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ITEM

255 **Physical Co-location**

ITEM

255.1 Service Description

Physical Co-location (PCL) is an arrangement which provides for access to and use of certain space in TCI Premises and associated power and environmental conditioning in order to locate the Interconnecting Carrier's (IC's) and Digital Subscriber Line Service Provider's (DSLSP's) Transmission Equipment and associated fibre facilities within the TCI Premises for the purpose of interconnecting with TCI network facilities or accessing TCI unbundled-network-components.

Under this arrangement, the Interconnecting Carrier provides and places outside fibre optic cable to the Meet Point, and provides sufficient additional outside fibre optic cable to allow TCI to place the fibre optic cable from the Meet Point to the Transition Cabinet. The Interconnecting Carrier provides the Transmission Equipment to be placed in the TCI Premises. The outside fibre optic cable and Transmission Equipment are not leased to TCI under a PCL arrangement, but continue to belong to the Interconnecting Carrier.

TCI connects the outside fibre optic cable provided by the Interconnecting Carrier with TCI's inside fibre optic cable at the Transition Cabinet. TCI also connects TCI's inside fibre optic cable to the Transmission Equipment owned by the Interconnecting Carrier and placed in the TCI Premises in order to facilitate interconnection by the Interconnecting Carrier to TCI's network facilities pursuant to an interconnection agreement or a TCI Tariff.

Physical Co-location provides the IC with the option of floor space within TCI Premises on a segregated basis, as Type 1 Co-location, or on an unsegregated basis, as Type 2 Co-location.

- Type 1 Co-location provides floor space that is segregated from that occupied by TCI or third parties, for the location of the IC's Transmission Equipment to a maximum of 20 sq. meters per initial request per TCI premises location. An existing IC that has exhausted its initial 20 sq. meters per TCI premises location may acquire additional floor space in the TCI premise, where space is available, in increments of one square meter. Under this arrangement, the installation and maintenance of the IC's transmission equipment will be performed by the IC's personnel or contractors, who have been approved by TCI, in accordance with Company operational guidelines. All IC personnel and contractors must have written approval from TCI prior to being allowed access to the segregated floor space.
- 2. Type 2 Co-location provides floor space within TCI premises unsegregated from that occupied by TCI and third parties, for the location of the IC's Transmission Equipment. All IC personnel and contractors must have written approval from TCI prior to being allowed access to the unsegregated floor space.

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.

ITEM

255.1 Service Description - Continued

Physical Co-location provides for the following:

- 1. a licence to use TCI conduit/riser space for the placement, by TCI, of the IC's fibre optic cable from the Meet Point to the Transition Cabinet, and the provision by TCI of TCI's fibre optic cable and associated riser space from the Transition Cabinet to the IC's Transmission Equipment in the TCI Premises;
- 2. a licence to use TCI Premises floor space for the placement of the IC's Transmission Equipment to interconnect with TCI's network facilities for the interchange of traffic; and
- 3. the provision of appropriate electrical power and environmental conditioning to operate the IC's Transmission Equipment.

ITEM 255.2 **Definitions**

For the purposes of this Tariff Item:

"*Co-location Agreement*" or "*COLA*" means the Physical Co-location (PCL) Agreement (or "PCL Agreement") between the Interconnecting Carrier and TCI regarding the PCL arrangement entered into pursuant to this Tariff Item.

"Digital Subscriber Line Service Provider (DSLSP)" means a non-facilities-based reseller of high speed data services who is duly registered with the CRTC pursuant to Order CRTC 2000-983.

"IC to IC Cross-Interconnection Link" means the arrangement by which a co-located Interconnecting Carrier connects to the facilities of a second Interconnecting Carrier co-located in the same TCI Premises.

"Interconnecting Carrier" or *"IC"* means a Canadian carrier, as defined in the *Telecommunications Act*, which is duly registered with the CRTC and which interconnects with TCI either pursuant to an interconnection agreement entered into with TCI or a TCI Tariff, for the interchange of traffic.

"Meet Point" means the point designated by TCI outside the TCI Premises where PCL has been requested (normally at or near the manhole nearest to the TCI Premises).

"Point of Termination/Demarcation" means the point of connection where a TCI-provided cable on the TCI network side interconnects with the Interconnecting Carrier's Transmission Equipment.

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ITEM

255.2 **Definitions - Continued**

"TCI Premises" means all central office premises of TCI, exclusive of enclosures designed to house remote line concentration equipment, that provide switching capability, including tandem, access tandem, local central offices, toll offices that house local or toll switches or central offices that provide a wire centre or subtending remote wire centre.

"Transition Cabinet" means the location in the TCI Premises at which TCI's inside fibre optic cable is connected to the outside fibre optic cable provided by the Interconnecting Carrier.

"Transmission Equipment" means IC-provided equipment that:

- 1. is necessary for interconnection with TCI network facilities or access to TCI unbundled-network-components, with the use of all functions of such equipment, including switching and routing functionality, being permitted under this arrangement;
- 2. is not ineligible pursuant to the equipment lists provided for in Order CRTC 2001-780; and
- 3. meets all industry standards as referred to in the Co-location Agreement.

For the purposes of this Tariff Item 255 and the COLA, references to "Transmission Equipment" shall include the fibre optic cable provided by the IC and placed by TCI from the Meet Point to the Transition Cabinet.

"Transmission Equipment" shall also include IC-provided equipment installed solely for Ν the purpose of connection to an IC to IC Cross-Interconnection Link.

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ITEM 255 **Physical Co-location - Continued**

ITEM

255.3 **Conditions of Service**

- 1. PCL is provided under the terms and conditions defined in this Tariff Item and in the Co-location Agreement.
- 2. PCL is offered only where appropriate floor space, facilities and necessary resources are available at the TCI Premises in question, after the current and future needs of TCI are taken into account. These facilities and resources include, for example, but without limitation, adequate entrance ducts, riser space, and power. Requests for PCL will be accommodated on a first-come, first-served basis, based on the date of submission of a completed application for PCL. TCI is not obligated to purchase additional land, buildings, plant or equipment, to relinquish floor space or facilities designated for TCI future use, or to undertake new construction to accommodate a request for PCL.
- 3. The IC's interface with TCI facilities, equipment or TCI's network shall comply with TCI's General Tariff Item 175, where applicable.
- 4. The IC, after interconnecting its Transmission Equipment with TCI's network facilities, is permitted to then connect to the Transmission Equipment of a second IC co-located in the same TCI Premises via an IC to IC Cross-Interconnection Link.
- 5. In co-locating the Transmission Equipment in TCI Premises, the IC shall ensure that the primary purpose of co-location is to interconnect with TCI network facilities, to access TCI unbundled-network-components or to connect to an IC to IC Cross-Interconnection Link. TCI reserves the right to require the IC to demonstrate that the capacity dedicated to interconnection with, or access to, TCI's network facilities is greater than that dedicated to IC to IC cross-Connection. TCI also reserves the right to require the IC to demonstrate that the transmission rate of any Transmission Equipment connected to an IC to IC Cross-Interconnection Link can be verified to not exceed the nominal rate of the associated IC to IC Cross-Interconnection Link through a physical inspection by TCI personnel. The IC shall also provide any assistance that TCI personnel reasonably require to verify the transmission rate on any IC to IC Cross-Interconnection Link.
- 6. ICs are required to meet all standards, regulatory requirements, TCI operating procedures and requirements, safety and labour codes and security standards as specified or provided for by TCI in this Tariff Item and in the COLA
- 7. The IC-provided equipment that is permitted in the TCI Premises is limited to Transmission Equipment as defined in Tariff Item 255.2. The Transmission Equipment must interconnect with TCI network facilities or access TCI unbundled-network-components.

ITEM

255.3 Conditions of Service - Continued

- 8. The IC is responsible for the provision, installation and maintenance of the outside fibre optic cable from its Point of Presence or other location to the Meet Point.
- 9. The IC is also responsible for providing sufficient additional outside fibre optic cable to allow TCI to place the fibre optic cable from the Meet Point to the Transition Cabinet.
- 10. TCI connects the outside fibre optic cable provided by the IC with TCI's inside fibre optic cable at the Transition Cabinet. TCI is responsible for the provision, installation and maintenance of fibre optic cable between the Transition Cabinet and the Transmission Equipment, and is responsible for completing the physical splice of the IC's fibre optic cable with TCI's fibre optic cable at the Transition Cabinet. TCI connects TCI's inside fibre optic cable to the Transmission Equipment provided by the IC in order to facilitate interconnection by the IC to TCI's network facilities pursuant to an interconnection agreement or a TCI Tariff, for the interchange of traffic.
- 11. TCI provides, installs and maintains the IC to IC Cross-Interconnection Link necessary to interconnect two ICs co-located in the same TCI Premises.
- 12. When requested, TCI will, at the expense of the IC, provide a second communication cable entrance for the IC's fibre optic cable into the TCI Premises where such second communication cable entrance exists and where capacity is available.
- 13. The IC has overall responsibility for monitoring the performance of all facilities and equipment on the IC's side of the Point of Termination/Demarcation, including TCI's fibre optic cable between the Transition Cabinet and the IC's Terminal Equipment, as well as for monitoring the performance of the IC to IC Cross Interconnection Link. TCI does not assume responsibility for the design, engineering, testing, or performance of the end-to-end services operated or offered by the IC. In order to ensure that TCI operational guidelines and installation, equipment, transmission, electrical, labour and safety standards or codes and any other conditions specified in this Tariff Item and in the Co-location Agreement are maintained, which the IC is obligated to do, TCI, without notice, has the right to access the Licensed Area (as defined in the COLA) and all Transmission Equipment and to inspect the IC's installation of equipment and facilities and to make subsequent and periodic inspections of the IC's equipment and facilities and to ensure compliance when required.
- 14. TCI is not liable for any act or omission on the part of the IC or its employees, agents or contractors arising from or associated with the furnishing of service by the IC to its customers.

ITEM

255.4 **Rates**

For the purposes of this Tariff Item, the following explanations regarding Service Items shall apply:

- 1. Pre-engineering Fee includes the preliminary work needed to determine whether PCL can be provided, or subsequently modified, as the case may be, to meet the Interconnecting Carrier's requirements and to provide an estimate of the Project Fee that will be incurred for the provision or modification of PCL at the specified TCI Premises.
- 2. Building Riser Space and Fibre Optic Cable provides for the building riser space and fibre optic cable between the Transition Cabinet and the Transmission Equipment.
- For Type 1 Co-location the monthly rate for Space includes the use of the bay space C required for Transmission Equipment and associated spares to be housed in a separate cabinet, and is charged on a per m² basis.
- 4. For Type 2 Co-location the monthly rate for Space is charged for each half of an IC- N provided equipment bay installed and reserved.
- Space, Category I applies to TCI Premises located in the Toll Building and Edmonton F Main Building in Edmonton and the Len Werry, Capitol Hill and 7th Avenue Main buildings in Calgary.
- 6. Space, Category II applies to the TCI Premises housing local end offices or tandem F switches not specified in Category I.
- 7. Space, Category III applies to the TCI Premises housing digital remotes. F
- 8. Access to the Synchronization Clock provides for access to the clock at the TCI F Premises, where such exists and is required by the Interconnecting Carrier.
- 9. Project Fee includes:
 - a. provisioning for environmental items such as power, air conditioning and heating to the bay in which the Transmission Equipment is located;
 - b. administration, design and engineering;
 - c. increasing the capacity of the existing TCI power facility;
 - d. installation of the Transmission Equipment by TCI if requested by the IC;
 - e. splicing at the Transition Cabinet; and
 - f. any other direct costs not included in other rates and charges incurred by TCI to provision PCL.

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ITEM

Rates - Continued

- 10. A monthly rate will apply for the IC to IC Cross-Interconnection Link between two F ICs in the same TCI Premises.
- 11. All ICs requesting PCL will be accommodated on a first-come, first-served basis, F based on the date of submission of a completed application for PCL. TCI reserves the right to determine the shape and specific location of the TCI Premises floor space provided in the TCI Premises.
- 12. A construction fee will apply for any TCI Premises modifications required to enable TCI to provide PCL. This fee covers the costs of all building modifications which are necessitated by the provision of PCL to all ICs in a particular TCI Premises. The first IC to obtain PCL at a specific TCI Premises will be charged all of the costs to modify that specific location. If more than one IC obtains PCL at a specific TCI Premises at the same time, the costs will be shared equally. If, within a period of sixty (60) months of the PCL effective date with respect to the first IC at that TCI Premises, additional ICs obtain PCL at the same TCI Premises, the additional ICs will be charged a proportionate share of the initial costs and this recovered amount will be reimbursed equally to the IC(s) with PCL already in place at that TCI Premises. The construction fee may include, but is not limited to, costs for such items as perimeter walls, additional riser requirements, lighting and environmental conditioning, and securing TCI property in the TCI Premises, in addition to the items referred to above.

ITEM 255 **Physical Co-location - Continued**

ITEM

255.4Rates - Continued

- 13. In addition to the specific construction costs associated with preparing the TCI N Premises for installation of the IC's Transmission Equipment (or "non-recurring costs" | within the meaning of Telecom Decision CRTC 2002-5), a subsequent IC requesting Type 1 Co-location is responsible for paying a contribution to common costs (within the meaning of Telecom Decision CRTC 2002-5) that may have been incurred by a previous or primary IC (or "primary co-locator") in the TCI Premises in question.
 - a. TCI will issue invoices to subsequent ICs for common costs no later than 40 days prior to the planned co-location effective date (or PCL Availability Date as referred to in the Co-location Agreement).
 - b. TCI will notify the primary co-locator(s) of a subsequent IC's application for PCL within 10 days after the co-location effective date, being the date the subsequent IC takes possession of the Licensed Area in question (as defined in the Co-location Agreement).
 - c. Payment in full of the common costs is due 30 days from the date of the invoice. Where TCI issues the invoice at least 40 days prior to the planned co-location effective date, access to the Licensed Area can be withheld from the subsequent IC, with a corresponding delay in the co-location effective date, until payment of common costs is received in full by TCI. Late payment charges will not apply where access to the Licensed Area is withheld for non payment.
 - d. Where TCI issues the invoice for common costs less than 40 days prior to the planned co-location effective date, access to the Licensed Area may not be withheld for non-payment, but late payment charges will apply on overdue accounts as specified in the General Tariff (CRTC 21461), Item 111.0, Payment Time Limits and Late Payments. In all cases, TCI will apply partial payments to common costs first before applying to non-recurring costs, and rebates to primary co-locator(s) are not dependent on payment of non-recurring charges.
 - e. Rebates to the primary co-locator(s) are to be issued no later than 30 days after the actual co-location effective date, in all circumstances. TCI is subject to late payment charges at the rate specified in the General Tariff (CRTC 21461), Item 111.0, Payment Time Limits and Late Payments in favour of the primary co-locator(s) where rebates are issued later than 30 days following the actual co-location effective date.

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ITEM 255 **Physical Co-location – Continued**

ITEM

Rates – Continued

The Interconnecting Carrier shall pay to TCI the following rates and charges for PCL. Such rates and charges are in addition to any other rates and charges that may be applicable.

Service Item	Monthly Rate	Service Charge
Power – 120 Volt AC (Unprotected), per fuse-amp	\$ 2.51	
Power – 120 Volt AC (Protected with Generator Backup) †, per fuse-amp	4.30	
Power - 48 Volt DC, per fuse-amp.	8.64	

[†] Provided where facilities are available.

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ITEM 255 **Physica**

5 Physical Co-location - Continued

ITEM

Rates - Continued

The Interconnecting Carrier shall pay to TCI the following rates and charges for PCL. Such rates and charges are in addition to any other rates and charges that may be applicable.

Service Item	Monthly Rate	Service Charge
Building Riser Space and		
Fibre Optic Cable, per sheath meter	\$ 0.97	
Entrance Conduit Space, per sheath meter	0.1202	
Space, Category I, per m ²	12.15	
Space, Category II, per m ²	12.15	
Space, Category III, per m ²	12.15	
Access to Synchronization Clock		
- Category I, Toll Centre	55.00	
- Category II, Host/Remote	32.59	
Transition Cabinet, per cable	10.54	
Pre-engineering Fee		\$901.21 (Note 1)
Order Processing Charge, per order		18.75
IC to IC Cross-Interconnection Link: DS-1 or DS-3 (Note 6)	See Tariff CRTC 21462, Item 224.3.5 – CDN Other CO Connecting Link (copper based)	
IC to IC Cross-Interconnection Link:		
2.5 Gbps (Note 6)	96.03	115.20

ITEM

Rates - Continued

The Interconnecting Carrier shall pay the following rates and charges for PCL, such rates and charges being in addition to other rates and charges that may be applicable:

Project Fee	(Notes 1, 2, 3, 4, 5)	
Installation & Maintenance	(Notes 2, 3, 4)	
Escort	(Notes 2, 3, 4)	
Construction Fee		
- Bldg. modifications, enclosures etc.	(Notes 1, 2, 3, 4, 5)	

- Note 1: The Interconnecting Carrier shall pay all costs incurred by TCI associated with the Pre-engineering Fee, Construction Fee and Project Fee from the date of a request for PCL to the date of the cancellation of the order should the Interconnecting Carrier cancel the order prior to implementation of PCL.
- Note 2: For the first hour or fraction thereof of work performed during "normal hours" an hourly labour rate of \$64.40 applies.
- Note 3: For each additional 15 minutes or fraction thereof, a charge of \$16.10 applies.
- Note 4: For work done on a call-out basis entirely outside of normal working hours, a minimum charge of 2 hours of labour time at \$105.80 per hour plus 1 hour of regular time at \$64.40 applies.
- Note 5: The charges for Project Fees associated with sub-contracted work are based on the costs incurred by TCI.
- Note 6:The provision of an IC to IC Cross-Interconnection Link requires that each ICNpre-order a Central Office Link under tariff CRTC 21462 Item 211.3.1 for DS-1|or DS-3; or a CDN Optical Co-location Link under tariff CRTC 21462 Item|224.3.4 for 2.5 Gbps.|