

shall provide access to unbundled network elements and combinations of unbundled network elements without regard to whether the requesting telecommunications carrier seeks access to the elements to establish a new circuit or to convert an existing circuit from a service to unbundled network elements.

(b) An incumbent LEC need not provide access to an unbundled DS1 loop in combination, or commingled, with a dedicated DS1 transport or dedicated DS3 transport facility or service, or to an unbundled DS3 loop in combination, or commingled, with a dedicated DS3 transport facility or service, or an unbundled dedicated DS1 transport facility in combination, or commingled, with an unbundled DS1 loop or a DS1 channel termination service, or to an unbundled dedicated DS3 transport facility in combination, or commingled, with an unbundled DS1 loop or a DS1 channel termination service, or to an unbundled DS3 loop or a DS3 channel termination service, unless the requesting telecommunications carrier certifies that all of the following conditions are met:

(1) The requesting telecommunications carrier has received state certification to provide local voice service in the area being served or, in the absence of a state certification requirement, has complied with registration, tariffing, filing fee, or other regulatory requirements applicable to the provision of local voice service in that area.

(2) The following criteria are satisfied for each combined circuit, including each DS1 circuit, each DS1 enhanced extended link, and each DS1-equivalent circuit on a DS3 enhanced extended link:

(i) Each circuit to be provided to each customer will be assigned a local number prior to the provision of service over that circuit;

(ii) Each DS1-equivalent circuit on a DS3 enhanced extended link must have its own local number assignment, so that each DS3 must have at least 28 local voice numbers assigned to it;

(iii) Each circuit to be provided to each customer will have 911 or E911 capability prior to the provision of service over that circuit;

(iv) Each circuit to be provided to each customer will terminate in a collocation arrangement that meets the requirements of paragraph (c) of this section;

(v) Each circuit to be provided to each customer will be served by an interconnection trunk that meets the requirements of paragraph (d) of this section;

(vi) For each 24 DS1 enhanced extended links or other facilities having equivalent capacity, the requesting telecommunications carrier will have at least one active DS1 local service interconnection trunk that meets the requirements of paragraph (d) of this section; and

(vii) Each circuit to be provided to each customer will be served by a switch capable of switching local voice traffic.

(c) A collocation arrangement meets the requirements of this paragraph if it is:

(1) Established pursuant to section 251(c)(6) of the Act and located at an incumbent LEC premises within the same LATA as the customer's premises, when the incumbent LEC is not the collocator; and

(2) Located at a third party's premises within the same LATA as the customer's premises, when the incumbent LEC is the collocator.

(d) An interconnection trunk meets the requirements of this paragraph if the requesting telecommunications carrier will transmit the calling party's number in connection with calls exchanged over the trunk.

[68 FR 52295, Sept. 2, 2003, as amended at 68 FR 64000, Nov. 12, 2003]

§51.319 Specific unbundling requirements.

(a) *Local loops.* An incumbent LEC shall provide a requesting telecommunications carrier with non-discriminatory access to the local loop on an unbundled basis, in accordance with section 251(c)(3) of the Act and this part and as set forth in paragraphs (a)(1) through (a)(9) of this section. The local loop network element is defined as a transmission facility between a distribution frame (or its equivalent) in an incumbent LEC central office and the loop demarcation point at an end-

user customer premises. This element includes all features, functions, and capabilities of such transmission facility, including the network interface device. It also includes all electronics, optronics, and intermediate devices (including repeaters and load coils) used to establish the transmission path to the end-user customer premises as well as any inside wire owned or controlled by the incumbent LEC that is part of that transmission path.

(1) *Copper loops.* An incumbent LEC shall provide a requesting telecommunications carrier with non-discriminatory access to the copper loop on an unbundled basis. A copper loop is a stand-alone local loop comprised entirely of copper wire or cable. Copper loops include two-wire and four-wire analog voice-grade copper loops, digital copper loops (e.g., DS0s and integrated services digital network lines), as well as two-wire and four-wire copper loops conditioned to transmit the digital signals needed to provide digital subscriber line services, regardless of whether the copper loops are in service or held as spares. The copper loop includes attached electronics using time division multiplexing technology, but does not include packet switching capabilities as defined in paragraph (a)(2)(i) of this section. The availability of DS1 and DS3 copper loops is subject to the requirements of paragraphs (a)(4) and (a)(5) of this section.

(i) *Line sharing.* Beginning on the effective date of the Commission's *Triennial Review Order*, the high frequency portion of a copper loop shall no longer be required to be provided as an unbundled network element, subject to the transitional line sharing conditions in paragraphs (a)(1)(i)(A) and (a)(1)(i)(B) of this section. Line sharing is the process by which a requesting telecommunications carrier provides digital subscriber line service over the same copper loop that the incumbent LEC uses to provide voice service, with the incumbent LEC using the low frequency portion of the loop and the requesting telecommunications carrier using the high frequency portion of the loop. The high frequency portion of the loop consists of the frequency range on the copper loop above the range that

carries analog circuit-switched voice transmissions. This portion of the loop includes the features, functions, and capabilities of the loop that are used to establish a complete transmission path on the high frequency range between the incumbent LEC's distribution frame (or its equivalent) in its central office and the demarcation point at the end-user customer premises, and includes the high frequency portion of any inside wire owned or controlled by the incumbent LEC.

(A) *Line sharing customers before the effective date of the Commission's Triennial Review Order.* An incumbent LEC shall provide a requesting telecommunications carrier with the ability to engage in line sharing over a copper loop where, prior to the effective date of the Commission's *Triennial Review Order*, the requesting telecommunications carrier began providing digital subscriber line service to a particular end-user customer and has not ceased providing digital subscriber line service to that customer. Until such end-user customer cancels or otherwise discontinues its subscription to the digital subscriber line service of the requesting telecommunications carrier, or its successor or assign, an incumbent LEC shall continue to provide access to the high frequency portion of the loop at the same rate that the incumbent LEC charged for such access prior to the effective date of the Commission's *Triennial Review Order*.

(B) *Line sharing customers on or after the effective date of the Commission's Triennial Review Order.* An incumbent LEC shall provide a requesting telecommunications carrier with the ability to engage in line sharing over a copper loop, between the effective date of the Commission's *Triennial Review Order* and three years after that effective date, where the requesting telecommunications carrier began providing digital subscriber line service to a particular end-user customer on or before the date one year after that effective date. Beginning three years after the effective date of the Commission's *Triennial Review Order*, the incumbent LEC is no longer required to provide a requesting telecommunications carrier with the ability to engage in line sharing for this end-user

customer or any new end-user customer. Between the effective date of the Commission's *Triennial Review Order* and three years after that effective date, an incumbent LEC shall provide a requesting telecommunications carrier with access to the high frequency portion of a copper loop in order to serve line sharing customers obtained between the effective date of the Commission's *Triennial Review Order* and one year after that effective date in the following manner:

(1) During the first year following the effective date of the Commission's *Triennial Review Order*, the incumbent LEC shall provide access to the high frequency portion of a copper loop at 25 percent of the state-approved monthly recurring rate, or 25 percent of the monthly recurring rate set forth in the incumbent LEC's and requesting telecommunications carrier's interconnection agreement, for access to a copper loop in effect on that date.

(2) Beginning one year plus one day after the effective date of the Commission's *Triennial Review Order* until two years after that effective date, the incumbent LEC shall provide access to the high frequency portion of a copper loop at 50 percent of the state-approved monthly recurring rate, or 50 percent of the monthly recurring rate set forth in the incumbent LEC's and requesting telecommunications carrier's interconnection agreement, for access to a copper loop in effect on the effective date of the Commission's *Triennial Review Order*.

(3) Beginning two years plus one day after effective date of the Commission's *Triennial Review Order* until three years after that effective date, the incumbent LEC shall provide access to the high frequency portion of a copper loop at 75 percent of the state-approved monthly recurring rate, or 75 percent of the monthly recurring rate set forth in the incumbent LEC's and requesting telecommunications carrier's interconnection agreement, for access to a copper loop in effect on the effective date of the Commission's *Triennial Review Order*.

(i) *Line splitting*. An incumbent LEC shall provide a requesting telecommunications carrier that obtains an unbundled copper loop from the in-

cumbent LEC with the ability to engage in line splitting arrangements with another competitive LEC using a splitter collocated at the central office where the loop terminates into a distribution frame or its equivalent. Line splitting is the process in which one competitive LEC provides narrowband voice service over the low frequency portion of a copper loop and a second competitive LEC provides digital subscriber line service over the high frequency portion of that same loop.

(A) An incumbent LEC's obligation, under paragraph (a)(1)(ii) of this section, to provide a requesting telecommunications carrier with the ability to engage in line splitting applies regardless of whether the carrier providing voice service provides its own switching or obtains local circuit switching as an unbundled network element pursuant to paragraph (d) of this section.

(B) An incumbent LEC must make all necessary network modifications, including providing nondiscriminatory access to operations support systems necessary for pre-ordering, ordering, provisioning, maintenance and repair, and billing for loops used in line splitting arrangements.

(iii) *Line conditioning*. The incumbent LEC shall condition a copper loop at the request of the carrier seeking access to a copper loop under paragraph (a)(1) of this section, the high frequency portion of a copper loop under paragraph (a)(1)(i) of this section, or a copper subloop under paragraph (b) of this section to ensure that the copper loop or copper subloop is suitable for providing digital subscriber line services, including those provided over the high frequency portion of the copper loop or copper subloop, whether or not the incumbent LEC offers advanced services to the end-user customer on that copper loop or copper subloop. If the incumbent LEC seeks compensation from the requesting telecommunications carrier for line conditioning, the requesting telecommunications carrier has the option of refusing, in whole or in part, to have the line conditioned; and a requesting telecommunications carrier's refusal of some or all aspects of line conditioning will not diminish any right it may

have, under paragraphs (a) and (b) of this section, to access the copper loop, the high frequency portion of the copper loop, or the copper subloop.

(A) Line conditioning is defined as the removal from a copper loop or copper subloop of any device that could diminish the capability of the loop or subloop to deliver high-speed switched wireline telecommunications capability, including digital subscriber line service. Such devices include, but are not limited to, bridge taps, load coils, low pass filters, and range extenders.

(B) Incumbent LECs shall recover the costs of line conditioning from the requesting telecommunications carrier in accordance with the Commission's forward-looking pricing principles promulgated pursuant to section 252(d)(1) of the Act and in compliance with rules governing nonrecurring costs in §51.507(e).

(C) Insofar as it is technically feasible, the incumbent LEC shall test and report troubles for all the features, functions, and capabilities of conditioned copper lines, and may not restrict its testing to voice transmission only.

(D) Where the requesting telecommunications carrier is seeking access to the high frequency portion of a copper loop or copper subloop pursuant to paragraphs (a) or (b) of this section and the incumbent LEC claims that conditioning that loop or subloop will significantly degrade, as defined in §51.233, the voiceband services that the incumbent LEC is currently providing over that loop or subloop, the incumbent LEC must either:

(1) Locate another copper loop or copper subloop that has been or can be conditioned, migrate the incumbent LEC's voiceband service to that loop or subloop, and provide the requesting telecommunications carrier with access to the high frequency portion of that alternative loop or subloop; or

(2) Make a showing to the state commission that the original copper loop or copper subloop cannot be conditioned without significantly degrading voiceband services on that loop or subloop, as defined in §51.233, and that there is no adjacent or alternative copper loop or copper subloop available that can be conditioned or to which the

end-user customer's voiceband service can be moved to enable line sharing.

(E) If, after evaluating the incumbent LEC's showing under paragraph (a)(1)(iii)(D)(2) of this section, the state commission concludes that a copper loop or copper subloop cannot be conditioned without significantly degrading the voiceband service, the incumbent LEC cannot then or subsequently condition that loop or subloop to provide advanced services to its own customers without first making available to any requesting telecommunications carrier the high frequency portion of the newly conditioned loop or subloop.

(iv) *Maintenance, repair, and testing.* (A) An incumbent LEC shall provide, on a nondiscriminatory basis, physical loop test access points to a requesting telecommunications carrier at the splitter, through a cross-connection to the requesting telecommunications carrier's collocation space, or through a standardized interface, such as an intermediate distribution frame or a test access server, for the purpose of testing, maintaining, and repairing copper loops and copper subloops.

(B) An incumbent LEC seeking to utilize an alternative physical access methodology may request approval to do so from the state commission, but must show that the proposed alternative method is reasonable and nondiscriminatory, and will not disadvantage a requesting telecommunications carrier's ability to perform loop or service testing, maintenance, or repair.

(v) *Control of the loop and splitter functionality.* In situations where a requesting telecommunications carrier is obtaining access to the high frequency portion of a copper loop either through a line sharing or line splitting arrangement, the incumbent LEC may maintain control over the loop and splitter equipment and functions, and shall provide to the requesting telecommunications carrier loop and splitter functionality that is compatible with any transmission technology that the requesting telecommunications carrier seeks to deploy using the high frequency portion of the loop, as defined in paragraph (a)(1)(i) of this section, provided that such transmission technology is presumed to be deployable pursuant to §51.230.

(2) *Hybrid loops.* A hybrid loop is a local loop composed of both fiber optic cable, usually in the feeder plant, and copper wire or cable, usually in the distribution plant.

(i) *Packet switching facilities, features, functions, and capabilities.* An incumbent LEC 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 customer's copper loop (which includes both a low-band 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.

(ii) *Broadband services.* When a requesting telecommunications carrier seeks access to a hybrid loop for the provision of broadband services, an incumbent LEC shall provide the requesting telecommunications carrier with nondiscriminatory access to the time division multiplexing features, functions, and capabilities of that hybrid loop, including DS1 or DS3 capacity (where impairment has been found to exist), on an unbundled basis to establish a complete transmission path between the incumbent LEC's central office and an end user's 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.

(iii) *Narrowband services.* When a requesting telecommunications carrier seeks access to a hybrid loop for the provision of narrowband services, the incumbent LEC 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 customer on an unbundled basis.

(3) *Fiber loops.* (i) *Definitions.* (A) *Fiber-to-the-home loops.* A fiber-to-the-home loop is a local loop consisting entirely of fiber optic cable, whether dark or lit, serving an end user's customer 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).

(B) *Fiber-to-the-curb loops.* A fiber-to-the-curb loop is a local loop consisting of fiber optic cable connecting to a copper distribution plant that is not more than 500 feet from the customer's premises or, in the case of predominantly residential MDUs, not more than 500 feet from the MDU's MPOE. The fiber optic cable in a fiber-to-the-curb loop must connect to a copper distribution plant at a serving area interface from which every other copper distribution subloop also is not more than 500 feet from the respective customer's premises.

(ii) *New builds.* An incumbent LEC is not required to provide nondiscriminatory access to a fiber-to-the-home loop or a fiber-to-the-curb loop on an unbundled basis when the incumbent LEC deploys such a loop to an end user's customer premises that previously has not been served by any loop facility.

(iii) *Overbuilds.* An incumbent LEC is not required to provide nondiscriminatory access to a fiber-to-the-home loop or a fiber-to-the-curb loop on an unbundled basis when the incumbent LEC has deployed such a loop parallel to, or in replacement of, an existing copper loop facility, except that:

(A) The incumbent LEC must maintain the existing copper loop connected to the particular customer premises after deploying the fiber-to-the-home loop or the fiber-to-the-curb loop and provide nondiscriminatory access to that copper loop on an unbundled basis unless the incumbent LEC retires the

copper loops pursuant to paragraph (a)(3)(iv) of this section.

(B) An incumbent LEC that maintains the existing copper loops pursuant to paragraph (a)(3)(iii)(A) of this section need not incur any expenses to ensure that the existing copper loop remains capable of transmitting signals prior to receiving a request for access pursuant to that paragraph, in which case the incumbent LEC shall restore the copper loop to serviceable condition upon request.

(C) An incumbent LEC that retires the copper loop pursuant to paragraph (a)(3)(iv) of this section shall provide nondiscriminatory access to a 64 kilobits per second transmission path capable of voice grade service over the fiber-to-the-home loop or fiber-to-the-curb loop on an unbundled basis.

(iv) Retirement of copper loops or copper subloops. Prior to retiring any copper loop or copper subloop that has been replaced with a fiber-to-the-home loop or a fiber-to-the-curb loop, an incumbent LEC must comply with:

(A) The network disclosure requirements set forth in section 251(c)(5) of the Act and in § 51.325 through § 51.335; and

(B) Any applicable state requirements.

(4) *DS1 loops.* (i) Subject to the cap described in paragraph (a)(4)(ii) of this section, an incumbent LEC shall provide a requesting telecommunications carrier with nondiscriminatory access to a DS1 loop on an unbundled basis to any building not served by a wire center with at least 60,000 business lines and at least four fiber-based collocators. Once a wire center exceeds both of these thresholds, no future DS1 loop unbundling will be required in that wire center. A DS1 loop is a digital local loop having a total digital signal speed of 1.544 megabytes per second. DS1 loops include, but are not limited to, two-wire and four-wire copper loops capable of providing high-bit rate digital subscriber line services, including T1 services.

(ii) *Cap on unbundled DS1 loop circuits.* A requesting telecommunications carrier may obtain a maximum of ten unbundled DS1 loops to any single building in which DS1 loops are available as unbundled loops.

(iii) *Transition period for DS1 loop circuits.* For a 12-month period beginning on the effective date of the *Triennial Review Remand Order*, any DS1 loop UNEs that a competitive LEC leases from the incumbent LEC as of that date, but which the incumbent LEC is not obligated to unbundle pursuant to paragraphs (a)(4)(i) or (a)(4)(ii) of this section, shall be available for lease from the incumbent LEC at a rate equal to the higher of 115% of the rate the requesting carrier paid for the loop element on June 15, 2004, or, 115% of the rate the state commission has established or establishes, if any, between June 16, 2004, and the effective date of the *Triennial Review Remand Order*, for that loop element. Where incumbent LECs are not required to provide unbundled DS1 loops pursuant to paragraphs (a)(4)(i) or (a)(4)(ii) of this section, requesting carriers may not obtain new DS1 loops as unbundled network elements.

(5) *DS3 loops.* (i) Subject to the cap described in paragraph (a)(5)(ii) of this section, an incumbent LEC shall provide a requesting telecommunications carrier with nondiscriminatory access to a DS3 loop on an unbundled basis to any building not served by a wire center with at least 38,000 business lines and at least four fiber-based collocators. Once a wire center exceeds both of these thresholds, no future DS3 loop unbundling will be required in that wire center. A DS3 loop is a digital local loop having a total digital signal speed of 44.736 megabytes per second.

(ii) *Cap on unbundled DS3 loop circuits.* A requesting telecommunications carrier may obtain a maximum of a single unbundled DS3 loop to any single building in which DS3 loops are available as unbundled loops.

(iii) *Transition period for DS3 loop circuits.* For a 12-month period beginning on the effective date of the *Triennial Review Remand Order*, any DS3 loop UNEs that a competitive LEC leases from the incumbent LEC as of that date, but which the incumbent LEC is not obligated to unbundle pursuant to paragraphs (a)(5)(i) or (a)(5)(ii) of this section, shall be available for lease from the incumbent LEC at a rate equal to the higher of 115% of the rate

the requesting carrier paid for the loop element on June 15, 2004, or, 115% of the rate the state commission has established or establishes, if any, between June 16, 2004, and the effective date of the *Triennial Review Remand Order*, for that loop element. Where incumbent LECs are not required to provide unbundled DS3 loops pursuant to paragraphs (a)(5)(i) or (a)(5)(ii) of this section, requesting carriers may not obtain new DS3 loops as unbundled network elements.

(6) *Dark fiber loops.* (i) An incumbent LEC is not required to provide requesting telecommunications carriers with access to a dark fiber loop on an unbundled basis. Dark fiber is fiber within an existing fiber optic cable that has not yet been activated through optronics to render it capable of carrying communications services.

(ii) *Transition period for dark fiber loop circuits.* For an 18-month period beginning on the effective date of the *Triennial Review Remand Order*, any dark fiber loop UNEs that a competitive LEC leases from the incumbent LEC as of that date shall be available for lease from the incumbent LEC at a rate equal to the higher of 115% of the rate the requesting carrier paid for the loop element on June 15, 2004, or, 115% of the rate the state commission has established or establishes, if any, between June 16, 2004, and the effective date of the *Triennial Review Remand Order*, for that loop element. Requesting carriers may not obtain new dark fiber loops as unbundled network elements.

(7) *Routine network modifications.* (i) An incumbent LEC shall make all routine network modifications to unbundled loop facilities used by requesting telecommunications carriers where the requested loop facility has already been constructed. An incumbent LEC shall perform these routine network modifications to unbundled loop facilities in a nondiscriminatory fashion, without regard to whether the loop facility being accessed was constructed on behalf, or in accordance with the specifications, of any carrier.

(ii) A routine network modification is an activity that the incumbent LEC regularly undertakes for its own customers. Routine network modifications

include, but are not limited to, rearranging or splicing of cable; adding an equipment case; adding a doubler or repeater; adding a smart jack; installing a repeater shelf; adding a line card; deploying a new multiplexer or reconfiguring an existing multiplexer; and attaching electronic and other equipment that the incumbent LEC ordinarily attaches to a DS1 loop to activate such loop for its own customer. They also include activities needed to enable a requesting telecommunications carrier to obtain access to a dark fiber loop. Routine network modifications may entail activities such as accessing manholes, deploying bucket trucks to reach aerial cable, and installing equipment casings. Routine network modifications do not include the construction of a new loop, or the installation of new aerial or buried cable for a requesting telecommunications carrier.

(8) *Engineering policies, practices, and procedures.* An incumbent LEC shall not engineer the transmission capabilities of its network in a manner, or engage in any policy, practice, or procedure, that disrupts or degrades access to a local loop or subloop, including the time division multiplexing-based features, functions, and capabilities of a hybrid loop, for which a requesting telecommunications carrier may obtain or has obtained access pursuant to paragraph (a) of this section.

(b) *Subloops.* An incumbent LEC shall provide a requesting telecommunications carrier with nondiscriminatory access to subloops on an unbundled basis in accordance with section 251(c)(3) of the Act and this part and as set forth in paragraph (b) of this section.

(1) *Copper subloops.* An incumbent LEC shall provide a requesting telecommunications carrier with nondiscriminatory access to a copper subloop on an unbundled basis. A copper subloop is a 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 of technically feasible access in an incumbent LEC's outside plant, including inside wire owned or controlled by the incumbent LEC, and the end-user customer premises. A copper

subloop includes all intermediate devices (including repeaters and load coils) used to establish a transmission path between a point of technically feasible access and the demarcation point at the end-user customer premises, and includes the features, functions, and capabilities of the copper loop. Copper subloops include two-wire and four-wire analog voice-grade subloops as well as two-wire and four-wire subloops conditioned to transmit the digital signals needed to provide digital subscriber line services, regardless of whether the subloops are in service or held as spares.

(i) *Point of technically feasible access.* A point of technically feasible access is any point in the incumbent LEC's outside plant where a technician can access the copper wire within a cable without removing a splice case. Such points include, but are not limited to, a pole or pedestal, the serving area interface, the network interface device, the minimum point of entry, any remote terminal, and the feeder/distribution interface. An incumbent LEC shall, upon a site-specific request, provide access to a copper subloop at a splice near a remote terminal. The incumbent LEC shall be compensated for providing this access in accordance with §§51.501 through 51.515.

(ii) *Rules for collocation.* Access to the copper subloop is subject to the Commission's collocation rules at §§51.321 and 51.323.

(2) *Subloops for access to multiunit premises wiring.* An incumbent LEC shall provide a requesting telecommunications carrier with nondiscriminatory access to the subloop for access to multiunit premises wiring on an unbundled basis regardless of the capacity level or type of loop that the requesting telecommunications carrier seeks to provision for its customer. The subloop for access to multiunit premises wiring is defined as any portion of the loop that it is technically feasible to access at a terminal in the incumbent LEC's outside plant at or near a multiunit premises. One category of this subloop is inside wire, which is defined for purposes of this section as all loop plant owned or controlled by the incumbent LEC at a multiunit customer premises between

the minimum point of entry as defined in §68.105 of this chapter and the point of demarcation of the incumbent LEC's network as defined in §68.3 of this chapter.

(i) *Point of technically feasible access.* A point of technically feasible access is any point in the incumbent LEC's outside plant at or near a multiunit premises where a technician can access the wire or fiber within the cable without removing a splice case to reach the wire or fiber within to access the wiring in the multiunit premises. Such points include, but are not limited to, a pole or pedestal, the network interface device, the minimum point of entry, the single point of interconnection, and the feeder/distribution interface.

(ii) *Single point of interconnection.* Upon notification by a requesting telecommunications carrier that it requests interconnection at a multiunit premises where the incumbent LEC owns, controls, or leases wiring, the incumbent LEC shall provide a single point of interconnection that is suitable for use by multiple carriers. This obligation is in addition to the incumbent LEC's obligations, under paragraph (b)(2) of this section, to provide nondiscriminatory access to a subloop for access to multiunit premises wiring, including any inside wire, at any technically feasible point. If the parties are unable to negotiate rates, terms, and conditions under which the incumbent LEC will provide this single point of interconnection, then any issues in dispute regarding this obligation shall be resolved in state proceedings under section 252 of the Act.

(3) *Other subloop provisions—(i) Technical feasibility.* If parties are unable to reach agreement through voluntary negotiations as to whether it is technically feasible, or whether sufficient space is available, to unbundle a copper subloop or subloop for access to multiunit premises wiring at the point where a telecommunications carrier requests, the incumbent LEC shall have the burden of demonstrating to the state commission, in state proceedings under section 252 of the Act, that there is not sufficient space available, or that it is not technically feasible to

unbundle the subloop at the point requested.

(ii) *Best practices.* Once one state commission has determined that it is technically feasible to unbundle subloops at a designated point, an incumbent LEC in any state shall have the burden of demonstrating to the state commission, in state proceedings under section 252 of the Act, that it is not technically feasible, or that sufficient space is not available, to unbundle its own loops at such a point.

(c) *Network interface device.* Apart from its obligation to provide the network interface device functionality as part of an unbundled loop or subloop, an incumbent LEC also shall provide nondiscriminatory access to the network interface device on an unbundled basis, in accordance with section 251(c)(3) of the Act and this part. The network interface device element is a stand-alone network element and is defined as any means of interconnection of customer premises wiring to the incumbent LEC's distribution plant, such as a cross-connect device used for that purpose. An incumbent LEC shall permit a requesting telecommunications carrier to connect its own loop facilities to on-premises wiring through the incumbent LEC's network interface device, or at any other technically feasible point.

(d) *Local circuit switching.* An incumbent LEC shall provide a requesting telecommunications carrier with nondiscriminatory access to local circuit switching, including tandem switching, on an unbundled basis, in accordance with section 251(c)(3) of the Act and this part and as set forth in paragraph (d) of this section.

(1) *Definition.* Local circuit switching is defined as follows:

(i) Local circuit switching encompasses all line-side and trunk-side facilities, plus the features, functions, and capabilities of the switch. The features, functions, and capabilities of the switch shall include the basic switching function of connecting lines to lines, lines to trunks, trunks to lines, and trunks to trunks.

(ii) Local circuit switching includes all vertical features that the switch is capable of providing, including custom calling, custom local area signaling

services features, and Centrex, as well as any technically feasible customized routing functions.

(2) *DS0 capacity (i.e., mass market) determinations.* (i) An incumbent LEC is not required to provide access to local circuit switching on an unbundled basis to requesting telecommunications carriers for the purpose of serving end-user customers using DS0 capacity loops.

(ii) Each requesting telecommunications carrier shall migrate its embedded base of end-user customers off of the unbundled local circuit switching element to an alternative arrangement within 12 months of the effective date of the *Triennial Review Remand Order*.

(iii) Notwithstanding paragraph (d)(2)(i) of this section, for a 12-month period from the effective date of the *Triennial Review Remand Order*, an incumbent LEC shall provide access to local circuit switching on an unbundled basis for a requesting carrier to serve its embedded base of end-user customers. The price for unbundled local circuit switching in combination with unbundled DS0 capacity loops and shared transport obtained pursuant to this paragraph shall be the higher of the rate at which the requesting carrier obtained that combination of network elements on June 15, 2004 plus one dollar, or, the rate the state public utility commission establishes, if any, between June 16, 2004, and the effective date of the *Triennial Review Remand Order*, for that combination of network elements, plus one dollar. Requesting carriers may not obtain new local switching as an unbundled network element.

(3) *DS1 capacity and above (i.e., enterprise market) determinations.* An incumbent LEC is not required to provide access to local circuit switching on an unbundled basis to requesting telecommunications carriers for the purpose of serving end-user customers using DS1 capacity and above loops except where the state commission petitions this Commission for waiver of this finding in accordance with the conditions set forth in paragraph (d)(3)(i) of this section and the Commission grants such waiver.

(i) *State commission inquiry.* In its petition, a state commission wishing to rebut the Commission's finding should petition the Commission to show that requesting telecommunications carriers are impaired without access to local circuit switching to serve end users using DS1 capacity and above loops in a particular geographic market as defined in accordance with paragraph (d)(2)(i) of this section if it finds that operational or economic barriers exist in that market.

(A) In making this showing, the state commission shall consider the following operational characteristics: incumbent LEC performance in provisioning loops; difficulties associated with obtaining collocation space due to lack of space or delays in provisioning by the incumbent LEC; and the difficulties associated with obtaining cross-connects in the incumbent LEC's wire center.

(B) In making this showing, the state commission shall consider the following economic characteristics: the cost of entry into a particular market, including those caused by both operational and economic barriers to entry; requesting telecommunications carriers' potential revenues from serving enterprise customers in that market, including all likely revenues to be gained from entering that market; the prices requesting telecommunications carriers are likely to be able to charge in that market, based on a consideration of the prevailing retail rates the incumbent LEC charges to the different classes of customers in the different parts of the state.

(ii) *Transitional four-line carve-out.* Until the state commission completes the review described in paragraph (b)(2)(iii)(B)(4) of this section, an incumbent LEC shall comply with the four-line "carve-out" for unbundled switching established in *Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, CC Docket No. 96-98, Third Report and Order and Fourth Further Notice of Proposed Rulemaking, 15 FCC Rcd 3822-31, paras. 276-98 (1999), *reversed and remanded in part sub. nom. United States Telecom Ass'n v. FCC*, 290 F.3d 415 (D.C. Cir. 2002).

(A) *DS1 capacity and above end-user transition.* Each requesting telecommunications carrier shall transfer its end-user customers served using DS1 and above capacity loops and unbundled local circuit switching to an alternative arrangement within 90 days from the end of the 90-day state commission consideration period set forth in paragraph (d)(5)(i), unless a longer period is necessary to comply with a "change of law" provision in an applicable interconnection agreement.

(4) *Other elements to be unbundled.* Elements relating to the local circuit switching element shall be made available on an unbundled basis to a requesting carrier to the extent that the requesting carrier is entitled to unbundled local circuit switching as set forth in paragraph (d)(2) of this section.

(i) An incumbent LEC shall provide a requesting telecommunications carrier with nondiscriminatory access to signaling, call-related databases, and shared transport facilities on an unbundled basis, in accordance with section 251(c)(3) of the Act and this part, to the extent that local circuit switching is required to be made available pursuant to paragraph (d)(2)(iii) of this section. These elements are defined as follows:

(A) *Signaling networks.* Signaling networks include, but are not limited to, signaling links and signaling transfer points.

(B) *Call-related databases.* Call-related databases are defined as databases, other than operations support systems, that are used in signaling networks for billing and collection, or the transmission, routing, or other provision of a telecommunications service. Where a requesting telecommunications carrier purchases unbundled local circuit switching from an incumbent LEC, an incumbent LEC shall allow a requesting telecommunications carrier to use the incumbent LEC's service control point element in the same manner, and via the same signaling links, as the incumbent LEC itself.

(I) Call-related databases include, but are not limited to, the calling name database, 911 database, E911 database, line information database, toll

free calling database, advanced intelligent network databases, and downstream number portability databases by means of physical access at the signaling transfer point linked to the unbundled databases.

(2) Service management systems are defined as computer databases or systems not part of the public switched network that interconnect to the service control point and send to the service control point information and call processing instructions needed for a network switch to process and complete a telephone call, and provide a telecommunications carrier with the capability of entering and storing data regarding the processing and completing of a telephone call. Where a requesting telecommunications carrier purchases unbundled local circuit switching from an incumbent LEC, the incumbent LEC shall allow a requesting telecommunications carrier to use the incumbent LEC's service management systems by providing a requesting telecommunications carrier with the information necessary to enter correctly, or format for entry, the information relevant for input into the incumbent LEC's service management system, including access to design, create, test, and deploy advanced intelligent network-based services at the service management system, through a service creation environment, that the incumbent LEC provides to itself.

(3) An incumbent LEC shall not be required to unbundle the services created in the advanced intelligent network platform and architecture that qualify for proprietary treatment.

(C) *Shared transport.* Shared transport is defined as the transmission facilities shared by more than one carrier, including the incumbent LEC, between end office switches, between end office switches and tandem switches, and between tandem switches, in the incumbent LEC network.

(ii) An incumbent LEC shall provide a requesting telecommunications carrier nondiscriminatory access to operator services and directory assistance on an unbundled basis, in accordance with section 251(c)(3) of the Act and this part, to the extent that local circuit switching is required to be unbundled by a state commission, if

the incumbent LEC does not provide that requesting telecommunications carrier with customized routing, or a compatible signaling protocol, necessary to use either a competing provider's operator services and directory assistance platform or the requesting telecommunications carrier's own platform. Operator services are any automatic or live assistance to a customer to arrange for billing or completion, or both, of a telephone call. Directory assistance is a service that allows subscribers to retrieve telephone numbers of other subscribers.

(5) *State commission proceedings.* A state commission shall complete the proceedings necessary to satisfy the requirements in paragraphs (d)(2) and (d)(3) of this section in accordance with paragraphs (d)(5)(i) and (d)(5)(ii) of this section.

(i) *Timing.* A state commission shall complete any initial review applying the triggers and criteria in paragraph (d)(2) of this section within nine months from the effective date of the Commission's *Triennial Review Order*. A state commission wishing to rebut the Commission's finding of non-impairment for DS1 and above enterprise switches must file a petition with the Commission in accordance with paragraph (d)(3) of this section within 90 days from that effective date.

(ii) *Continuing review.* A state commission shall complete any subsequent review applying these triggers and criteria within six months of the filing of a petition or other pleading to conduct such a review.

(e) *Dedicated transport.* An incumbent LEC shall provide a requesting telecommunications carrier with non-discriminatory access to dedicated transport on an unbundled basis, in accordance with section 251(c)(3) of the Act and this part, as set forth in paragraphs (e) through (e)(4) of this section. A "route" is a transmission path between one of an incumbent LEC's wire centers or switches and another of the incumbent LEC's wire centers or switches. A route between two points (e.g., wire center or switch "A" and wire center or switch "Z") may pass through one or more intermediate wire centers or switches (e.g., wire center or

switch "X"). Transmission paths between identical end points (e.g., wire center or switch "A" and wire center or switch "Z") are the same "route," irrespective of whether they pass through the same intermediate wire centers or switches, if any.

(1) *Definition.* For purposes of this section, dedicated transport includes incumbent LEC transmission facilities between wire centers or switches owned by incumbent LECs, or between wire centers or switches owned by incumbent LECs and switches owned by requesting telecommunications carriers, including, but not limited to, DS1-, DS3-, and OCn-capacity level services, as well as dark fiber, dedicated to a particular customer or carrier.

(2) *Availability.* (i) *Entrance facilities.* An incumbent LEC is not obligated to provide a requesting carrier with unbundled access to dedicated transport that does not connect a pair of incumbent LEC wire centers.

(ii) *Dedicated DS1 transport.* Dedicated DS1 transport shall be made available to requesting carriers on an unbundled basis as set forth below. Dedicated DS1 transport consists of incumbent LEC interoffice transmission facilities that have a total digital signal speed of 1.544 megabytes per second and are dedicated to a particular customer or carrier.

(A) *General availability of DS1 transport.* Incumbent LECs shall unbundle DS1 transport between any pair of incumbent LEC wire centers except where, through application of tier classifications described in paragraph (e)(3) of this section, both wire centers defining the route are Tier 1 wire centers. As such, an incumbent LEC must unbundle DS1 transport if a wire center at either end of a requested route is not a Tier 1 wire center, or if neither is a Tier 1 wire center.

(B) *Cap on unbundled DS1 transport circuits.* A requesting telecommunications carrier may obtain a maximum of ten unbundled DS1 dedicated transport circuits on each route where DS1 dedicated transport is available on an unbundled basis.

(C) *Transition period for DS1 transport circuits.* For a 12-month period beginning on the effective date of the Tri-

ennial Review Remand Order, any DS1 dedicated transport UNE that a competitive LEC leases from the incumbent LEC as of that date, but which the incumbent LEC is not obligated to unbundle pursuant to paragraphs (e)(2)(ii)(A) or (e)(2)(ii)(B) of this section, shall be available for lease from the incumbent LEC at a rate equal to the higher of 115 percent of the rate the requesting carrier paid for the dedicated transport element on June 15, 2004, or, 115 percent of the rate the state commission has established or establishes, if any, between June 16, 2004, and the effective date of the *Triennial Review Remand Order*, for that dedicated transport element. Where incumbent LECs are not required to provide unbundled DS1 transport pursuant to paragraphs (e)(2)(ii)(A) or (e)(2)(ii)(B) of this section, requesting carriers may not obtain new DS1 transport as unbundled network elements.

(iii) *Dedicated DS3 transport.* Dedicated DS3 transport shall be made available to requesting carriers on an unbundled basis as set forth below. Dedicated DS3 transport consists of incumbent LEC interoffice transmission facilities that have a total digital signal speed of 44.736 megabytes per second and are dedicated to a particular customer or carrier.

(A) *General availability of DS3 transport.* Incumbent LECs shall unbundle DS3 transport between any pair of incumbent LEC wire centers except where, through application of tier classifications described in paragraph (e)(3) of this section, both wire centers defining the route are either Tier 1 or Tier 2 wire centers. As such, an incumbent LEC must unbundle DS3 transport if a wire center on either end of a requested route is a Tier 3 wire center.

(B) *Cap on unbundled DS3 transport circuits.* A requesting telecommunications carrier may obtain a maximum of 12 unbundled DS3 dedicated transport circuits on each route where DS3 dedicated transport is available on an unbundled basis.

(C) *Transition period for DS3 transport circuits.* For a 12-month period beginning on the effective date of the *Triennial Review Remand Order*, any DS3

dedicated transport UNE that a competitive LEC leases from the incumbent LEC as of that date, but which the incumbent LEC is not obligated to unbundle pursuant to paragraphs (e)(2)(iii)(A) or (e)(2)(iii)(B) of this section, shall be available for lease from the incumbent LEC at a rate equal to the higher of 115 percent of the rate the requesting carrier paid for the dedicated transport element on June 15, 2004, or, 115 percent of the rate the state commission has established or establishes, if any, between June 16, 2004, and the effective date of the *Triennial Review Remand Order*, for that dedicated transport element. Where incumbent LECs are not required to provide unbundled DS3 transport pursuant to paragraphs (e)(2)(iii)(A) or (e)(2)(iii)(B) of this section, requesting carriers may not obtain new DS3 transport as unbundled network elements.

(iv) *Dark fiber transport.* Dedicated dark fiber transport shall be made available to requesting carriers on an unbundled basis as set forth below. Dark fiber transport consists of unactivated optical interoffice transmission facilities.

(A) *General availability of dark fiber transport.* Incumbent LECs shall unbundle dark fiber transport between any pair of incumbent LEC wire centers except where, though application of tier classifications described in paragraph (e)(3) of this section, both wire centers defining the route are either Tier 1 or Tier 2 wire centers. As such, an incumbent LEC must unbundle dark fiber transport if a wire center on either end of a requested route is a Tier 3 wire center.

(B) *Transition period for dark fiber transport circuits.* For an 18-month period beginning on the effective date of the *Triennial Review Remand Order*, any dark fiber dedicated transport UNE that a competitive LEC leases from the incumbent LEC as of that date, but which the incumbent LEC is not obligated to unbundle pursuant to paragraphs (e)(2)(iv)(A) or (e)(2)(iv)(B) of this section, shall be available for lease from the incumbent LEC at a rate equal to the higher of 115 percent of the rate the requesting carrier paid for the dedicated transport element on June 15, 2004, or, 115 percent of the rate the

state commission has established or establishes, if any, between June 16, 2004, and the effective date of the *Triennial Review Remand Order*, for that dedicated transport element. Where incumbent LECs are not required to provide unbundled dark fiber transport pursuant to paragraphs (e)(2)(iv)(A) or (e)(2)(iv)(B) of this section, requesting carriers may not obtain new dark fiber transport as unbundled network elements.

(3) *Wire center tier structure.* For purposes of this section, incumbent LEC wire centers shall be classified into three tiers, defined as follows:

(i) Tier 1 wire centers are those incumbent LEC wire centers that contain at least four fiber-based collocators, at least 38,000 business lines, or both. Tier 1 wire centers also are those incumbent LEC tandem switching locations that have no line-side switching facilities, but nevertheless serve as a point of traffic aggregation accessible by competitive LECs. Once a wire center is determined to be a Tier 1 wire center, that wire center is not subject to later reclassification as a Tier 2 or Tier 3 wire center.

(ii) Tier 2 wire centers are those incumbent LEC wire centers that are not Tier 1 wire centers, but contain at least 3 fiber-based collocators, at least 24,000 business lines, or both. Once a wire center is determined to be a Tier 2 wire center, that wire center is not subject to later reclassification as a Tier 3 wire center.

(iii) Tier 3 wire centers are those incumbent LEC wire centers that do not meet the criteria for Tier 1 or Tier 2 wire centers.

(4) *Routine network modifications.* (i) An incumbent LEC shall make all routine network modifications to unbundled dedicated transport facilities used by requesting telecommunications carriers where the requested dedicated transport facilities have already been constructed. An incumbent LEC shall perform all routine network modifications to unbundled dedicated transport facilities in a nondiscriminatory fashion, without regard to whether the facility being accessed was constructed on behalf, or in accordance with the specifications, of any carrier.

(ii) A routine network modification is an activity that the incumbent LEC regularly undertakes for its own customers. Routine network modifications include, but are not limited to, rearranging or splicing of cable; adding an equipment case; adding a doubler or repeater; installing a repeater shelf; and deploying a new multiplexer or reconfiguring an existing multiplexer. They also include activities needed to enable a requesting telecommunications carrier to light a dark fiber transport facility. Routine network modifications may entail activities such as accessing manholes, deploying bucket trucks to reach aerial cable, and installing equipment casings. Routine network modifications do not include the installation of new aerial or buried cable for a requesting telecommunications carrier.

(f) *911 and E911 databases.* An incumbent LEC shall provide a requesting telecommunications carrier with nondiscriminatory access to 911 and E911 databases on an unbundled basis, in accordance with section 251(c)(3) of the Act and this part.

(g) *Operations support systems.* An incumbent LEC shall provide a requesting telecommunications carrier with nondiscriminatory access to operations support systems on an unbundled basis, in accordance with section 251(c)(3) of the Act and this part. Operations support system functions consist of pre-ordering, ordering, provisioning, maintenance and repair, and billing functions supported by an incumbent LEC's databases and information. An incumbent LEC, as part of its duty to provide access to the pre-ordering function, shall provide the requesting telecommunications carrier with nondiscriminatory access to the same detailed information about the loop that is available to the incumbent LEC.

[68 FR 52295, Sept. 4, 2003, as amended at 68 FR 64000, Nov. 12, 2003; 69 FR 54591, Sept. 9, 2004; 69 FR 77953, Dec. 29, 2004; 70 FR 8953, Feb. 24, 2005]

§ 51.320 Assumption of responsibility by the Commission.

If a state commission fails to exercise its authority under § 51.319, any party seeking that the Commission step into the role of the state commis-

sion shall file with the Commission and serve on the state commission a petition that explains with specificity the bases for the petition and information that supports the claim that the state commission has failed to act. Subsequent to the Commission's issuing a public notice and soliciting comments on the petition from interested parties, the Commission will rule on the petition within 90 days of the date of the public notice. If it agrees that the state commission has failed to act, the Commission will assume responsibility for the proceeding, and within nine months from the date it assumed responsibility for the proceeding, make any findings in accordance with the Commission's rules.

[68 FR 52305, Sept. 2, 2003]

§ 51.321 Methods of obtaining interconnection and access to unbundled elements under section 251 of the Act.

(a) Except as provided in paragraph (e) of this section, an incumbent LEC shall provide, on terms and conditions that are just, reasonable, and nondiscriminatory in accordance with the requirements of this part, any technically feasible method of obtaining interconnection or access to unbundled network elements at a particular point upon a request by a telecommunications carrier.

(b) Technically feasible methods of obtaining interconnection or access to unbundled network elements include, but are not limited to:

(1) Physical collocation and virtual collocation at the premises of an incumbent LEC; and

(2) Meet point interconnection arrangements.

(c) A previously successful method of obtaining interconnection or access to unbundled network elements at a particular premises or point on any incumbent LEC's network is substantial evidence that such method is technically feasible in the case of substantially similar network premises or points. A requesting telecommunications carrier seeking a particular collocation arrangement, either physical or virtual, is entitled to a presumption that such arrangement is