entities to transition or cutover to the Wireless Network Evolution.

9.1.3 maintain its wireless network prior to the Wireless Network Evolution Date (or such other date as TELUS and GPS Entities may agree to in writing) so that Orphaned Cellular Products will operate in accordance with the corresponding Specifications and Service Levels as they exist prior to the start of the implementation of the Wireless Network Evolution;

9.1.4 with the co-operation and assistance of the GPS Entities through the Governance Process, prepare and provide to the GPS Entities a detailed plan (the "**Wireless Network Evolution Plan**"), including time lines, for:

9.1.4.1 the cessation or wind-down of any existing Standard Cellular Services that will cease to exist as part of the implementation of the Wireless Network Evolution; and

9.1.4.2 the transition by or for GPS Entities from existing Standard Cellular Services to the new, alternative or related Standard Cellular Services offered to the GPS Entities in connection with the Wireless Network Evolution;

and will implement, upon approval of the GPS Entities, the Wireless Network Evolution Plan in accordance with its terms; and

9.1.5 cooperate, coordinate with and assist GPS Entities or any third party designated by GPS Entities in order to facilitate the orderly cessation, wind-down or transition of the Orphaned Cellular Products, as applicable.

9.2 In the event that one or more GPS Entities determines not to implement alternative products (whether Cellular User Equipment, Cellular Software and Custom Applications or Cellular Service Plans or related products) for the Orphaned Cellular Products as necessitated by the Wireless Network Evolution by reason of insufficient network coverage or the inability of TELUS to provide a technologically equivalent offering at an equivalent cost to such GPS Entity,

9.2.1 such GPS Entities may terminate the Standard Cellular Services corresponding to the Orphaned Cellular Products without payment of, notwithstanding section 31.6 of the main body of this Agreement, any termination fees, penalties or other amounts of any kind provided that the GPS Entity is not replacing the terminated Standard Cellular Services with technologically equivalent services having an equivalent cost to such GPS Entity to those offered as a result of the Wireless Network Evolution; and

9.2.2 the Subscriber Commitment will be adjusted accordingly to remove, as applicable, the corresponding Cellular End Users or Fees from their calculation so that GPS Group is not adversely affected (from a Fee perspective) from the removal of such Standard Cellular Services from the Services.

9.3 This section 9 will subject to and implemented through the Change Process as applicable.

10. Subscriber Commitment

10.1 Subscriber Commitment. The GPS Group, excluding BC Hydro and Power Authority and British Columbia Lottery Corporation until such time as they are receiving Cellular Services under this Agreement pursuant to a Service Order, (the "**GPS Subscriber Group**") commits to a minimum of 70% of In Scope Subscribers receiving In Scope Cellular Services from TELUS (the "**Subscriber Commitment**").

10.2 Calculation of Subscriber Commitment.

10.2.1 Whether the Subscriber Commitment has been met will be calculated on a quarterly basis in respect of the prior three months (the "**Subscriber**

Commitment Calculation Period") using the TELUS Subscriber Report and the corresponding subscriber report from one or more secondary providers selected in respect of the STSP opportunity or in respect of arrangements in lieu thereof (the "**Cellular Secondary Provider**") providing In Scope Cellular Services to In Scope Subscribers as follows:

$$\frac{\text{total number of In Scope Subscribers in the Subscriber Commitment Calculation Period receiving In Scope Cellular Services from TELUS}}{\text{total number of In Scope Subscribers in the Subscriber Commitment Calculation Period receiving In Scope Cellular Services from TELUS and the Cellular Secondary Provider}}$$

10.2.2 The duration of Subscriber Commitment Calculation Period will decrease from quarterly to monthly during any period that the GPS Subscriber Group is below the Subscriber Commitment.

10.2.3 Where a GPS Entity has paid an ECF for an In Scope Subscriber, the denominator in the calculation set out in section 10.2.1 will be reduced by that In Scope Subscriber.

10.2.4 For the purposes of this section 10, "**In Scope Subscribers**" means subscribers, as defined by cellular telephone numbers, of the GPS Subscriber Group receiving cellular services (the "**In Scope Cellular Services**") from TELUS or the Cellular Secondary Provider that are, or are the same as, the Cellular Services. Notwithstanding the foregoing, In Scope Cellular Services excludes the following out-of-scope services, which will be excluded from the calculation set out in section 10.2.1:

10.2.4.1 existing and future applications of cellular data solutions providing service for a GPS Entity which require specialized software, hardware or engineering design, including Machine-to-Machine Services;

10.2.4.2 existing and future enhanced coverage (whether in-building or other BDA solutions) where TELUS has not agreed to provide a similar service to the incumbent or proposed provider, including not providing such coverage at a price that is competitive with such other coverage;

10.2.4.3 cellular services for which a GPS Entity elects not to roll its existing service agreement into this Agreement in accordance with section 5.5.1.5 of this Attachment and section 5.4.1.5 of Attachment H9-B; and

10.2.4.4 (a) the TELUS cellular data plans described as "ASR/SMI Smart meter rates" in the Corporate Customer Agreement between BC Hydro and Power Authority and TELUS dated May 5, 2011 and (ii) "Connect 30 data plans", being the

services set out in Schedule 2 of the Lottery Network Services Agreement between British Columbia Lottery Corporation and TELUS dated October 31, 2006, and (b) all equivalent plans provided by TELUS to such parties, as any such plan set out in clause (a) or (b) is amended, superseded or replaced.

10.2.5 Any disagreement as to the interpretation of sections 10.2.4.1 through 10.2.4.4, inclusive, will be resolved pursuant to the Dispute Resolution Process.

10.3 Reporting.

10.3.1 TELUS will provide a report (the "**TELUS Subscriber Report**") to the Administrator setting out the In Scope Subscribers receiving In Scope Cellular Services from it in respect of each Subscriber Commitment Calculation Period within 30 days of the end of the applicable Subscriber Commitment Calculation Period.

10.3.2 The Administrator will provide a report (the "**Administrator Subscriber Report**") to TELUS setting out whether the Subscriber Commitment has been met in respect of each Subscriber Commitment Calculation Period (as calculated in accordance with 10.2) within 20 Business Days of receiving the TELUS Subscriber Report.

10.4 Failure to Achieve Subscriber Commitment.

10.4.1 Where the GPS Subscriber Group falls below the Subscriber Commitment (a "**Subscriber Commitment Shortage**") in any quarter and fails to within 60 days of the Administrator Subscriber Report to achieve or exceed the Subscriber Commitment, TELUS will be entitled to the early cancellation fees ("**ECFs**") applicable to any In Scope Subscriber terminations thereafter until the Subscriber Commitment is once again achieved or exceeded.

10.4.2 ECFs will only apply (a) after a "burn in period" of three quarterly TELUS Subscriber Reports are received by the Administrator, and (b) under the following conditions: (i) all Cellular Services are cancelled with an associated cellular telephone number, and (ii) ECFs are applied only to In Scope Subscribers.

10.4.3 This section 10.4 sets out TELUS' sole remedy and the GPS Group's sole liability in respect of a failure by the GPS Subscriber Group to achieve the Subscriber Commitment.

10.5 Calculation of ECFs.

10.5.1 Subject to section 10.5.1, the applicable ECF for an In Scope Subscriber termination will be calculated by subtracting from 36 months the number of active months the Cellular Services have been associated with the Cellular User Equipment for the applicable In Scope Subscriber under this Agreement. The difference is multiplied by $5, in the case of Cellular Services Plans and iDEN (Mike) Service Plans for Cellular Data Services, and $10, in the case of Cellular Services Plans and iDEN (Mike) Service Plans for Cellular Voice Services for the In Scope Subscriber associated with the cellular telephone number.

10.5.2 The maximum amount payable for ECFs, per cellular telephone number, is

10.5.2.1 $100 in the case of Cellular Service Plans for Cellular Voice Services;

10.5.2.2 $200 in the case of Cellular Service Plans for Cellular Data Services; and

10.5.2.3 $300 in case of Cellular Service Plans for both Cellular Voice Services and Cellular Data Services.

10.5.3 No ECFs will be payable in respect of Cellular Service Plans associated with cellular telephones where a non-discounted price (i.e. the month-to-month price) was paid for such telephone.

Example:

In Scope Subscriber has a Blackberry with Cellular Service Plans for both Cellular Voice Services and Cellular Data Services provided under this Agreement for 12.5 months. All Cellular Services associated with the cellular telephone number are then cancelled.

Active months: 12

Minimum months: 36

Applicable Services at time of cancellation: voice - $10 and data - $5

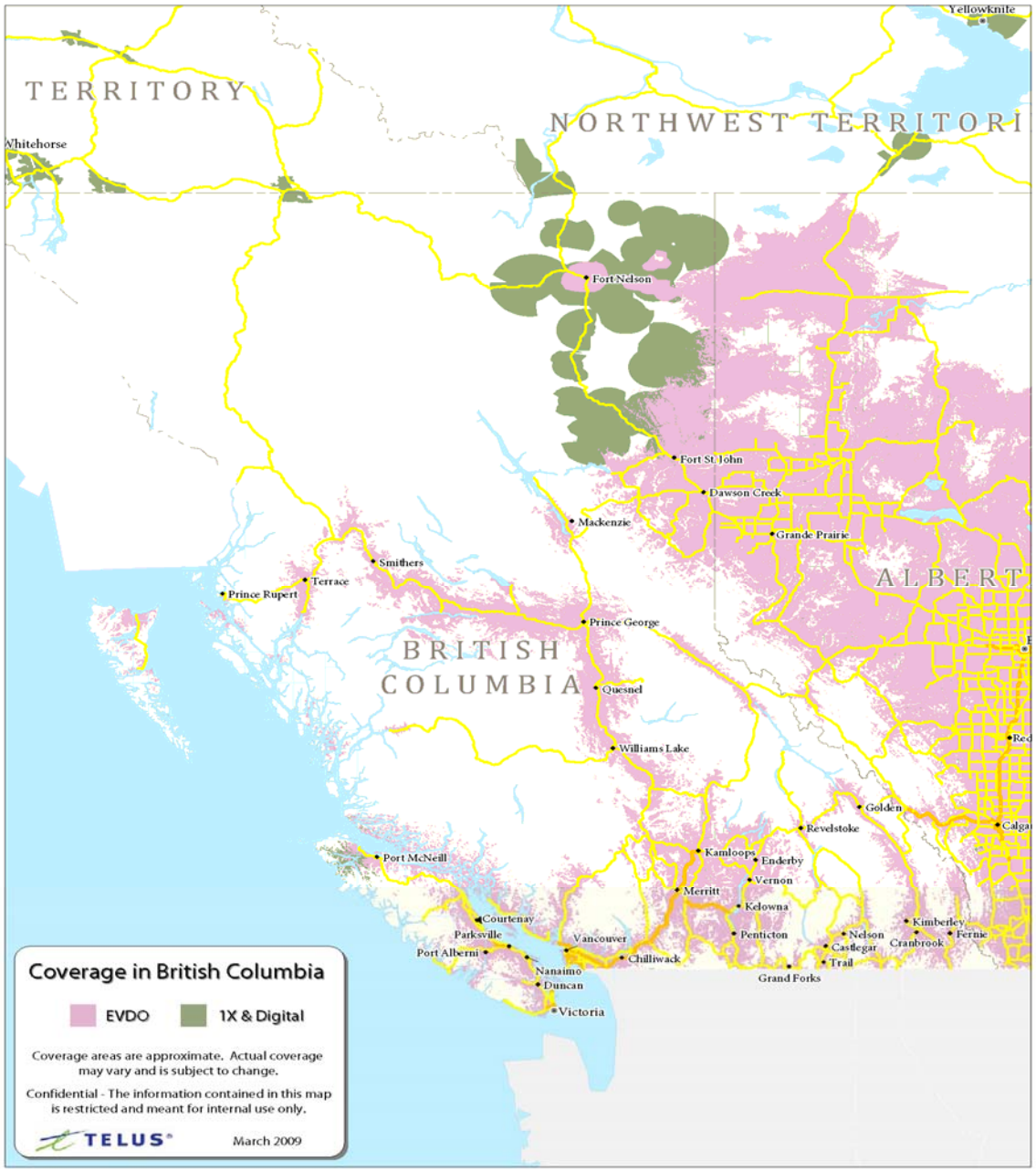
((36 months -12 months) x ($10+$5)) = $360 ECF

In this example, the maximum ECF of $300 would be charged in respect of the In Scope Subscriber.

Exhibit H9-A1

Standard Cellular Services – BC Cellular Voice and Data Services Coverage Map

CDMA coverage in British Columbia

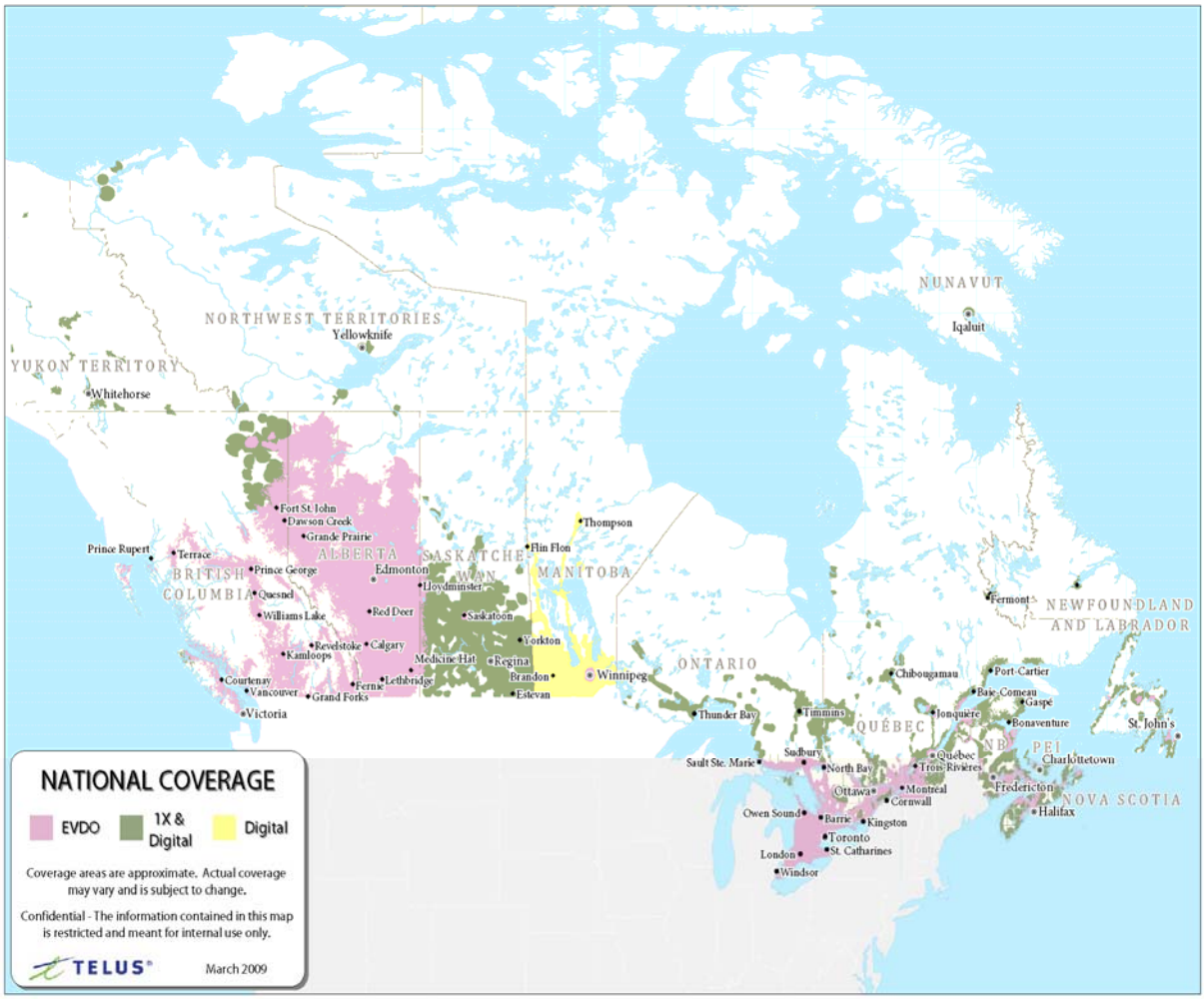


For the latest information, go to the Cellular TELUS GPS Entity Portal.

Exhibit H9-A2

Standard Cellular Services– Canada Cellular Voice and Data Services Coverage Map

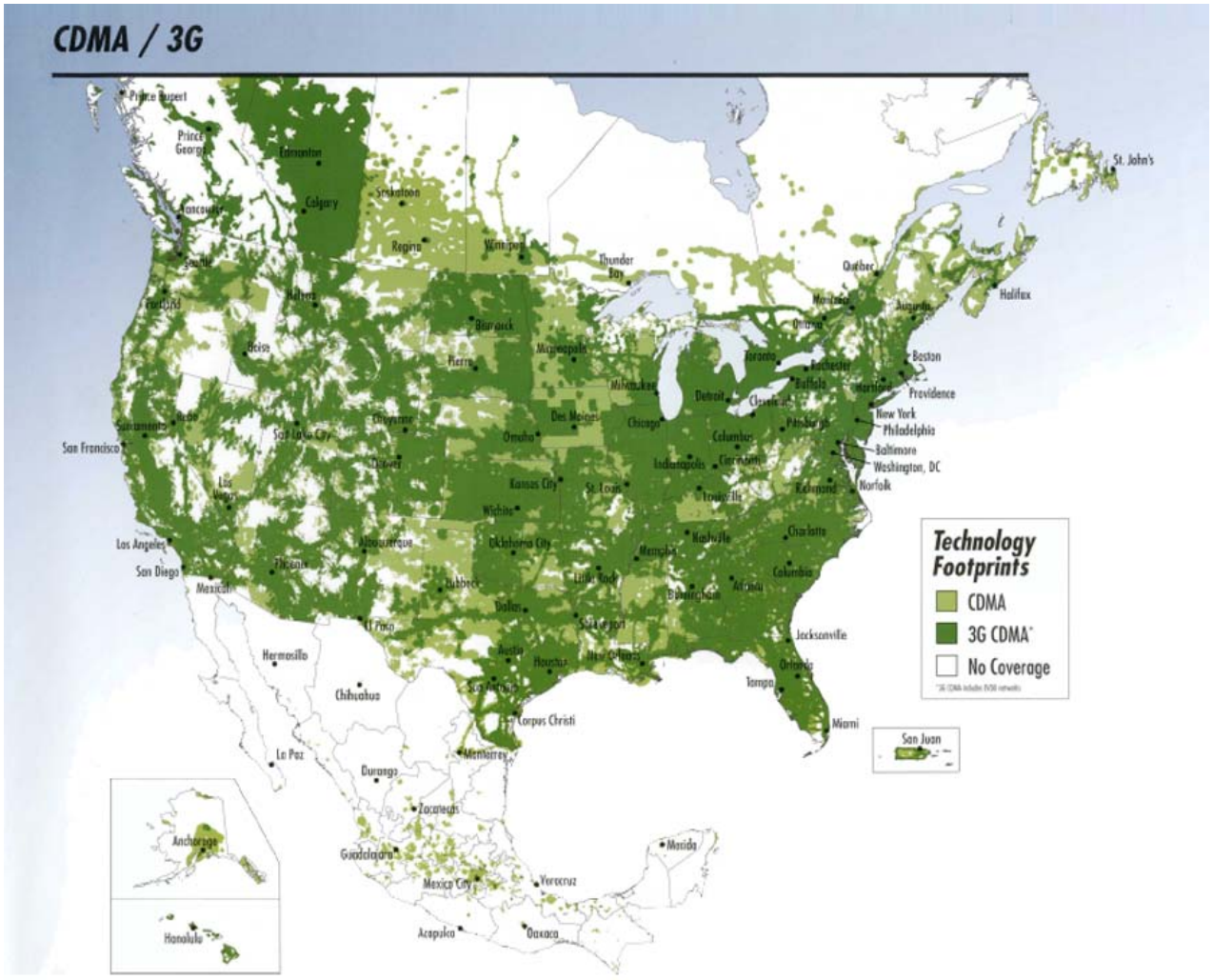
CDMA coverage in Canada



For the latest information, go to the Cellular TELUS GPS Entity Portal.

Exhibit H9-A3

Standard Cellular Services– USA Cellular Voice and Data Services Coverage Map



For the latest information, go to the Cellular TELUS GPS Entity Portal.
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Exhibit H9-A4

Standard Cellular Services – Cellular LAN Services (SIPA and VPN+)

1. Secure IP Anywhere (SIPA)

Secure IP Anywhere Service consists of two components, the details of which are set out in Exhibit H5-E10:

(1) MPLS IP Wireless Service, and
(2) WAN L3 VPN Access Connection.

Secure IP Anywhere Service provides a wireless connection from the Cellular User Equipment through the TELUS core network to the each GPS Entity's LAN(s), and also provides interconnection, through the TELUS core network, of the GPS Entity's geographically disparate LAN(s), located at their sites in different metropolitan areas. The wireless connection from the Cellular User Equipment to the TELUS core network (the "**MPLS IP Wireless Service** ") is provisioned using the TELUS' 1xEVDO and HSPA wireless high speed networks, and Secure IP Anywhere Service is only available with wireless data Services using TELUS' 1xEVDO and HSPA wireless high speed networks.

The connection from the GPS Entity's LAN to the TELUS core network (the **"WAN L3 VPN Access Connection**"), is provisioned using the IP for routing between sites in a unique WAN plan.

The Secure IP Anywhere Service will be provisioned in accordance with IP addressing and routing standards, and will support routing to unique, TELUS-provided, public IP addresses, or to TELUS-provided or GPS Entity- provided private IP addresses.

2. VPN+

VPN+ provides network security for mobile workers, and keeps Cellular End Users connected to the LAN. Cellular End Users may roam across different networks without closing applications or having to login again during the day.

VPN+ can be combined with a Mobile Internet Key to help reduce downtime and:

- Communicate securely and access applications. VPN+ employs AES (Advanced Encryption Standard) encryption.

- Roam seamlessly. VPN+ automatically switches to the fastest available connection across any combination of wired and wireless IP-based networks. Application sessions are maintained even in spotty network coverage areas.

- Manage centrally. Helps to establish control using a centralized, Web-based interface that gives administrators a system-wide view, such as overall metrics, device connections, worker behaviour and application use.

3. TELUS Mobile Care

A web-based administrator tool provides a centralized view of field activity, and allows care coordinators to push visit updates directly to the field, view and update daily visits and care plans and validate mileage. TELUS Mobile Care can integrate with existing 3rd-party clinical management software or is available as a standalone application.

Exhibit H9-A5

Standard Cellular Services– TELUS Alert and Assist

1. General Description

TELUS Alert and Assist is a tracking and alert-based service that enables GPS End Users of such service ("**Alert and Assist End Users**") to immediately request assistance and includes a set of options to address different types of Alert and Assist End Users facing differing levels of risk (the "**Alert and Assist Services**").

Each GPS Entity will only be required to pay for the specific subcategory of Alert and Assist Services (as identified below in section 3) that are subscribed to in the applicable Service Order.

2. Service Elements

2.1. Web Portal

The Alert and Assist Services are supported through a common web based portal (the "**Alert and Assist Portal**") that can be used by the GPS Entities to manage their Alert and Assist End Users. All devices certified for use with the Alert and Assist Services ("**Alert and Assist Devices**") integrate into the Alert and Assist Portal and will be visible with all other Alert and Assist Devices for each GPS Entity.

The Alert and Assist Portal administrator can view routine check in messages in the standard portal reports, as well as view requests for assistance via the event dashboard. The Alert and Assist Portal offers additional functionality such as:

- Storage of Alert and Assist End User profiles that can help emergency crews and GPS Entity staff identify the Alert and Assist End User in the event of an alert or emergency;
- Centralized check in scheduling and alert monitoring;
- The ability to locate or rapidly track Alert and Assist End Users on demand;
- Customizable email and text message notification options by Alert and Assist End User, group, and event type; and
- Reports that can be exported for further analysis.

Each GPS Entity can choose to manage its own secure and separate version of the Alert and Assist Portal for their implementation with their own Alert and Assist End Users. Alternatively, a GPS Entity can support Alert and Assist End Users from several departments or other subcategories or groups in a single portal and manage access and security requirements using different administrator profiles.

2.2. Location Based Services

Alert and Assist Services use TELUS's location based services ('**LBS**") infrastructure to provide the ability to locate Alert and Assist End Users both on an intermittent basis and on-demand in the event of an emergency or alert situation.

LBS-enabled Alert and Assist Devices use both GPS satellites and wireless network triangulation to locate Alert and Assist End Users indoors or outdoors, locating the Alert and

Assist End User to street level. LBS provide continuous tracking in 15-second intervals for many applications.

LBS also include built in redundancies to ensure a higher quality of service when a GPS satellite fix is not available, such as while Alert and Assist End Users are indoors.

3. Service Options

Alert and Assist Services are comprised of five services supported through the Alert and Assist Portal with optional monitoring services:

- TELUS Alert and Assist IVR
- TELUS Alert and Assist Lite
- TELUS Alert and Assist Integrated
- TELUS Alert and Assist Dedicated
- TELUS Alert and Assist Spot

3.1. TELUS Alert and Assist IVR

The Interactive Voice Response (IVR) system enables Alert and Assist End Users to use any type of phone (landline, cellular, satellite phone) to dial into a national toll free number and perform a variety of functions, including:

- Identify and authenticate the Alert and Assist End User;
- Confirm the start and end of shift;
- Check in throughout the day (according to flexible intervals);
- Request assistance and automatically trigger alert; notifications and follow-up;
- Change check in schedule; and
- Leave recorded voice notes to provide key contextual information as to their status and location.

The IVR provides automated dial-out reminders to Alert and Assist End Users who have missed their check in schedule. If a Alert and Assist End User does not successfully check in, then automatic calls are made to supervisors, managers, and support people who are provided with the option to assume responsibility for a Alert and Assist End User who has not checked in. All events in the system are available via the Alert and Assist Portal in reports that can be viewed, printed and exported on demand. Voice notes can be played automatically from the Alert and Assist Portal.

The IVR can be used in conjunction with the LITE, INTEGRATED, DEDICATED and SPOT solutions outlined below.

3.2. TELUS Alert and Assist LITE

Alert and Assist LITE uses LBS to allow the GPS Entity to locate Alert and Assist End Users on demand via the Alert and Assist Portal. In situations where a Alert and Assist End User has

failed to check in, or an employee must be located, the Alert and Assist End User may enter tracking mode and receive tracking updates on a minute-by-minute basis.

Alert and Assist LITE can be combined with the IVR to provide the ability to check in, in addition to locating Alert and Assist End Users indoors or outdoors.

3.3. TELUS Alert and Assist INTEGRATED

Alert and Assist INTEGRATED is a BlackBerry application that provides Alert and Assist End Users with the ability to set customized check in schedules directly from their Device along with additional notes to provide further context of their location or status information. This service allows Alert and Assist End Users to set audible and visual alarms when they enter an area that is out of cellular coverage or when their device battery is low.

The BlackBerry can be located on demand or continuously tracked every (15) seconds from the Alert and Assist Portal. In addition, the BlackBerry can be located on a flexible schedule every 15, 30 or 60 minutes, and Alert and Assist End Users can send or cancel an alert directly from this application.

A Geo-fencing function allows additional email or text message alerts to be configured to indicate if an Alert and Assist End User has left an allowed area, or entered an area that is off limits.

The optional Alert Pendant is paired with the BlackBerry using Bluetooth and can be used to send alerts using its built-in alert button. It can be configured to use LED, audio and vibration notifications and its no-motion sensor will send an alert automatically in “man down” situations where an Alert and Assist End User is injured and unable to move.

3.4. TELUS Alert and Assist DEDICATED

The Alert and Assist DEDICATED solution eliminates the need for a separate cellular handset by using a standalone device. The DEDICATED solution Alert and Assist End User uses a standalone device to trigger alerts at the push of a button.

The Alert and Assist End User can use the “Alert” button to request assistance to their location, and the device can be located on demand, or continuously tracked every (15) seconds from the Alert and Assist Portal.

The Alert and Assist DEDICATED device can be located on a flexible schedule every 15, 30 or 60 minutes, and additional email or text message alerts can be configured to indicate if an Alert and Assist End User has left an allowed area, or entered a disallowed area. The device can also indicate to the Alert and Assist End User if they are in or out of cellular coverage and when the batteries need to be charged.

3.5. TELUS Alert and Assist SPOT

The SPOT solution provides an option for Alert and Assist End Users that may be outside of cellular phone coverage. The SPOT device can be used by the Alert and Assist End User to check in periodically or send an emergency or non-emergency request for assistance. The location of the Alert and Assist End User and any alert requests are visible in the Alert and

Assist Portal. Check in details are also combined into a single report interface in the Alert and Assist Portal.

SPOT Alert and Assist Devices use a simple 4-button operation system that allows Alert and Assist End Users to send both emergency and non-emergency requests for assistance via email and SMS. Because the SPOT Alert and Assist Devices are located using GPS (satellite) technology, these devices are recommended for Alert and Assist End Users who often find themselves in remote locations outside of cellular coverage either as a standalone option or in conjunction with other solutions.

4. Limitations on Use

Each GPS Entity acknowledges that the Alert and Assist Services should not be used in mission critical applications where immediate notification and response is required. Each GPS Entity agrees that it is responsible for ensuring that: (i) its Alert and Assist End Users are within the coverage area for the Alert and Assist Services when such users want to use the Alert and Assist Services and (ii) all Alert and Assist Devices have sufficient electrical power to operate. Each GPS Entity also agrees that it is responsible for monitoring the Alert and Assist End Users' use of the Alert and Assist Services.

The Alert and Assist Service and the Alert and Assist Devices may contain technology that is not fault tolerant and is not designed, manufactured, or intended for use in environments or applications in which the failure of the software products could lead to death, personal injury, or severe physical, property or environmental damage. The Alert and Assist Service and the Alert and Assist Devices only work in the coverage area for the Alert and Assist Services and only if the Alert and Assist Devices have enough battery power to operate and are either connected to or within range of a Device that can communicate with the Alert and Assist Service. The GPS Entities are responsible for checking for Service coverage and battery power levels before using the Alert and Assist Service. The Alert and Assist Service is only available within Service coverage areas located in Canada.

Exhibit H9-A6

Standard Cellular Services– TELUS GPS Tracking and Dispatch Solutions

TELUS Tracking and Dispatch solutions provide visibility into the location of Cellular End Users, assets and vehicles. Real-time information and up-to-date reports are available.

Real-time information

- Track real-time location of vehicles, assets and Cellular End Users
- Monitor in-vehicle sensors such as temperature, status of ignition, and battery voltage
- Dispatch tasks to the tracking device and monitor the status of task completion
- Real-time status updates and better utilization of vehicles and resources

Increase performance

- Helping to streamline assets and vehicle distribution and deployment
- Create task reports to analyze resource performance
- Automate driver logs and manifests, and reduce paper flow and administrative work
- Improve customer service by providing GPS Entities with accurate arrival times and dependable scheduling

Security

- Help prevent unauthorized use of vehicles and out-of-route activities by using automated alerts
- Reduce risk of write-offs due to theft with real-time tracking of vehicles and assets
- Enable communication of all vehicle time-sensitive information

Operations efficiency

- Reduce over-time bookings by minimizing unnecessary stops while maximizing routing efficiency
- Reduce fuel costs and increase mobile worker productivity by eliminating inefficient routes
- Optimize fleet repair schedules based on mileage tracking

Asset Tracking

- Monitor location of high-value assets such as trailers and cargo. Small rugged asset tags, the size of a matchbox, can be easily inserted into high value goods or affixed to mobile assets.

Fleet Tracking

- Monitor fleets in real-time and track vehicles' location, travel speed, idle time, distance travelled and much more. Regularly scheduled or ad-hoc system reports help businesses to analyze, benchmark and optimize their fleet operations. Alerts notify dispatchers of rule violations in the field, as they occur.

Solution	TELUS Asset Tracker	TELUS Resource Tracker		TELUS Track and Dispatch*		TELUS Fleet Tracker	
Transmission Frequency	30 mins	15 mins	2 mins	15 mins	2 mins	6 mins	4 mins
Hours vehicle driven per week with no data overages	N/A	N/A		N/A		45 hours	60 hours**
On-demand lookups	Yes	Yes	No	No	No	No	
Network	CDMA/HSPA	CDMA/HSPA	iDEN	CDMA/HSPA	iDEN	CDMA/HSPA	
Hardware required (must be purchased from TELUS or a Retailer)	Asset Tag	PCS Device	Mike Devices	PCS Device	Mike Devices	In-Vehicle Modem	
Location Based Service	AGPS (Indoor/Outdoor)	AGPS (Indoor/ Outdoor)	GPS (Outdoor)	AGPS (Indoor/ Outdoor)	GPS (Outdoor)	GPS (Outdoor)	
Features/ Benefits	Monitor location of high-value assets such as trailers, packages, cargo and other goods.	Track real-time location of mobile work force and monitor travel speed, stop times and travel distance.		Builds on the TELUS Resource Tracker solution by adding dispatch or task assignment and response capabilities.		Monitor vehicles in real time and track vehicles' location, travel speed, stop times and travel distance.	
	The asset tag is small enough to clip on a belt, throw into a glove compartment, or even carry in your pocket.			Dispatch jobs to the closest mobile worker by tracking his/her real-time location and track job status.		Capture vehicle information such as status of ignition, battery voltage, power take-off sensor, etc.	

* For the TELUS Track and Dispatch solution, the data usage for tracking the device and dispatching work assignments is calculated as 200 hours logged-on to application / months, or 50 hours logged-on to application/week. Data usage above this threshold will incur device's data plan overages. Alternatively, additional data bucket is recommended.

**Reducing the transmit frequency to every 6 mins (rather than the default every 4 mins) on the TELUS Fleet tracker $60 plan allows for vehicle usages of 90 hours per week, with no data overages.

Note: All software features and functionality are available across all six solutions including: reporting, geo-fencing, etc. except for the dispatch feature which is specific to TELUS Track and Dispatch.

Exhibit H9-A7

Device Protection Plan

The Device Protection Plan is a service which, subject to the terms set out in this Exhibit, covers eligible Cellular User Equipment in the event of loss, theft, accidental physical or liquid damage and mechanical or electrical failure and protects eligible Cellular User Equipment against factory defects once the manufacturer's warranty expires.

Eligible Cellular User Equipment:

- Mobile phones
- Smartphones
- Mobile Internet keys
- Modems
- Accessories affected in conjunction with the loss, theft or damage of an eligible device. Accessories covered are limited to those that come standard in the original device packaging (e.g. standard battery, standard battery charger, standard leather case, standard earpiece, SIM card where applicable, etc.).

Note that the Apple iPhone is not eligible for the Device Protection Plan.

Limitations and Exclusions:

The Device Protection Plan does not cover damages or losses caused by:

- War, revolution, acts of public enemy or terrorist, labour difficulties, civil commotion, embargo, acts of government or military authority,
- Abuse, misuse, or intentional acts,
- Pre-existing incidents with the Cellular End User's Cellular User Equipment that occurred before the Cellular End User was subscribed to the Device Protection plan,
- Changes or enhancements, however caused, in color, texture, finish, expansion, contraction, or any cosmetic damage to the Cellular User Equipment that do not affect the mechanical or electrical function of the equipment, including scratches and marring,
- Incidents caused by computer viruses or similar unauthorized intrusive codes or programming, or
- Incidental or consequential damages

The following are also excluded from the Device Protection Plan:

- Contraband or property in the course of illegal transportation or trade,

- Property in transit to a GPS Entity or Cellular End User from anyone other than TELUS or Asurion (TELUS' Device Protection Plan Administrator),

- Routine maintenance and consumable items, such as batteries (one standard battery will be provided with the replacement device if it is a different model than defective device or if the battery was part of the incident),

- Antennas (unless there is also loss, theft or damage of the associated Cellular User Equipment), or

- Any accessories (other than in-box accessories affected in conjunction with the loss, theft or damage of eligible Customer User Equipment) including color face plates, personalized data, or customized software, such as personal information managers (PIMs), ring tones, games, and screen savers.

Additional Conditions:

- A GPS Entity can subscribe to a Device Protection Plan only at the point of Celluar User Equipment Activation or up to 30 days after Activation.

- A replacement service fee set out in the Price Book will apply based on the model of Cellular User Equipment that is the subject of the replacement request.

- For a replacement request that is not covered by the Device Protection Plan (e.g. cosmetic damage, antenna damage, etc.), TELUS may charge a non-covered service fee set out in the Price Book to provide replacement services.

- The Device Protection Plan does not apply to defects covered by the manufacturer's warranty during the term of such warranty.

- Each request for service is limited to a maximum value of $750.

- The Device Protection Plan service is not an auto-renewable service.

- Cellular End Users who are subscribed to the Device Protection Plan are entitled to 2 replacement requests during any consecutive 12 month period. Once a Cellular End User has submitted two claims within any consecutive 12 month period they are automatically unsubscribed from the Device Protection Plan and have to wait 12 months before they can be subscribed again with a new device activation.

- The Device Protection Plan is not available for prepaid plans. If the GPS Entity is migrating to a prepaid arrangement, their Device Protection Plan will no longer be available in conjunction with such prepaid plans.

- A GPS Entity can unsubscribe to the Device Protection Plan service at any time.

- Cellular User Equipment approved for replacement, other than equipment that has been lost or stolen, must be returned to Asurion within fifteen days of such approval and must contain no GPS Entity data.

- Replacement Cellular User Equipment will be shipped from TELUS to the GPS Entity billing address (excluding PO boxes) via overnight delivery typically within two Business Days from the date the claim is received. The units will be activated on TELUS' network and will be ready to be programmed using over-the-air programming by the time they are received by the GPS Entity.

- Replacement requests will be fulfilled with Cellular User Equipment that is of like kind and quality with comparable features and functionality. However, identical colour, brand, model, features and accessory compatibility are not guaranteed. Replacement Cellular User Equipment may be new, remanufactured or refurbished.

- If a Cellular End User decides to cancel their claim after TELUS has sent the replacement Cellular User Equipment in the mail, a replacement fee as specified in the Price Book will be charged on their invoice and will be credited back once the Asurion receives the replacement device in good working order, with all GPS Entity data removed, from the Cellular End User. The credit will be seen on the next Contractor invoice.

- TELUS' standard Device Protection Plan Terms and Conditions (posted at http://www.telusmobility.com/en/BC/protection_plan/details.shtml) apply to use of the Device Protection Plan service.

Exhibit H9-A8
Model of Cellular User Equipment by Category

1. Table 1 below provides the models of Cellular User Equipment for each of the corresponding price categories for Cellular User Equipment set out in Exhibit C9-A7, as amended from time to time in accordance with section 5.11 of Attachment H9-A.

Table 1: Models of Cellular User Equipment by Price Category

Category	Subcategory	Price Category	Model(s)
Mobile Phones	General Usage	Advanced	LG Optimus 7, Samsung Galaxy S Fascinate, Samsung Nexus S
		Medium	LG Shine, Nokia Rush, Samsung C414, Samsung Evergreen, Samsung Galaxy Appollo
		Low	ING Chat, LG Breeze, LG Cookie Plus, LG Madison, LG Optimus One
	Ruggedized	Advanced	Motorola Defy
		Medium	Samsung Rugby
		Low	NA
BlackBerry		Advanced	BB Bold 9780, BB Torch, BB 9670
		Medium	BB Pearl 9100
		Low	BB 7130, BB Curve 9300
Smartphone		Advanced	iPhone 4 16GB, iPhone 4 32GB, HTC Desire HD
		Medium	iPhone 3GS 16 GB, HTC Desire
		Low	iPhone 3GS 8 GB, HTC Desire
Data Modem		Advanced	Huawei E372, Sierra AC319U
		Low	Huawei E182E, Huawei E5836 Mobile WiFi, Sierra USB 306

For example, a Blackberry, which is identified in Table 1 as being offered in the "Low" price category of the Blackberry category of Cellular User Equipment may be purchased at corresponding purchase price for the "Low" price category of the Blackberry category of Cellular User Equipment set out in Exhibit C9-A7.

2. TELUS will post the applicable pricing for the respective models of Cellular User Equipment as determined in accordance with this Agreement on the Cellular TELUS GPS Entity Portal.

Attachment H9-B

iDEN Network (Mike) Services

Service Title:	iDEN Network (Mike) Services
Service Number:	H9-B

1. Service Title and Number

1.1 The Service Title and the Service Number of this specific Available Service are set out in the above table.

1.2 Where a Service Order or Service Change Order, in each case entered into in accordance with the terms of this Agreement, references such Service Title or such Service Number TELUS will provide such GPS Entity with iDEN Network (Mike) Services which include all of the attributes, features, characteristics, components and service parameters described in this Attachment H9-B, unless expressly excluded or modified in the Service Order or Service Change Order.

2. Service Description

2.1 The iDEN Network (Mike) Services consists of the MPN Moblie Radio Services, the Mike Public Network Services, the use by iDEN End Users of MIKE User Equipment, the services described in the iDEN Mike Service Plans, and may include Additional iDEN MIKE Service Plan Features and Optional iDEN Network (Mike) Services Features.

2.2 The availability, standards, and features of the iDEN Network (Mike) Services may vary depending on whether the iDEN Network (Mike) Services are being used for MPN Mobile Radio Services or Mike Public Network Services. During the Term, TELUS may replace or supplement the wireless standards to provide the iDEN Network (Mike) Services with new or additional standards as part of its overall wireless network evolution in accordance with the technology currency obligation contained in Section 8.1 of the main body of this Agreement provided that TELUS complies with its obligation in Section 9.1 of this Attachment and the GPS Entities have the benefit of the termination rights and related adjustments as contemplated in Section 9.2 of this Attachment. As and when such wireless standards evolve, TELUS will update the iDEN Network (Mike) Services as applicable in accordance with its obligations under this Agreement.

2.3 The iDEN Network (Mike) Services are further described in the iDEN (Mike) Service Plans and Additional iDEN (Mike) Service Plan Features. iDEN (Mike) Service Plans for the iDEN (Mike) Services facilitate the access of the Mike User Equipment to the TELUS' MIKE network and determine the features and characteristics which will be available to iDEN End Users.

2.4 The general characteristics and availability of the MPN Mobile Radio Services and Mike Public Network Services as part of the monthly fees will vary depending

on characteristics of the iDEN (Mike) Service Plan that is applicable to each iDEN End User.

2.5 Additional iDEN (Mike) Service Plan Features may vary depending on whether the iDEN End User subscribes for MPN Mobile Radio Services or Mike Public Network Services.

2.6 Some features of iDEN Network (Mike) Services are dependent on the model of Mike User Equipment used.

2.7 The iDEN Network (Mike) Services include:

2.7.1 the provision of Mike User Equipment described in this Attachment as, if and when requested in accordance with this Agreement by a GPS Entity for their iDEN End Users;

2.7.2 the other components of the iDEN Network (Mike) Services described in Section 5.1.1; and

2.7.3 the provision of the support services described in this Attachment and Schedule N (Problem and Incident Management Procedures)

3. Service Availability

3.1 As of the Effective Date, the iDEN (Mike) Services will be available to the iDEN End Users within British Columbia in the areas set out in the coverage map in the attached Exhibit H9-B1. Access to such iDEN (Mike) Services will also be available to the iDEN End Users within Canada in the areas set out in the coverage map in attached Exhibit H9-B2 and through roaming in the United States of America and other countries as set out in the coverage map in the attached Exhibit H9-B3. After the Effective Date, TELUS will make its coverage maps for such jurisdictions available to the GPS Entities, in reasonable detail, at the Cellular TELUS GPS Entity Portal. If after the Effective Date, TELUS reduces the areas where the iDEN (Mike) Services are available under this Section 3.1 (which for certainty will exclude any temporary outages), the Cellular Spend Allocation and the Revenue Commitment will be adjusted accordingly through the Change Process to remove, as applicable, the corresponding, affected Mike End Users or Fees from their calculation so that the GPS Group is not adversely affected (from a Fee perspective) from the reduction in the area of availability of such Cellular Services.

3.2 iDEN Network (Mike) Services will be made available by TELUS to the iDEN End Users in accordance with the availability-related Service Levels for iDEN Network (Mike) Services set out in Schedule J (Service Levels).

3.3 In the event that any GPS Entity requests from TELUS additional Cellular Services coverage, including coverage within buildings within British Columbia ("**Additional BC Coverage**") during the Term, the following terms and conditions will apply:

3.3.1 if TELUS can provide the additional requested Service coverage for no cost or nominal cost, TELUS will make the appropriate changes in order to provide the Additional BC Coverage at no cost to the GPS Entity within a time period mutually agreed to by such GPS Entity and TELUS, each party acting reasonably, such time period commencing on the date upon which the GPS Entity requested that TELUS provide such additional Service coverage;

3.3.2 if TELUS cannot provide the additional the Additional BC Coverage for no cost or nominal cost, but TELUS will be adding such coverage in order to provide services to its other customers, TELUS will make the appropriate changes to provide the Additional BC Coverage to the GPS Entities at no cost to the GPS Entity within the time period for which TELUS has scheduled such changes;

3.3.3 if TELUS notifies the GPS Entity that it cannot provide the Additional BC Coverage for no cost or nominal cost and TELUS will not otherwise be adding such coverage, the GPS Entity may, in accordance with Section 9 of the main body of this Agreement, issue a Change Request to TELUS describing the work required, including:

3.3.3.1 whether a project manager is required;

3.3.3.2 the date by which the Additional BC Coverage is required to be completed;

3.3.3.3 other applicable terms for the Additional BC Coverage; and

3.3.3.4 the period for which the Proposal is to be valid.

3.3.4 TELUS will respond, in accordance with Section 9 of the main body of this Agreement, to each such Change Request issued by a GPS Entity with a Proposal which will include (in addition to information required under Section 9.2.3 of the main body of this Agreement):

3.3.4.1 a detailed itemization of each appropriate component of the work;

3.3.4.2 the deployment plan;

3.3.4.3 the firm pricing to complete the work, in accordance with Section 16.8 of the main body of this Agreement and any applicable fees set out in the Price Book; and

3.3.4.4 the estimated time period to complete the work;

3.3.5 Within the period for which the Proposal is valid, the GPS Entity will either notify TELUS in writing of which (if any) of the components in the Proposal the GPS Entity wishes TELUS to provide to the GPS Entity or request that the time period for the Proposal to remain valid be extended to a mutually agreeable date. If the GPS Entity notifies TELUS that it Approves of one or

more of the components described in the Proposal, TELUS will proceed with the Approved components within the committed to time period for implementation set out in the Approved Proposal and, upon receipt of an appropriate detailed invoice, the GPS Entity will pay to TELUS the Fees set out in the Change Order.

4. Technical Standards

4.1 TELUS will provide iDEN Network (Mike) Services which at a minimum:

4.1.1 operate in the 800 MHz SMR band and are based on time division multiple access (TDMA), and

4.1.2 use Motorola's Vector Sum Excited Linear Predictors (VSELP) vocoder for voice compression and QAM modulation.

5. Service Features

5.1 General Features.

5.1.1 The specific components of the iDEN Network (Mike) Services are as follows:

5.1.1.1 iDEN Network (Mike) Services are available in two categories:

5.1.1.1.1 MPN Mobile Radio Services; and

5.1.1.1.2 Mike Public Network Services.

5.1.1.2 Access to the iDEN Network (Mike) Services is provided by a subscription to an iDEN (Mike) Service Plan which may include the optional features set out in Section 7.1 without additional charge.

5.1.1.3 In addition to the features included in the iDEN (Mike) Service Plans (including the optional features described in Section 7.1), the billable features include the Additional iDEN (Mike) Service Plan Features as described in Section 7.2.

5.1.1.4 The provision by TELUS of Mike User Equipment, in the four following categories, on the terms and conditions set out in this Attachment:

5.1.1.4.1 mobile phones which are primarily designed for iDEN Voice Services;

5.1.1.4.2 BlackBerry Mike User Equipment designed for use primarily with the BlackBerry Enterprise Server and iDEN Voice Services;

5.1.1.4.3 smart phones which are designed for iDEN Voice Services and iDEN Data Services; and

5.1.1.4.4 if available, data modems which are primarily designed for iDEN Data Services.

5.1.1.5 the provision of the following two categories of Cellular Software and Custom Applications:

5.1.1.5.1 cellular data compression Software and software to track and store cellular modem locations via GPS; and

5.1.1.5.2 BlackBerry® device-related Cellular Software and Custom Applications, which includes all software to enable the BlackBerry suite of applications on BlackBerry brand Mike User Equipment (including BlackBerry- BlackBerry Enterprise Server (BES) and BlackBerry – Client Access License (CAL)).

5.2 General Characteristics of iDEN Network (Mike) Services.

5.2.1 TELUS will provide iDEN Network (Mike) Services with the general characteristics set out in Table 1 below.

Table 1

	Direct Connect (Push To Talk) – Availability	Direct Connect – Talk Groups - Availability	Direct Connect – Talk Group Service Coverage	PSTN Access
MPN Mobile Radio Services	Unlimited usage within private network - included in monthly fee	Unlimited number of talk groups within private network group or subgroup(s) - included in monthly fee	Direct Connect unlimited Talk Group coverage is defined by region (East or West*) as specified in the iDEN (Mike) Service Plan. (refer to Attachment C9B).	Can be implemented with or without PSTN access
Mike Public Network Services	Amount of Direct Connect usage is specified in the iDEN (Mike) Service Plan (refer to Attachment C9B)	Unlimited number of talk groups within public network	North America coverage is included in pricing plan.	Can only be implemented with PSTN access

* Western Network: Includes all coverage in British Columbia, Alberta, and Manitoba. Eastern Network: Includes all coverage within Ontario and Quebec.

5.2.2 Additional iDEN (Mike) Service Plan Features both included in the base price and available for an additional Fee are described in Section 7 below.

5.3 Eligibility to Purchase iDEN Network (Mike) Services.

5.3.1 Subject to Section 5.3.2, TELUS will only sell iDEN Network (Mike) Services under this Agreement to GPS Entities. Any Fees for such Services will be payable by the GPS Entity that ordered such Service and billed by TELUS to the applicable Designated Entity Unit.

5.3.2 iDEN Network (Mike) Services will not be sold by TELUS under this Agreement to individuals, provided, however, that, if TELUS is authorized in writing by the Administrator, TELUS will offer through TELUS' website, and employees of a GPS Entity may purchase, iDEN Network (Mike) Services pursuant to an Employee Purchase Plan. Employees of a GPS Entity will be personally liable for all fees and charges payable in respect of such services provided pursuant to an Employee Purchase Plan and the GPS Entity will have no obligation to support such plan. TELUS will bill employees of a GPS Entity receiving services under an Employee Purchase Plan independently of the GPS Entity. For greater certainty, any

such services purchased by an employee of a GPS Entity will be purchased pursuant to a separate agreement between TELUS and employee, and such services will not be considered Services under this Agreement. Availability of the iDEN Network (Mike) Services to contractors of a GPS Entity pursuant to an Employee Purchase Plan is subject to the Approval of TELUS.

5.4 General Conditions for the Purchase of iDEN Network (Mike) Services.

5.4.1 TELUS will provide the iDEN Network (Mike) Services and their components under the following general conditions:

5.4.1.1 MIKE services that are advertised on the TELUS Public Web Site will not be withheld by TELUS if any GPS Entity requests that they be included in the iDEN Network (Mike) Services in accordance with the process set out in Section 5.10;

5.4.1.2 No iDEN Network (Mike) Services purchased (including renewed) under this Agreement will have a term that extends past the end of the Term.

5.4.1.3 If an iDEN End User cancels his or her iDEN (Mike) Service Plan for MPN Mobile Radio Services which includes PSTN voice services, such iDEN End User will be entitled to keep the telephone number used to deliver the iDEN Network (Mike) Services under such iDEN (Mike) Service Plan. Notwithstanding the foregoing, any entitlement of an iDEN End User to a telephone number shall at all times be subject to Applicable Laws.

5.4.1.4 Subject to Section 5.4.1.7, an iDEN End User may suspend a iDEN Service Plan pursuant to Section 5.4.1.6 without losing any entitlement to the telephone number used to deliver the iDEN Network (Mike) Services under such iDEN Network (Mike) Services Plan;

5.4.1.5 The Parties agree that, pursuant to Section 7.2.1 of the main body of this Agreement all service agreements between the GPS Entities and TELUS with respect to iDEN Network (Mike) Services that are in force and effect as of the Effective Date will be superseded and replaced by this Agreement upon the issuance of an Initial Service Order for such iDEN Network (Mike) Services. Notwithstanding the foregoing, in the event that:

5.4.1.5.1 a plan currently subscribed to by a GPS Entity is not available pursuant to this Agreement; and

5.4.1.5.2 there is no similar or better plan available pursuant to this Agreement in the reasonable opinion of the GPS Entity;

A GPS Entity may request that TELUS review the plans currently subscribed to by such GPS Entity with the iDEN Service Plans to determine if the plans currently subscribed to by a GPS Entity may be grandfathered, or to determine if a replacement plan is available to address the GPS Entity's concerns. TELUS may, in its sole discretion, determine whether or not to grandfather a plan or to create a new plan. In the event that TELUS does not grandfather the plan and no iDEN Service Plan hereunder is satisfactory to the GPS Entity as a replacement plan, the GPS Entity may elect not to roll its existing service agreement into this Agreement.

5.4.1.6 iDEN Network (Mike) Service Plans purchased or renewed under this Agreement by a GPS Entity may be suspended by the GPS Entity for a period of up to 90 days without payment of a Fee for such suspension or for a period of more than 90 days for the applicable Fee specified in the Price Book (which is inclusive of all charges for the Services or features that are not accessed during such suspension) by delivering written notice of suspension to TELUS.

5.4.1.7 A suspended iDEN Network (Mike) Service Plan that is resumed within 180 consecutive days of each such suspension will have the same attributes (e.g. phone number, service plan, and functionality), except IP address, domain name and e-mail i.d., as at the time of suspension, unless otherwise requested by the GPS Entity in writing. Suspended iDEN (Mike) Service Plans that are resumed following such 180 consecutive day period may not have the same attributes as at the time of suspension.

5.4.1.8 A GPS Entity may pursuant to a Service Change Order authorize the move of one or more IDEN End Users from one iDEN (Mike) Service Plan to another iDEN (Mike) Service Plan.

5.4.1.9 Unless otherwise specified in a Change Order, all iDEN (Mike) Service Plan changes requested by a GPS Entity will be, for billing purposes, effective the date the request made by the GPS Entity is received by TELUS.

5.4.1.10 In accordance with Section 33.5 of the main body of this Agreement, if any iDEN (Mike) Service Plan purchased by a GPS Entity under this Agreement is affected by a Regulatory Event, then such GPS Entity may terminate any part of the plan that is affected by such change or the whole plan without payment of any termination or other similar Fees.

5.4.1.11 TELUS will not charge any early cancellation Fees on iDEN (Mike) Service Plans if they are cancelled prior to the end of the Term unless:

5.4.1.11.1 a Subscriber Commitment Shortage occurs in respect of the period to which the early cancellation Fees are applicable; or

5.4.1.11.2 the early cancellation Fees are associated with iDEN (Mike) Service Plans added in accordance with Section 5.10 which were then offered on a promotional pricing basis and not otherwise ordinarily offered by TELUS on such basis or which were bundled with a specific Mike User Equipment and not otherwise ordinarily offered except in connection with such Mike User Equipment.

5.4.1.12 TELUS is only permitted to provide, either directly or through its Retailers that are Subcontractors, IDEN Network (Mike) Services to a GPS Entity if it receives a Service Order or Service Change Order from such GPS Entity for IDEN Network (Mike) Services and only to the extent specified in such order.

5.4.1.13 New iDEN Network (Mike) Services ordered pursuant to a Service Order or Service Change Order will be deemed initially activated upon the cellular telephone number for such Service being activated by TELUS.

5.4.1.14 For iDEN Network (Mike) Services where optional features are added to allow voice calls to be made through the PSTN, TELUS will ensure Wireless Number Portability is available to GPS Entities such that a cellular telephone number may be transferred from TELUS to another cellular carrier, and vice versa, without additional charge when: the cellular telephone number has an active iDEN (Mike) Service Plan attached; and Wireless Number Portability is available.

5.4.1.15 TELUS will ensure that cellular telephone numbers may be retained and transferred without additional charge when a GPS End User migrates from Standard Cellular Services to iDEN Network (Mike) Services, and vice versa, with TELUS.

5.4.1.16 Where the time for the doing of a thing by TELUS or a Subcontractor through a Retailer under this Agreement falls outside of Business Hours, but within the hours for which the Retailer is open to the public for business, the reference to Business Hours will be deemed to include such additional hours the Retailer is open to the public for business.

5.5 General Conditions for the Provision of Mike User Equipment.

5.5.1 TELUS will provide Mike User Equipment to the GPS Group on the following terms and conditions:

5.5.1.1 Models of the Mike User Equipment will be available to the GPS Entities under this Agreement when the respective model is advertised on the TELUS Public Web Site or through Subcontractors and has been approved by the Administrator in accordance with Section 6.1.4.

5.5.1.2 Mike User Equipment that is advertised on the TELUS Public Web Site or through Subcontractors will be available to the GPS Entities under this Agreement unless a manufacturer's notice of discontinuance has been issued with respect to any such equipment. TELUS will be required to notify the Administrator when Mike User Equipment is discontinued.

5.5.1.3 The categories and subcategories of Mike User Equipment available for purchase from TELUS by GPS Entities, including their respective prices, are set out in Exhibit H9-B5 and Exhibit C9-B1 are subject to change in accordance with Section 5.10.

5.5.1.4 TELUS will provide new and not previously used Mike User Equipment unless approved in writing by the GPS Entity to which it is proposed such equipment will be provided.

5.5.1.5 TELUS will accept, for a full refund and at its expense, any Mike User Equipment that is returned by a GPS Entity if such Mike User Equipment provided by TELUS differs from what was ordered by the GPS Entity pursuant to a Service Order or Service Change Order.

5.5.1.6 GPS Entities may purchase Mike User Equipment from vendors other than TELUS, and use such equipment with iDEN (Mike) Service Plans provided by TELUS subject to the following terms and conditions: (a) TELUS will have no obligation to subsidize the purchase of any such equipment; (b) such equipment must contain a SIM card that has been purchased from TELUS or its Retailers; and (c) such equipment must be certified by TELUS for use on its MIKE network.

5.5.1.7 TELUS will provide a link to the TELUS Approved Cellular User Equipment List on the Cellular TELUS GPS Entity Portal.

5.5.1.8 If a GPS Entity chooses not to purchase Mike User Equipment from TELUS, the GPS Entity will still be entitled to TELUS' Cellular iDEN(Mike) Service Plan rates set out in the Price Book with respect to the Mike User Equipment it purchases from third parties and, subject to Section 5.5.1.6, activates on TELUS' cellular network. TELUS will not substitute different Mike User Equipment for Mike User Equipment ordered by a GPS Entity unless such GPS Entity agrees to the substitution in writing.

5.5.1.9 A GPS Entity will have the right to inspect and approve of any Mike User Equipment requested by it pursuant to a Service Order. Inspection by the GPS Entity of advance samples will not constitute final acceptance.

5.5.1.10 Except for loaner Mike User Equipment (other than Self-Managed Loaners) or demonstration Mike User Equipment, title to Mike User Equipment, requested pursuant to a Service Order, including for Self Managed Loaners, will pass from TELUS to a GPS Entity upon delivery to the GPS Entity.

5.5.1.11 Except for loaner Mike User Equipment (other than Self-Managed Loaners) or demonstration Mike User Equipment, Mike User Equipment (including SIM cards) to be supplied by TELUS to a GPS Entity at any time during the Term will be transferred and assigned by TELUS free and clear of all charges, liens and encumbrances of every nature and kind whatsoever at the time of transfer and assignment to the GPS Entity. The GPS Entities will and may, from time to time, and at all times hereafter, peaceably and quietly have, hold, possess and enjoy the Mike User Equipment (including SIM cards) transferred and assigned to and for its own benefit pursuant to a Service Order and without any manner of hindrance, interruption, claim or demand whatsoever of, from or by TELUS, or any person whomsoever claiming through TELUS, or any person claiming title paramount to TELUS.

5.5.2 A GPS Entity may return any Mike User Equipment to TELUS within 30 days from the date of purchase for a full refund and may deactivate the iDEN (Mike) Service Plan attached to such Mike User Equipment provided the Mike User Equipment has, as applicable, less than 30 minutes of voice usage and 30 MB of data usage and the Mike User Equipment has been received by TELUS in complete and like new condition.

5.5.3 If a GPS Entity fails to accept or reject Mike User Equipment within 30 days from the receipt by the GPS Entity of the Mike User Equipment in accordance with the applicable Service Order, the GPS Entity will be deemed to have accepted such Mike User Equipment unless the GPS Entity and TELUS agree otherwise, provided that such deemed acceptance will not override any warranties which, for certainty, will commence on the date of possession.

5.6 Mike User Equipment Refresh.

5.6.1 Mike User Equipment refresh for all equipment associated with iDEN (Mike) Service Plans will be available on specific price plans noted in Attachment C9-B, provided that Mike User Equipment for MPN Mobile Radio Services are not eligible for refresh.

5.6.2 TELUS will ensure that Mike User Equipment provided to any GPS Entity is available for refresh on the following terms and conditions:

5.6.2.1 The GPS Group may require TELUS to refresh (upgrade or replace) a third of all Mike User Equipment being used by the GPS Group, which is eligible for refresh in accordance with Section 5.6.1, every year without any additional administration or other Fees being payable by any GPS Entity.

5.6.2.2 The number of Mike User Equipment available for refresh pursuant to Section 5.6.2.1 will be based on the average subscriber base of the GPS Group over a rolling three year period calculated at the beginning

5.6.2.3 g of the third year of each three year period by adding together the total number of subscribers receiving iDEN Network (Mike) Services from TELUS as of the first day of each of the three years during such period and dividing by three. For purposes of this Section 5.6, the measurement of years will commence on the Effective Date. For greater certainty, the number of Mike User Equipment available for refresh pursuant to Section 5.6.2.1 will only first be determinable as of the first day of the third year. Notwithstanding the foregoing, the GPS Group will be able to exercise its refresh rights under this Section 5.6 prior to such day based on its reasonable estimate of the number of Mike User Equipment that will be available for refresh and a true up reconciliation will occur upon the number of Mike User Equipment available for refresh pursuant to Section 5.6.2.1 becoming first determinable.

For example, if the total subscribers receiving iDEN Network (Mike) Services from TELUS for three years is as follows:

Effective Date	*20,000*
1st anniversary of the Effective Date	*19,000*
2nd anniversary of the Effective Date	*24,000*

Then, the number of Mike User Equipment available for refresh pursuant to Section 5.6.2.1 *will be 21,000 ((20,000 + 19,000 + 24,000) ÷ 3).*

5.6.2.4 The distribution of the refresh and the selection of the specific Mike User Equipment to be refreshed will be determined by the GPS Group. If required, the GPS Group may use a portion of the following year's quota ahead of the end of the current year or may carry forward any 'unused refresh room' into the following year provided, however, that no more than 40% of the subscriber base receiving iDEN Network (Mike) Services as of the Effective Date will be refreshed within 12 months of such date pursuant to this Section 5.6.2.

5.6.2.5 If a GPS Entity requires that any Mike User Equipment be refreshed and such refresh is not covered by the GPS Group refresh rights set out above in this Section 5.6.2, then such refresh will be done through a new purchase of Mike User Equipment at the consumer rate for such equipment on a month to month term iDEN (Mike) Service Plan as set out in the Price Book.

5.7 User Equipment Warranty.

5.7.1 TELUS will ensure that all Mike User Equipment provided by TELUS to a GPS Entity pursuant to this Agreement is warranted as follows:

5.7.1.1 Mike User Equipment will carry the manufacturer's warranty provided, however, that in addition to any other limitations or exclusions specified in the manufacturer's warranty, the manufacturer's warranty will not cover:

5.7.1.1.1 Defects or damage due to improper use of the Mike User Equipment;

5.7.1.1.2 Defects or damage due to misuse, accident or neglect;

5.7.1.1.3 Defects or damage due to improper testing, operation, maintenance, installation, alteration, modification or adjustment;

5.7.1.1.4 Mike User Equipment that has had its Mechanical Serial Number (MSN) label removed or rendered illegible;

5.7.1.1.5 Defects or damage due to food, liquid or foreign-substance spills;

5.7.1.1.6 Scratches or damage caused to plastic surfaces and other externally exposed parts due to normal use; and

5.7.1.1.7 Defects or damage cause by ancillary equipment or accessories not manufactured by the original equipment manufacturer.

5.7.1.2 Irrespective of any manufacturer's warranty, the Mike User Equipment will be of merchantable quality and free of defects in labour and parts for at least one year after the GPS Entity takes possession of such equipment. If any defects in labour and parts are identified by the GPS Entity in the first year (commencing from the date of possession) and such defect is not covered by the manufacturer's warranty, then TELUS will

be responsible for remedying such defect in accordance with Section 5.7.1.4.

5.7.1.3 All manufacturers' warranties will be assigned to the individual Mike User Equipment and the GPS Entity will be considered to be the device owner for the purposes of warranty validation.

5.7.1.4 For 12 months after the date that a GPS Entity takes possession of any Mike User Equipment provided by TELUS, TELUS will promptly repair or replace defective Mike User Equipment and their components at its cost without any charges (including charges for parts, labour, shipping and taxes) to the applicable GPS Entity or iDEN End User, unless the damage or defect is of a type described in Section 5.7.1.1.1 to 5.7.1.1.7 above or if the defective Mike User Equipment is not returned to TELUS.

5.7.1.5 An iDEN End User will have the right to inspect and approve the Mike User Equipment ordered by or for such iDEN End User in order to ensure that the Mike User Equipment is the correct equipment ordered, is new and is not damaged, deficient or broken and such initial acceptance will not override any warranties.

5.8 Self-Managed Loaner Mike User Equipment. In addition to the loaner Mike User Equipment available at no charge under Section 6.1.2.2.5, TELUS will make available loaner Mike User Equipment (such loaners together with loaners set out in Section 5.9.1 of Attachment H9-A, the "**Self-Managed Loaners**") to GPS Entities for self-managed loaner purposes at no charge to the GPS Entities subject to the terms and conditions set out in Section 5.9.1 of Attachment H9-A.

5.9 Documentation. TELUS will provide documentation for iDEN Network (Mike) Services as set out in Section 5.10 of Attachment H9-A with the necessary changes, if any, deemed to have been made to that Section to make it applicable to the iDEN Network (Mike) Services.

5.10 Changes to Plans, Equipment, Services and Software. In respect of changes to the iDEN Network (Mike) Services Plans, the Mike User Equipment, the Additional iDEN (Mike) Service Plan Features or any Cellular Software and Custom Applications, the parties will comply with the change management process set out in Section 5.11 of Attachment H9-A with the necessary changes, if any, deemed to have been made to that Section to make it applicable to the iDEN Network (Mike) Services.

6. Service Support Features

6.1 General Service Support from TELUS.

6.1.1 The following service support features will be available to GPS Entities with respect to iDEN Network (Mike) Services:

6.1.1.1 All components of iDEN Voice Services and iDEN Data Services will be available both directly from TELUS and through Retailers.

6.1.1.2 iDEN End Users and GPS Entities will be able to make changes in Mike User Equipment, including Mike User Equipment refresh, directly with TELUS and through Retailers.

6.1.1.3 TELUS will not, nor will any Subcontractor, make any request to return damaged or defective Mike User Equipment owned by the Province for repair.

6.1.1.4 The GPS Entities may retain Mike User Equipment that is replaced through a repair or refresh without incurring any additional Fees.

6.1.2 Support for Changes in iDEN Network (Mike) Services.

6.1.2.1 iDEN End Users may order iDEN Network (Mike) Services in accordance with the Service Order and Service Change Order processes for the iDEN Network (Mike) Services set out in Section 5.4 and Attachment F9.

6.1.2.2 When TELUS is in receipt of a Service Order or Service Change Order for iDEN Network (Mike) Services, it will perform, either directly or through a Retailer, support functions described in this Attachment, as applicable, including:

6.1.2.2.1 activation of Mike User Equipment;

6.1.2.2.2 exchanging Mike User Equipment;

6.1.2.2.3 repairing Mike User Equipment;

6.1.2.2.4 refreshing Mike User Equipment;

6.1.2.2.5 providing loaner Mike User Equipment during repairs; and

6.1.2.2.6 adding, removing, and changing iDEN Network (Mike) Service Plans, and Additional iDEN (Mike) Service Plan Features.

6.1.2.3 Any Ordinary Course Change to the iDEN Network (Mike) Services ordered by a GPS Entity (which for certainty is a change that does not affect the cost of the iDEN Network (Mike) Services) will not require a Service Change Order or Change Order but will require that the request be made by an employee of the GPS Entity with appropriate authority, and, for greater certainty, any work required by TELUS to implement such change will be inclusive within the monthly service Fee for the Service impacted by the change**.**

6.1.2.4 TELUS will provide an online tool within the Cellular TELUS GPS Entity Portal, at no charge to the GPS Entities, to allow each GPS Entity to make specified changes to the iDEN Network (Mike) Services being provided to such GPS Entity (e.g. feature changes, suspension and reinstatements).

6.1.3 Service Support for the Approval of New Mike User Equipment.

6.1.3.1 Prior to new Mike User Equipment being added to the GPS Entity Approved Cellular User Equipment List, the GPS Group may request and receive up to a total of six demonstration units of such new Mike User Equipment with associated demonstration service plans, (with long distance blocked) at no charge for a 60 day testing period. The GPS Group will be responsible for all risk of loss or damage to any such demonstration units while on loan to the GPS Entities pursuant to this Section 6.1.3.1.

6.1.3.2 If such proposed new Mike User Equipment is added to the GPS Entity Approved Cellular User Equipment List, the GPS Entities may purchase such demonstration units for the applicable Fee specified in the Price Book. If such equipment is not added to such list the GPS Group will promptly return such equipment to TELUS.

6.1.4 Communication of Changes in Mike User Equipment.

6.1.4.1 TELUS will ensure that Mike User Equipment information is communicated to iDEN End Users and changes to Mike User Equipment models approved for purchase by the GPS Entities are handled as follows:

6.1.4.1.1 Within the time period set out in Schedule II of this Agreement, the Cellular TELUS GPS Entity Portal will go-live and thereafter will be provided and maintained by TELUS during the Term. The GPS Entity Approved Cellular User Equipment List will be available on the Cellular TELUS GPS Entity Portal and any Mike User Equipment described on such list will be deemed available for purchase by GPS Entities under this Attachment. Prior to the

go-live date of the Cellular TELUS GPS Entity Portal GPS, TELUS will circulate at the request of the Administrator the Entity Approved Cellular User Equipment List to the GPS Group.

6.1.4.1.2 TELUS may make the following changes to such list: (a) TELUS may remove from the list any Mike User Equipment that is discontinued by the manufacturer provided that TELUS has no further stock of such equipment; (b) TELUS may remove from the list any Mike User Equipment that no longer meets the GPS Entities' requirements, for such equipment set out in this Agreement; or (c) TELUS may add to the list any new Mike User Equipment that has been approved by the Administrator for inclusion, such list will be updated by TELUS in accordance with Section 6.1.4.1.3.

6.1.4.1.3 TELUS will provide advance notice in writing to each of the GPS Entities and the Administrator of any new Mike User Equipment models being introduced by TELUS (such notice to be the Confidential Information of TELUS). Once approved in writing by the Administrator, TELUS will update the GPS Entity Approved Cellular User Equipment List on the Cellular TELUS GPS Entity Portal and will update its billing system to implement the pricing for such equipment. Once these tasks are completed by TELUS, the newly added Mike User Equipment may be ordered by a GPS Entity through the Cellular TELUS GPS Entity Portal and through Retailers.

6.1.4.1.4 If TELUS is notified by a manufacturer or otherwise becomes aware that any Mike User Equipment is nearing end of life (EOL) or is being discontinued, TELUS will notify each of the GPS Entities and the Administrator through the Cellular TELUS GPS Entity Portal or otherwise in writing.

6.1.4.1.5 TELUS will provide the Administrator and certain GPS Entities designated by the Administrator with advance bulletins regarding Mike User Equipment at the same time any such advance bulletins are provided by TELUS to its Retailers.

6.1.5 Mike User Equipment Repair Requirements. TELUS will provide Mike User Equipment repairs as set out in Section 6.1.5 of Attachment H9A with the necessary changes, if any, deemed to have been made to that Section to make it applicable to the iDEN Network (Mike) Services.

6.1.6 Changes to Retailers and their Location. TELUS will ensure that service support from Retailers in connection with iDEN Network (Mike) Services is communicated and maintained as set out in Section 6.1.6 of Attachment H9A with the necessary changes, if any, deemed to have been made to that Section to make it applicable to the iDEN Network (Mike) Services.

6.1.7 Problem and Problem Resolution.

6.1.7.1 TELUS will perform the support services with respect to Incident and Problems relating to the iDEN Network (Mike) Services in accordance with Schedule N (Problem and Incident Management Procedures).

6.1.7.2 iDEN End Users with Incidents involving Mike User Equipment will be directed by TELUS' dedicated support team to the Retailer from which the equipment was purchased or if that Retailer is not available, to the Retailer located nearest to such user for the resolution and repair of such Equipment.

7. Optional Features

7.1 Included Optional Features. TELUS will make each of the optional features with respect to the iDEN Network (Mike) Services set out in Table 2 below available to all GPS Entities at no additional cost to the GPS Entities. Where an optional feature has been selected by a GPS Entity in a Service Order or Service Change Order, then TELUS will provide such optional feature as a part of the iDEN Network (Mike) Services ordered without any additional Fee in respect of such feature being payable.

Table 2

No.	Type of iDEN Network (Mike) Service MPN Mobile Radio Services or Mike Public Network Services or Both	Optional Feature Title	Description	Special Terms and Conditions
H9-B-Op1	Both	Direct Connect	Push To Talk capability to other Mike Users	Amount of included Direct Connect is specified in the iDEN(Mike) Service Plans (Section 2 of Attachment C9-B).
H9-B-Op2	Both	Talk Around	Upon disconnecting from the iDEN (MIKE) network, the Mike User may use the walkie talkie function on their Mike User Equipment at no additional charge to communicate with other Mike Users	Available on compatible Mike User Equipment models

No.	Type of iDEN Network (Mike) Service MPN Mobile Radio Services or Mike Public Network Services or Both	Optional Feature Title	Description	Special Terms and Conditions
H9-B-Op3	Both	Voicemail 10	Basic voice mail for PSTN voice messages	

7.2 Fee-Based Optional Features. TELUS will make each of the optional features with respect to the iDEN Network (Mike) Services set out in Table 3 below available to all GPS Entities at the additional price stated for each of such features in the Price Book. Where an optional feature has been selected by a GPS Entity in a Service Order or Service Change Order, then TELUS will provide such optional feature as a part of such Services.

Table 3

No.	Type of iDEN Network (Mike) Service MPN Mobile Radio Services or Mike Public Network Services or Both	Optional Feature Title	Description	Notes
H9-B-Op4	Both	PSTN Voice	Allows Mike User to make voice calls through PSTN via the iDEN (Mike) Network	Availability is specified in the iDEN(Mike) Service Plans (Section 3 of Attachment C9-B)
H9-B-Op5	Both	Unlimited Direct Connect	Same	MPN includes Unlimited Direct Connect
H9-B-Op6	Both	PSTN Voice – Domestic LD	Same	Specified in the iDEN(Mike) Service Plans (Section 3 of Attachment C9-B)
H9-B-Op7		PSTN Voice - Canada to International LD	Same	See Exhibit C9-A1.
H9-B-Op8	Both	PSTN Voice - US Roaming	Same	See iDEN (Mike) Service Plans (Section 3 of Attachment C9-B)

H9-B-Op9	Both	Direct Connect - US Roaming	Same	Pay per Use. See iDEN (Mike) Service Plans (Section 3 of Attachment C9-B)
H9-B-Op10	Both	Unlimited Direct Connect - US Roaming	Same	See iDEN (Mike) Service Plans (Section 3 of Attachment C9-B)
H9-B-Op11	Both	Unlimited Group Connect	Same	MPN Mobile Radio Services includes Unlimited Group Connect (East or West)
H9-B-Op12	Both	Group Connect	Same	MPN Mobile Radio Services includes Unlimited Group Connect (East or West) Pay per use – Rate is specified in the description of Mike Public Network Services in Section 3 of Attachment C9-B
H9-B-Op13	Both	Voicemail 25	Greater mail box and storage capacity than basic voicemail	
H9-B-Op14	Both	Visual Voicemail	Visual voicemail where iDEN End Users will be able to view voice messages by converting voicemail to text and will be able to view the messages in the order of the IDEN End User's choice	
H9-B-Op15	Both	Device Protection Plan	Monthly fee provides insurance for loss, theft or damage to Mike User Equipment	See Exhibit H9-A7
H9-B-Op16	Both	Roadside Assistance	Monthly fee provides roadside assistance to IDEN End User	
H9-B-Op17	Both	Push to View	Send pictures using Direct Connect.	Both sender and recipient must have MMS messaging capable handsets.
H9-B-Op18	Both	Sound and Sound Picture Message	Send sound or sound and picture using Direct Connect.	Both sender and recipient must have MMS messaging capable handsets.

H9-B-Op19	Both	Messaging 250	Monthly fee includes: 250 Outgoing SMS / MMS [Push To View] Unlimited incoming SMS / MMS [Push To View]	Both sender and recipient must have MMS messaging capable handsets.
H9-B-Op20	Both	Messaging 2500	Monthly fee includes: 2500 Outgoing SMS / MMS [Push To View] Unlimited incoming SMS / MMS [Push To View]	Both sender and recipient must have MMS messaging capable handsets.
H9-B-Op21	Both	Unlimited Messaging	Monthly fees includes unlimited incoming and outgoing SMS / MMS [Push To View]	Both sender and recipient must have MMS messaging capable handsets.
H9-B-Op22	Both	Work Email & Web 40 (Mike BlackBerry data)	Unlimited Blackberry data in Canada and the United States	
H9-B-Op23	Both	Mike Packet Data 50	Includes 100 MB of data in Canada	
H9-B-Op24	Both	Mike Packet Data 75	Includes unlimited data in Canada	
H9-B-Op25	Both	Pay per use data – mobile phone	Data use outside of Service Plan	
H9-B-Op26	Both	Pay per use data – BlackBerry	Data use outside of Service Plan	
H9-B-Op27	Both	iDEN PTT Priority Service	Two-way radio priority offering that, under emergency or disaster scenarios, bypasses the public switched telephone network (PSTN) and allows priority push to talk (PTT) user priority	See Exhibit H9 – B4
H9-B-Op28	Both	Pay per use of SMS	For SMS use that is greater than the amount that is included in Service Plan	

Any special terms and conditions with respect to an optional feature set out in Table 3 above will apply with respect to such optional feature. The optional feature H9-B-Op15 (Device Protection Plan) (a) will only be offered by TELUS or its Subcontractors to the extent and manner approved in writing by the GPS Entity having selected such optional feature, and (b) will not be offered to the Province and TELUS will reimburse the Province for any payment made by the Province to TELUS or a Subcontractor in respect of such a plan. The Province will not facilitate the purchase of optional feature H9-B-Op15 (Device Protection Plan) by its purchasing representatives or its GPS End Users, including advertising the availability of such optional feature to such Persons.

8. Additional Terms Regarding the iDEN Network (Mike) Services

8.1 Monitoring. TELUS will use its commercially reasonable efforts to ensure the security of all data and telephone calls within the iDEN Network (Mike) Services. TELUS has the right, but not the obligation, to monitor or log any TELUS Internet

site or use of the IDEN Network (Mike) Services. Subject to the Privacy Obligations and the Security Obligations, the GPS Entities consent to any such monitoring and logging that is necessary to satisfy any law, regulation or other government request, or to enhance operating efficiencies, improve service levels, assess customer satisfaction, or protect TELUS or its customers from unwanted use of certain services or applications. TELUS reserves the right to delete, remove or block access to any Internet capability, content, information or third party products or services available or transmitted through the IDEN Network (Mike) Services that TELUS reasonably believes to be unacceptable or in violation of the terms set out in this Section 8.

8.2 Rights in Numbers and Addresses. Subject to any rights the GPS Entities may have under Applicable Laws, including any right to port a number to another carrier, the GPS Entities do not own or have any property rights in any phone number, IP address, domain name or e-mail i.d. assigned to the GPS Entities or IDEN End Users for use with the IDEN Network (Mike) Services, and, except as otherwise specified in this Attachment, TELUS may change such phone numbers, IP addresses, domain names or e-mail i.d.s without the consent of the GPS Entity:

8.2.1 if TELUS has mistakenly assigned the same to two customers;

8.2.2 in the case of new number plan area introductions for phone numbers;

8.2.3 as required by Applicable Laws or Governmental Authority; or

8.2.4 as is otherwise reasonably necessary in order for TELUS to continue to deliver the Services to the GPS Entities.

For any such change, TELUS will give the GPS Entity reasonable advance notice stating the reason for and the anticipated date of such change, or in cases of emergency, give the GPS Entity verbal notice, followed by a written explanation as soon as is reasonably possible.

8.3 The GPS Entities are solely responsible for all information, data, software or other material or content transmitted, stored or received by the GPS Entities or IDEN End Users using the IDEN Network (Mike) Services (the "**GPS Entity iDEN Content**"). TELUS exercises no control whatsoever over the content, accuracy or quality of any GPS Entity IDEN Content. TELUS is not responsible for detecting errors or anomalies or for recreating or re-transmitting data.

8.4 Roaming. When roaming outside of TELUS' coverage area, the GPS Entities are responsible for all applicable charges, and are subject to the terms and conditions of service (including limitations of liability) imposed by the wireless service provider providing the roaming services. Charges for roaming calls may be billed in the months after the calls were made, but GPS Entities are not responsible for roaming charges that are not billed within 180 days from the date the roaming charges were incurred. At the request of a GPS Entity, TELUS will pre-configure the GPS Entity's Mike End User Equipment prior to delivery, or provide to its GPS End Users the information necessary to configure their Mike End User Equipment, to avoid unintended roaming. Notwithstanding any such

pre-configuration, the GPS Entity will remain liable for any roaming charges it may incur subject always to the right of such GPS Entity to dispute Fees incurred in respect of inadvertent roaming outside of TELUS' coverage area while the applicable Cellular End User Equipment is located in TELUS' coverage area

8.5 Pricing Caps. The Fees payable in respect of the iDEN Network (Mike) Services during the Term will be in accordance with the prices set out in the Price Book and, subject to Section 5.10 of this Attachment, all prices for Standard Cellular Services during the Term will be capped at the prices set out in the Price Book as of the Effective Date.

8.6 Comprehensive Pricing. TELUS agrees that the prices appearing in the Price Book in respect of the iDEN Network (Mike) Services are correct, inclusive of all costs associated with transitioning to and accessing the iDEN Network (Mike) Services, activation of the iDEN Network (Mike) Services, shipping of Cellular User Equipment and Incident resolution, administration fees, service management and service maintenance with respect to the iDEN Network (Mike) Services (other than costs with respect to in-building service coverage enhancements) and constitute the total per unit expenditure required to be made by the GPS Entity to receive the iDEN Network (Mike) Services.

9. Wireless iDEN Network Evolution.

9.1 If during the Term TELUS proposes to replace or supplement the wireless standards applicable to the iDEN Network (Mike) Services with new or additional standards or otherwise evolve its wireless network to a next generation technology, (each a "**iDEN Network Evolution**"), TELUS will:

9.1.1 provide the GPS Entities written notice of the date of TELUS implementation of iDEN Network Evolution (the "**iDEN Network Evolution Date**") not less than 18 months prior to such date;

9.1.2 when and to the extent that such information becomes available, advise the GPS Entities in writing of each of the following (the "**iDEN Network Evolution Requirements**"):

9.1.2.1 the technical standards applicable to the iDEN Network Evolution;

9.1.2.2 any Mike User Equipment, Cellular Software and Custom Applications or iDEN (Mike) Service Plans or related products (collectively, the "**iDEN Orphaned Products**") then used by the GPS Entities in connection with the existing iDEN Network (Mike) Services that will no longer be provided, actively supported or compatible with, or will have degraded performance with, the iDEN Network Evolution upon its implementation;

9.1.2.3 alternative or successor products to the iDEN Orphaned Products provided by TELUS that offer equivalent functionality

to the iDEN Orphaned Products and the corresponding costs for acquiring such products;

9.1.2.4 to enable continued and uninterrupted receipt of the iDEN Network (Mike) Services by the GPS Entities during and for the Network Evolution in an efficient manner that minimizes any adverse affect on the GPS Entities any:

9.1.2.4.1 planning, testing and any other activities TELUS believes the GPS Entities will have to perform in connection with the Network Evolution, and

9.1.2.4.2 transformed or future state services and or other services required by the GPS Entities to transition or cutover to the Network Evolution.

9.1.3 maintain its wireless network prior to the iDEN Network Evolution Date (or such other date as TELUS and GPS Entities may agree to in writing) so that iDEN Orphaned Products will operate in accordance with the corresponding Specifications and Service Levels as they exist prior to the start of the implementation of the iDEN Network Evolution;

9.1.4 with the co-operation and assistance of the GPS Entities through the Governance Process, prepare and provide to the GPS Entities a detailed plan (the "**iDEN Network Evolution Plan**"), including time lines, for:

9.1.4.1 the cessation or wind-down of any existing iDEN Network (Mike) Services that will cease to exist as part of the implementation of the Network Evolution; and

9.1.4.2 the transition by or for GPS Entities from existing iDEN Network (Mike) Services to the new, alternative or related iDEN Network (Mike) Services offered to the GPS Entities in connection with the Network Evolution;

and will implement, upon approval of the GPS Entities, the iDEN Network Evolution Plan in accordance with its terms; and

9.1.5 cooperate, coordinate with and assist GPS Entities or any third party designated by GPS Entities in order to facilitate the orderly cessation, wind-down or transition of the Orphaned Products, as applicable.

9.2 In the event that one or more GPS Entities, determines not to implement alternative products (whether Mike User Equipment, Cellular Software and Custom Applications or iDEN (Mike) Service Plans or related products) for the Orphaned Products as necessitated by the iDEN Network Evolution, by reason of insufficient network coverage or the inability of TELUS to provide a technologically equivalent offering at an equivalent cost to such GPS Entity,

9.2.1 such GPS Entities may terminate the iDEN Network (Mike) Services corresponding to the Orphaned Products without payment of,

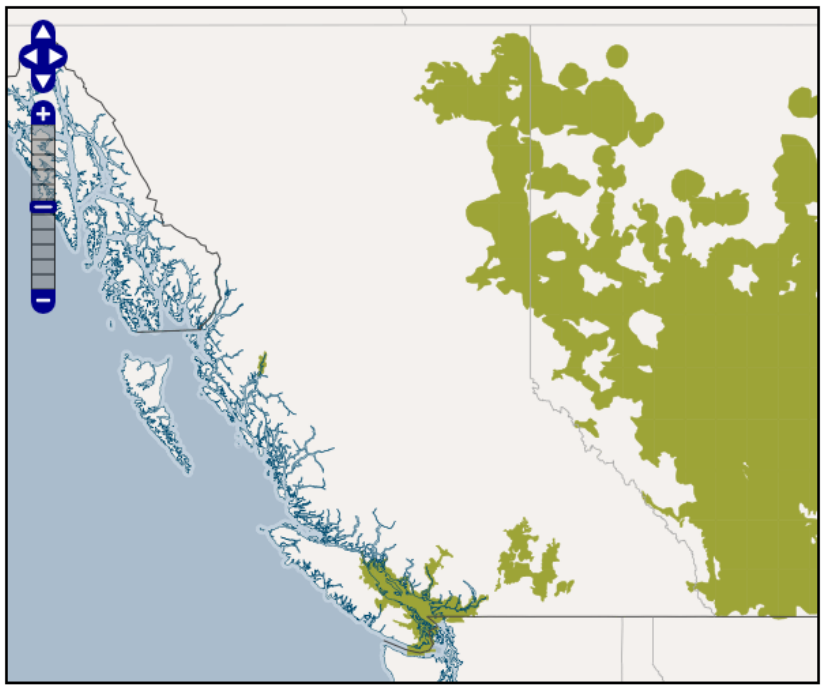
notwithstanding Section 31.6 of the main body of this Agreement, any termination fees, penalties or other amounts of any kind, provided that the GPS entity is not replacing the terminated iDEN Network (Mike) Services with technologically equivalent services having an equivalent cost to such GPS Entity to those offered as a result of the iDEN Network Evolution; and

9.2.2 the Cellular Spend Allocation will be adjusted accordingly to remove, as applicable, the corresponding Mike End Users or Fees from their calculation so that GPS Group is not adversely affected (from a Fee perspective) from the removal of such iDEN Network (Mike) Services from the Services.

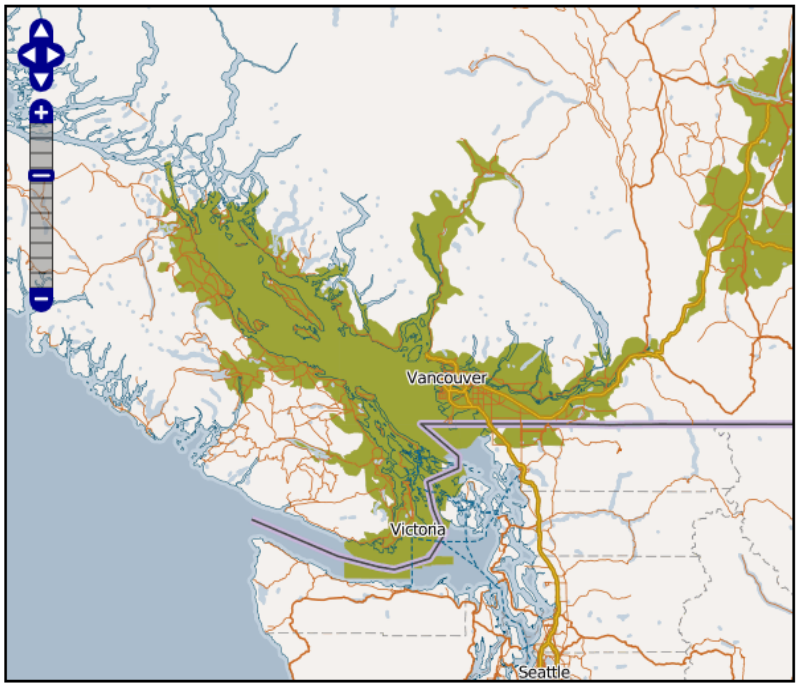
9.3 This Section 9 will subject to and implemented through the Change Process as applicable.

Exhibit H9-B1

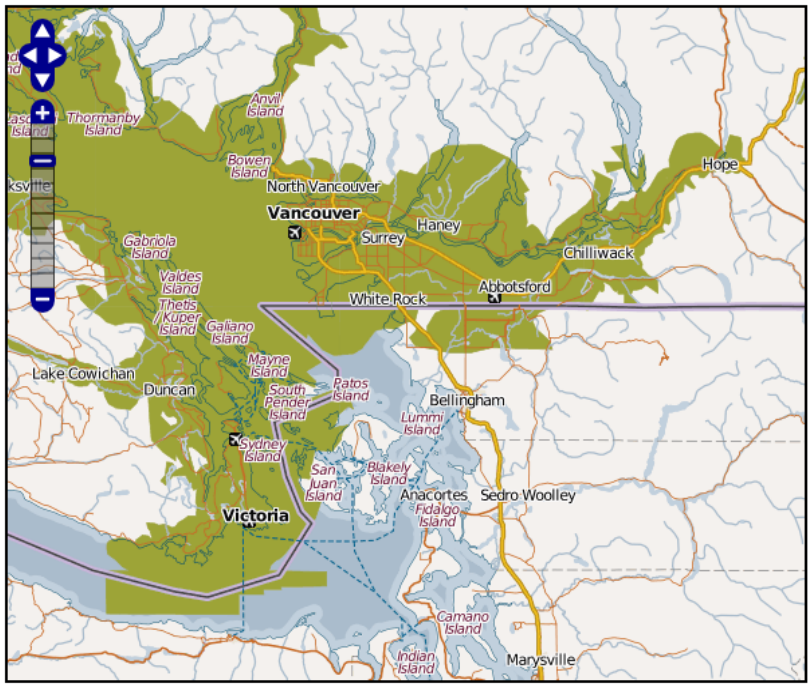
iDEN Network (Mike) Services – BC iDEN (Mike) Services Coverage Map



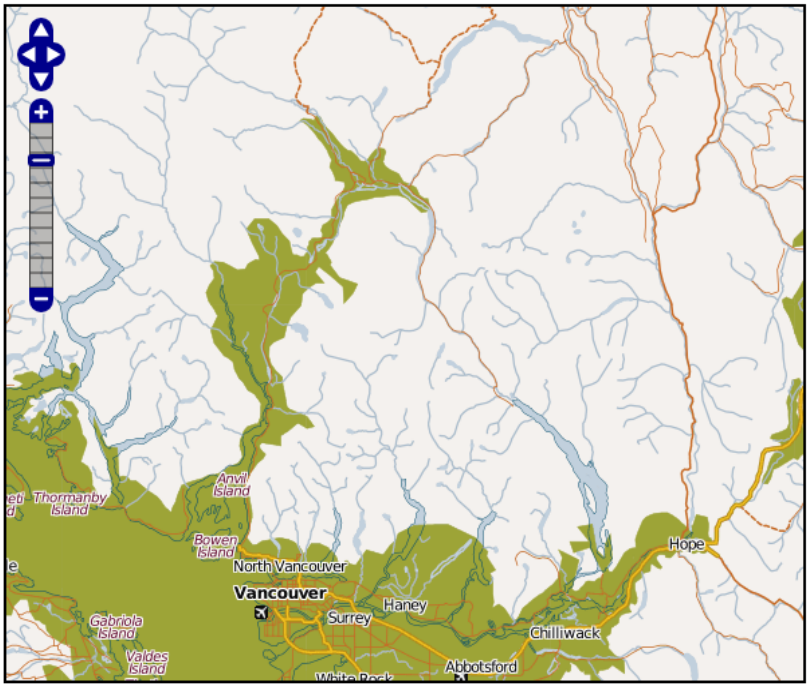
BC High Level Map



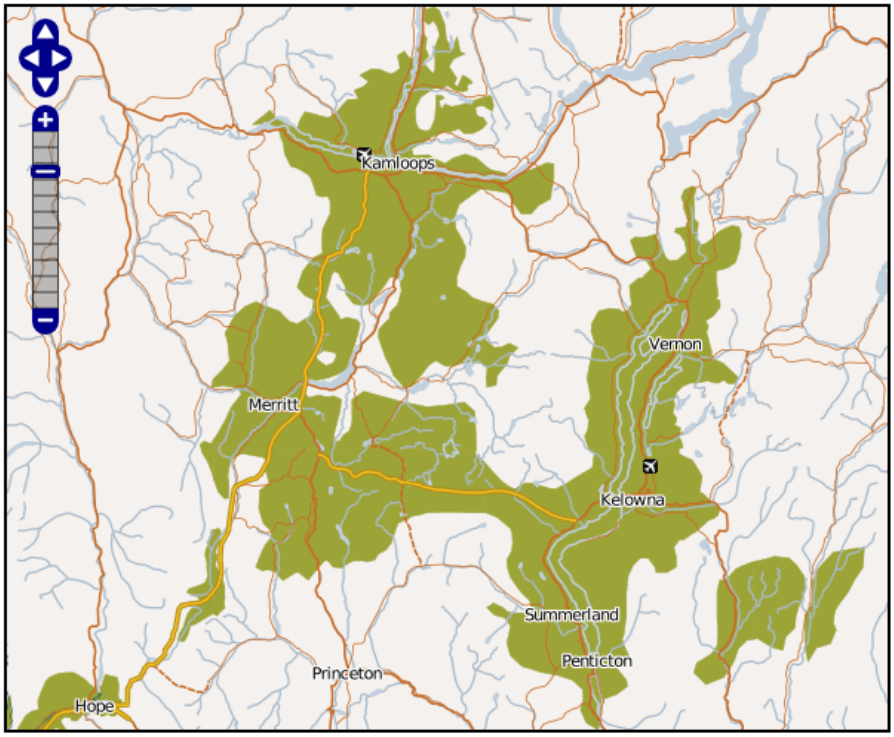
Vancouver Island



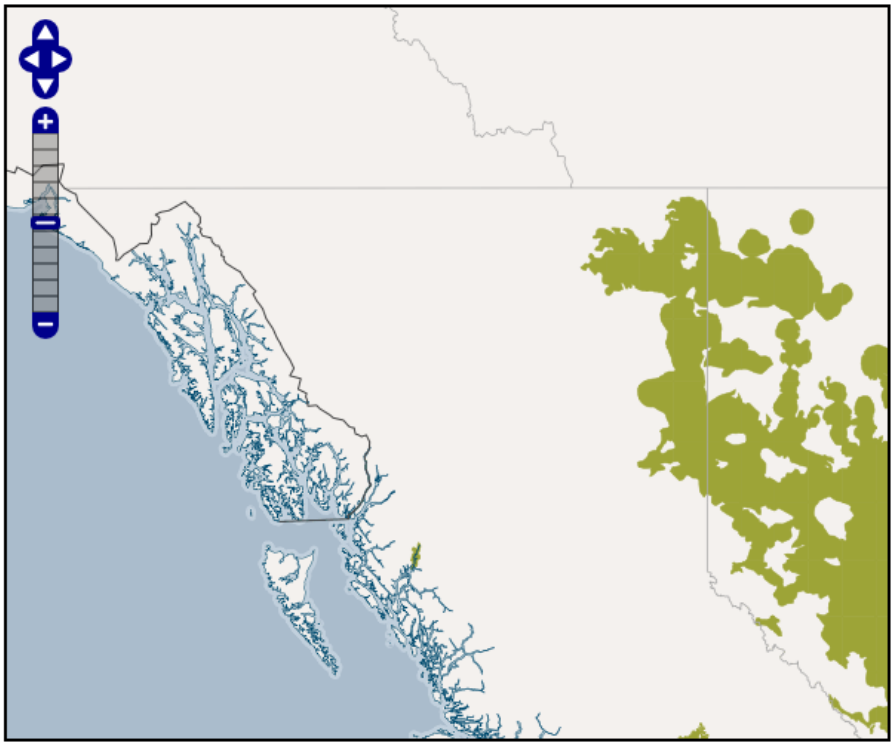
GVRD Lower Mainland, Strait of Georgia



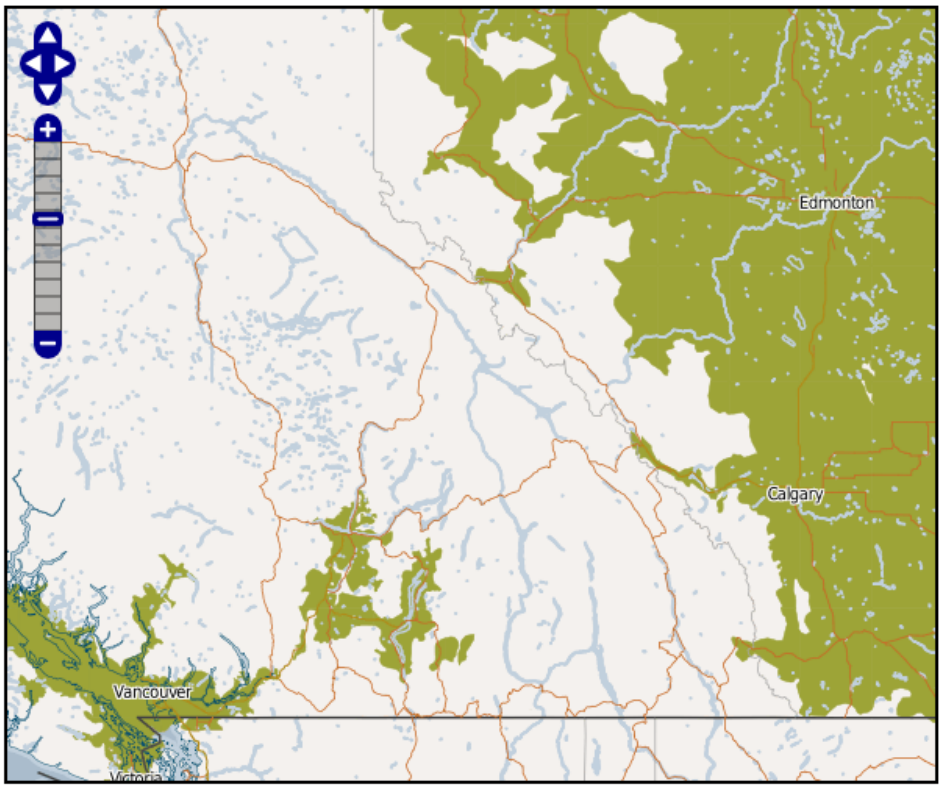
Whistler, Pemberton



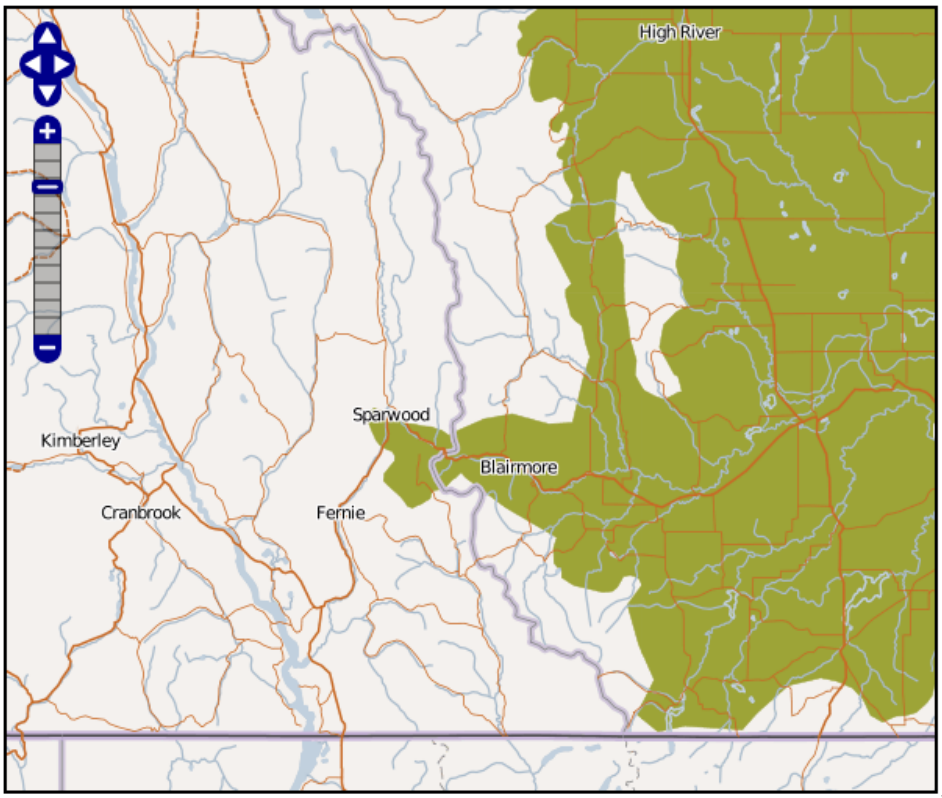
BC Interior



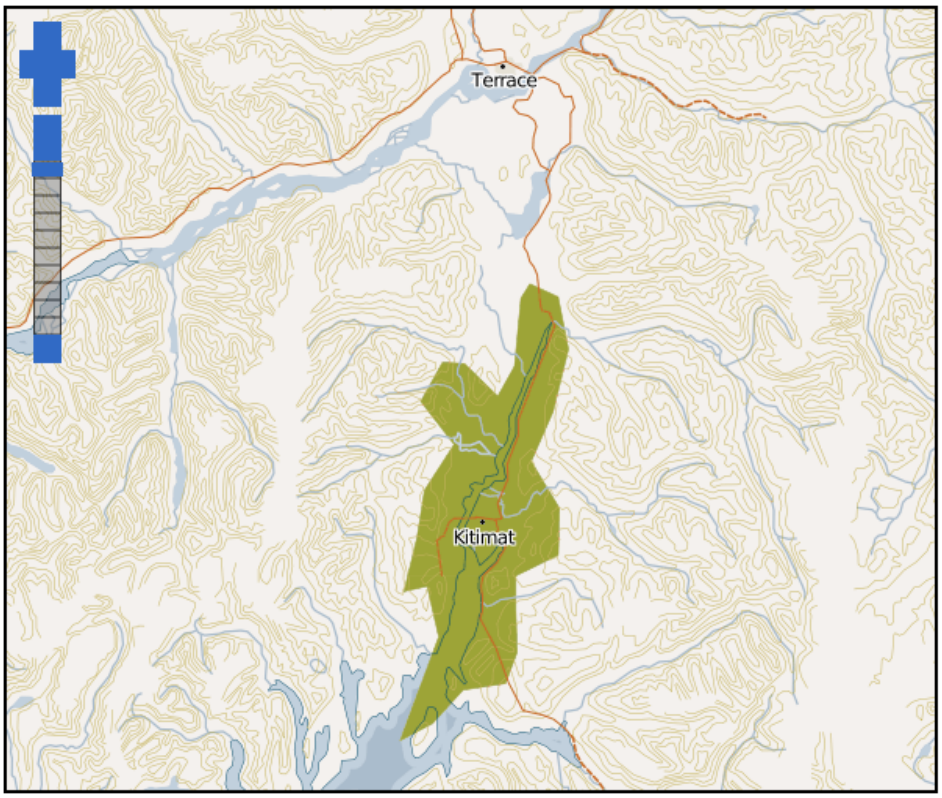
Northern BC



Eastern BC



South East BC



Kitimat

Exhibit H9-B2

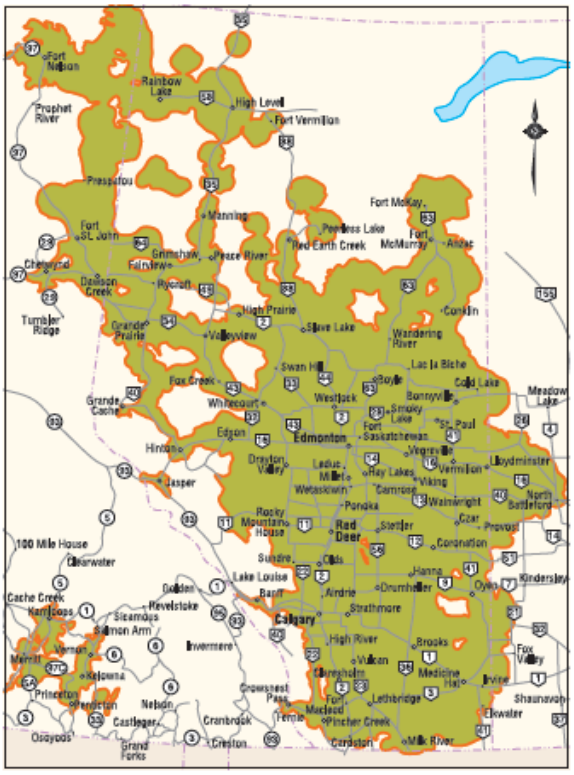
iDEN Network (Mike) Services – Canada Coverage Map

There are currently two Mike network regions within Canada:

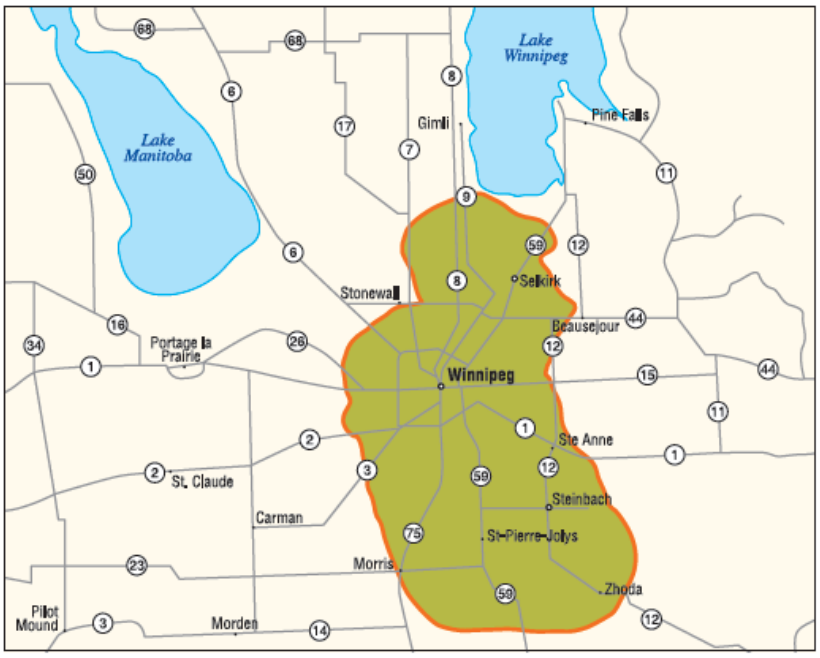
Eastern Network: Includes all coverage within Ontario and Quebec.

Western Network: Includes all coverage in British Columbia, Alberta, and Manitoba.

British Columbia



Alberta



Manitoba

Ontario

Quebec

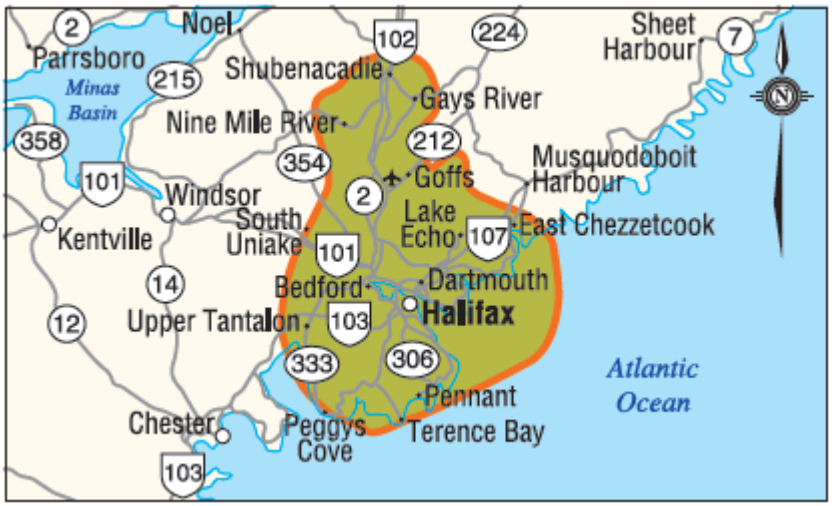
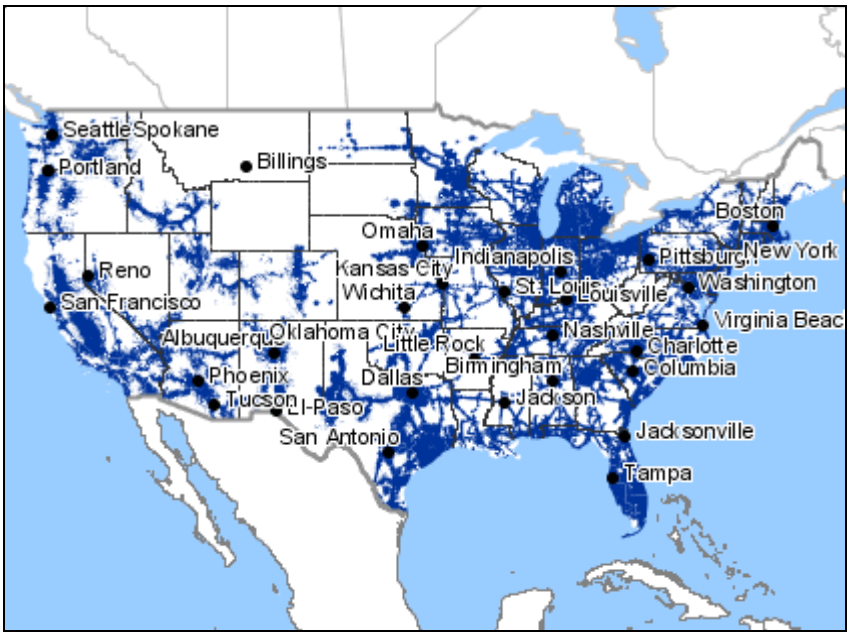
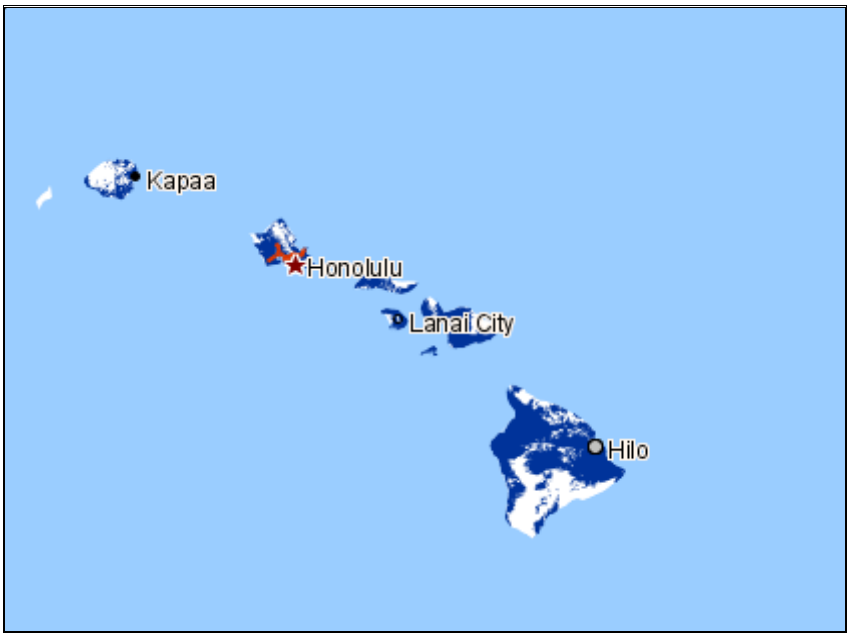

Noel
Parrsboro
Minas Basin
Shubenacadie
Gays River
Sheet Harbour
Nine Mile River
Musquodoboit Harbour
Goffs
Windsor
South Uniake
Lake Echo
East Chezzetcook
Kentville
Bedford
Dartmouth
Halifax
Upper Tantallon
Atlantic Ocean
Pennant
Chester
Peggys Cove
Terence Bay
2
215
102
224
7
358
101
354
212
14
12
103
333
306
107
N
Nova Scotia

Exhibit H9-B3

iDEN Network (Mike) Services– USA & International iDEN (Mike) Services Coverage Map

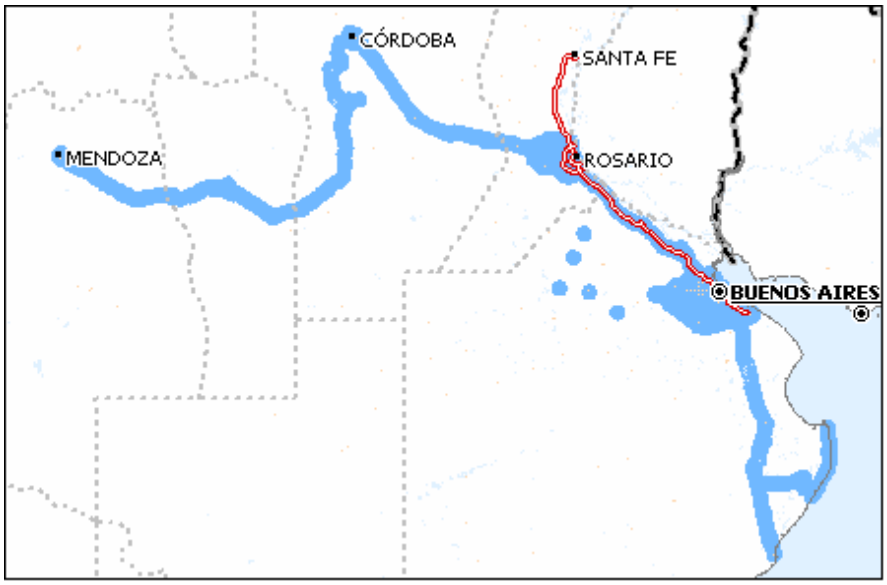


U.S. Mainland



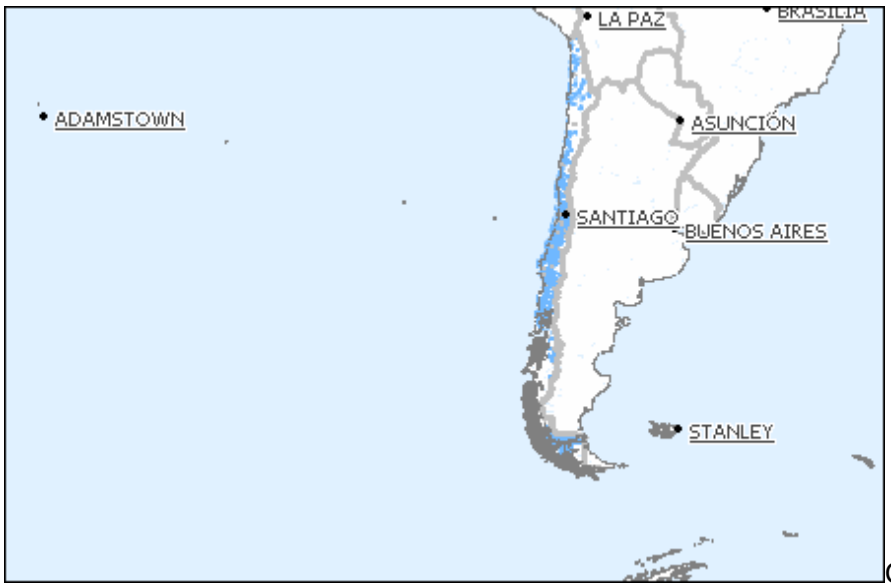
Hawaii

Mexico

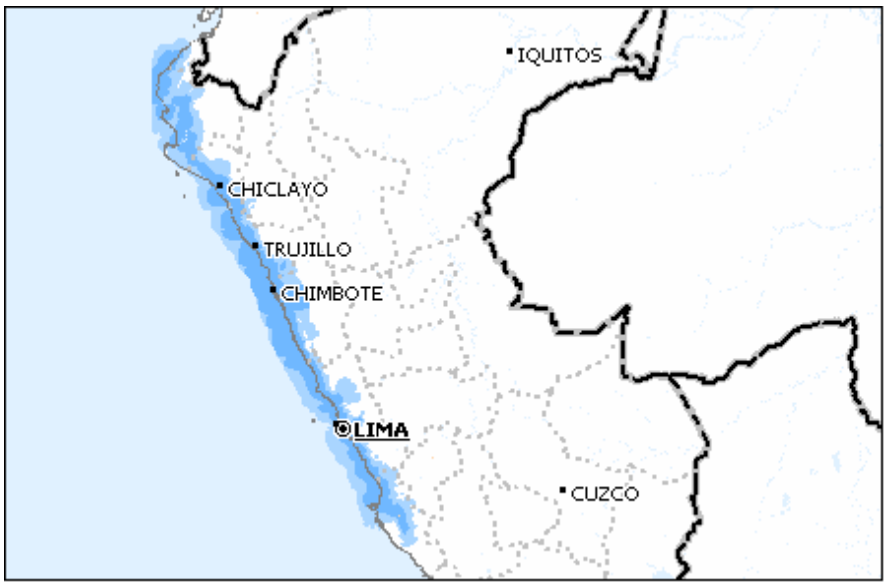


Argentina

Brazil



Chile



Peru

Exhibit H9-B4
iDEN Priority Services

The iDEN Priority Service operates on TELUS' iDEN Mike Push to Talk Radio network infrastructure which bypasses the PSTN in emergency or disaster situations.

The radio portion of the network's digital format enables it to assign priority levels ranging from one to 15, with one being the highest. Currently, all commercial users on the network are set at priority level 7.

These priority levels, ranging from executive leadership and military command-and-control to disaster recovery, are always on and do not have to be accessed through any sequence. This, in turn, means authorized users can take advantage of a priority and emergency alert, or ruthless pre-emption, feature simply by pushing a button on their Mike User Equipment for iDEN Network (Mike) Services to obtain prioritized radio channel access over all lower priority users.

Moreover, when assigning priority levels on our network, TELUS follows the priority-level grid established by Industry Canada and described in detail below:

1. Priority level 1—Executive leadership and decision makers

1.1 Prime Minister, Minister of Defence, DND leaders (military) and senior staff supporting these officials, Public Safety and Emergency Preparedness Canada;

1.2 Provincial premiers, cabinet-level officials responsible for public safety and health, and their senior support staff;

1.3 Mayors and their senior support staff;

1.4 Ministers and deputy ministers of lead departments with safety/security responsibilities and their senior support staff; and

1.5 Wireless service provider technicians essential to restoring wireless priority service

2. Priority level 2—Disaster response/Military command and control

Personnel key to managing the initial response to an emergency at the local, provincial, regional or federal level and for ensuring the viability or reconstruction of the basic infrastructure in an emergency-stricken area, including:

2.1 Federal, provincial and local emergency operations centre (EMO) coordinators, including emergency telecom personnel;

2.2 EMO directors, federal and provincial damage-assessment team leaders;

2.3 Federal, provincial and local personnel essential to the continuity of government and national security functions;

2.4 Incident command centre managers, local emergency managers; and

2.5 Federal personnel with intelligence and diplomatic responsibilities.

3. Priority level 3—Public health and safety and law-enforcement command

Individuals who, immediately following an event, direct operations crucial to life, property and maintenance of law and order:

3.1 RCMP (federal law-enforcement command);

3.2 Provincial police leadership;

3.3 Local fire and law-enforcement command;

3.4 Emergency medical service leaders;

3.5 Search-and-rescue team leaders; and

3.6 Emergency communications coordinators.

4. Priority level 4—Public service/Utilities and public welfare

Users whose responsibilities include managing public works, utility infrastructure damage assessment, restoration efforts and transportation to accomplish emergency-response activities:

4.1 Power, water, sewage and telecom utilities; and

4.2 Transportation leadership.

5. Priority level 5—Disaster recovery

Individuals responsible for managing recovery operations after the initial response, such as:

5.1 Medical recovery operations leadership;

5.2 Detailed damage-assessment leadership;

5.3 Disaster shelter coordination and management; and

5.4 Critical disaster field-office support personnel.

6. ORDERING PROCESS: iDEN PRIORITY SERVICES

To be classified as a Public First Responder, a GPS Entity will need to first be recognized as such via the following procedure.

1. Applicants must confirm their eligibility for the service with Industry Canada as per the applicable Industry Canada guidelines.

2. Approved applicants would then submit their approved application to their TELUS client care representative.

3. TELUS will then add the appropriate feature codes to the iDEN End User's Mike User Equipment at the rate set out in schedule C9-B

Exhibit H9-B5

Models of Mike User Equipment by Category

1. Table 1 below provides the models of Mike User Equipment for each of the corresponding price categories for Mike User Equipment set out in Exhibit C9-B1 as amended from time to time in accordance with section 5.10 of Attachment H9-B.

Table 1: Models of Mike User Equipment by Price Category

Category	Subcategory	Price Category	Model(s)
Mobile Phones	General Usage	Advanced	Motorola Mike i365i S
		Medium	Motorola Mike i365,Motroloa Mike i465
		Low	Motorola Mike i296,Motorola Mike i410
	Ruggedized	Advanced	Motorola Mike i686
		Medium	Motorola Mike i576
BlackBerry		Standard	8530i
		Low	[reserved for future use]
Smartphone		Standard	[reserved for future use]
		Low	Motorola i1 (PDA)
Data Modem		[reserved for future use]	

For example, a mobile phone, which is identified in Table 1 as being offered in the “Low” price category of the mobile phone category, general usage subcategory, of Mike User Equipment may be purchased at corresponding purchase price for the “Low” price category of the mobile phone category, general usage subcategory, of Mike User Equipment set out in Exhibit C9-B1.

2. TELUS will post the applicable pricing for the respective models of Mike User Equipment as determined in accordance with this Agreement on the Cellular TELUS GPS Entity Portal.

Attachment H10

Hardware and Software Procurement Services

Service Title:	Hardware and Software Procurement Services
Service Number:	H10

1. Service Title and Number

1.1 The Service Title and the Service Number of this specific Available Service are set out in the above table.

1.2 Where a Service Order or Service Order Change, in each case entered into in accordance with the terms of this Agreement, references such Service Title or such Service Number TELUS will provide such GPS Entity with the Hardware and Software Procurement Services which include all of the attributes, features, characteristics, components and service parameters described in this Attachment H10, unless expressly excluded or modified in the Service Order or Service Order Change.

2. Service Description

2.1 The Hardware and Software Procurement Services involve the procurement and purchase of Hardware, Software and Systems from third party suppliers on behalf of a GPS Entity. More specifically, the Hardware and Software Procurement Services are comprised of the following Services, which are subject to the terms and conditions of section 3:

2.1.1 assisting with the selection of third suppliers to supply Hardware, Software and Systems required by a GPS Entity;

2.1.2 ordering from third party suppliers Hardware, Software and Systems ordered by a GPS Entity;

2.1.3 liaising with third party suppliers to coordinate the ordering, shipping, delivery and return processes for any such Hardware, Software and Systems ordered by a GPS Entity;

2.1.4 delivering any such Hardware, Software and Systems ordered to one or more Sites specified by such GPS Entity in accordance with any instructions of such GPS Entity specified in a Service Order or Service Change Order for such Hardware, Software and Systems;

2.1.5 managing, monitoring and tracking such order process from start to completion;

2.1.6 coordinating any returns of Hardware, Software and Systems ordered by a GPS Entity; and

2.1.7 any other related Services or Work specified in a Service Order or Service Change Order for Hardware and Software Procurement Services.

2.2 For greater certainty, the procurement (including purchase and delivery) of Hardware, Software and Systems as part of other Services, including Projects and standard changes (e.g. installations) described in the Service Descriptions for Service Towers, is distinct from the Hardware and Software Procurement Services, which are separate Services.

3. Procurement Terms and Conditions

3.1 All right, title, benefit and interest in and to any Hardware, Software and Systems purchased by a GPS Entity ("**Purchased Equipment**") through the provision of Hardware and Software Procurement Services and risk of loss therein will pass from TELUS to the GPS Entity upon the GPS Entity providing acceptance with respect to the Purchased Equipment in the manner specified in the Service Order or Service Change Order for the Purchased Equipment provided, however, that the GPS Entity will be responsible for losses that are solely and directly attributable to acts of the GPS Entity or third parties while Purchased Equipment is in the GPS Entity's possession or control.

3.2 Any warranty for Purchased Equipment will be provided by the Purchased Equipment manufacturer or, if Software, the third party licensor of the Software and will accompany the Purchased Equipment.

3.3 Any warranty provided with Purchased Equipment will be between the applicable GPS Entity and the third party licensor or the Purchased Equipment manufacturer, as the case may be.

3.4 Subject to section 3.5, TELUS will be responsible for payment of all fees for transportation to a GPS Entity of tangible Purchased Equipment under a Service Order or Service Change Order from the point of shipment to a Site identified or set out in the Service Order or Service Change Order, including all costs arising in connection with loading and unloading the tangible Purchased Equipment, mileage charges, insurance charges, duty for the shipment of Purchased Equipment to Canada, customs clearance for the shipment of Purchased Equipment to Canada and brokerage charges for the shipment of Purchased Equipment to Canada.

3.5 If a GPS Entity requests expedited shipping of tangible Purchased Equipment or other out of the ordinary special Hardware and Software Procurement Services under a Service Order or Service Change Order, Fees for such out of the ordinary special Services may apply, provided, however, that the GPS Entity has agreed to such Fees in the Service Order or Service Change Order.

3.6 Prior to delivery, TELUS will ensure that tangible Purchased Equipment is handled, boxed, and loaded in accordance with procedures, and in packaging materials to preserve the value and performance of the tangible Purchased Equipment. All packaging materials will be marked with the appropriate order number(s) and will be addressed to the appropriate GPS Entity designated shipping contract. TELUS will ensure that enclosed with each shipment of

tangible Purchased Equipment is a shipping notice setting out a description of the contents and TELUS' name and the relevant order number. TELUS will ensure that each shipment is complete with all required customs documentation.

3.7 Any license or use agreement provided with Software or Systems purchased by a GPS Entity through the provision of Hardware and Software Procurement Services will be between the applicable GPS Entity and the third party licensor or the Systems manufacturer, as the case may be. The GPS Group agrees that TELUS will have no liability to any GPS Entity in connection with any GPS Entity's obligations under any such third party license or use agreement. To the extent the vendor or licensor of Software or Systems purchased by a GPS Entity through the provision of Hardware and Software Procurement Services is TELUS, the GPS Entity and TELUS will enter into a separate license or use agreement setting out the license terms or terms of use, as the case may be, of such Software or Systems.