### Triennial Review Order and USTA II Decision Amendment to the Interconnection Agreement between Qwest Corporation and Verizon Northwest, Inc. for the State of Washington

This is an Amendment ("Amendment") to incorporate the Triennial Review Order (TRO) and the USTA II Decision into the Interconnection Agreement between Qwest Corporation ("Qwest"), formerly known as U S WEST Communications, Inc., a Colorado corporation, and Verizon Northwest, Inc. ("CLEC"), a corporation.

### RECITALS

WHEREAS, the Parties entered into an Interconnection Agreement (such Interconnection Agreement, as amended to date, being referred to herein as the "Agreement") for services in the state of Washington, which was approved by the Washington Utilities and Transportation Commission ("Commission") on January 8, 2003, as referenced in Docket No. UT-023066; and

WHEREAS, the Federal Communications Commission ("FCC") promulgated new rules and regulations pertaining to, among other things, the availability of unbundled network elements ("UNEs") pursuant to Section 251(c)(3) of the Telecommunications Act of 1996 (the "Act") in its Report and Order *In the Matter of Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers; Implementation of the Local Competition Provisions of the Telecommunications Act of 1996; Deployment of Wireline Services Offering Advanced Telecommunications Capability, CC Docket Nos. 01-338, 96-98 and 98-147, (effective October 2, 2003) ("TRO"); and* 

WHEREAS, the United States Court of Appeals for the Washington D.C. Circuit, among other things, reversed and vacated portions of the TRO with respect to several UNEs in its decision, *USTA v. FCC*, 359 F.3d 554 (D.C. Cir. 2004) (effective June 16, 2004) ("USTA II Decision"); and

WHEREAS, the FCC subsequently further issued Interim Rules in its Order and Notice of Proposed Rulemaking *In the Matter of Unbundled Access to Network Elements, Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers*, WC Docket No. 04-313, CC Docket No. 01-338 (effective September 13, 2004) ("Interim Rules"); and

WHEREAS, the TRO, the USTA II Decision, and the Interim Rules, individually and together ("Decisions") materially modify Qwest's obligations under the Act with respect to, among other things, Qwest's requirement to offer certain UNEs; and

WHEREAS, the Parties wish to amend the Agreement to comply with the Decisions hereby agree to do so under the terms and conditions contained herein.

#### AGREEMENT

NOW THEREFORE, in consideration of the mutual terms, covenants and conditions contained in this Amendment and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties agree as follows:

### I. Amendment Terms

A. To the extent applicable, the Agreement is hereby amended by changing or adding terms and conditions for certain UNEs as set forth in Attachment 1 to this Amendment, attached hereto and incorporated herein by this reference.

B. The Interim Rules require that Qwest continue to make available the following UNEs to CLEC under the same rates, terms, and conditions as set forth in the underlying Agreement as of June 15, 2004: mass market switching; DS1, DS3, and dark fiber loops; and DS1, DS3, and dark fiber transport facilities. Therefore, as set forth in Attachment I to this Amendment, Qwest shall continue to make these UNEs available under these rates, terms, and conditions, until such time as there is a change of law or other event that modifies Qwest's obligations, as contemplated by Section II.B below.

# II. Limitations

A. Nothing in this Amendment shall be deemed an admission by Qwest or CLEC concerning the interpretation or effect of the Decisions, nor rules, regulations, interpretations, and appeals thereof, including but not limited to state rules, regulations, and laws as they may be issued or promulgated regarding the same. Nothing in this Amendment shall preclude or estop Qwest or CLEC from taking any position in any forum concerning the proper interpretation or effect of Decisions or concerning whether the Decisions should be changed, vacated, dismissed, stayed or modified.

B. This Amendment is based on applicable law as it exists as of September 13, 2004. In the event that Qwest's obligations to provide the UNEs listed in subparagraph I.B. above are altered by: 1) the issuance of permanent or other rules or orders by the FCC; 2) issuance of a court decision that affects the validity of the Decisions; 3) the expiration of the six month time period set forth in the Interim Rules or the expiration of any other time period that the FCC hereafter may identify during which Qwest must continue to provide these UNEs; and/or 4) issuance of a court order that affects the validity of any other FCC rules or orders; then the Parties agree to comply with said order or decision, which will be made automatically applicable to this Agreement immediately upon its effectiveness without further need for amendment to this Agreement. Changes in law that affect Qwest's obligations to provide any other UNEs or services will be handled in accordance with the change of law provisions in the underlying Agreement.

## III. Conflicts

In the event of a conflict between this Amendment and the terms and conditions of the Agreement, this Amendment shall control, subject to Section I.B above; provided, however, that the fact that a term or provision appears in this Amendment but not in the Agreement shall not be interpreted as, or deemed a grounds for finding, a conflict for purposes of this Section III.

## IV. Scope

This Amendment shall amend, modify and revise the Agreement only to the extent the UNEs listed in Attachment 1 are included in the Agreement and, except to the extent set forth in Section I and Section II of this Amendment, the terms and provisions of the Agreement shall remain in full force and effect after the execution date.

## V. Effective Date

This Amendment shall be deemed effective upon approval by the Commission except where the change of law provision in CLEC's Interconnection Agreement specifies a different effective date. The Parties agree to implement the provisions of this Amendment upon execution ("execution date").

## VI. Further Amendments

The provisions of this Amendment, including the provisions of this sentence, may not be amended, modified or supplemented, and waivers or consents to departures from the provisions of this Amendment may not be given without the written consent thereto by both Parties' authorized representative. No waiver by any Party of any default, misrepresentation, or breach of warranty or covenant hereunder, whether intentional or not, will be deemed to extend to any prior or subsequent default, misrepresentation, or breach of warranty or covenant hereunder or affect in any way any rights arising by virtue of any prior

or subsequent such occurrence.

## VII. Entire Agreement

The Agreement as amended (including the documents referred to herein) constitutes the full and entire understanding and agreement between the Parties with regard to the subjects of the Agreement as amended and supersedes any prior understandings, agreements, or representations by or between the Parties, written or oral, to the extent they relate in any way to the subjects of the Agreement as amended.

The Parties intending to be legally bound have executed this Amendment as of the dates set forth below, in multiple counterparts, each of which is deemed an original, but all of which shall constitute one and the same instrument.

Qwest Corporation
Signature
L.T. Christensen
Name Printed/Typed
Director – Interconnection Agreements
Title
Date

## **Table of Contents**

RECI	TALS	1
TABLE	E OF CONTENTS	4
1.0	DEFINITIONS	5
2.0	UNBUNDLED NETWORK ELEMENTS (UNE) GENERALLY	5
2.1		7
2.2	SUBLOOP UNBUNDLING	9
2.3	LINE SHARING	9
2.4	UNBUNDLED DEDICATED INTEROFFICE TRANSPORT (UDIT)	10
2.5	UNBUNDLED LOCAL SWITCHING	10
2.6	COMMINGLING	10
2.7	RATCHETING	11
2.8	ROUTINE MODIFICATIONS	12

### 1.0 Definitions

"Commingling" means the connecting, attaching, or otherwise linking of an Unbundled Network Element, or a Combination of Unbundled Network Elements, to one or more facilities or services that a requesting Telecommunications Carrier has obtained at wholesale from Qwest, or the combination of an Unbundled Network Element, or a Combination of Unbundled Network Elements, with one or more such facilities or services.

"Commingle" means the act of Commingling.

"Dedicated Transport" is a Qwest provided digital transmission path between Qwest Wire Centers, Qwest End Office Switches, and Qwest Tandem Switches to which CLEC is granted exclusive use.

"Unbundled Network Element" (UNE) is a Network Element that has been defined by the FCC as a Network Element to which Qwest is obligated under Section 251(c)(3) of the Act to provide unbundled access or for which unbundled access is provided under CLEC's Agreement and under this Amendment. Unbundled Network Elements do not include those Network Elements Qwest is obligated to provide only pursuant to Section 271 of the Act.

#### 2.0 Unbundled Network Elements (UNE) Generally

2.0.1 UNEs shall be obtained solely for the provision of Telecommunications Services only to the extent allowed by law, which does not include telecommunications utilized by CLEC for its own administrative use. UNEs shall not be used solely to provide wireless services also known as Commercial Mobile Radio Service (CMRS).

2.0.2 CLEC's Interconnection Agreement may include terms and conditions for certain Network Elements that Qwest is no longer required to offer on an unbundled basis pursuant to Section 251 of the Act. The FCC determined in its Triennial Review Order, effective October 2, 2003, that certain Network Elements do not satisfy the FCC's impairment test, and as a result, Qwest is no longer obligated to offer to CLEC those Network Elements on an unbundled basis pursuant to Section 251 of the Act. As of the execution date of this Amendment, CLEC shall not order, and Qwest will not provide, the following Network Elements on an unbundled basis pursuant to Section 251 of the Act:

- a) OCn Loops;
- b) Fiber to the Home, except as identified in Section 2.1.2 below;
- c) Hybrid Unbundled Loops except as required by Section 2.1.2.3 below;
- d) Non-copper distribution Subloop, unless required to access Qwest-owned inside wire at an MTE;
- e) Feeder Subloops;
- f) Line Sharing;
- g) E-UDIT (Extended Unbundled Dedicated Interoffice Transport), E-UDF (Extended Unbundled Dark Fiber), and Transport from a CLEC's Premises to a

Qwest Wire Center;

- h) OCn UDIT;
- i) UDIT and UDF as a part of a Meet-Point arrangement;
- j) Remote Node/Remote Port;
- k) SONET add/drop multiplexing and 3/1 and 1/0 multiplexing;
- Enterprise Unbundled Local Switching and related services, including UNE-P PRI, UNE-P DSS, Customized Routing, Shared Transport, Signaling, and Callrelated Databases (see Section 2.5 below);
- m) Unbundled Local Tandem Switching at the DS1 or above capacity;
- n) Packet Switching; and

2.0.3 Upon the execution date of this Amendment, CLEC shall begin to submit orders to disconnect or to make other arrangements to convert any former Unbundled Network Elements listed in Section 2.0.2 above that Qwest is providing to CLEC under CLEC's Interconnection Agreement. Any elements listed in Section 2.0.2 above remaining in service on January 1, 2005 will be converted to an alternative arrangement such as resale or Qwest Tariffed service. The effective date of those conversions will be governed by the change of law provision in CLEC's Interconnection Agreement or January 1, 2005, whichever is earlier.

2.0.4 CLEC's Interconnection Agreement may include terms and conditions for certain Network Elements that had been established by the FCC under its Triennial Review Order as Section 251 Unbundled Network Elements. The Decision by the United States Court of Appeals for the Washington D.C. Circuit, effective June 16, 2004, vacated the FCC's rules with respect to unbundling obligations for several Network Elements, as listed below in this Section.

- a) Unbundled Loops at DS1 and DS3 capacities;
- b) Unbundled Dark Fiber Loops (UDF-Loops);
- c) Enhanced Extended Loops (EEL) at DS1 and above capacities;
- d) Unbundled Dedicated Interoffice Transport (UDIT) at DS1 and DS3 capacities;
- e) Unbundled Dark Fiber Interoffice Facilities (UDF-IOF);
- f) Unbundled Customer-Controlled Rearrangement Element (UCCRE); and
- g) Mass Market Unbundled Local Switching and related services, including UNE-P, Customized Routing, Shared Transport, Signaling, and Call-related Databases (see Section 2.5 below).

2.0.5 The FCC, in its Interim Rules effective September 13, 2004, required that Qwest continue to

make available the Network Elements listed in Section 2.0.4 to CLEC on an interim basis if their Agreement included the UNEs on June 15, 2004. Therefore, Qwest shall continue to provide these Network Elements under existing rates, terms, and conditions, as required until such time as there is a change of law or other event that modifies Qwest's obligations, as contemplated by Section II.B of this Amendment. In the event that there is a change of law or other event that terminates Qwest's obligations to provide these Network Elements as contemplated by Section II.B of this Amendment, then CLEC shall submit orders to disconnect or to make other arrangements to convert any former Unbundled Network Elements listed in Section 2.0.4 above that Qwest is providing to CLEC under CLEC's Interconnection Agreement within 90 days of the effective date of the order or in compliance with the order, whichever is earlier. The effective date of those conversions will be the effective date of the change of law or other date if ordered by the FCC.

## 2.1 Unbundled Loop

2.1.1 CLEC's Interconnection Agreement terms and conditions shall govern those existing CLEC Unbundled Loop elements listed below until such time as they are converted or disconnected pursuant to Section 2.0.3 and 2.0.5 of this Amendment.

- a) Unbundled Loops at DS1 and DS3 capacities;
- b) OCn Unbundled Loops;
- c) Fiber to the Home Unbundled Loops (FTTH) except as identified in 2.1.2 below;
- d) Unbundled Dark Fiber Loops (UDF-Loops);
- e) Enhanced Extended Loop (EEL) at DS1 and above capacities; and
- f) Hybrid Unbundled Loops except as required by Section 2.1.2.3 below.

2.1.2 **Fiber to the Home (FTTH) Loops.** For purposes of this Section, a Fiber to the Home ("FTTH") loop is a local Loop consisting entirely of fiber optic cable, whether dark or lit, and serving an End User Customer's premises or, in the case of predominantly residential multiple dwelling units (MDUs), a fiber optic cable, whether dark or lit, that extends to the multiunit premises' minimum point of entry (MPOE).

2.1.2.1 FTTH New Builds. Qwest shall have no obligation to provide access to a FTTH loop as an Unbundled Network Element in any situation where Qwest deploys such a loop to an End User Customer's premises that had not previously been served by any loop facility prior to October 2, 2003.

2.1.2.2 FTTH Overbuilds. Qwest shall have no obligation to provide access to a FTTH loop as an Unbundled Network Element in any situation where Qwest deploys such a loop parallel to, or in replacement of, an existing copper loop facility. Notwithstanding the foregoing, where Qwest deploys a FTTH loop parallel to, or in replacement of, an existing copper loop facility:

2.1.2.2.1 Qwest shall: (i) leave the existing copper loop connected to the End User Customer's premises after deploying the FTTH loop to such premises, and (ii) upon

request provide access to such copper loop as an Unbundled Network Element. Not withstanding the foregoing, Qwest shall not be required to incur any expense to ensure that any such existing copper loop remains capable of transmitting signals prior to receiving a request from CLEC for access, as set forth above, in which case Qwest shall restore such copper loop to serviceable condition. Any such restoration shall not be subject to Performance Indicator Definition or other performance service measurement or intervals. Qwest's obligations under this subsection 2.1.2.2.1 shall terminate when Qwest retires such copper Loop in accordance with the provisions of Section 2.1.2.2.3 below.

2.1.2.2.2 In the event Qwest, in accordance with the provisions of Section 2.1.2.2.3 below, retires the existing copper loop connected to the End User Customer's premises, Qwest shall provide access, as an Unbundled Network Element over the FTTH loop, to a 64 kbps transmission path capable of voice grade service.

2.1.2.2.3 Retirement of Copper Loops or Copper Subloops and Replacement with FTTH Loops. In the event Qwest decides to replace any copper loop or copper Subloop with a FTTH Loop, Qwest will: (i) provide notice of such planned replacement on its website (www.qwest.com/disclosures) and (ii) provide public notice of such planned replacement to the FCC. Such notices shall be in addition to any applicable state Commission notification that may be required. Any such notice provided to the FCC shall be deemed approved on the ninetieth (90<sup>th</sup>) Day after the FCC's release of its public notice of the filing, unless an objection is filed pursuant to the FCC's rules. In accordance with the FCC's rules: (i) a CLEC objection to a Qwest notice that it plans to replace any copper loop or copper subloop with a FTTH Loop shall be filed with the FCC and served upon Qwest no later than the ninth (9<sup>th</sup>) business day following the release of the FCC's public notice of the filing and (ii) any such objection shall be deemed denied ninety (90) Days after the date on which the FCC releases public notice of the filing, unless the FCC rules otherwise within that period.

2.1.2.3 Hybrid Loops - A "Hybrid Loop" is an Unbundled Loop composed of both fiber optic cable, usually in the feeder plant, and copper wire or cable, usually in the distribution plant.

2.1.2.3.1 Packet Switching Facilities, Features, Functions and Capabilities – Qwest is not required to provide unbundled access to the Packet Switched features, functions and capabilities of its Hybrid Loops. Packet switching capability is the routing or forwarding of packets, frames, cells, or other data units based on address or other routing information contained in the packets, frames, cells or other data units, and the functions that are performed by the digital subscriber line access multiplexers, including but not limited to the ability to terminate an End User Customers' copper loop (which includes both a lowband voice channel and a high-band data channel, or solely a data channel); the ability to forward the voice channels, if present, to a circuit Switch or multiple circuit Switches; the ability to extract data units from the data channels on the loops; and the ability to combine data units from multiple loops onto one or more trunks connecting to a Packet Switch or Packet Switches.

2.1.2.3.2 Broadband Services – When CLEC seeks access to a Hybrid Loop for the provision of broadband services, Qwest shall provide CLEC with nondiscriminatory access to the time division multiplexing features, functions, and capabilities of that Hybrid Loop on an an unbundled basis to establish a complete transmission path between

Qwest's Central Office and an End User Customer premises. This access shall include access to all features, functions, and capabilities of the Hybrid Loop that are not used to transmit packetized information.

2.1.2.3.3 Narrowband Services – When CLEC seeks access to a Hybrid Loop for the provision of narrowband services, Qwest may either:

a) Provide nondiscriminatory access, on an unbundled basis, to an entire Hybrid Loop capable of voice-grade service (i.e., equivalent to DS0 capacity), using time division multiplexing technology; or

b) Provide nondiscriminatory access to a spare home-run copper loop serving that End User Customer on an unbundled basis.

### 2.2 Subloop Unbundling

2.2.1 CLEC's Interconnection Agreement terms and conditions shall govern those existing CLEC unbundled feeder subloop and non-copper distribution subloop elements until such time as they are converted or disconnected pursuant to Section 2.0.3 of this Amendment.

2.2.2 An Unbundled Subloop is defined as the distribution portion of a copper Loop or hybrid Loop comprised entirely of copper wire or copper cable that acts as a transmission facility between any point that it is Technically Feasible to access at terminals in Qwest's outside plant (originating outside of the Central Office), including inside wire owned or controlled by Qwest, and terminates at the End User Customer's premises. An accessible terminal is any point on the Loop where technicians can access the wire or fiber within the cable without removing a splice case to reach the wire or fiber within. Such points may include, but are not limited to, the pole, pedestal, Network Interface Device, minimum point of entry, single point of Interconnection, Remote Terminal, Feeder Distribution Interface (FDI), or Serving Area Interface (SAI). CLEC shall not have access on an unbundled basis to a feeder subloop defined as facilities extending from the Central Office to a terminal that is not at the End User Customer's premises or multiple tenant environment (MTE). CLEC shall have access to the feeder facilities only to the extent it is part of a complete transmission path, not a subloop, between the Central Office and the End User Customer's premises or MTE.

2.2.3 Qwest's obligation to construct a Single Point of Interface (SPOI) is limited to those MTEs where Qwest has distribution facilities to that MTE and owns, controls, or leases the inside wire at the MTE. In addition, Qwest shall have an obligation to construct a SPOI only when CLEC indicates that it intends to place an order for access to an unbundled Subloop Network Element via a SPOI.

2.2.4 Access to Distribution Loops or Intrabuilding Cable Loops at an MTE Terminal within a non-Qwest owned MTE is done through an MTE-POI. Collocation is not required to access Subloops used to access the network infrastructure within an MTE, unless CLEC requires the placement of equipment in a Qwest Premises. Cross-Connect Collocation, refers to creation of a cross connect field and does not constitute Collocation. The terms and conditions of Collocation do not apply to Cross-Connect Collocation if required at or near an MTE.

#### 2.3 Line Sharing

2.3.1 Qwest shall not be required to provide Line Sharing.

### 2.4 Unbundled Dedicated Interoffice Transport (UDIT)

2.4.1 CLEC's Interconnection Agreement terms and conditions shall govern those existing CLEC Unbundled Dedicated Interoffice Transport (UDIT) elements listed below until such time as they are converted or disconnected pursuant to Section 2.0.3 and 2.0.5 of this Amendment.

- a) E-UDIT (Extended Unbundled Dedicated Interoffice Transport), Extended Unbundled Dark Fiber (E-UDF); and Transport between CLEC's premises and a Qwest wire center;
- b) OCn UDIT;
- c) UDIT and UDF as a part of a Meet-Point arrangement,
- d) Remote Node/Remote Port;
- e) SONET add/drop multiplexing and 3/1 and 1/0 multiplexing;
- f) Unbundled Dark Fiber Interoffice Facilities (UDF-IOF);
- g) Enhanced Extended Loop (EEL) Interoffice Facilities at DS1 and above capacities;
- h) Unbundled Customer-Controlled Rearrangement Element (UCCRE); and
- i) UDIT at DS1 and DS3 capacities.

#### 2.5 Unbundled Local Switching

2.5.1 CLEC's Interconnection Agreement terms and conditions shall govern those existing CLEC Unbundled Switching and related elements listed below until such time as they are converted or disconnected pursuant to Section 2.0.3 and 2.05 of this Amendment.

- a) Enterprise and Mass Market Unbundled Local Switching, and related services:
  - Customized Routing
  - Signaling
  - AIN Database Services
  - Line Information Database (LIDB)
  - 8XX Database Services
  - InterNetwork Calling Name (ICNAM)
  - Unbundled Network Element Platform (UNE-P)
  - Local Number Portability (LNP) Database
  - Shared Transport
- b) Packet Switching
- c) Unbundled Local Tandem Switching

#### 2.6 Commingling

2.6.1 To the extent it is Technically Feasible, CLEC may Commingle Telecommunications Services purchased on a resale basis with an Unbundled Network Element or combination of Unbundled Network

Elements. Notwithstanding the foregoing, the following are not available for resale Commingling:

- a) Non-telecommunications services;
- b) Enhanced or Information services;
- c) Features or functions not offered for resale on a stand-alone basis or separate from basic Exchange Service; and
- d) Network Elements offered pursuant to Section 271.

2.6.2 CLEC may Commingle DS0 UNEs and combinations of DS0 UNEs with wholesale services and facilities (e.g., Switched and Special Access Services offered pursuant to Tariff) and request Qwest to perform the necessary functions to provision such Commingling. CLEC will be required to provide the CFA (Connecting Facility Assignment) of CLEC's network demarcation (e.g., Collocation or multiplexing facilities) for each UNE, UNE Combination, or wholesale service when requesting Qwest to perform the Commingling of such services. Qwest shall not deny access to a UNE on the grounds that the UNE or UNE Combination shares part of Qwest's network with Access Services.

2.6.2.1 Work performed by Qwest to Commingle services at CLEC's request or to provide services that are not subject to standard provisioning intervals will not be subject to standard provisioning intervals, or to performance measures and remedies, if any, contained in CLEC's Interconnection Agreement or elsewhere, by virtue of that service's inclusion in a requested Commingled service arrangement. Provisioning intervals applicable to services included in a requested Commingled service arrangement will not begin to run until CLEC provides a complete and accurate service request and necessary CFAs to Qwest, and Qwest completes work required to perform the Commingling that is in addition to work required to provision the service as a stand-alone facility or service.

2.6.3 Qwest will not combine or Commingle services or Network Elements that are offered by Qwest pursuant to Section 271 of the Communications Act of 1934, as amended, with Unbundled Network Elements or combinations of Unbundled Network Elements.

2.6.4 Services are available for Commingling only in the manner in which they are provided in Qwest's applicable product Tariffs, catalogs, price lists, or other Telecommunications Services offerings.

2.6.5 Entrance Facilities obtained pursuant to Tariff are available for Commingling. Entrance Facilities and mid-span meet SPOI obtained pursuant to the LIS Section of CLEC's Interconnection Agreement are not available for Commingling.

## 2.7 Ratcheting

2.7.1 To the extent a Qwest Tariffed service is used to provide both UNEs and non-UNE services, Qwest shall not be required to bill for such Qwest Tariffed service at blended or multiple rates (otherwise known as Ratcheting). Instead, CLEC shall be assessed the Tariffed rate, or resale rate, or the rate from other Qwest wholesale service offerings, as appropriate, for the non-UNE service.

2.7.2 To the extent a multiplexed facility is included in a Commingled circuit, the multiplexed facility will be ordered and billed pursuant to the appropriate Tariff.

## 2.8 Routine Modifications

2.8.1 Qwest will also perform routine modifications to existing loop and transport facilities used by CLEC to the same extent it performs such activities for its own retail End User Customers, including, but not limited to, rearrangement or splicing of cable (including rearrangement of existing pairs to include fiber hub counts and rearrangement of existing pairs to extend the line), adding a doubler or repeater, adding and/or rearranging an equipment case, adding a smart jack, installing a repeater shelf, adding a line card, and deploying a new multiplexer or reconfiguring an existing multiplexer.