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September 22, 2005

VIA PSC ELECTRONIC REGULATORY FILING SYSTEM

Ms. Christy Zehner, Secretary to the Commission
Public Service Commission of Wisconsin
610 North Whitney Way
P.O. Box 7854
Madison, WI 53707-7854

RE: Amendment 1 to the Adopted Interconnection Agreement }
Pursuant to Section 252(i) of the Telecommunications Act } 05-TI-
of 1996 between Verizon North Inc. ("Verizon") and }
Merrimac Communications, Ltd. ("Merrimac") }

Dear Ms. Zehner,

Attached for filing with the Commission is Amendment 1 to the terms of the interconnection agreement between Verizon North Inc. ("Verizon") and Merrimac Communications, Ltd. ("Merrimac"). Merrimac adopted the terms of the Interconnection Agreement between Verizon North Inc. and MH Telecom. The adoption letter and underlying agreement were filed with the Public Service Commission of Wisconsin ("PSCW") on August 27, 2003 and assigned docket number 05-TI-880. An electronic copy of Amendment 1 has been transmitted to Ken Barth of the PSCW on September 22, 2005.

I have been authorized by Merrimac to submit this filing to the Commission pursuant to 47 U.S.C. Section 252(e) and in recognition of the Commission's jurisdiction in this matter.

If you have questions relating to this matter, I can be contacted at the above numbers.

Very truly yours,

/s/ Michael J. Wirl

Michael J. Wirl

c: Mr. Bart Olson, President
Merrimac Communications, Ltd.
327 Palisade Street
Merrimac, WI 53561

Ken Barth – Public Service Commission of Wisconsin

AMENDMENT NO. 1

to the

INTERCONNECTION AGREEMENT

between

Verizon North Inc.,
f/k/a GTE North Incorporated

and

Merrimac Communications, Ltd

This Amendment No. 1 (the "Amendment") is made by and between Verizon North Inc., f/k/a GTE North Incorporated ("Verizon"), a Wisconsin corporation with offices at 8001 West Jefferson Ft. Wayne, IN 46804, and Merrimac Communications, Ltd. ("Merrimac"), a Corporation with offices at 327 Palisade Street, Merrimac, Wisconsin 53561, ("Merrimac"), and shall be deemed effective on September 12, 2005 (the "Amendment Effective Date"). Verizon and Merrimac are hereinafter referred to collectively as the "Parties" and individually as a "Party". This Amendment covers services in Verizon's service territory in the State of Wisconsin (the "State").

WITNESSETH:

WHEREAS, pursuant to an adoption letter dated July 31, 2003 (the "Adoption Letter"), Merrimac adopted in the State of Wisconsin, the interconnection agreement between MH Telecom Inc. and Verizon (such Adoption Letter and underlying adopted interconnection agreement referred to herein collectively as the "Agreement"); and

WHEREAS, pursuant to Section 252(a) of the Communications Act of 1934, as amended, (the "Act"), the Parties wish to amend the Agreement, as set forth herein, in order to provide for Fiber Meet (as such term is used in this Amendment) arrangements.

NOW, THEREFORE, in consideration of the promises and mutual agreements set forth herein, the Parties agree to amend the Agreement as follows:

1. Amendment to Agreement. The Agreement is amended to include the following provisions, which shall apply to and be a part of the Agreement notwithstanding any other provision of the Agreement or a Verizon tariff or a Verizon Statement of Generally Available Terms and Conditions ("SGAT").
2. Fiber Meet Arrangement Provisions.
 - 2.1 Either Party may request a Fiber Meet arrangement by providing written notice thereof to the other Party; provided, however, that a Party may not make such a request if the Parties have not consistently been exchanging an amount of applicable traffic (as set

forth in Section 2.3 below) equal to at least one (1) DS-3. Any such Fiber Meet arrangement shall be subject to the terms of this Amendment. In addition, the establishment of any Fiber Meet arrangement is expressly conditioned upon the Parties' mutually agreeing to the technical specifications and requirements for such Fiber Meet arrangement including, but not limited to, the location of the Fiber Meet points, routing, equipment (e.g., specifications of Add/Drop Multiplexers, number of strands of fiber, etc.), software, ordering, provisioning, maintenance, repair, testing, augment and on any other technical specifications or requirements necessary to implement the Fiber Meet arrangement. For each Fiber Meet arrangement the Parties agree to implement, the Parties will complete and sign a Technical Specifications and Requirements document, the form of which is attached hereto as Exhibit A. Each such document will be treated as confidential information.

- 2.2 The Parties agree to consider the possibility of using existing fiber cable with spare capacity, where available, to implement any such request for a Fiber Meet arrangement. If existing fiber cable with spare capacity is not available, the Parties agree to minimize the construction and deployment of fiber cable necessary for any Fiber Meet arrangement to which they agree. Except as otherwise agreed by the Parties, any and all Fiber Meet points established between the Parties shall extend no further than three (3) miles from an applicable Verizon Wire Center and Verizon shall not be required to construct or deploy more than five hundred (500) feet of fiber cable for a Fiber Meet arrangement.
- 2.3 Except as otherwise agreed by the Parties, any Fiber Meet arrangements established under this Amendment shall be used only for the transmission and routing of Reciprocal Compensation Traffic, translated LEC IntraLATA toll free service access code (e.g., 800/888/877) traffic, and IntraLATA Toll Traffic, between their respective Telephone Exchange Service Customers, Tandem Transit Traffic, and Measured Internet Traffic, all in accordance with the Agreement. Operator Services/Directory Assistance traffic, 911 traffic, and Exchange Access traffic, including translated InterLATA toll free service access code (e.g., 800/888/877) traffic, between Merrimac Telephone Exchange Service Customers and purchasers of Switched Exchange Service via a Verizon access Tandem, may be exchanged over Fiber Meet arrangements subject to applicable Verizon Tariff rates and charges. Except as otherwise agreed by the Parties, point-to-point (*i.e.*, unswitched) access services and unbundled network elements shall not be provisioned on or accessed through Fiber Meet arrangements.
- 2.4 Merrimac will include traffic to be exchanged over Fiber Meet arrangements in its forecasts provided to Verizon under the Agreement.
- 2.5 For the avoidance of doubt, and without limiting the Parties' rights and obligations under the Agreement, including but not limited to Sections 2 and 7 of the Agreement's Interconnection Attachment, the point(s) where the Parties' facilities will meet under any Fiber Meet arrangement arrived at pursuant to this Amendment will serve as a Merrimac-IP under Section 7.1.1.1 of the Agreement's Interconnection Attachment. For purposes of Section 7.1.2 of the Interconnection Attachment, the point(s) where the Parties' facilities meet under any such Fiber Meet arrangement will also serve as a Verizon IP for Verizon Customers served by a terminating End Office that subtends the Tandem Office identified in Section 1 of the applicable "Technical Specifications and Requirements" (if Section 1 identifies a Verizon Tandem Switch) or, alternatively, for Verizon Customers served by the End Office identified in the applicable "Technical Specifications and Requirements" (if Section 1 identifies a Verizon End Office). Nothing herein shall be read to limit Merrimac's financial responsibility for transport to reach additional Verizon IPs as required under Section 7.1.2 of the Interconnection Attachment of the Agreement or to relieve Merrimac of its obligation to provide additional Merrimac-IPs as required under Section 7.1.1.1. To the extent Merrimac wishes to obtain

transport to reach additional Verizon IPs, it can purchase such transport from Verizon's applicable tariff.

3. Miscellaneous Provisions.

- 3.1 Conflict between this Amendment and the Agreement. This Amendment shall be deemed to revise the terms and provisions of the Agreement only to the extent necessary to give effect to the terms and provisions of this Amendment. In the event of a conflict between the terms and provisions of this Amendment and the terms and provisions of the Agreement, this Amendment shall govern; provided, however, that the fact that a term or provision appears in this Amendment but not in the Agreement, or in the Agreement but not in this Amendment, shall not be interpreted as, or deemed grounds for finding, a conflict for purposes of this Section 3.1.
- 3.2 Counterparts. This Amendment may be executed in counterparts, each of which when so executed and delivered shall be an original and all of which together shall constitute one and the same instrument.
- 3.3 Captions. The Parties acknowledge that the captions in this Amendment have been inserted solely for convenience of reference and in no way define or limit the scope or substance of any term or provision of this Amendment.
- 3.4 Scope of Amendment. This Amendment shall amend, modify and revise the Agreement only to the extent set forth expressly herein. For the avoidance of any doubt, nothing in this Amendment shall be deemed to amend or extend the term of the Agreement, or to affect the right of a Party to exercise any right of termination it may have under the Agreement.
- 3.5 Reservation of Rights. Notwithstanding any contrary provision in the Agreement, this Amendment, any Verizon tariff or SGAT, nothing contained in the Agreement, this Amendment, or any Verizon tariff or SGAT shall limit either Party's right to appeal, seek reconsideration of or otherwise seek to have stayed, modified, reversed or invalidated any order, rule, regulation, decision, ordinance or statute issued by the Wisconsin Public Service Commission, the FCC, any court or any other governmental authority related to, concerning or that may affect either Party's rights or obligations under the Agreement, this Amendment, any Verizon tariff or SGAT, or Applicable Law.
- 3.6 Joint Work Product. This Amendment is a joint work product, and any ambiguities in this Amendment shall not be construed by operation of law against either Party.
- 3.7 Definitions. Notwithstanding any other provision in the Agreement or any Verizon tariff or SGAT, the following terms shall have the meanings set forth below:
- 3.7.1 Fiber Network Interface Device ("FNID").
- A passive fiber optic demarcation unit designed for the interconnection and demarcation of optical fibers between two separate network providers.
- 3.7.2 Maintenance Control Office.
- Either Party's center responsible for control of the maintenance and repair of a circuit.

3.7.3 Non-Revertive.

Where traffic is redirected to a protection line because of failure of a working line and the working line is repaired, traffic will remain on the protection line until there is either manual intervention or a failure of the protection line.

3.7.4 Primary Reference Source.

Equipment that provides a timing signal to synchronize network elements.

IN WITNESS WHEREOF, the Parties hereto have caused this Amendment to be executed as of the Amendment Effective Date.

Merrimac Communications, Ltd.

Verizon North Inc.

By:

By: Jeffrey A. Masoner

Printed:

Printed:

Title:

Title: Vice President – Interconnection Services
Policy & Planning

Technical Specifications and Requirements

for

Merrimac - Verizon North Inc. Fiber Meet Arrangement No. [XX]

The following technical specifications and requirements will apply to Merrimac - Verizon North Inc. Fiber Meet Arrangement [NUMBER] ("FM No. [XX]"):

1. FM No. [XX] will provide interconnection facilities for the exchange of applicable traffic (as set forth in the Amendment) between Verizon's [NAME OF WIRE CENTER/CENTRAL OFFICE] and Merrimac's [NAME OF SWITCH/WIRE CENTER/CENTRAL OFFICE] in the State of Wisconsin. A diagram of FM No. [XX] is included as Appendix A.
2. Fiber Meet Points ("FMPs").
 - 2.1 FM No. [XX] will be configured as shown on Appendix A. FM No. [XX] will have two FMPs. Neither FMP is more than three (3) miles from the nearest Verizon Wire Center.
 - 2.2 Verizon will provision a Fiber Network Interface Device ("FNID") at [POLE XX, STREET YY, TOWN ZZ, STATE] and terminate [____] strands of its fiber optic cable in the FNID. The FNID provisioned by Verizon will be a [MANUFACTURER, MODEL]. Verizon will bear the cost of installing and maintaining its FNID. The fiber patch panel within Verizon's FNID will serve as FMP No. 1. Verizon will provide a fiber stub at the fiber patch panel in Verizon's FNID for Merrimac to connect [____] strands of its fiber cable [____] connectors. Verizon's FNID will be locked, but Verizon and Merrimac will have 24 hour access to their respective side of the fiber patch panel located in Verizon's FNID.
 - 2.3 Merrimac will provision a FNID at [POLE XX, STREET YY, TOWN ZZ, STATE] and terminate [____] strands of its fiber optic cable in the FNID. The FNID provisioned by Merrimac will be a [MANUFACTURER, MODEL]. Merrimac will bear the cost of installing and maintaining its FNID. The fiber patch panel within Merrimac's FNID will serve as FMP No. 2. Merrimac will provide a fiber stub at the fiber patch panel in Merrimac's FNID for Verizon to connect [____] strands of its fiber cable. Merrimac's FNID will be locked, but Merrimac and Verizon will have 24 hour access to their respective side of the fiber patch panel located in Merrimac's FNID.
3. Transmission Characteristics.
 - 3.1 FM No. [XX] will be built [as a ring configuration].
 - 3.2 The transmission interface for FM No. [XX] will be [Synchronous Optical Network ("SONET")].
 - 3.3 Terminating equipment shall comply with [SONET transmission requirements as specified in Telcordia Technologies document GR-253 CORE (Tables 4-3 through 4-11)].
 - 3.4 The optical transmitters and receivers shall provide adequate power for the end-to-end length of the fiber cable to be traversed.
 - 3.5 The optical transmission rate will be [Unidirectional] OC-[XX].

- 3.6 The path switch protection shall be set as [Non-Revertive].
- 3.7 Verizon and Merrimac shall provide [Primary Reference Source traceable timing].
4. Add Drop Multiplexer.
- 4.1 Verizon will, at its own cost, obtain and install (at its own premise) its own Add Drop Multiplexer. Verizon will use a [MANUFACTURER, MODEL] Add Drop Multiplexer with firmware release of [X.X] at the network level. Before making any upgrade or change to the firmware of its Add Drop Multiplexer, Verizon must provide Merrimac with fourteen (14) days advance written notice that describes the upgrade or change to its firmware and states the date on which such firmware will be activated in Verizon's Add Drop Multiplexer.
- 4.2 Merrimac will, at its own cost, obtain and install (at its own premise) its own Add Drop Multiplexer. Merrimac will use a [MANUFACTURER, MODEL] Add Drop Multiplexer with firmware release of [X.X] at the network level. Before making any upgrade or change to the firmware of its Add Drop Multiplexer, Merrimac must provide Verizon with fourteen (14) days advance written notice that describes the upgrade or change to its firmware and states the date on which such firmware or software will be activated in Merrimac's Add Drop Multiplexer.
- 4.3 Merrimac and Verizon will monitor all firmware upgrades and changes to observe for any failures or anomalies adversely affecting service or administration. If any upgrade or change to firmware adversely affects service or administration of FM No. [XX], the firmware will be removed from the Add Drop Multiplexer and will revert to the previous version of firmware.
- 4.4 The Data Communication Channel shall be disabled between the Verizon and Merrimac Add Drop Multiplexers of FM No. [XX].
5. Testing.
- Prior to turn-up of FM No. [XX], Verizon and Merrimac will mutually develop and implement testing procedures for FM No. [XX]
6. Connecting Facility Assignment ("CFA") and Slot Assignment Allocation ("SAA").
- 6.1 For one-way and two-way trunk arrangements, the SAA information will be turned over to Merrimac as a final step of turn up of the FM No. [XX].
- 6.2 For one-way trunk arrangements, Verizon will control the CFA for the subtending facilities and trunks connected to Verizon's slots and Merrimac will control the CFA for the subtending facilities and trunks connected to Merrimac's slots. Merrimac will place facility orders against the first half of the *fully configured* slots (for example, slots 1-6 of a fully configured OC12) and Verizon will place orders against the second half of the slots (for example, slots 7-12). If either Party needs the other Party's additional slot capacity to place orders, this will be negotiated and assigned on a case-by-case basis. For SAA, Verizon and Merrimac shall jointly designate the slot assignments for Verizon's Add Drop Multiplexers and Merrimac's Add Drop Multiplexer in FM No. [XX].
- 6.3 For two-way trunk arrangements, Merrimac shall control the CFA for the subtending facilities and trunks connected to FM No. [XX]. Merrimac shall place facility and trunk orders against the total available SAA capacity of FM No. [XX].
7. Inventory, Provisioning and Maintenance, Surveillance, and Restoration.

- 7.1 Verizon and Merrimac will inventory FM No. [XX] in their operational support systems before the order flow begins.
- 7.2 Verizon and Merrimac will notify each other's respective Maintenance Control Office of all troubleshooting and scheduled maintenance activity to be performed on FM No. [XX] facilities prior to undertaking such work, and will advise each other of the trouble reporting and maintenance control point contact numbers and the days and hours of operation. Each Party shall provide a timely response to the other Party's action requests or status inquiries.
- 7.3 Verizon will be responsible for the provisioning and maintenance of the FM No. [XX] transport facilities on Verizon's side of the FMPs, as well as delivering its applicable traffic to the FMPs. Merrimac will be responsible for the provisioning and maintenance of the FM No. [XX] transport facilities on the Merrimac's side of the FMPs, as well as delivering its applicable traffic to the FMPs. As such, other than payment of any applicable intercarrier compensation charges pursuant to the terms of the Agreement, neither Party shall have any obligation to pay the other Party any charges in connection with FM No. [XX].
- 7.4 Verizon and Merrimac will provide alarm surveillance for their respective FM No. [XX] transport facilities. Verizon and Merrimac will notify each other's respective maintenance control office of all troubleshooting and scheduled maintenance activity to be performed on the facility prior to undertaking such work, and will advise each other of the trouble reporting and maintenance control point contact numbers and the days and hours of operation.

8. Cancellation or Modification of FM No. [XX].

- 8.1 Except as otherwise provided in this Section 8, all expenses and costs associated with the construction, operation, use and maintenance of FM No. [XX] on each Party's respective side of the FMPs will be borne by such Party.
- 8.2 If either Party terminates the construction of the FM No. [XX] before it is used to exchange traffic, the Party terminating the construction of FM No. [XX] will compensate the other Party for that Party's reasonable actual incurred construction and/or implementation expenses.
- 8.3 If either Party proposes to move or change FM No. [XX] as set forth in this document, at any time before or after it is used to exchange traffic, the Party requesting the move or change will compensate the other Party for that Party's reasonable actual incurred construction and/or implementation expenses. Augments, moves and changes to FM No. [XX] as set forth in this document must be mutually agreed upon by the Parties in writing.

Merrimac

Verizon

By: _____

By: _____

Appendix A

Merrimac - Verizon Fiber Meet No. [XX]
City, State

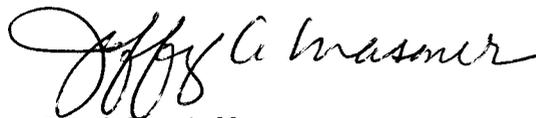
IN WITNESS WHEREOF, the Parties hereto have caused this Amendment to be executed as of the Amendment Effective Date.

Merrimac Communications, Ltd.



By: Bart Olson

Verizon North Inc.



By: Jeffrey A. Masoner

Printed:

Printed:

Title: President

Title: Vice President – Interconnection Services
Policy & Planning