

Aggregated Asymmetric Digital Subscriber Line (ADSL) Service

1. Service Description

Aggregated ADSL Service (or "the Service") is a broadband access service based on ADSL technology. This Service will enable a Competitive Local Exchange Carrier (CLEC), Internet Service Provider (ISP) or Digital Subscriber Line Service Provider (DSLSP), hereinafter referred to as a "High Speed Service Provider (HSSP)" to provide high speed applications through the establishment of a high speed data access path between an End-user's premises and a SaskTel designated point of aggregation.

Aggregated ADSL Service uses a transmission technology that provides asymmetric transmission (higher bandwidth in one direction, and lower bandwidth in the opposite direction) of data. Aggregated ADSL Service delivers high speed, downstream transmission to the End-user and a lower speed, upstream transmission to the HSSP.

Aggregated ADSL Service uses the available bandwidth above the voice-band on the same SaskTel provided local loop used by SaskTel or a CLEC to provide residential or business Qualifying Network Access Service (NAS) or on a Dry Loop. Aggregated ADSL Service does not prevent the simultaneous use of the End-user's telephone line for voice-band applications. A subscription by the HSSP or an End-user to a SaskTel or CLEC NAS is not a prerequisite for the Aggregated ADSL Service.

The Aggregated ADSL Service demarcation at the End-user's premise is the SaskTel Customer Connection Point (CCP) or demarcation point. The Aggregated ADSL Service demarcation at the interconnection with a HSSP is the interface, or patch panel associated with an Ethernet switch in a SaskTel designated wire centre. A HSSP may connect to the interface, via either an Ethernet Central Office (CO) Connecting Link to its own co-located transmission equipment or via a SaskTel-provided Ethernet Access between the SaskTel wire centre and the HSSP Point of Presence (POP), to achieve end-to-end connectivity.

Aggregated ADSL Service has been structured to enable HSSPs to acquire the service elements required to provide high speed applications.

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2. Definitions

For the purposes of this Tariff Item:

"End-user" is defined as being the HSSP's customer, the ultimate user of the digital high speed service application.

"Qualifying Network Access Service (NAS)" is defined as a SaskTel provided local loop used by SaskTel or a CLEC to establish the following voice service applications:

- Non-hunting residential or business touch tone individual line, or
- Non-hunting multi-line trunk, or
- Analog Centrex network access line

"Dry Loop" is defined as ADSL access that is provisioned on a loop which is not used to provide any other service.

"Internet Traffic Management Practices" (ITMPs) are defined as measures that may be used by Internet Service Providers (ISP) to manage Internet traffic through economic or technical means.

"HSSP Name Change" is defined as the situation where one HSSP is requesting that its name be changed to a different billing or official legal name.

"Merger and acquisitions" refers to a situation where a HSSP is transferring a portion of its subscriber base to another HSSP. This also includes two HSSPs merging in order to become one new HSSP, or a single HSSP becoming multiple HSSPs.

A "HSSP cutover or access upgrade" encompasses the case where a HSSP requires larger bandwidth to its POP to accommodate growth in End-user traffic. The HSSP may also be relocating its POP access or transferring all of its existing End-users to a different interface which does not necessarily require an upgrade in bandwidth.

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Aggregated Asymmetric Digital Subscriber Line (ADSL) Service - Continued

3. Conditions of Service

1. Components of Service

- 1. The two components of this Aggregated ADSL Service tariff are:
 - a) An ADSL Aggregated High Speed Service Provider Interface (AHSSPI) which provides for the aggregation of End-user ADSL traffic associated with a single HSSP, from every ADSL enabled wire centre in SaskTel's serving territory.
 - b) An Aggregated ADSL Access over a loop that qualifies for the Service, where the ADSL serving equipment is located either in a host wire centre or at a remote location, i.e. a location other than a host wire centre.

Note: Enabling the Aggregated ADSL Service to achieve end to end connectivity between the AHSSPI and the HSSP's network must be established via SaskTel Ethernet Access Service terminating at the HSSP's designated POP or SaskTel Ethernet CO Links terminating at the HSSP's co-located transmission equipment. For these services, refer to SaskTel Ethernet Access Service and Ethernet CO Connecting Link tariffs, respectively.

2. General

- 1. Aggregated ADSL Service is provided under the terms and conditions in this tariff. The rates for an Aggregated ADSL Access are based on month to month. The AHSSPI provides for an Ethernet 10, 100, or 500 Mbps interface, and is limited to 1000 VLANs (Virtual Local Area Network).
- 2. The Aggregated ADSL Access component of this service consists of the ADSL serving equipment in the serving wire centre and remote location as appropriate, and cross connection of such equipment to either a SaskTel or CLEC provided qualifying NAS as required.
- 3. The HSSP may be required to provide to SaskTel a Letter of Authorization. A Letter of Authorization is only required when a dispute arises between the End-user and SaskTel or a competitor.

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3. Conditions of Service - Continued

2. General - Continued

- 4. The Service is available from the End-user's SaskTel serving wire centre and shall be provided subject to the availability of suitable equipment and facilities as determined by SaskTel. SaskTel determines those of its serving wire centres which will support Aggregated ADSL Service. Aggregated ADSL Access is provisioned at the same speeds as SaskTel retail high speed Internet service in the wire centre serving the End-user. Maximum sustained speeds are not guaranteed.
- 5. Aggregated ADSL Access is available to HSSPs in association with an End-user's qualifying NAS, as defined in this tariff. Such services, however, are not included as part of Aggregated ADSL Service itself. It is the responsibility of the HSSP to ensure that its End-user obtains a qualifying NAS from SaskTel or CLEC if they require voice services. If an End-user does not require voice services on the same local loop (i.e. Dry Loop), the HSSP is responsible for the additional charges for that loop as per the rates stated in this tariff.
- 6. If an End-user chooses to receive Aggregated ADSL Service through a bonded configuration that provides end-user access through two copper pairs, and a second loop is available at a specific address, the HSSP shall pay a monthly rate for a bonded service and an additional dry loop charge for the second local loop as listed in this item. If a second loop is not available at a specific address, a bonded configuration of Aggregated ADSL Service will not be provided.
- 7. The ADSL equipment itself is subject to operational constraints related to the characteristics of the underlying loop facility. HSSPs may use Aggregated ADSL Service to establish high speed connections to only those End-user premises located within the operational range of the ADSL transmission equipment associated with a particular SaskTel serving wire centre. HSSPs may not use Aggregated ADSL Service to establish high speed connections to End-user premises located outside the range of the ADSL transmission equipment, or served by loop facilities which are not capable of supporting the Service.
- 8. When it is necessary for SaskTel to install special equipment or to incur an unusual expense to establish service, the HSSP shall pay an additional charge based on the equipment installed and the unusual expense incurred.

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ITEM Aggregated Asymmetric Digital Subscriber Line (ADSL) Service - Continued 650.32

3. Conditions of Service - Continued

2. General - Continued

- 9. SaskTel does not guarantee the level of digital data transmission provided by the HSSP over the End-user's local loop, even when such local loop is provided by SaskTel.
- 10. In the furnishing of services in this tariff item, SaskTel is not responsible to the HSSP or HSSP's End-user for end-to-end service
- 11. The HSSP and/or End-user is responsible for installation, operation and maintenance of customer premise equipment (CPE) device(s), filters, wiring and/or splitters, which are beyond SaskTel's CCP or demarcation point. The HSSP is responsible to ensure the End-user's CPE is compatible with SaskTel's network architecture and meets all SaskTel general terms and conditions, Canadian Standards Association (CSA) and other applicable industry and government safety standards.
- 12. The HSSP will be billed for Aggregated ADSL Access until the HSSP requests termination of the Aggregated ADSL Access; even if the Enduser qualifying NAS has been suspended or terminated.
- 13. In the event that an Access is not installed at the same time as the AHSSPI, the contract period is effective from the in service date of each component of the Service.

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ITEM Aggregated Asymmetric Digital Subscriber Line (ADSL) Service – Continued 650.32

- 3. Conditions of Service Continued
 - 2. General Continued
 - 14. One Aggregated ADSL Access is required for each End-user.
 - 15. One (1) VLAN identifier is allocated for each access between the Enduser's premises and the AHSSPI located in SaskTel's designated wire centre. Communication between remote subscriber accesses must be done via the HSSP as the Service does not provide for bridging between Endusers.
 - 16. SaskTel will determine the maximum speeds available in each wire centre that supports the Aggregated ADSL Access. Reverse (low speed downstream, high speed upstream) ADSL transmission is not permitted.
 - 17. The HSSP will be responsible to modify speed profiles if the HSSP chooses to provide the End-user with maximum speeds that are less than the maximum speed available.
 - 18. Although an HSSP can have an AHSSPI in both a Saskatoon and Regina location, all of the HSSP Aggregated ADSL Accesses originating from the same serving wire centre must terminate at the same AHSSPI. Additional charges apply, as specified in this tariff, if accesses from the same serving wire centre are requested to terminate at both designated AHSSPI locations.
 - 19. A minimum of one interface is required for each HSSP. This interface is a pre-requisite for the Aggregated ADSL Access service component.
 - 20. AHSSPI cannot be shared with any other services or traffic (i.e. ADSL traffic only).
 - 21. SaskTel does not provide redundancy or access diversity for the Service.

Aggregated Asymmetric Digital Subscriber Line (ADSL) Service - Continued

3. Conditions of Service - Continued

2. General - Continued

- 22. Connectivity between the AHSSPI located at a SaskTel designated wire center and the HSSP's POP or Co-locate can be established only via the following services:
 - a) Where the HSSP's equipment is co-located within the same Central office as the AHSSPI, the HSSP would connect to the AHSSPI using SaskTel's Ethernet Central Office Connecting Link service.
 - b) Where the HSSP's POP is located within the same wire center serving area as the AHSSPI, the HSSP would connect using SaskTel's Ethernet Access service.
- 23. Aggregated ADSL Service will transparently transport Point to Point Protocol over Ethernet (PPPoE) however the PPPoE termination equipment must be provided, installed and maintained by the HSSP.
- 24. As a condition of service under this tariff, and in accordance with paragraphs 50, 66 and 104 of Telecom Regulatory Policy CRTC 2009-657, Review of the Internet traffic management practices of Internet service providers (TRP 2009-657), customers employing Internet Traffic Management Practices (ITMPs) shall:
 - a) Whether or not they are Canadian carriers, abide by the requirements of subsection 27(2) of the Telecommunications Act with regard to any ITMPs they employ;
 - b) Abide by the disclosure requirements described in TRP 2009-657; and
 - c) Not use for other purposes personal information collected for the purposes of traffic management or disclose such information.

4. Network and Facilities

1. SaskTel does not make any representations that over time its network, equipment, facilities, and services are, or will remain, adapted for use in connection with the HSSP's equipment, facilities and services.

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4. Network and Facilities - Continued

- 2. SaskTel reserves the right to change, in whole or in part the design, function, operation, technology, or layout of its equipment, apparatus, lines, switches, circuits, and devices at its sole discretion. SaskTel shall not be held responsible to the HSSP or a HSSP's End-user for their equipment, apparatus, lines, switches, circuits or devices, in whole or in part, which cease to be compatible with SaskTel's facilities or which become inoperative as a result of SaskTel network changes.
- 3. SaskTel and the HSSP will each provide network-to-network notification to the other party in accordance with the network-to-network notification standards prior to implementing changes to the design, function, operation, technology or layout of its equipment, apparatus, lines, switches, circuits or devices.
- 4. The HSSP shall not implement any changes to its operations, services or network, which would, in the reasonable assessment of SaskTel, materially affect SaskTel's operations, services or network without the prior consent of SaskTel, which shall not be unreasonably withheld.

5. Network Outages

SaskTel does not guarantee uninterrupted operation of the Service and/or equipment and shall not be liable to the HSSP or any other entity for any interruption, failure or delay in performance of the Service provided under this tariff item, or any other SaskTel tariff or agreement. In the event of network outages or other service problems, nothing in this tariff item shall extend the liability of SaskTel as specified in the SaskTel Terms of Service or any component thereof.

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6. Protection

- 1. It is the responsibility of the HSSP to ensure that the characteristics and methods of operation of any circuits, facilities or equipment of the HSSP or it's End-users, when connected to SaskTel's network or facilities, shall not:
 - b) interfere with or impair service over any facilities of SaskTel or its connecting carriers;
 - c) cause damage to SaskTel facilities;
 - d) impair the privacy of any communication carried over SaskTel facilities; or
 - e) create hazards to SaskTel's employees or the public.
- 2. If HSSP operations are not in accordance with the preceding, SaskTel will, where practicable, use reasonable efforts to notify the HSSP that the temporary discontinuance of the use of any circuits, facilities or equipment of the HSSP may be required. When prior notice is not practicable, nothing contained within this Tariff Item shall preclude SaskTel from temporarily discontinuing forthwith the availability to the HSSP the Service or any component part thereof if such action is reasonable under the circumstances. In cases of such discontinuance, the HSSP will be promptly notified and afforded the opportunity to correct the condition which gave rise to the temporary discontinuance.
- 3. During any period of temporary discontinuance of the Service caused by a trouble or condition arising in the HSSPs operations, facilities, equipment, or network, no refund for interruption of the Service shall be made.

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Aggregated Asymmetric Digital Subscriber Line (ADSL) Service - Continued

7. Rates

The HSSP shall pay to SaskTel the following rates and charges for Aggregated ADSL Service. Such rates and charges are in addition to any other rates and charges that may be applicable.

1. Aggregated High Speed Service Provider Interface (AHSSPI), for each:

AHSSPI*	Monthly Rental	Service
(Note 1,4,5)		Charge
10 Mbps (burstable up to 10Mbps)	\$168.75	\$570.17
100 Mbps (burstable up to 100	\$168.75	\$570.17
Mbps)		
500 Mbps (burstable up to 500	\$168.75	\$570.17
Mbps)		

2. Aggregated ADSL Access, for each:

Aggregated ADSL Access: per access ⁸	Monthly Rental	Service Charge
Per Access	\$11.27	\$202.25
(Note 2,4,5,6)		
Per Bonded Access	\$37.52	\$202.25
(Note 2,3,4,5,6)		
VLAN Remapping	N/A	\$86.24
(per access per request)		

* Because the Commission has forborne, in Telecom Regulatory Policy CRTC 2009-19, with respect to the regulation of this service as set out in that decision, the company may also provide the service in this tariff at rates and on terms different from the tariffed rates and terms pursuant to an agreement entered into between the company and a competitor that has been filed with the Commission for the public record.

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7. Rates - Continued

- **Note 1:** In addition to the AHSSPI, either a SaskTel Ethernet Access or Ethernet CO Connecting Link (see SaskTel Ethernet Access Service and Ethernet CO Connecting Link tariff) will be required to terminate the Service at the HSSP's POP or co-locate space. The bandwidth associated with the Ethernet Access or CO link must match or exceed the bandwidth capability of the AHSSPI.
- **Note 2:** Monthly and Service charges apply when provisioned in conjunction with a qualifying NAS. Additional dry loop charges, as specified in this tariff, will apply when ADSL is provided on a Dry Loop.
- **Note 3:** Bonding Service/Bonded Configuration will use two metallic continuity telephone loops or dry loops. Additional dry loop charges will be applied if the service is provided over a bonded configuration.
- **Note 4:** Each Aggregated ADSL Access service charge includes the initial mapping of one (1) VLAN per access. When a change occurs due to a HSSP cutover or network upgrade, HSSP name changes or HSSP merger or acquisitions, the VLAN Remapping charge applies.
- **Note 5:** If after a firm order has been placed and is cancelled, the applicable Service Charge applies and any incurred costs associated with the provision of the Service, the HSSP shall pay SaskTel all incurred costs, including without limitation, those such as labour and materials.
- **Note 6:** These interface and service charge rates are considered interim pursuant to Telecom Order CRTC 2014-355 effective 08 July 2014.
- **Note 7:** The rates for this item are frozen pursuant to paragraph 241 of Telecom Regulatory Policy CRTC 2015-326.
- Note 8: Speeds listed represent the maximum download speed that may be experienced for each rate element. Accesses meet the distance specifications to obtain these speeds, but maximum speeds are not guaranteed.



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- 7. Rates Continued
 - 3. The HSSP shall pay to SaskTel the following rates and charges for ADSL provided on a Dry Loop. Such rates and charges are in addition to any rates and charges specified in this tariff item.

	Band A	Band B	Band C	Band E	Band F	Band G
Monthly Rates	\$4.69	\$ 9.34	\$ 13.14	\$ 25.95	\$ 21.87	\$ 21.62

4. Service Charge for Dry Loops:

Note: Extra construction charges may apply	Service Charge
Service Charge per Loop	
Per loop, Business	20.01
Per loop, Residence	13.28

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7. Rates - Continued

5. Other charges:

A Diagnostic Maintenance Charge applies for each test made in response to a HSSP request for repair or testing of a trouble when no trouble is found in SaskTel's Aggregated ADSL Service. Service charges specified below will apply.

Diagnostic Maintenance repair or test time scheduled*	Service Charge
Per diagnostic (Note 1)	\$167.30

* Because the Commission has forborne, in Telecom Regulatory Policy CRTC 2009-19, with respect to the regulation of this service as set out in that decision, the company may also provide the service in this tariff at rates and on terms different from the tariffed rates and terms pursuant to an agreement entered into between the company and a competitor that has been filed with the Commission for the public record.

Note 1: These service charge rates are considered interim pursuant to Telecom Order CRTC 2014-355 effective 08 July 2014.

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