

**BEFORE THE  
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION**

**In the Matter of Telecommunications  
Collocation Rulemaking**

---

)  
) **Docket No. UT-990582**  
)

**COMMENTS OF TELIGENT SERVICES, INC.**

**TELIGENT SERVICES, INC.**

Terri B. Natoli  
Victoria A. Schlesinger  
Suite 400  
8065 Leesburg Pike  
Vienna, VA 22182  
(703) 762-5100

Attorneys for  
Teligent Services, Inc.

**ATER WYNNE LLP**

Arthur A. Butler  
601 Union Street  
Suite 5450  
Seattle, WA 98101  
(206) 623-4711

Date: March 15, 2000

Teligent Services, Inc. ("Teligent") hereby submits its Comments in response to the Commission's Notice, dated February 15, 2000, in the above-captioned proceeding.<sup>1</sup>

## INTRODUCTION

Teligent is a full-service competitive telecommunications company offering facilities-based switched local exchange and interexchange services in Washington state. Unlike many competitive carriers that utilize fiber-based technologies, Teligent primarily utilizes fixed wireless technology to route its competitive services. Specifically, Teligent uses point-to-point and point-to-multipoint microwave frequencies pursuant to licenses issued by the Federal Communications Commission ("FCC") to bring the benefits of local competition to Washington consumers.

As a new competitor, Teligent must interconnect its facilities with those of other carriers operating in its service area, particularly incumbent local exchange carriers ("ILECs"). Under the Telecommunications Act of 1996 ("1996 Act"), ILECs are required to offer interconnection in the form of physical collocation at rates, terms and conditions that are just, reasonable, and nondiscriminatory.<sup>2</sup> Although Teligent to date has not utilized physical collocation arrangements to interconnect its facilities with ILECs in the state of Washington (opting instead for an entrance facility method of interconnection to facilitate speed to market), it has negotiated collocation

---

<sup>1</sup> See Notice of Opportunity to File Supplemental Comments Re Collocation Rulemaking, Docket No. UT-990582, dated February 15, 2000.

<sup>2</sup> 47 U.S.C. §251 (c)(6).

provisions, including microwave collocation, into its interconnection agreements.<sup>3</sup>

In its Notice, the Commission seeks comment on whether it should adopt the FCC's collocation rule (Section 51.323) as a state regulation, and on the proposed rule language that was jointly submitted by AT&T Communications, TCG Seattle, NEXTLINK Washington, Inc., NorthPoint Communications, Inc., GST Telecom Washington, Inc., Advanced Telecom Group, Inc., and MCI WorldCom (collectively "Joint Commenters"). As a general matter, Teligent supports the proposed rule language submitted by the Joint Commenters, urges the Commission to adopt the rule contained in the Notice, and equally important to explicitly recognize that microwave collocation, *i.e.*, collocation of microwave transmission facilities, is a required method of physical collocation in its proposed rules. As explained below, a failure by the Commission to explicitly recognize microwave collocation as a required method of physical collocation would vitiate the technology neutral principles upon which the 1996 Act was based. Moreover, it would be contrary to Section 251(c)(6) of the 1996 Act, which requires that collocation be provided under rates, terms and conditions that are nondiscriminatory, as well as Section 51.323 (d)(4) of the FCC's rules.

---

<sup>3</sup> For instance, Teligent's approved interconnection agreements with U S WEST and GTE in Washington state contain microwave collocation provisions.

## COMMENTS

Teligent supports the recommendation of the Joint Commenters that the Commission use this opportunity to consolidate the FCC's minimum collocation requirements and the Commission's requirements into a single set of rules applicable to collocation provided by all ILECs in Washington state. The Commission should adopt rules that incorporate the FCC's requirements and supplement those requirements by adopting additional rules that further advance the FCC's and the Commission's goal of preventing space exhaust by promoting efficient collocation arrangements and to decrease costs competitors incur when collocating at ILEC central offices.

To be consistent with the requirements of the 1996 Act and the FCC's collocation requirements, and to promote efficient competition in Washington state, Teligent recommends that the Commission specifically incorporate microwave interconnection collocation into the rule language as a required physical collocation method. Microwave collocation is a method of interconnection whereby microwave transmission equipment is physically collocated on the rooftop of the ILEC central office. Such interconnection includes the placement of microwave antennas on the rooftop or other suitable exterior space of ILEC central offices. Under a microwave collocation arrangement, the CLEC, at its own expense, procures, installs and maintains the microwave equipment located on the rooftop or other exterior mounting of the ILEC central office. The CLEC then has the option of procuring, installing and maintaining the cable and power source from its

exterior microwave facilities to the physical or virtual collocation space inside the central office through inside conduit space leased to it by the ILEC, much the same way a facilities-based fiber carrier brings its fiber in from the ground up to its collocation space within the ILEC central office.<sup>4</sup>

The FCC recognizes microwave collocation as a legitimate form of physical collocation and requires that it be made available to CLECs. Under the FCC's Rules, "[w]hen an incumbent LEC provides physical collocation, virtual collocation, or both, the incumbent LEC shall . . . permit physical collocation of microwave transmission facilities except where such collocation is not practical for technical reasons or because of space limitations, in which case virtual collocation of such facilities is required where technically feasible."<sup>5</sup> A similar provision should be included in the Commission's collocation rules.

Moreover, Teligent submits that it would be discriminatory for the Commission to subject CLECs utilizing wireless technology to more burdensome or costly procedures for interconnection via microwave facilities than those applicable to other types of technology. Indeed, Section 251(c)(6) of the 1996 Act requires that physical collocation be provided on a nondiscriminatory

---

<sup>4</sup> The ILEC would also provide the CLEC with access to its exterior mounted microwave equipment and to its facilities and equipment in the conduit running from the microwave equipment to the collocation space 24 hours per day, seven days per week.

<sup>5</sup> 47 C.F.R. § 51.323(d)(4). *See also id.*, §§ 51.323(b)(2) (defining equipment covered by collocation obligation to include that which is collocated to terminate basic transmission facilities pursuant to § 64.1402); §64.1402(b) (establishing the right of interconnecting carriers to collocate microwave transmission facilities as part of the FCC's expanded interconnection regime).

basis.<sup>6</sup> For this reason, the rates, terms and conditions for microwave collocation should, to the extent practicable, mirror those adopted for other forms of physical collocation. For instance, the per square foot recurring rate charged for exterior collocation space should be no higher than the per square foot recurring rate applied to interior collocation space in the same building.<sup>7</sup> Indeed, microwave collocation, as a form of physical collocation, is substantially similar to conventional physical collocation arrangements except for the need to place CLEC interconnection-related equipment on the central office rooftop (or other suitable exterior space) in addition to within the central office.

Attached to these Comments is a proposed additional section to be added to the Joint Commenters' collocation rule that would recognize microwave collocation as a standard interconnection method and includes the additional rate elements necessary for microwave collocation. Adoption of these additional provisions would eliminate the need to address this requirement pursuant to a *bona fide* request or individual case basis ("ICB") process and experience the lengthy delays and extra costs associated therewith. These additional rate elements relate primarily to the equipment located on the exterior of the central office. Once inside the central

---

<sup>6</sup> 47 U.S.C. § 251(c)(6).

<sup>7</sup> In fact, rates charged for exterior collocation space should arguably be less than those charged for interior collocation space due to the extra elements required for interior space such as climate control, conditioning, lighting, etc.

office, Teligent does not believe there is any basis for rate element or pricing differences from other types of technology to reach the interior collocation space.

As mentioned earlier, requests for physical or virtual collocation through microwave interconnection, should be subject to the same procedures as applications for physical and virtual collocation through fiber, copper, or other types of transmission facilities, with the additional information included to reflect the amount of exterior rooftop space requested on a per square foot basis as well as a description of the dimensions of such equipment to be located in the space.

The proposed additional section addresses the issues specific to microwave collocation arrangements. With the growing number of competitive carriers utilizing fixed-wireless technology, *i.e.*, 24 GHz, 39 GHz, and LMDS, it is important for the Commission to recognize this technology and adopt rules that incorporate efficient interconnection arrangements for carriers utilizing this technology.

## CONCLUSION

For the foregoing reasons, Teligent requests that the Commission adopt the collocation rule proposed by the Joint Commenters as amended to recognize interconnection through microwave collocation as an additional method of physical collocation. Specifically, Teligent urges the Commission to adopt, as an additional section to the Joint Commenters' proposed collocation rule, the language attached to these Comments.

Respectfully submitted,

**TELIGENT SERVICES, INC.**

**TELIGENT SERVICES, INC.**

Terri B. Natoli  
Victoria A. Schlesinger  
Suite 400  
8065 Leesburg Pike  
Washington, D.C. 20036  
(703) 762-5100

By: \_\_\_\_\_

**ATER WYNNE LLP**  
**Arthur A. Butler, WSBA No. 04678**

601 Union Street  
Suite 5450  
Seattle, WA 98101  
(206) 623-4177  
Attorneys for TELIGENT SERVICES, INC.

**COMMENTS OF TELIGENT SERVICES, INC. - 7**

ATER WYNNE LLP  
601 UNION STREET, SUITE 5450  
SEATTLE, WA 98101-2327  
(206) 623-4711



## Attachment

### **MICROWAVE COLLOCATION INSERT**

- 1.0 Where technically feasible, the ILEC will provide for physical collocation of a fixed-wireless CLEC's microwave equipment on the roofs or other suitable exterior spaces of the ILEC's Central Office buildings ("Microwave Collocation"). Such equipment will be limited to that which is used or useful for interconnection with the ILEC's network or for access to the ILEC's unbundled network elements.
- 1.0.1 Microwave Collocation includes placement of supporting masts, roof mounts, and microwave antenna(e) on the roofs or other suitable exterior spaces of the ILEC's Central Office buildings. The elements listed below reflect requirements for Microwave Collocation, which shall be provided in accordance with the rates, terms and conditions set forth herein. It is acknowledged that Microwave Collocation requires an unobstructed line-of-sight.
- 1.1 Provisioning Process and Fees
  - 1.1.1 Initial Site Visit
    - 1.1.1.1 CLEC will provide a Site Visit Request to the ILEC, in writing, setting forth the names of the ILEC Central Office Building(s) CLEC wishes to visit for potential Microwave Collocation. Such site visit consists of CLEC representative and appropriate the ILEC personnel visiting a the ILEC Central Office building for the purpose of determining whether an unobstructed line-of-sight may be technically feasible. Such Site Visit does not obligate CLEC to request, or the ILEC to provide, Microwave Collocation on the site. The site visit will take place within five (5) business days of receipt by the ILEC of CLEC's Site Visit Request or as soon thereafter as can be scheduled by the Parties.
    - 1.1.1.2 CLEC will submit a Site Visit Request fee of \$250.00 for each site requested with each Site Visit not to exceed two hours. Charges for site visits that take longer than two (2) hours will be charged by the ILEC to CLEC at the ILEC's loaded labor rate on a per hour basis.
  - 1.1.2 Application and Approval
    - 1.1.2.1 CLEC shall submit a collocation application fee and form for each central office building where CLEC seeks Microwave Collocation. The form and fees will apply both to space on the roof as well as space inside the ILEC central office. Within ten (10) days of receiving the applications the ILEC shall inform CLEC (a) if space is

available inside the central office for the termination equipment and (b) if space is available on the roof, parapet or other exterior structures.

1.1.2.2 If the ILEC concludes that rooftop/exterior space that provides unobstructed line-of-sight does not appear to be technically feasible, the ILEC will provide to CLEC a written explanation of such technical unfeasibility. Such explanation shall also be provided within ten (10) days of the ILEC's receipt of the collocation application.

### 1.1.3 Pre-Construction/Technical Site Visit

1.1.3.1 Within ten (10) business days after the ILEC has approved CLEC's Microwave Collocation application for a given Central Office building, the Parties shall visit the subject Central Office building to develop specific engineering and related technical data for use by the ILEC to prepare a quote.

1.1.3.2 Within five (5) business days after the site visit conducted under section 1.2.3.1, CLEC shall provide the ILEC with the following data for the subject Central Office building:

1.1.3.2.1 Type of antenna mount (pipe, penetrating, non-penetrating);

1.1.3.2.2 Type of equipment to be collocated within CLEC's cage (vendor, capacity);

1.1.3.2.3 Line of sight requirements (Azimuth) Station Name, Call Sign, Latitude, Longitude, Primary Antenna Type, Antenna Center Line (C/L), Antenna Gain, Diversity Antenna type (if used), Diversity Antenna C/L, Diversity Antenna Gain, Equipment Type, Equipment Emission, Power (dBm/Watts), Receive Level (dBm), EIRP (dBm/Watts), Transmit Frequency (MHz); and

1.1.3.2.4 Other relevant information as identified at the site visit.

### 1.1.4 Provision of Quote(s)

1.1.4.1 Within thirty (30) days of receiving the information set forth in section 1.2.3.2, the ILEC will provide, as more fully described below, (a) a written assessment of the work to be performed, (b) Track A and/or Track B quote(s), and (c) a quote for the Monthly Recurring Charges pursuant to the rates and terms set forth in this Agreement. The ILEC or its designated subcontractors shall perform all necessary work outside of the Microwave Collocation arrangement (including work associated with grounding, power

and building modifications) unless otherwise agreed by the Parties. The quote(s) shall reflect the specifications submitted by CLEC and may change based on the actual field conditions encountered during construction. All the ILEC quotes shall be based upon the most cost-effective and practical method of accomplishing the tasks attendant to the proposed interconnection and collocation and hourly rates for the ILEC personnel shall be billed at their standard labor rate.

#### 1.1.4.1.1 Written Assessment

This shall include:

- 1.1.4.1.1.1 A statement of technical feasibility, including information on line of sight and any obstructions;
  - 1.1.4.1.1.2 Preliminary construction drawings that show the relevant roof plan, elevations as necessary, and support structure detail; and
  - 1.1.4.1.1.3 Electrical drawings.
- 1.1.4.1.2 Track A Quote

A Track A quote shall state that the ILEC will be responsible for performing the necessary Microwave Collocation work. A Track A quote shall set forth separate, itemized charges for the following work, to the extent such work is deemed necessary:

#### 1.1.4.1.2.1 Architect Fees

The standard building permit application process will be handled by the ILEC's architect. Any Permit requirements will be handled as provided below.

#### 1.1.4.1.2.2 Engineering Study

An Engineering Study will only be performed if necessary to maintain the integrity of the rooftop location or if required by a relevant permitting agency. The fee quoted for the study will be the sum of the hourly charges for time spent by the ILEC's Engineers.

#### 1.1.4.1.2.3 Permitting Review

**COMMENTS OF TELIGENT SERVICES, INC. - 10**

ATER WYNNE LLP  
601 UNION STREET, SUITE 5450  
SEATTLE, WA 98101-2327

This shall be the sum of the hourly charges of the ILEC Real Estate and/or Project Managers whose time was reasonably necessary and actually spent reviewing material and/or assisting CLEC in the permitting process. The ILEC shall have final approval authority on all proposed conditions (which shall not be unreasonably withheld) imposed by relevant jurisdictions and the ILEC shall have the right to be represented at all hearings in connection with governmental approvals.

#### 1.1.4.1.2.4 Microwave Equipment Installation

This shall include:

- 1.1.4.1.2.4.1 Mounting of microwave antenna(e) and support structure, as required;
- 1.1.4.1.2.4.2 Installation of required coaxial cable;
- 1.1.4.1.2.4.3 Installation of any required conduit to the interior physical Collocation space;
- 1.1.4.1.2.4.4 Coring, if required;
- 1.1.4.1.2.4.5 Weatherproofing, if required;
- 1.1.4.1.2.4.6 Electrical modifications, including grounding; and
- 1.1.4.1.2.4.7 Antenna specialist, if required.

#### 1.1.4.1.2.5 The ILEC Supervision of Installation

This shall be the sum of hourly charges of any ILEC Real Estate Specialists or Project Managers who monitor the installation performed by the ILEC's contractor. All necessary monitoring and related activity undertaken by the ILEC employees shall not exceed a total of two hours per day of construction unless circumstances reasonably warrant additional time.

#### 1.1.4.1.2.6 Special Security Construction

If the ILEC demonstrates that new, secure access to the Microwave Collocation location is reasonably

necessary or if CLEC desires such access, the costs associated with the construction of such access shall be described on a separate schedule to be provided by the ILEC to CLEC.

#### 1.1.4.1.3 Track B Quote

A Track B quote shall set forth a list of the ILEC-approved contractors from which CLEC may select to perform the necessary work for the Microwave Collocation arrangement. CLEC may also perform the necessary work itself if it is deemed an ILEC-approved contractor. If CLEC elects to subcontract the work for the Microwave Collocation arrangement, CLEC will also pay the ILEC to monitor and/or supervise such work, as reasonably required. All such work contracted by CLEC will be performed under the reasonable supervision of the ILEC personnel and comply with the ILEC's nondiscriminatory practices and procedures. Escorted access will also be provided as necessary by the ILEC, at CLEC's expense, as described below. A Track B quote shall set forth separate, itemized charges for the following work, to the extent to such work is deemed necessary:

##### 1.1.4.1.3.1 Architectural Plan Review

This shall be the sum of hourly charges of the ILEC Architects necessary to review the plans. The ILEC shall not charge in excess of two hours for such review of draft(s), unless the ILEC demonstrates that circumstances reasonably warrant additional time or the Parties agree that more time is required.

##### 1.1.4.1.3.2 Permitting Review

This shall be the sum of the hourly charges of the ILEC Real Estate and/or Project Managers whose time was reasonably necessary and actually spent reviewing permitting material and/or assisting CLEC in the permitting process. The ILEC shall have final approval authority on all proposed conditions, (which shall not be unreasonably

withheld) imposed by relevant jurisdictions and the ILEC shall have the right to be represented at all hearings in connection with governmental approvals.

#### 1.1.4.1.3.3 Exterior (and Related Interior) Building Modification Work

The ILEC will include a quote for the ILEC to perform coring within the Central Office, roof strengthening or any other exterior building modification, that may be required.

#### 1.1.4.1.3.4 Supervision of General Contractor

This shall be the sum of the hourly charges of any the ILEC Real Estate Building Specialists or Project Managers who monitor the installation performed by CLEC's contractor. All necessary monitoring and related activity undertaken by the ILEC employees shall not exceed a total of two (2) hours per day of construction unless the ILEC demonstrates that circumstances reasonably warrant additional time or the Parties agree that more time is required.

#### 1.1.4.1.3.5 Special Security Construction

This shall be the same element as set forth in section 1.2.4.1.2.6 above.

#### 1.1.4.1.4 Recurring Charges

These consist of:

##### 1.1.4.1.4.1 Monthly Recurring Roof-Top Space Rental Fee

The Monthly Recurring Roof-Top Space Rental Fee shall be on a per square foot basis as set forth in this Agreement. The Commencement Date for payment

of the Space Rental Fee shall be the date the space is approved and turned over to CLEC for use.

#### 1.1.4.1.4.2 Escorted Access

Where necessary, the ILEC will provide escorted access to space on the roof based on the hourly rates set forth in Attachment A. The level of the ILEC personnel assigned to escort CLEC shall be commensurate with CLEC's needs.

1.1.4.2 Except as provided below, the ILEC shall always provide a "Track B" quote, provided that the ILEC shall be permitted, where unusual circumstances warrant, to provide only a "Track A" quote. Where a Track A quote is provided, CLEC shall have the right to also provide a quote from an ILEC-approved contractor. If such CLEC-provided quote is more cost-effective and efficient to CLEC — either on price or implementation schedule — the ILEC must either use such CLEC-selected contractor or provide that the ILEC's contractor will match the price and implementation schedule of the CLEC-selected contractor.

1.1.4.2.1 Where CLEC-provided Track B quote is provided, all contractors shall be the ILEC - approved contractors. The ILEC reserves the right to object to any part of the quote or work on the grounds of quality of work, performance specifications, or scheduling, and to either select another contractor or provide a quote to CLEC to perform the work itself, provided that in either event CLEC shall not be adversely affected. The parties agree to cooperate so as to complete the necessary work in an expeditious, high quality and cost-effective manner.

1.1.4.3 All quotes shall be valid for ninety (90) days from issuance, and CLEC shall accept, reject or request changes within such time period. To accept a quote, CLEC shall so state in writing and shall pay the ILEC 50 percent of the total estimated charges ("Initial Payment") with the balance due upon completion of the Microwave Collocation area and any necessary supporting electrical or building modification work. The date of such payment shall be the Start Date for purposes of this Agreement.

#### 1.1.5 Permit Process

1.1.5.1 CLEC shall be responsible for obtaining all relevant Permits and shall bear all costs and fees. CLEC shall regularly apprise the ILEC of the status of such permitting and consult with the ILEC as reasonably necessary.

1.1.5.2 The ILEC shall cooperate with CLEC, and CLEC shall pay the ILEC the hourly rates for time reasonably necessary and actually spent by the ILEC Real Estate of Project Managers on the permitting process. The ILEC shall have final authority and exercise it in a reasonable manner on all proposed jurisdictional conditions and has the right to be represented at all Permit hearings.

#### 1.1.6 Schedule

1.1.6.1 The Initial Microwave Collocation Method of Procedure (MOP) meeting between the Parties and the contractor(s) shall be held within ten (10) business days of the Start Date of receipt of all necessary permits, whichever is later.

1.1.6.2 Installation of the Microwave Collocation shall be completed within ten (10) business days of the MOP, provided that (a) CLEC has delivered all the necessary microwave and related equipment to the Central Office prior to or on the date requested by the contractor; (b) all necessary permits have been issued; (c) there is not inclement weather which makes it commercially unreasonable to perform work (e.g., rain or snow); (d) there are no concurrent the ILEC projects (disclosed at the initial MOP or being performed in an emergency) that interfere with the completion of CLEC's proposed project; and (e) there are no Acts of God or other force majeure which prohibit the installation.

1.1.6.3 A final project acceptance meeting shall be held by the Parties within five (5) business days of the installation completion date. At this final meeting, the Parties shall review and approve the hand-off of the Microwave Collocation.

#### 1.2 Equipment and Maintenance

1.2.1 CLEC shall be responsible for providing, at its sole expense, the antenna(e), brackets, connectors, support structure, and weather-proofing materials for such support structure or antenna(e) required for the Microwave Collocation.

1.2.2 CLEC's antenna(e) shall be secured with penetrating or non-penetrating roof mounts, as agreed to by the Parties.

1.2.3 CLEC is responsible for securing or providing cabling from the radio frequency equipment in the Microwave Collocation space to the CLEC collocation space within the



subject the ILEC Central Office. The ILEC shall permit CLEC to utilize existing the ILEC cabling for that purpose.

- 1.2.4 CLEC shall be solely responsible for final adjustments (e.g., pointing) of the antenna(e). At no time shall an antenna(e) be directed across open roof space without approval of the ILEC which shall not be unreasonably withheld.
- 1.2.5 CLEC shall be guaranteed a clear line of light from the antenna mount and the edge of the ILEC's roof line once the ILEC has agreed that the microwave collocation is feasible. In advance of taking or authorizing any action that would obstruct CLEC's existing line of sight, the ILEC shall work with CLEC to move or raise the CLEC antenna or mount to achieve a clear line of sight that is acceptable to CLEC. The costs of such modifications will be borne by the ILEC.
- 1.2.6 Except as otherwise provided in this Agreement, at its sole cost and expense, CLEC shall maintain CLEC's provided Microwave equipment, including without limitation, performing all necessary repairs, replacements, and restorations. In addition, CLEC shall keep its Microwave Collocation space in a good, neat, sanitary and workmanlike condition. If CLEC fails to keep its Microwave Collocation space in such workmanlike condition, after ten (10) days written notice from the ILEC, the ILEC shall have the right but not the obligation to clean up the space on CLEC's behalf. In such event, CLEC shall be liable to the ILEC for the cost and expense of such work, upon written demand from the ILEC.
- 1.2.7 CLEC may not initiate new construction or make Major Alterations to its rooftop space or microwave transmission facilities without prior written approval from the ILEC, which consent will not unreasonably be withheld. The ILEC shall respond to requests for such approval within a reasonable timeframe not to exceed thirty (30) calendar days. "Major Alterations" shall include (a) construction by CLEC of additional support equipment within its rooftop space, (b) addition of mounted equipment not expressly contemplated by the Microwave Collocation Application relating to such rooftop space and microwave transmission facilities, and (c) any modification of the actual rooftop space. "Major Alterations" shall not include replacement of mounted equipment with similar-sized or smaller mounted equipment or similar functionality, addition of mounted equipment expressly contemplated by the Microwave Collocation Application relating to such rooftop space and microwave transmission facilities, and routine repairs and maintenance to such microwave transmission facilities.
- 1.2.8 CLEC equipment placed in the Microwave Collocation space must comply with Bellcore Network Equipment Building System (NEBS) Generic Equipment Requirements (TR-

NWT-000063), Electromagnetic Compatibility and Electrical Safety Generic Criteria for Network Telecommunication Equipment (TR-NWT-001089), and FCC OET Bulletin 65 dated 08/97.

- 1.2.9 If at any time the ILEC reasonably determines that any of CLEC's facilities or equipment or the installation of CLEC's facilities or equipment does not meet the requirements set forth in this Agreement, CLEC will be responsible for the costs associated with the removal of such facilities or equipment or modification of the facilities or equipment or installation thereof to render it compliant. If CLEC fails to correct any non-compliance with these standards or fails to demonstrate that the equipment is compliant within fifteen (15) days' written notice to CLEC, the ILEC may have the facilities or equipment removed or the condition corrected at CLEC's expense.
- 1.2.10 If the ILEC reasonably determines that any CLEC activities, equipment or facilities are unsafe or are in violation of any applicable fire, environmental, health, safety or other laws or regulations, the ILEC has the right to immediately stop such activities or the operation of such facilities or equipment or place it on hold. When such conditions do not pose an immediate threat to the safety of the ILEC employees, interfere with the performance of the ILEC service obligations, or pose an immediate threat to the physical integrity of the roof, the walls, the conduit system, the cable facilities, or any other facility of the ILEC, the ILEC will provide CLEC twenty (20) days written notice to correct the condition. However, when such conditions pose an immediate threat, the ILEC may perform such work and/or take such action that the ILEC deems necessary without prior notice to CLEC. The cost of this work and/or actions will be at CLEC's expense.

### 1.3 Property Right Conferred

- 1.3.1 Notwithstanding anything contained herein to the contrary, Microwave Collocation shall not confer or be deemed to confer any property interest or right in the ILEC's property, and the rights conferred hereunder shall constitute merely a non-exclusive license to use a portion of the ILEC's property solely for the purposes set forth herein.
- 1.3.2 Title to CLEC's Microwave Collocation equipment shall remain in CLEC as the property of CLEC and shall not become fixtures to the ILEC's property.

### 1.4 General Responsibility of the Parties

**COMMENTS OF TELIGENT SERVICES, INC. - 17**

ATER WYNNE LLP  
601 UNION STREET, SUITE 5450  
SEATTLE, WA 98101-2327

- 1.4.1 CLEC shall obtain any and all applicable and necessary permits, variances, licenses, approvals and authorizations from governmental agencies with jurisdiction, including without limitation, conditional use permits and building permits, FCC licenses and FAA approval, to operate and maintain CLEC's fixed-wireless facilities during the Term of this Agreement.
- 1.4.2 CLEC shall not use the ILEC's property or permit CLEC's agents or contractors to do anything in or about the Central Office(s) in conflict with any applicable law affecting the condition, use or occupancy of the property or the installation, operation or maintenance of CLEC's Microwave Collocation equipment. CLEC shall not commit any public or private nuisance or any other act or practice which might or would materially disturb the quiet enjoyment of any occupant of nearby properties.
- 1.4.3 Where the ILEC performs the installation work (i.e., Track A), the ILEC shall select the architect, engineers, surveyors, contractors, suppliers, consultants and subcontractors which may be necessary to develop plans, furnish materials and equipment, and perform construction work. The ILEC shall manage all such work in accordance with the plans and specifications approved by the Parties, all applicable laws, codes and regulations, and shall require that all contractors perform their work in a good workmanlike manner. The ILEC shall require that all Contractors include CLEC as an additional insured to any policies of insurance maintained by the Contractor for purposes of the Work. The ILEC shall not be liable for the work performed, materials, supplies, or work products furnished by any contractor, and that CLEC shall look solely to the contractor and any warranties, indemnification or insurance furnished by such Contractor, waiving and releasing the ILEC from any claim or liability therefrom except to the extent of the negligence or willful misconduct of the ILEC in the performance of its project management activities.
- 1.4.4 It is acknowledged that the ILEC may have existing wireless communications facilities of its own or of other tenants or licensees on or at the ILEC's Central Office, and/or the ILEC may desire from time to time throughout the term of this Agreement to enter into agreements with other wireless communications providers for the installation, operation and maintenance of communications facilities on or at the ILEC's Property ("Aggregating Providers"). CLEC shall cooperate with the ILEC and all other Aggregating Providers with respect to the installation, operation use and maintenance of their equipment and facilities, and all necessary alterations, modifications and other improvements to the ILEC's property, including utility connections and access. Subject to ownership of any exclusive frequency rights, CLEC's facilities shall not physically, electronically, or inductively interfere with the existing the ILEC or other customers' or tenants' existing facilities. Each transmitter individually and all transmitters collectively at a given location shall comply with appropriate federal, state, and/or local regulations governing

the safe level of RF radiation. The foregoing obligations shall apply to all other Aggregating Providers.

- 1.4.5 In the event CLEC desires to relocate any of its then-existing Microwave Collocation facilities to a different place on the relevant the ILEC Central Office rooftop, CLEC shall submit a written request to the ILEC specifying the new location CLEC proposes to occupy. The ILEC shall, within ten (10) days, approve such relocation or describe, in writing, why such relocation is not technically feasible.
- 1.4.6 Upon the expiration or termination of this Agreement, CLEC shall surrender the Microwave Collocation space to the ILEC in its original condition and in good order and repair, less ordinary wear and tear. CLEC, at its expense, to the ILEC's reasonable satisfaction, shall repair any and all damages caused by removal of CLEC's Microwave equipment, or by the use, operation or placement of its Microwave equipment on the Premises. In the event CLEC fails to remove its Microwave equipment, the ILEC shall have the right to retain such Microwave equipment and all rights of CLEC with respect to it shall cease. CLEC shall be liable to the ILEC for all costs of removal, restoration of the property, and the costs of storage, transportation, sale or other disposition of such Microwave equipment incurred by the ILEC.
- 1.4.7 The ILEC will manage roof space on a first-come/first-served basis. The ILEC will work cooperatively with CLEC in determining suitable space for CLEC equipment.

Annex 1  
Microwave Collocation Rate Elements

Definitions and Conditions

**Non-recurring charges — Relating to Rooftop Microwave Transmission Equipment**

- 1) Microwave Preparation Fees — (Track A & Track B — rate level would vary for each type)  
Architectural fees/Architectural Plan Review  
Permit Review  
General Contractor Supervision
- 2) Coring/Cable Pull — (Track A & Track B — rate level would not vary)  
Electrical and Building modification work for coring  
Weather Proofing  
Pulling cable to collocation equipment
- 3) Roof Preparation — (if applicable) (Track A & Track B — rate level would not vary)  
Engineering Study (To develop roof preparation alternatives/costs)  
Cost to preparation roof for installation (i.e. strengthening costs or other related costs)
- 4) Microwave Equipment Installation — (Track A only)  
Mounting of microwave antennae and support structure  
Installation of required coaxial cable  
Antenna Specialist (if required)
- 5) Escort — charge for access to roof  
Charge for access to Roof (Track A & Track B — rate level would not vary)

**Monthly Recurring Rates and Conditions — Relating to Microwave Roof Equipment  
(Track A & Track B — rate level would not vary)**

1) The following conditions will apply to rooftop/exterior space:

Roof Mounts — CLEC must lease sufficient roof space to cover the "footprint" of its antenna and structure; roof mounts shall be no taller than 20 feet above the top of the building unless otherwise agreed upon.

2) Roof Space Lease Charge — State specific rate for roof space per square foot, based on a per square foot rate no greater than the per square foot rate applicable to collocation space inside the building.

Annex 2

Microwave Collocation Rates

**Non-recurring charges**

- |    |  |                   |
|----|--|-------------------|
| 1) | Microwave Prep Fee   | [Hourly Rate TBD] |
| 2) | Coring/Cable Pull  | [ICB]             |
| 3) | Roof Preparation   | [ICB]             |
| 4) | Microwave Installation (Track A Only)                                  | [ICB]             |
| 5) | Additional Charges (e.g., for environmental conditioning if necessary) | [ICB]             |

**Monthly recurring charges**

- |    |                              |       |
|----|------------------------------|-------|
| 1) | Roof space (per square foot) | [TBD] |
| 2) | Escorted access              | [TBD] |