

ITEM
235

MVNO Wholesale Access Service

N

ITEM
235.1

Service Description

MVNO Wholesale Access Service is a facilities-based MVNO access service that provides MVNO Wholesale Access Customers with GSM-based permanent RAN access in an MVNO Customer Service Area. All other facilities and equipment required by an MVNO Wholesale Access Customer beyond the RAN, including but not limited to: the core network, billing systems, customer care, and devices, are not included in this service, and are to be supplied or otherwise obtained by the MVNO Wholesale Access Customer itself. MVNO Wholesale Access Service enables MVNO End-Customers to automatically access retail mobile voice, SMS, MMS and data services on all available GSM-based networks, including 3G, 4G/LTE, and 5G (and any eventual future GSM-based network generations), as expressly set out in this Tariff when they are in the MVNO Customer Service Area.

MVNO Wholesale Access Service shall also enable seamless hand-off functionality on the Company’s 4G/LTE and 5G networks as expressly set out in this Tariff. The Company shall make available Seamless Hand-off Service as a key feature of the MVNO Wholesale Access Service pursuant to the terms herein.

Bell Mobility Inc. and Rogers Communications Canada Inc. (“RCCI”) and their respective affiliates, successors and assigns, are not eligible to obtain the MVNO Wholesale Access Service.

Consistent with the determinations set out in Telecom Regulatory Policy CRTC 2021-130 (“TRP 2021-130”), the Company may also provide the service in this Tariff at terms and conditions different from the tariffed terms and conditions pursuant to an agreement entered into between the Company and an MVNO Wholesale Access Customer.

ITEM
235.2

Definitions

For the purposes of this Tariff Item:

“*Commercial End Date*” shall mean the date that is seven (7) years from the date on which the Commission issues final approval for this MVNO Wholesale Access Service Tariff or such other date as the Commission determines in a Commission decision.

“*Commercial Start Date*” shall mean the date agreed to by both the Company and the MVNO Wholesale Access Customer in writing and occurs after successful completion of all technical and billing test procedures.

ITEM

235 **MVNO Wholesale Access Service – Continued**

N

ITEM

235.2 **Definitions – Continued**

“*Eligible Customer*” shall mean a Canadian carrier as defined under the *Telecommunications Act*, (other than Bell Mobility Inc. and RCCI and their respective affiliates, successors and assigns), duly registered with the Commission as a wireless carrier, and which is a licensee of Eligible Spectrum and is actively providing commercial mobile telecommunications services to retail customers in a geographic area on its own HPMN (including a radio access network and core network) within Canada where it holds a wireless spectrum licence.

“*Eligible Spectrum*” shall mean one or more primary or subordinated licences issued by the Department of Innovation, Science and Economic Development Canada (ISED), for commercial mobile radio spectrum at a Tier 4 level or higher, as defined by ISED, or Local Telephone (TEL) spectrum licences. Such spectrum licences must be held in good standing at the time that the MVNO Wholesale Access Service is provided.

“*Eligible Spectrum Area*” shall mean the geographic service area (whether Tier 4 or higher or TEL licence area) where the MVNO Wholesale Access Customer is the licensee of Eligible Spectrum. Primary licensees that have subordinated their spectrum are not eligible to access the MVNO Wholesale Access Service in those areas covered by the subordinated licence(s), unless there is a joint network build or network-sharing agreement between the primary licensee and the subordinated spectrum licence holder.

“*GSM*” shall mean Global System for Mobile and is a technology-based protocol used for wireless networks.

“*Home Network Inner Boundary*” shall mean the area within the HPMN, as shown on a coverage map and as agreed to by the Parties, as delineated by a boundary of MVNO Wholesale Access Customer cell sites, and within which the MVNO Wholesale Access Customer has no verifiable wireless network coverage (i.e. a network “coverage gap” as referred to in paragraph 234 of Telecom Decision CRTC 2022-288), where the MVNO Wholesale Access Customer will request Seamless Hand-off along the outer boundary of such area, pursuant to Item 235.3B and subject to Items 235.3A.21 and 235.3A.22. The Home Network Inner Boundary must be within the geographic area of the VPMN.

“*Home Network Outer Boundary*” shall mean the perimeter of the HPMN coverage area, as shown on a coverage map provided by the MVNO Wholesale Access Customer to the Company and as agreed to by the Parties, where that perimeter falls within the geographic area of the VPMN.

“*HPMN*” shall mean home PMN (including a radio access network and core network) of the MVNO Wholesale Access Customer and shall exclude any roaming networks or other networks not owned and operated by the MVNO Wholesale Access Customer.

ITEM

235

MVNO Wholesale Access Service – Continued

N

ITEM

235.2

Definitions – Continued

“*IMSI*” shall mean International Mobile Subscriber Identity.

“*IR.21*” shall mean IREG Document 21 as defined by the GSM Association and may be updated from time to time.

“*IREG*” shall mean International Roaming Expert Group for the purposes of connectivity and roaming service testing and certification between the HPMN and VPMN.

“*Indirect Interconnection*” shall mean the use of a third party supplier or suppliers, interconnected with other third party suppliers, consistent with GSM Association Permanent Reference Documents as set out in Item 235.3A.1, to provide:

- a. diameter signaling for MVNO End-Customer authentication, services available to the MVNO End-Customer while using the MVNO Wholesale Access Service, and transit for Short Message Service (SMS) back to the HPMN;
- b. Internet Protocol (IP) Packet eXchange (IPX) to allow the VPMN to pass IP-based traffic back to the HPMN; and
- c. Data clearing house to allow the HPMN to receive call detail records from the VPMN.

“*LAC*” shall mean Location Area Code.

“*MMS*” shall mean Multimedia Messaging Service and is a wireless messaging service that adds images, text, audio clips and video clips to SMS.

“*MVNO*” shall mean Mobile Virtual Network Operator.

“*MVNO Customer Service Area*” shall mean, at any particular time, the Eligible Spectrum Area(s) in the geographic areas of the VPMN and OPMN for which the MVNO Wholesale Access Customer has elected to obtain MVNO Wholesale Access Service. For clarity, each MVNO Wholesale Access Customer will have a distinct MVNO Customer Service Area.

“*MVNO End-Customer*” shall mean a Person

- a. that is an individual or small business with 1 to 99 paid employees, and
- b. who is using supported technology utilizing a GSM SIM (Subscriber Identity Module) and/or a GSM USIM (Universal Subscriber Identity Module) to enable that person to access the VPMN or OPMN as the case may be, for MVNO Wholesale Access Service in the MVNO Customer Service Area, provided such person obtains retail mobile wireless services either directly via an MVNO Wholesale Access Customer or via a Third Party Reseller, but a person does not include subscribers of other Canadian or international mobile wireless carriers that are roaming on the MVNO Wholesale Access Customer's network.

ITEM

235

MVNO Wholesale Access Service – Continued

N

ITEM

235.2

Definitions – Continued

“*MVNO Wholesale Access Customer*” shall mean an Eligible Customer who obtains MVNO Wholesale Access Service pursuant to this Tariff Item. With the exception of RAN access, the MVNO Wholesale Access Customer must provide all facilities, systems and equipment to enable the provision of mobile telecommunications services to its customers, including but not limited to: the core network (including a core wireless network), billing systems, customer care and devices.

“*OPMN*” shall mean Other PMN and refers to the RAN in Canada where such RAN is: (i) commonly owned and operated by the Company and a third party, and to which access is provided for the Company's retail subscribers pursuant to a joint-network build agreement; or (ii) owned and operated by Bell Mobility Inc. and to which access is provided for the Company's retail subscribers pursuant to the reciprocal radio access network capacity and purchase agreement between the Company and Bell Mobility Inc. The OPMN excludes RAN in Saskatchewan, Yukon, the Northwest Territories, and Nunavut. The OPMN also excludes any areas where a private network has been deployed. For the purpose of this definition, a “private network” means a network deployed for a specific customer or groups of customers, but to which the Company’s broader customer base does not have access.

“*OPMN Operator*” shall mean the party that owns and operates the OPMN.

“*PMN*” shall mean Public Mobile Network and is a network that complies with the definition of a GSM network as set out in the Articles of Association of the GSM Association (GSMA). Public Wi-Fi networks do not form any part of a PMN.

“*PRD*” shall mean Permanent Reference Document by the GSM Association Technical Specification and may be updated from time to time.

“*PTCRB*” shall mean PCS-Type Certification Review Board, which is the body responsible for the testing and certification of GSM and Long-Term Evolution (LTE) devices and for generating the input regarding testing of standards development.

“*Party*” shall mean the MVNO Wholesale Access Customer or the Company and “*Parties*” means both the MVNO Wholesale Access Customer and the Company.

“*RAEX IOT*” shall mean GSM Association Roaming Agreement EXchange Inter-Operator Tariff.

“*RAEX OpData*” shall mean GSM Association Roaming Agreement EXchange Operational Roaming Data.

ITEM

235

MVNO Wholesale Access Service – Continued

N

ITEM

235.2

Definitions – Continued

“*RAN*” shall mean Radio Access Network and consists of spectrum, towers, and related facilities and equipment located at tower sites.

“*Seamless Hand-off Boundary*” shall mean a boundary for Seamless Hand-off Service, consisting of the edge of the coverage of one or more cell sites on the VPMN in a single region along either (i) the Home Network Outer Boundary, or (ii) a Home Network Inner Boundary. For greater certainty, other areas within the HPMN coverage area are not a Seamless Hand-off Boundary even if MVNO End-Customers are served by the MVNO Wholesale Access Service in those areas from time to time due to signal strength on the HPMN, or other reasons.

“*Seamless Hand-off Boundary Change*” shall mean a change requested by the MVNO Wholesale Access Customer that impacts one or more of the cell sites included in an existing Seamless Hand-off Boundary.

“*Seamless Hand-off Service*” shall mean a functionality included as a key feature of the MVNO Wholesale Access Service. It enables the hand-off of an MVNO End-Customer’s VoLTE calls and data sessions from the HPMN to the VPMN. Seamless Hand-off is not available for 3G technologies. Seamless Hand-off will be made available where the Home Network Outer Boundary meets a geographic area within the VPMN, and also along a Home Network Inner Boundary as agreed to by the Parties, subject to Items 235.3A.21 and 235.3A.22. The MVNO Wholesale Access Customer must subscribe to the MVNO Wholesale Access Service and request Seamless Hand-off Service pursuant to the process contained herein in order to be eligible to obtain the Seamless Hand-off Service. Seamless Hand-off Service will be enabled by an Evolved Packet Core (EPC) to EPC interconnection and integration between the VPMN and HPMN, facilitating packet switch data and VoLTE session handovers, with no IP Multimedia Subsystem (IMS) to IMS peering. For greater certainty, no EPC to EPC interconnection is provided as between (i) the VPMN and (ii) the networks of the MVNO Access Customer’s roaming, and Third Party Reseller customers.

“*SMS*” shall mean Short Message Service and is a wireless messaging service that permits the transmission of a short text message from and/or to a digital mobile telephone.

“*TADIG*” shall mean Transferred Account Data Interchange Group and is used as a unique identifier for each provider for billing purposes.

“*TAC*” shall mean Tracking Area Code.

“*TAP*” shall mean Transferred Accounting Procedure.

ITEM

235

MVNO Wholesale Access Service – Continued

N

ITEM

235.2

Definitions – Continued

“*Third Party Reseller*” shall mean a reseller or mobile virtual network operator that is registered as such with the Commission and is enabled on the HPMN of the MVNO Wholesale Access Customer. For greater certainty, the Third Party Reseller can only obtain access to the MVNO Wholesale Access Service in the same Eligible Spectrum Area as the enabling MVNO Wholesale Access Customer.

“*VPMN*” shall mean Visited Public Mobile Network and refers to the Company’s PMN in Canada that is used to provide the MVNO Wholesale Access Service to the MVNO Wholesale Access Customer. The VPMN shall be limited to geographic areas where the VPMN Operator, or an affiliate of the VPMN Operator, owns and operates the UTRAN (Universal Terrestrial Radio Access Network), EUTRAN (Evolved Universal Terrestrial Radio Access Network) or NGRAN (Next Generation Radio Access Network), but shall exclude any areas where the VPMN Operator has deployed a private network. For the purpose of this definition, a “private network” means a network deployed by the VPMN Operator for a specific customer or groups of customers, to which the VPMN Operator’s broader customer base does not have access.

“*VPMN Operator*” shall mean the party that allows an MVNO Wholesale Access Customer to use its RAN, in accordance with TRP 2021-130.

“*3GPP*” shall mean 3rd Generation Partnership Project (3GPP) that unites seven telecommunications standard development organizations (ARIB, ATIS, CCSA, ETSI, TSDSI, TTA, TTC), known as “Organizational Partners”, and provides their members with a stable environment to produce the Reports and Specifications that define 3GPP technologies.

ITEM

235

MVNO Wholesale Access Service – Continued

N

ITEM

235.3A

Conditions of Service – General

1. This Tariff enables MVNO access by way of permanent roaming between a VPMN Operator and MVNO Wholesale Access Customer in accordance with:

- a. The technical requirements and terms and conditions set forth in this Tariff;
- b. GSM Association Permanent Reference Document for Roaming (AA.12), GSM Association Permanent Reference Document - Common Annexes (AA.13) and GSM Association 5G Implementation Guidelines Option 3;
- c. For Seamless Hand-off Service: GSM Association VoLTE Roaming Testing (IR.25) and VoLTE Implementation questionnaire;
- d. GSM Association End-to-End Functional Capability Test Specification for Inter-PLMN GPRS Roaming (IR.35);
- e. all relevant GSM Association Technical Specifications;
- f. all binding GSM Association Permanent Reference Documents that specifically apply to domestic roaming; and
- g. the non-binding GSM Association Permanent Reference Documents,

including in each case all the commercial aspects, as defined in this Tariff. In case of conflict between any of the above documents and specifications and this Tariff, the provisions in this Tariff shall prevail.

Additional requirements and exceptions to the Technical Specifications and GSM Association Permanent Reference Documents are detailed in this Tariff.

2. The Company will provide MVNO Wholesale Access Service for 5G pursuant to section 2.12 of the GSMA 5G Implementation Guidelines: NSA Option 3, dated February 2020.
3. Prior to obtaining the MVNO Wholesale Access Service from the Company, the MVNO Wholesale Access Customer must sign a commercial agreement with the Company. The agreement includes but is not limited to: the rates, terms and conditions of the MVNO Wholesale Access Service as well as the Commercial Start Date.
4. The MVNO Wholesale Access Service does not include access for fixed wireless, wireline, Wi-Fi services, Internet of Things (“IoT”) or Machine-to-Machine (“M2M”) communications. For greater certainty, for the purpose of this Tariff Item, the MVNO Wholesale Access Service can be used to enable IoT or M2M solutions that are consumer electronics activated by individuals and small businesses on a consumer or small business mobility plan.

ITEM

235

MVNO Wholesale Access Service – Continued

N

ITEM

235.3A

Conditions of Service – General – Continued

5. As part of MVNO Wholesale Access Service, the Company is not obligated to provide facilities, systems or equipment beyond RAN access to an MVNO Wholesale Access Customer. “Facilities, systems or equipment” includes, but is not limited to: a core network, billing systems, customer care and devices.
6. The Company is not required to provide an MVNO Wholesale Access Customer’s End-Customers with a service that the MVNO Wholesale Access Customer does not itself provide to its end-customers.
7. The Company is not obligated to provide the MVNO Wholesale Access Service beyond the Commercial End Date.
8. There is no obligation on the part of an MVNO Wholesale Access Customer to use the MVNO Wholesale Access Service offered by a VPMN Operator, however the MVNO Wholesale Access Customer remains subject to the requirements set out in Item 235.3A.19.
9. The MVNO Wholesale Access Customer is permitted to allow the end-customers of Third Party Resellers operating on the MVNO Wholesale Access Customer’s HPMN to access the MVNO Wholesale Access Service under the following conditions:
 - a. The MVNO Wholesale Access Customer must ensure that any use of the MVNO Wholesale Access Service on behalf of its Third Party Reseller occurs on the same basis, and with the same limitations, as set out in this Tariff.
 - b. The MVNO Wholesale Access Customer must ensure that the end-customers of the Third Party Resellers comply with the terms and conditions in this Tariff applicable for MVNO End-Customers, including but not limited to those set out in the definition of MVNO End-Customer in Item 235.2.

ITEM

235

MVNO Wholesale Access Service – Continued

N

ITEM

235.3A

Conditions of Service – General – Continued

10. Implementation of the MVNO Wholesale Access Service and Quality of Service

- a. Both Parties agree that the MVNO End-Customers, while accessing the MVNO Wholesale Access Service, may experience conditions of service different from the conditions they experience when accessing the HPMN. The MVNO Wholesale Access Customer acknowledges and agrees that the VPMN Operator shall not be obligated to provide the MVNO Wholesale Access Service such that the MVNO End-Customers will be provided with the ability to access voice, SMS, MMS and data services at a level of quality, functionality, technology, service or level of service, including but not limited to data transmission speeds, technology or a generation of GSM technology, in excess of the lesser of (i) a quality, functionality, technology, service or level of service generally offered by the MVNO Wholesale Access Customer to its own end-customers on its HPMN, or (ii) a quality, functionality, technology, service or level of service generally offered by the Company to its own residential and small business end-customers on the VPMN.
- b. For certainty, should the MVNO Wholesale Access Customer provide a quality, functionality, technology, service or level of service to its MVNO End-Customers on the HPMN which the Company does not offer to its own subscribers, under no circumstances shall the Company be required to offer the same to the MVNO End-Customers. However, in the case of an MVNO Wholesale Access Customer utilizing a GSM-based network generation that has been decommissioned by the Company, the Company must provide the MVNO Wholesale Access Customer with the next highest available network generation without throttling the speed of the MVNO Wholesale Access Service down to what the Company deems to be the equivalent of the speed of the MVNO Wholesale Access Customer's HPMN.
- c. The Company shall provide an MVNO Wholesale Access Customer with the ability to access voice, SMS, MMS and data services included in the MVNO Wholesale Access Service at a level of quality comparable to that offered for similar services to the Company's own residential and small business end-customers.
- d. For certainty, in no case shall the Company be required to provide the MVNO Wholesale Access Customer with a quality of service that would prioritize any MVNO End-Customers over any of the Company's retail consumer or small business wireless subscribers who receive service on a best-efforts basis without quality of service guarantees or prioritization on the VPMN.

ITEM

235

MVNO Wholesale Access Service – Continued

N

ITEM

235.3A

Conditions of Service – General – Continued

e. The MVNO Wholesale Access Customer acknowledges that the MVNO Wholesale Access Service, or Seamless Hand-off Service as applicable, is being made available on an “as is/as available” basis and the Company does not guarantee or warrant the performance, availability, coverage, uninterrupted use, security or operation of these services. MVNO Wholesale Access Service, or Seamless Hand-off Service as applicable, may be temporarily refused, interrupted, or limited at any time because of, among other things:

- i. limitations of the VPMN including, without limitation, congestion;
- ii. transmission limitations caused by atmospheric, topographical or other factors;
- iii. equipment modifications, upgrades, relocations, repairs, and other similar activities necessary for the proper or improved operation of the MVNO Wholesale Access Service or the Seamless Hand-off Service as applicable; or
- iv. in order to protect the quality of service and customer experience of the Company’s retail subscribers.

f. Network Interconnection: MVNO Wholesale Access Service shall be provided by the Company, upon request from an MVNO Wholesale Access Customer, only at such locations (and in respect of such facilities and equipment of the Company) that meet the applicable eligibility requirements, industry and technical standards and guidelines, as well as Commission stipulations, established for interconnection. The Company and the MVNO Wholesale Access Customer will implement interconnections between the HPMN and the VPMN by way of Indirect Interconnection unless the Company and the MVNO Wholesale Access Customer agree otherwise in writing after the launch of the Company’s 5G-SA core network.

The implementation of the Signalling Protocols and/or Inter-PLMN backbone (as defined in IREG PRDs) shall be in accordance with the Technical Specifications and relevant GSM Association Permanent Reference Documents with the exception of PMN specific deviations and/or chosen options agreed by both Parties during the testing phase. Because MVNO Wholesale Access Service is enabled by permanent roaming, the technical information relevant for roaming shall be exchanged between the Parties as part of IREG testing procedures and IREG PRDs. Each Party agrees to adhere to the processes set out in PRD IR.21, Section 4: Procedures for Updating the Database, when making changes in the numbering and addressing information with an impact on the MVNO Wholesale Access Service.

g. Restrictions on MVNO Wholesale Access Service: No Party shall have any access hereunder to the network or services of any third party network operator with which the VPMN Operator may have roaming arrangements.

ITEM

235

MVNO Wholesale Access Service – Continued

N

ITEM

235.3A

Conditions of Service – General – Continued

11. The MVNO Wholesale Access Customer shall be the Company's customer for the services provided under this Tariff Item. The provision of this Tariff Item is subject to the Company's General Terms of Service (as referenced in Item 100) insofar as they are reasonably applicable and not inconsistent with this Tariff. The MVNO Wholesale Access Customer shall pay to the Company all charges incurred for services provided through any connections furnished to the MVNO Wholesale Access Customer pursuant to this Tariff Item, and any other chargeable services.

12. The provision of MVNO Wholesale Access Service by the Company to the MVNO Wholesale Access Customer pursuant to this Tariff Item does not constitute a partnership, joint venture or joint undertaking between the Company and the MVNO Wholesale Access Customer.

13. The Company shall not be responsible for end-to-end service for the MVNO End-Customers.

14. Design and Ownership of PMNs

The MVNO Wholesale Access Customer acknowledges and agrees that:

a. the design, engineering, construction, modification, configuration, and operation of the VPMN is entirely within the discretion of the Company and the Company is under no obligation to make or refrain from making any additions or modifications to the VPMN or its configuration or operation to accommodate the needs or requirements of the MVNO Wholesale Access Customer or MVNO End-Customers or to address any incompatibility in the technologies used by the Company and the MVNO Wholesale Access Customer that may preclude or otherwise affect the provision of MVNO Wholesale Access Service hereunder to any MVNO Wholesale Access Customer;

b. the Company does not control the design, engineering, construction, modification, configuration or operation of the OPMN;

c. the MVNO Wholesale Access Service being provided hereafter shall be subject to such modifications, additions and deletions as the Company may, in its sole discretion, implement from time to time on the VPMN;

d. the Company reserves the right to modify or change, from time to time and in its sole discretion, its network, facilities, equipment or service (including exchange boundaries of Local Calling Area boundaries) in accordance with the applicable provisions of the Company's tariffs and Commission directives; and

ITEM

235

MVNO Wholesale Access Service – Continued

N

ITEM

235.3A

Conditions of Service – General – Continued

- e. no provision of this Tariff Item shall be construed as vesting in the MVNO Wholesale Access Customer any control or ownership interest whatsoever in any equipment, facilities or operations of the Company including, without limitation, the VPMN.

15. Management of Modifications to the MVNO Wholesale Access Service, Facilities and Certain Procedural Matters

- a. Changes to MVNO Wholesale Access Service: The VPMN Operator may, at its sole discretion, from time to time make changes to the MVNO Wholesale Access Service by adding, removing, replacing or modifying the network used for the MVNO Wholesale Access Service (a "Change"), provided that the same additions, deletions, replacements and/or modifications, as the case may be, shall apply to equivalent services provided by the VPMN Operator to its own customers, and such changes affect all end-users in a similar manner, irrespective of their wireless carrier. The VPMN Operator shall use all commercially reasonable efforts to provide the MVNO Wholesale Access Customer with ninety (90) days written notice prior to implementing a Change. In the case of the VPMN Operator notifying its own customers of a Change more than ninety (90) days in advance, the VPMN Operator shall notify the MVNO Wholesale Access Customer at the same time. Following notice of a Change served by the VPMN Operator, both Parties shall discuss the impact of any such Change for MVNO End-Customers and the necessary actions to be performed, including without limitation, in relation to:
 - i. network and billing test procedures as set out in the Technical Specifications;
 - ii. administrative activities; and
 - iii. the targeted starting date of the applicable Change.
- b. For greater certainty, and without limiting other obligations which may need to be assumed by the MVNO Wholesale Access Customer as a result of the VPMN Operator implementing a Change, the MVNO Wholesale Access Customer shall be responsible for all of its own costs and expenses associated with accessing the VPMN Operator's Network in order to make use of or benefit from the MVNO Wholesale Access Service and the Seamless Hand-off Service. In addition, the VPMN Operator shall not be responsible to compensate the MVNO Wholesale Access Customer for any of the costs and expenses that the MVNO Wholesale Access Customer may incur as a result of the MVNO Wholesale Access Customer evaluating the impact and implications of a Change proposed by the VPMN Operator.

ITEM

235 **MVNO Wholesale Access Service – Continued**

N

ITEM

235.3A **Conditions of Service – General – Continued**

- c. Subject to Item 235.3A.15.a above, nothing in this Tariff shall be construed or interpreted as:
 - i. limiting the VPMN Operator's right to make changes or modifications to the MVNO Wholesale Access Service and the Seamless Hand-off Service provided that such changes or modifications comply with GSMA standards, specifications and protocols; and
 - ii. representing that the MVNO Wholesale Access Service and the Seamless Hand-off Service as offered by the VPMN Operator will remain unchanged. The Parties hereby expressly acknowledge and agree that the VPMN Operator shall have full and complete discretion as to the management of its network, and with respect to resulting changes or modifications to the MVNO Wholesale Access Service and the Seamless Hand-off Service.

- d. Changes to LAC and/or TAC: the VPMN Operator may, at its sole discretion, from time to time make changes to its LAC and/or TAC and its geographic boundaries (and equivalent data boundaries). Where the VPMN Operator plans to materially change the geographic boundaries of an existing LAC and/or TAC, the VPMN Operator shall notify the MVNO Wholesale Access Customer in writing prior to such change. The MVNO Wholesale Access Customer may also request from time to time a LAC and/or TAC to be removed or added from the VPMN or OPMN as the case may be for purposes of the MVNO Wholesale Access Customer's MVNO Wholesale Access Service, and the VPMN Operator shall replace or remove the said LAC and/or TAC requested on the VPMN within ninety (90) days as per the MVNO Wholesale Access Customer's written request. For greater certainty, any cell site added from time to time by the VPMN Operator or the OPMN Operator within a LAC and/or TAC shall be deemed to be included for the purpose of the MVNO Wholesale Access Service as part of such LAC and/or TAC, and MVNO Wholesale Access Service shall be made available to the MVNO Wholesale Access Customer from such new cell site pursuant to the terms and conditions of this Tariff Item. The Company does not guarantee that LAC and/or TAC areas will match exactly the relevant geographic areas determined by the Tier 4 licence areas and TEL licence areas of Eligible Spectrum. The Company is under no obligation to modify to match these areas nor is it required to provide 'tower' or 'IMSI' level blocking to accommodate any request.

- e. Discontinuance of GSM-based Protocols: Notwithstanding Tariff Item 235.3A.15.a, where the Company intends to end the provision of any of the GSM-based network protocols on the VPMN on a permanent basis, either nationally or regionally, the Company shall provide prior written notice to the MVNO Wholesale Access Customer either (i) forthwith upon entering into a commercial agreement for the provision of the MVNO Wholesale Access Service or (ii) no less than eighteen (18) months prior to the intended change.

ITEM

235

MVNO Wholesale Access Service – Continued

N

ITEM

235.3A

Conditions of Service – General – Continued

16. Charging, Billing and Accounting

a. Charging and Rates: When an MVNO End-Customer uses the Company's services pursuant to this Tariff Item, the MVNO Wholesale Access Customer shall be responsible for payment of charges for the services in accordance with the rates specified within a commercial agreement.

b. Implementation of Billable Records: The Parties shall implement the exchange of TAP via a Data Clearing House (DCH) in accordance with the GSMA PRDs further details are available in the TELUS AA.13 (Common Annex) and the RAEX OpData, or as otherwise mutually agreed to in writing by the Parties.

c. Billing and Accounting: The Parties shall implement billing and accounting according to the GSM Association Permanent Reference Documents as amended from time to time.

d. Settlement Procedure: The procedure for settlement of amounts between the Parties is set forth in the TELUS AA.13 (Common Annex) and the RAEX OpData. The Parties may amend the procedure for settlement upon their mutual written agreement.

17. Customer Care

MVNO End-Customers shall contact the customer care services of the MVNO Wholesale Access Customer while using the MVNO Wholesale Access Service. MVNO End-Customers shall not contact the VPMN Operator. The MVNO Wholesale Access Customer's customer care services will be the sole point of contact for the MVNO End-Customers. The MVNO Wholesale Access Customer may then contact the VPMN Operator for troubleshooting as needed. The contact details for the MVNO Wholesale Access Customer are detailed in the TELUS Domestic IR.21

ITEM

235

MVNO Wholesale Access Service – Continued

N

ITEM

235.3A

Conditions of Service – General – Continued

18. The MVNO Wholesale Access Customer must ensure that its services, facilities or equipment will not interfere with, impair or cause damage to the Company's services, facilities or equipment; or endanger the safety of Company employees or the public. In the event of any failure to comply with this condition, the Company will notify the MVNO Wholesale Access Customer in writing that temporary discontinuance of the use of the Company's services, facilities or equipment may be required. When prior notice is not practicable, the Company may temporarily discontinue, without notifying the MVNO Wholesale Access Customer, the provision of a service, facility or equipment if such action is reasonable under the circumstances. In cases of such temporary discontinuance, the MVNO Wholesale Access Customer will be notified verbally (and in writing as soon as possible after the temporary discontinuance) and be afforded the opportunity to correct the situation.

19. Forecast

a. Thirty (30) days prior to the Commercial Start Date and thirty (30) days prior to the beginning of each subsequent calendar year, the MVNO Wholesale Access Customer shall provide to the Company a forecast by Tier 4 area and by TEL licence area (if applicable) in the MVNO Customer Service Area, for the subsequent twelve (12) months, of the monthly aggregated volume of data, represented in gigabyte, comprising all voice, text and data to be consumed by its MVNO End-Customers. The forecasts shall also include service elements forecasted to be consumed by any Third Party Reseller. On a good-faith basis, the MVNO Wholesale Access Customer shall notify the Company in writing of any significant changes to its forecasts as soon as the MVNO Wholesale Access Customer becomes aware of such a change. All forecasts provided by the MVNO Wholesale Access Customer shall be treated as confidential information pursuant to the terms and conditions set out in Item 235.3A.26 below.

b. In all instances, the MVNO Wholesale Access Customer shall pay for their actual consumption in accordance with the rates agreed to by way of commercial agreement.

20. The MVNO Wholesale Access Customer acknowledges and agrees that outside of an Eligible Spectrum Area, it is not eligible to obtain the MVNO Wholesale Access Service within the geographic areas of the VPMN and OPMN. Should the MVNO Wholesale Access Customer desire roaming services for its MVNO End-Customers from the Company within the geographic area of the VPMN but outside of an Eligible Spectrum Area, it must obtain the GSM-based roaming service provided by the Company in its GSM-based Roaming Service Tariff (Item 233).

ITEM

235

MVNO Wholesale Access Service – Continued

N

ITEM

235.3A

Conditions of Service – General – Continued

21. The MVNO Wholesale Access Customer must take all reasonable steps to ensure that their subscribers configure their devices to register on the HPMN in priority to the VPMN Operator’s Network (or to the OPMN Operator’s Network, as the case may be) where MVNO Wholesale Access Service is permitted and where the MVNO Wholesale Access Customer owns and operates the HPMN, to minimize in-footprint access of the MVNO Wholesale Access Service and traffic offloading.

22. Capacity Offloading

a. Consistent with Tariff Item 235.3A.21, the MVNO Wholesale Access Customer shall strive to avoid any capacity offloading in areas where both the MVNO Wholesale Access Customer and the VPMN Operator (or the OPMN Operator, as the case may be) have networks, especially in the densely populated urban areas.

b. The MVNO Wholesale Access Customer will take all reasonable steps to ensure that its handsets preferentially seek out its network and do not seek out the VPMN Operator's network or the OPMN Operator’s network as the case may be, when the HPMN is successfully identified with a signal strength that can provide service.

c. The Parties' engineering groups will share such data and other information reasonably necessary or convenient to identify occurrences of capacity offload by specific area.

d. If the MVNO Wholesale Access Customer repeatedly offloads capacity in a particular area where it has a network then the MVNO Wholesale Access Customer shall take reasonable steps to prevent any further reoccurrences in that area, such as by the installation of additional capacity in that area.

e. If it is technically more practicable, the VPMN Operator may request that the MVNO Wholesale Access Customer take actions to suspend the voice, SMS, MMS and data services to the MVNO End-Customers in the area where the offloading occurred.

23. The Company shall only respond to trouble reports from the MVNO Wholesale Access Customer, or the MVNO Wholesale Access Customer’s duly authorized representatives, after the MVNO Wholesale Access Customer has first determined the trouble does not originate in the MVNO Wholesale Access Customer’s system or network service. The MVNO Wholesale Access Customer shall instruct the MVNO End-Customers to report all cases of trouble to the MVNO Wholesale Access Customer.

ITEM

235 **MVNO Wholesale Access Service – Continued**

N

ITEM

235.3A **Conditions of Service – General – Continued**

24. Devices:

- a. The MVNO Wholesale Access Customer shall not knowingly sell or otherwise provide devices used for accessing the MVNO Wholesale Access Service on the VPMN or OPMN, including all modifications thereto, unless such devices:
 - i. are capable of operating on the MVNO Wholesale Access Customer's PMN;
 - ii. initially have and continue to have PTCRB approval; and
 - iii. comply with all applicable laws, rules, and regulations, including the rules and regulations of set by the Minister of Innovation, Science and Industry or any successor minister in the Government of Canada acting in accordance with the powers and discretion accorded to a minister under the *Radiocommunication Act* or any successor statute and includes the Department of Innovation, Science and Economic Development.
- b. In the event that the VPMN Operator believes, acting reasonably, that any devices used or to be used for accessing the MVNO Wholesale Access Service on the VPMN or OPMN adversely affect or could adversely affect the VPMN or OPMN or other customers of the VPMN Operator or the VPMN Operator otherwise has concerns with regard to such devices, then the VPMN Operator may require, upon written notice to the MVNO Wholesale Access Customer, that such devices be tested prior to permitting their use or continued use, as the case may be, on the VPMN or OPMN. For greater certainty, this Item 235.3A.24 shall not apply to devices similar in nature to the devices in use by the VPMN Operator's subscribers or otherwise made available by other operators and members of the GSM Association. The Parties hereby agree that the general intent of this Item 235.3A.24 is to address the use by MVNO End-Customers of complex devices, or devices that have a very distinct purpose from any of the devices offered by the VPMN Operator to its own subscribers.
- c. All devices of the MVNO End-Customers, which are to be used for accessing the MVNO Wholesale Access Service on the VPMN or the OPMN, must be able to operate on the MVNO Wholesale Access Customer's PMN using the radio spectrum frequencies used by the MVNO Wholesale Access Customer's PMN.

ITEM

235 **MVNO Wholesale Access Service – Continued**

N

ITEM

235.3A **Conditions of Service – General – Continued**

- d. The MVNO Wholesale Access Customer shall ensure that the devices of MVNO End-Customers are able to receive and comply with applicable codes (for example: 3GPP TS 51.010-1 V5.5.0 (2003-09) standard Cause Code 13: "Roaming Not Allowed in this Location Area") from the VPMN Operator or the OPMN Operator as the case may be, in order to deny access of any such device in a particular geographic area and in order to prohibit such device from reattempting registration on the VPMN or the OPMN until it has moved into another geographic area.
 - e. Equipment Identity Register: The MVNO Wholesale Access Customer acknowledges that the Company has an equipment identity register (EIR) program. If any device belonging to an MVNO End-Customer is identified as being stolen or unauthorized equipment that is registered in the Company's EIR or in another EIR registry program in which the Company participates, then the Company shall be entitled to prevent usage of such equipment on the Company's VPMN. In the event the Company notifies the MVNO Wholesale Access Customer of any devices that have been used for accessing the MVNO Wholesale Access Service which the Company believes have been stolen or are unauthorized, then the MVNO Wholesale Access Customer shall use commercially reasonable efforts to investigate the registration of the device and, where appropriate, suspend such device.
25. Suspension or Termination and Other Remedies for Payment Issues and Non-Compliance
- a. The VPMN Operator has the right at any time upon thirty (30) days written notice, without liability, to suspend or terminate access to any or all of the MVNO Wholesale Access Service made available hereunder for the MVNO Wholesale Access Customer in the event that:
 - i. the MVNO Wholesale Access Customer is in default of the payment of any undisputed amount due to the VPMN Operator under this Tariff Item or under a commercially negotiated agreement between the Company and the MVNO Wholesale Access Customer where such agreement incorporates the terms and conditions set out in in this Tariff Item.
- A. The VPMN Operator may not suspend or terminate MVNO Wholesale Access Service where
- (1) the MVNO Wholesale Access Customer is prepared to enter into and honour a reasonable deferred payment agreement; or
 - (2) there is a dispute regarding the basis of the proposed suspension or termination, provided payment is being made for undisputed outstanding amounts and the VPMN Operator does not have reasonable grounds for believing that the purpose of that dispute is to evade or delay payment.

ITEM

235

MVNO Wholesale Access Service – Continued

N

ITEM

235.3A

Conditions of Service – General – Continued

ii. the MVNO Wholesale Access Customer has failed to comply with the deposit provisions as set out in CRTC 21461, Item 112 of the Company’s General Terms of Service;

or

iii. the network access provided under this Tariff is used in a manner other than that permitted by the terms and conditions herein.

b. The VPMN Operator has the right at any time upon thirty (30) days written notice, without liability, to suspend or terminate all or any of its MVNO Wholesale Access Service to specific MVNO End-Customer(s) for any technical reasons that, if present for its own subscribers would cause it suspend or terminate services.

c. The phrase “reasonable advance notice” as used in this Item 235.3A.25 will generally be at least thirty (30) days. Prior to suspension or termination, the VPMN Operator must provide MVNO Wholesale Access Customer with reasonable advance notice, stating

i. the reason for the proposed suspension or termination and the amount owing, if any;

ii. the scheduled suspension or termination date; and

iii. subject to contrary provisions of this Tariff or as approved by the Commission, that a reasonable deferred payment agreement can be entered into (where the reason for suspension or termination is failure to pay).

d. Where repeated efforts to contact the MVNO Wholesale Access Customer have failed, the VPMN Operator must, at a minimum, deliver the notice referred to in Item 235.3A.25.c to the billing address prior to delivering the notice referred to in Item 235.3A.25.e.

ITEM

235

MVNO Wholesale Access Service – Continued

N

ITEM

235.3A

Conditions of Service – General – Continued

- e. In addition to the notice required by Item 235.3A.25.c the VPMN Operator must, at least 24 hours prior to suspension or termination, advise the MVNO Wholesale Access Customer or another responsible person that suspension or termination is imminent, except where
 - i. repeated efforts to so advise have failed;
 - ii. immediate action must be taken to protect the VPMN Operator from network harm resulting from facilities controlled or provided by the MVNO Wholesale Access Customer; or
 - iii. the suspension or termination occurs by virtue of a failure to provide payment when requested by the VPMN Operator for non-recurring charges that have accrued, by providing notice to the MVNO Wholesale Access Customer with details regarding the services and charges in question, prior to the normal billing date.
- f. Except with the MVNO Wholesale Access Customer's consent or in exceptional circumstances, suspension or termination may occur only on business days between 8 a.m. and 5 p.m., local time, unless the business day precedes a non-business day, in which case disconnection may not occur after 12 noon local time.
- g. Suspension or termination does not affect the MVNO Wholesale Access Customer's obligation to pay any amount owed to the VPMN Operator.
- h. In the case of MVNO Wholesale Access Service that has been suspended, the VPMN Operator must make a daily pro rata allowance based on the monthly charge for such services.
- i. The VPMN Operator must restore MVNO Wholesale Access Service, without undue delay, where the grounds for suspension or termination no longer exist, or a payment or deferred payment agreement has been negotiated. Service charges may apply.
- j. Where it becomes apparent that suspension or termination occurred in error or was otherwise improper, the VPMN Operator must restore MVNO Wholesale Access Service the next day, at the latest, unless exceptional circumstances do not permit this, and no reconnection charges shall be levied.
- k. The VPMN Operator must follow an incremental approach to suspending and terminating the MVNO Wholesale Access Service provided to the MVNO Wholesale Access Customer, with reasonable advance notice.

ITEM

235

MVNO Wholesale Access Service – Continued

N

ITEM

235.3A

Conditions of Service – General – Continued

26. In addition to the provisions provided for in General Tariff (CRTC 21461) Item 119.0 - *Confidentiality of Customer Records*, neither the Company nor the MVNO Wholesale Access Customer shall disclose to any third party during the service requisition or subscription period of this Tariff Item, and for three (3) years following the termination or expiration of the subscription in question, any confidential information as follows:

- a. For the purposes of Tariff Item 235.3A.26 and subject to Item 235.3A.26.b, confidential information means any data or information, tangible or intangible, that is of value to the disclosing party and is not generally known in the industry or to competitors of the disclosing party. Confidential information shall include:
 - i. tangible information, marked by the disclosing party with the word “Confidential” or otherwise identified by an appropriate stamp or legend indicating its confidential nature;
 - ii. Confidential information disclosed orally or visually and identified by the disclosing party as confidential when disclosed, and confirmed by the disclosing party in a written notice within thirty (30) days following disclosure, which notice shall include markings similar to those outlined in Item 235.3A.26.a.i above; and
 - iii. all other information that, notwithstanding the absence of markings or designations, would be understood by the Parties, exercising reasonable business judgment, to be confidential.
- b. Confidential information shall not include information that is:
 - i. previously known to a Party free of any obligation to keep it confidential;
 - ii. or has been or is subsequently made public by a party that owns that information or by a third party who is under no obligation of confidence to any party;
 - iii. independently developed by a party without reference to or knowledge of the other party's confidential information; or,
 - iv. disclosed with the prior approval of the owner of the information.
- c. Any combination of confidential information regarding, for example, products or features of technology, shall not be deemed to be within the foregoing exception (as identified in Item 235.3A.26.b above) merely because individual portions of such combination are disclosed or separately known in the public domain or known by the receiving party.
- d. Each Party acknowledges that the confidential information disclosed by a Party is and shall remain the property of the Party that disclosed the confidential information. The Parties agree that they shall hold confidential information exchanged hereunder in confidence and shall use the same solely for the provisioning of service under this Tariff Item.

ITEM

235

MVNO Wholesale Access Service – Continued

N

ITEM

235.3A

Conditions of Service – General – Continued

- e. The Parties further agree that they shall not disclose any confidential information to anyone except those employees or contractors to whom such disclosure is necessary for the purposes authorized herein. In the event such confidential information must be disclosed by any party to a third party in order to provision the service under this Tariff Item, the disclosing party shall, prior to disclosure, obtain written consent from the party wishing to disclose the confidential information and obtain from the third party a written agreement regarding confidentiality of the confidential information, the terms of which shall be substantially the same as those contained herein.
- f. Notwithstanding Item 235.3A.26.a to e, a Party may disclose confidential information to its professional advisors without the written consent of the disclosing Party where, in the opinion of such Party, the advice of its professional advisors is necessary to accomplish the objectives of provisioning service under this Tariff Item. In addition, either Party may reveal such confidential information as may be reasonably necessary as required by law including to any governmental authority having jurisdiction over it, or its affiliates, for the purpose of obtaining applicable regulatory approvals as may be required hereunder. If a Party is involved in court proceedings and is subject to a legally enforceable demand for discovery of confidential information, that Party shall give written notice to the owner of the confidential information prior to disclosing the confidential information, and shall cooperate in seeking such reasonable protective arrangements as may be requested by the owner.
- g. Notwithstanding Item 235.3A.26.a to f, the Company may disclose confidential information of the MVNO Wholesale Access Customer to the OPMN Operator if such confidential information is technical or operational information that is required to be shared with the OPMN Operator in order to assess, plan, implement or enable the MVNO Wholesale Access Service in the MVNO Customer Service Area that is in the geographic area of the OPMN.
- h. Nothing in Tariff Item 235.3A.26 shall affect the right of any Party to take such action as it may deem advisable, including legal action, to protect its confidential information.
- i. In the event that the MVNO Wholesale Access Customer is served with court orders or warrants in connection with interception of private communications on the VPMN Operator's network, the MVNO Wholesale Access Customer may advise the concerned governmental authority to issue the court order or warrant in the name of the VPMN Operator.

ITEM

235

MVNO Wholesale Access Service – Continued

N

ITEM

235.3A

Conditions of Service – General – Continued

- j. In relation to lawful intercept, the VPMN Operator will be responsible for addressing any interception of private communications court orders and warrants relating to its network served on the VPMN Operator by any governmental authority. The VPMN Operator will be entitled to any and all fees recovered from the appropriate governmental authority in connection with lawful interception of private communications requests on the VPMN Operator's network.
 - k. As per paragraph 449 of Telecom Decision CRTC 2022-288 and paragraph 215 of Telecom Order CRTC 2023-133, the MVNO Wholesale Access Customer and the Third Party Reseller shall not be prevented from disclosing the identity of its VPMN Operator to its current or potential MVNO End-Customers.
 - l. The MVNO Wholesale Access Customer and the Third Party Reseller shall not make, market, advertise or promote any claims concerning network quality, speed or reliability that are based, in whole or in part, on the MVNO End-Customer's experience on the VPMN Operator's network and any such claims may only be based on MVNO End-Customers' experience on the MVNO Wholesale Access Customer's HPMN.
27. As a condition of the Company providing MVNO Wholesale Access Service to MVNO Wholesale Access Customers, the MVNO Wholesale Access Customers and Third Party Resellers shall abide by all applicable regulatory obligations, including but not limited to:
- a. the rules set out in the Wireless Code and its implementation schedule according to Telecom Regulatory Policy CRTC 2017-200;
 - b. existing and future consumer safeguard obligations, including those set out in the Appendix to Telecom Regulatory Policy CRTC 2017-11;
 - c. existing and future obligations with respect to 9-1-1 service, including those set out in the Appendix to Telecom Regulatory Policy CRTC 2016-12; and
 - d. existing and future accessibility requirements, including the telecommunications accessibility obligations set out in Broadcasting and Telecom Regulatory Policy CRTC 2009-430 and the message relay service obligations set out in Telecom Regulatory Policy CRTC 2018-466.

ITEM

235

MVNO Wholesale Access Service – Continued

N

ITEM

235.3A

Conditions of Service – General – Continued

28. Limitation of Liability and Indemnification

- a. The MVNO Wholesale Access Customer acknowledges and agrees that it is responsible, and assumes all liability to the Company for all: (i) Third Party Reseller use of the MVNO Wholesale Access Service, and (ii) MVNO End-Customer use of the MVNO Wholesale Access Service.
- b. Without limiting the generality of the above or Item 124.4 of the Company’s General Tariff (CRTC 21461), the Company is not liable:
 - i. for libel, slander, defamation or the infringement of copyright arising from material or messages transmitted over the Company's telecommunications network or facilities by the MVNO Wholesale Access Customer, any Third Party Reseller or MVNO End-Customer, or any other person using the MVNO Wholesale Access Service,
 - ii. for the infringement of patents arising from the combining or using of the MVNO Wholesale Access Customer's, or any Third Party Reseller's or MVNO End-Customer's, facilities or equipment with Company equipment or the Company's telecommunications network or facilities,
 - iii. for damages arising out of the act, default, neglect or omission of the MVNO Wholesale Access Customer, any Third Party Reseller or MVNO End-Customer, or any other person using the MVNO Wholesale Access Service, in the use or operation of facilities provided by the Company, or
 - iv. for damages arising out of the transmission of material or messages over the Company's telecommunications network on behalf of the MVNO Wholesale Access Customer, any Third Party Reseller or MVNO End-Customer, or any other person using the MVNO Wholesale Access Service, which is in any way unlawful;

and the MVNO Wholesale Access Customer is responsible for, and shall indemnify and hold the Company harmless from and against, any damages or third party claims (including legal fees or other costs of responding to such claims) arising (i) out of any of the circumstances listed above or under Item 124.4(a) through (d) of the Company’s General Tariff (CRTC 21461), or (ii) from the act or omission of any Third Party Reseller or MVNO End-Customer.

ITEM

235

MVNO Wholesale Access Service – Continued

N

ITEM

235.3B

Conditions of Service – Seamless Hand-off Service

1. Seamless Hand-off Service is available as of August 7, 2023 pursuant to Telecom Order CRTC 2023-133. The MVNO Wholesale Access Customer may opt out of obtaining Seamless Hand-off Service at its discretion. The submission of a Seamless Hand-off Request (as described below) will initiate a seamless hand-off project comprised of several phases: (i) High Level Implementation Assessment; (ii) Drafting and Finalization of Statement of Work (“SoW”); and (iii) Detailed Solution Design, Testing, and Implementation. Each Party will be required to participate in each phase of the project and the level of effort and materials required by the Company to complete each phase of the project is provided subject to Item 235.4.

a. Seamless Hand-off Request:

- i. An MVNO Wholesale Access Customer that wishes to have Seamless Hand-off Service must make a written request to the Company’s relevant Carrier Relations prime. Prior to making the written request as detailed below, the MVNO Wholesale Access Customer may request necessary network border site information from the Company specific to the locations for which it will seek the Seamless Hand-off Service from the Company. Such site information request must be made in writing to the applicable Carrier Relations prime at the Company. The Company shall provide the network border site information to the MVNO Wholesale Access Customer within seven (7) days of receiving such request.
- ii. In its request for Seamless Hand-off Service, the MVNO Wholesale Access Customer must clearly specify: 1) the province; 2) latitude and longitude of cell site location; 3) E-UTRAN Cell Identifier (“ECI”) or 5G NGRAN Cell Identifier as the case may be; 4) TAC list and map; and 5) neighbor frequencies to be added to Enhanced NodeB’s (“eNodeB’s”) for each cell site in the following:
 - A. the portion of the Home Network Outer Boundary along which the Seamless Hand-off Service is requested, and if applicable, the Home Network Inner Boundary along which the Seamless Hand-off Service is requested;
 - B. the MVNO Wholesale Access Customer neighbour cell sites for (1) the portion of the Home Network Outer Boundary along which Seamless Hand-off Service is requested and (2) the Home Network Inner Boundary along which the Seamless Hand-off Service is requested, if applicable; and
 - C. the proposed Company cell sites where the MVNO Wholesale Access Customer requests seamless hand-off.

ITEM

235

MVNO Wholesale Access Service – Continued

N

ITEM

235.3B

Conditions of Service – Seamless Hand-off Service - Continued

- iii. The information requested for items (ii)(A) through (C) above must be provided in both a spreadsheet and a GIS file in MapInfo format, or such other format as specified by the Company.
 - iv. In this request, the MVNO Wholesale Access Customer must also provide a list of all vendors for the MVNO Wholesale Access Customer's RAN and core network, along with a general description of the type of equipment provided by each vendor. Such information is to be provided in a spreadsheet.
 - v. The Company will review the information received and may seek additional information from the MVNO Wholesale Access Customer as required to conduct a seamless hand-off high level implementation assessment.
- b. High Level Implementation Assessment:
- i. Once the Company has received the required information in the specified format, the Company will work with the MVNO Wholesale Access Customer to perform a high level implementation assessment of the Seamless Hand-off Request. (Note: The Company and the MVNO Wholesale Access Customer will discuss and agree upon the specific regions from the request that are out of scope for the implementation activity.)
 - ii. As part of the high level implementation assessment, the Company will provide an initial estimate of the effort (labour) required to complete the seamless hand-off implementation for the specific portions of the MVNO Wholesale Access Customer's network boundaries that are mutually agreed to be in scope. The initial estimate is a non-binding high level estimate, meant to be used to determine whether Parties wish to proceed with the creation of a SoW.

ITEM

235

MVNO Wholesale Access Service – Continued

N

ITEM

235.3B

Conditions of Service – Seamless Hand-off Service - Continued

c. Drafting and Finalization of SoW:

- i. The MVNO Wholesale Access Customer and the Company will work together to agree on a SoW reflecting what each Party will do to implement the Seamless Hand-off Service, including roles and responsibilities of each Party set out in a Responsible, Accountable, Consulted, Informed (“RACI”) chart with accompanying descriptions and scope. It is expected that each Party will be responsible to perform its own detailed solution design, testing and implementation of the solution and that the MVNO Wholesale Access Customer will need to carry out numerous activities for the project, including but not limited to RAN drive test and data fill validation.
- ii. The MVNO Wholesale Access Customer and the Company will sign the SoW to indicate alignment between the Parties prior to commencement of any implementation activities.
- iii. Without limiting the Company's right to make changes pursuant to Items 235.3A.14 and 235.3A.15, the MVNO Wholesale Access Customer acknowledges and agrees that the SoW may need to be updated and amended as part of the detailed solution, design, testing and implementation phase.

d. Detailed Solution Design, Testing, and Implementation:

- i. Following the signing of the SoW, each Party will develop a detailed solution design to enable the Seamless Hand-off Service in their respective networks.
- ii. The Company may seek additional information from the MVNO Wholesale Access Customer as required to complete this phase of the project.
- iii. Activities at this stage include but are not limited to: design documentation, validation and sign-offs; test documentation, validation and sign-offs; system assessments (billing, security, interoperability, etc.); vendor consulting; system and environment set-up (DNS, OSS, etc.); testing (lab, field testing in a single cluster, monitoring of test cluster); production data fills and drive test validation (core, RAN); enablement across in-scope sites; and service assurance. Certain of these activities will be performed by one or both Parties.
- iv. Implementation of the Seamless Hand-off Service will be completed in a manner mutually agreed to by the Company and the MVNO Wholesale Access Customer in the SoW, without limiting the Company's right to make changes pursuant to Items 235.3A.14 and 235.3A.15 of this Tariff.

ITEM

235

MVNO Wholesale Access Service – Continued

N

ITEM

235.3B

Conditions of Service – Seamless Hand-off Service - Continued

e. Subsequent changes:

- i. After the SoW is signed, should the MVNO Wholesale Access Customer subsequently (i) change or update its underlying wireless technology (including but not limited to software, hardware updates), or any of its wireless technology vendor(s), and/or (ii) seek to implement any other technology or operational changes which impact the operation of the Seamless Hand-off Service, then the process outlined in the preceding sections (a) through (d) must be followed.
- ii. Network boundary changes to the Home Network Outer Boundary and the Home Network Inner Boundary are subject to Item 235.3B.1.f, “Seamless Hand-off Service Boundary Change Process.”
- iii. Updates to cell site information are subject to Item 235.3B.1.g “MVNO Wholesale Access Customer Updated Cell Site Information Change Process.”
- iv. The MVNO Wholesale Access Customer shall provide at least thirty (30) days written notice to the Company that the MVNO Wholesale Access Customer intends to cease supporting seamless hand-off at particular cell sites located along the Home Network Outer Boundary or the Home Network Inner Boundary, and the Company shall be entitled to cease supporting the Seamless Hand-off Service for such sites as of the date specified by the MVNO Wholesale Access Customer.

ITEM

235

MVNO Wholesale Access Service – Continued

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ITEM

235.3B

Conditions of Service – Seamless Hand-off Service - Continued

- f. Seamless Hand-off Service Boundary Change Process:
 - i. Following the implementation of the Seamless Hand-off Service, the MVNO Wholesale Access Customer shall be entitled to initiate no more than one Seamless Hand-off Boundary Change in a thirty (30) day period unless otherwise agreed to by the Parties.
 - ii. An MVNO Wholesale Access Customer may initiate a Seamless Hand-off Boundary Change by providing a written request to the applicable Carrier Relations prime at the Company. The written request shall contain the following in respect of the MVNO Wholesale Access Customer’s cell sites that either (1) will no longer be part of the MVNO Wholesale Access Customer’s existing Home Network Outer Boundary and/or Home Network Inner Boundary, or (2) are intended to comprise part of the of the MVNO Wholesale Access Customer’s Home Network Outer Boundary and/or Home Network Inner Boundary following the Seamless Hand-off Network Boundary Change:
 - A. the information set out in Item 235.3B.1.a.ii in the format set out in Item 235.3B.1.a.iii, (for a single network boundary change, it is anticipated that some of the information originally provided as part of the original seamless hand-off request could be re-used and re-submitted with any changes to relevant cell site information clearly indicated);
 - B. the date on which the MVNO Wholesale Access Customer will implement the relevant change(s) to the HPMN;
 - C. a summary of any relevant changes made to the MVNO Wholesale Access Customer’s network since the last change to the MVNO Wholesale Access Customer’s Home Network Outer Boundary and/or Home Network Inner Boundary (as the case may be) that could impact the provision of Seamless Hand-off Service.
 - iii. Upon receipt of a written request, the Company shall, without undue delay, review the information provided by the MVNO Wholesale Access Customer for completeness and provide the MVNO Wholesale Access Customer with either a confirmation that the Company has received the complete information required to provide its response or with a request for omitted information.
 - iv. Within seven (7) days of confirming the receipt of complete information, or such longer period as may be agreed to by the Parties, the Company shall provide the MVNO Wholesale Access Customer with a response containing relevant information regarding the Company’s cell sites that correspond to the Seamless Hand-off Boundary Change.

ITEM

235

MVNO Wholesale Access Service – Continued

N

ITEM

235.3B

Conditions of Service – Seamless Hand-off Service - Continued

- v. Based on the information exchanged, the Parties shall work together in good faith to agree on a SoW reflecting what each Party will do to implement the Seamless Hand-off Boundary Change.
- vi. The Company shall undertake commercially reasonable efforts to make the necessary adjustments to the implementation of the relevant Seamless Hand-off Boundary on its network within thirty (30) days of confirming the receipt of complete information or such later date as agreed upon by the Parties, subject to any unforeseen technical issues that may arise prior to completion or any delays caused by the MVNO Wholesale Access Customer.
- g. MVNO Wholesale Access Customer Updated Cell Site Information Change Process:
 - i. Following the implementation of the Seamless Hand-off Service, the MVNO Wholesale Access Customer may provide updated relevant cell site information as required for the Seamless Hand-off Service, but no more than once every thirty (30) days unless otherwise agreed to by the Parties.
 - ii. The MVNO Wholesale Access Customer shall provide its updated cell site information to the applicable Carrier Relations prime at the Company, including the following information as applicable (this package of information is referred to as the “Cell Site Information Change Request”):
 - A. The proposed cell site information changes, including the following as applicable for each cell site for which a change is requested: 1) the province; 2) latitude and longitude of cell site location; 3) E-UTRAN Cell Identifier (“ECI”) or 5G NGRAN Cell Identifier as the case may be; 4) TAC list and map; and 5) other relevant parameters;
 - B. The required cell site information must be provided in both a spreadsheet and a GIS file in MapInfo format, or such other format as specified by the Company, with all cell site changes clearly indicated; and
 - C. the date on which the MVNO Wholesale Access Customer will implement the proposed cell site changes.
 - iii. Upon receipt of a Cell Site Information Change Request, the Company shall, without undue delay, review the information provided by the MVNO Wholesale Access Customer for completeness and provide the MVNO Wholesale Access Customer with either a confirmation that the Company has received the complete information required to provide its response or with a request for omitted information.

ITEM

235 **MVNO Wholesale Access Service – Continued**

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ITEM

235.3B **Conditions of Service – Seamless Hand-off Service - Continued**

- iv. If the Cell Site Information Change Request contains the required information, then the Company will determine whether such request necessitates a change on the Company network, and the Company will advise the MVNO Wholesale Access Customer whether such change must occur within a Company maintenance window. The Company will make commercially reasonable efforts to provide the MVNO Wholesale Access Customer with an estimate within seven (7) business days of confirming receipt of complete information within the Cell Site Information Change Request, of the likely timeframe in which it will complete the associated adjustments required on the Company network.
- v. The Company shall undertake commercially reasonable efforts to make the necessary adjustments on its network associated with the Cell Site Information Change Request within thirty (30) days of confirming the receipt of complete information or such other date as agreed upon by the Parties, subject to any unforeseen technical issues that may arise prior to completion or any delays caused by the MVNO Wholesale Access Customer.
- vi. Following the completion of a Cell Site Information Change Request, the MVNO Wholesale Access Customer shall be responsible for testing the resulting functionality of the Seamless Hand-off Service at its impacted cell site locations, as required.
- h. Resolving Impediments to providing the Seamless Hand-off Service:
 - i. The Company will advise the MVNO Wholesale Access Customer whether implementation of the Seamless Hand-off Service, (or of changes to the Seamless Hand-off Service, as the case may be, such as a Seamless Hand-off Boundary Change), is feasible, given the information provided by the MVNO Wholesale Access Customer.
 - ii. If it is determined that it is not feasible to implement the Seamless Hand-off Service (or the requested changes to the Seamless Hand-off Service, as the case may be), the Company will advise the MVNO Wholesale Access Customer of the basis for its determination and, if the MVNO Wholesale Access Customer does not agree with the determination, the Parties will work together in good faith to identify how any impediments to implementing the Seamless Hand-off Service (or the requested changes to the Seamless Hand-off Service, as the case may be), can be resolved in accordance with the terms of this Tariff.
 - iii. If a dispute between the Parties regarding the feasibility of implementing the Seamless Hand-off Service (or the requested changes to the Seamless Hand-off Service, as the case may be), cannot be resolved, the Parties may seek to resolve the relevant issue using other means, including the CRTC's staff-assisted dispute resolution mechanisms.

ITEM

235

MVNO Wholesale Access Service – Continued

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ITEM

235.3B

Conditions of Service – Seamless Hand-off Service - Continued

2. For greater certainty, the MVNO Wholesale Access Customer acknowledges and agrees that a Change may impact wireless carriers differently for technology or engineering reasons including differences in equipment vendors, network design, generation of wireless technology, locations in which the Services are accessed, or approach to the implementation of the Seamless Hand-off Service.

ITEM

235.4

Rates

Pursuant to paragraph 354 of TRP 2021-130, the rates for MVNO Wholesale Access Service shall be negotiated between the MVNO Wholesale Access Customer and the Company and set out in a separate commercial agreement.

For greater certainty, if Seamless Hand-off is requested, the rates for Seamless Hand-off shall also be negotiated and set out in a commercial agreement.

The rates for MVNO Wholesale Access Service may be renegotiated at least every two years after the date the rates are last established, or a different term as agreed to by the Parties.