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May 25, 2021

VIA ELECTRONIC FILING

Rosemary Chiavetta, Secretary
Pennsylvania Public Utility Commission
Commonwealth Keystone Building
400 North Street, 2nd Floor
Harrisburg, PA 17120

RE: Joint Filing of Verizon Pennsylvania LLC and
DISH Wireless, L.L.C.
for Approval of an Interconnection Agreement
Dkt. No. _____

Dear Secretary Chiavetta:

Enclosed please find the joint filing of Verizon Pennsylvania LLC and DISH Wireless, L.L.C. ("DISH") for Approval of an Interconnection Agreement. The Interconnection Agreement is deemed effective as of May 12, 2021, and was signed by the second of the two parties on May 12, 2021. This this filing is being made within 30 days of the day that the Agreement was signed, as required by ordering Paragraph 5 of the Commission's May 3, 2004 Final Order in Docket No. M-00960799.

As evidenced by the cc: below, notice of this filing is being provided to DISH.

Please do not hesitate to contact me with any questions.

Very truly yours,

Suzan D. Paiva

SDP/sau
Enclosure

Via Email

cc: Jeff McSchooler, DISH Wireless, L.L.C.
Attached Service List

SERVICE LIST

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Bureau of Consumer Protection
Strawberry Square, 14th Floor
Harrisburg, PA 17120

INTERCONNECTION AGREEMENT

by and between

DISH WIRELESS L.L.C.

and

VERIZON PENNSYLVANIA LLC

FOR THE COMMONWEALTH OF

PENNSYLVANIA

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INTERCONNECTION AGREEMENT

PREFACE

This Interconnection Agreement (“Agreement”) shall be deemed effective as of May 12, 2021 (the “Effective Date”), between DISH Wireless L.L.C. (“DISH”), a limited liability company organized under the laws of the State of Colorado, with offices at 5701 S. Santa Fe Dr., Littleton, CO 80120 and Verizon Pennsylvania LLC (“Verizon”), a limited liability company organized under the laws of the State of Delaware with offices at 900 Race Street, Philadelphia, PA 19107 (Verizon and DISH may be referred to hereinafter, each, individually as a “Party”, and, collectively, as the “Parties”).

GENERAL TERMS AND CONDITIONS

In consideration of the mutual promises contained in this Agreement, and intending to be legally bound, pursuant to Section 252 of the Act, Verizon and DISH hereby agree as follows:

1. The Agreement

- 1.1 This Agreement includes: (a) the Principal Document; (b) the Tariffs of Verizon applicable to the Services that are offered for sale by it in the Principal Document (which Tariffs are incorporated into and made a part of this Agreement by reference); and (c) an Order by a Party that has been accepted by the other Party.
- 1.2 Except as otherwise expressly provided in the Principal Document (including, but not limited to, the Pricing Attachment), conflicts among provisions in the Principal Document, Tariffs, and an Order by a Party that has been accepted by the other Party, shall be resolved in accordance with the following order of precedence, where the document identified in subsection “(a)” shall have the highest precedence: (a) the Principal Document; (b) the Tariffs; and, (c) an Order by a Party that has been accepted by the other Party. The fact that a provision appears in the Principal Document but not in a Tariff, or in a Tariff but not in the Principal Document, shall not be interpreted as, or deemed grounds for finding, a conflict for the purposes of this Section 1.2.
- 1.3 This Agreement constitutes the entire agreement between the Parties on the subject matter hereof, and supersedes any prior or contemporaneous agreement, understanding, or representation, on the subject matter hereof.
- 1.4 Except as otherwise provided in the Principal Document, the Principal Document may not be waived or modified except by a written document that is signed by the Parties. Subject to the requirements of Applicable Law, a Party shall have the right to add, modify, or withdraw, its Tariff(s) at any time, without the consent of, or notice to, the other Party.

2. Term and Termination

- 2.1 This Agreement shall be effective as of the Effective Date and, unless cancelled or terminated earlier in accordance with the terms hereof, shall continue in effect until two year from the Effective Date (the “Initial Term”). Thereafter, this Agreement shall continue in force and effect unless and until cancelled or terminated as provided in this Agreement.

- 2.2 Either DISH or Verizon may terminate this Agreement effective upon the expiration of the Initial Term or effective upon any date after expiration of the Initial Term by providing written notice of termination at least ninety (90) days in advance of the date of termination.
- 2.3 If DISH or Verizon provides notice of termination pursuant to Section 2.2 and on or before the proposed date of termination either DISH or Verizon has requested negotiation of a new interconnection agreement, unless this Agreement is cancelled or terminated earlier in accordance with the terms hereof (including, but not limited to, pursuant to Section 11), this Agreement shall remain in effect until the earlier of: (a) the effective date of a new interconnection agreement between DISH and Verizon; or (b) the date one (1) year after the proposed date of termination.
- 2.4 If DISH or Verizon provides notice of termination pursuant to Section 2.2, and by 11:59 PM Eastern Time on the proposed date of termination neither DISH nor Verizon has requested negotiation of a new interconnection agreement (or, in accordance with Subsection 2.3(b), if no new agreement is reached by the date one (1) year after the proposed date of termination), then (a) this Agreement will terminate at 11:59 PM Eastern Time on the proposed date of termination (or in the case of termination in accordance with Subsection 2.3(b), at 11:59 PM Eastern Time on the date one (1) year after the proposed date of termination), and (b) the Services being provided under this Agreement at the time of termination will be terminated, except to the extent that the Purchasing Party has requested that such Services continue to be provided pursuant to an applicable Tariff or Statement of Generally Available Terms (SGAT).

3. Glossary and Attachments

The Glossary and the following Attachments are a part of this Agreement:

- Additional Services Attachment
- Two-Way Wireless Attachment
- Wireless - 911 Attachment
- Pricing Attachment

4. Applicable Law

- 4.1 The construction, interpretation and performance of this Agreement shall be governed by (a) the laws of the United States of America and (b) the laws of the Commonwealth of Pennsylvania, without regard to its conflicts of laws rules. All disputes relating to this Agreement shall be resolved through the application of such laws.
- 4.2 Each Party shall remain in compliance with Applicable Law in the course of performing this Agreement.
- 4.3 Neither Party shall be liable for any delay or failure in performance by it that results from requirements of Applicable Law, or acts or failures to act of any governmental entity or official.
- 4.4 Each Party shall promptly notify the other Party in writing of any governmental action that limits, suspends, cancels, withdraws, or otherwise materially affects, the notifying Party's ability to perform its obligations under this Agreement.

- 4.5 If any provision of this Agreement shall be invalid or unenforceable under Applicable Law, such invalidity or unenforceability shall not invalidate or render unenforceable any other provision of this Agreement, and this Agreement shall be construed as if it did not contain such invalid or unenforceable provision; provided, that if the invalid or unenforceable provision is a material provision of this Agreement, or the invalidity or unenforceability materially affects the rights or obligations of a Party hereunder or the ability of a Party to perform any material provision of this Agreement, the Parties shall promptly renegotiate in good faith and amend in writing this Agreement in order to make such mutually acceptable revisions to this Agreement as may be required in order to conform the Agreement to Applicable Law.
- 4.6 If any legislative, regulatory, judicial or other governmental decision, order, determination or action, or any change in Applicable Law, materially affects any material provision of this Agreement, the rights or obligations of a Party hereunder, or the ability of a Party to perform any material provision of this Agreement, the Parties shall promptly renegotiate in good faith and amend in writing this Agreement in order to make such mutually acceptable revisions to this Agreement as may be required in order to conform the Agreement to Applicable Law. If within thirty (30) days of the effective date of such decision, determination, action or change, the Parties are unable to agree in writing upon mutually acceptable revisions to this Agreement, either Party may pursue any remedies available to it under this Agreement, at law, in equity, or otherwise, including, but not limited to, instituting an appropriate proceeding before the Commission, the FCC, or a court of competent jurisdiction, without first pursuing dispute resolution in accordance with Section 13 of this Agreement.
- 4.6.1 Notwithstanding Section 4.6 above, to the extent Verizon is required by a change in Applicable Law to provide to DISH a Service that is not offered under this Agreement to DISH, the terms, conditions and prices for such Service (including, but not limited to, the terms and conditions defining the Service and stating when and where the Service will be available and how it will be used, and terms, conditions and prices for pre-ordering, ordering, provisioning, repair, maintenance and billing) shall be as provided in an applicable Verizon Tariff, or, in the absence of an applicable Verizon Tariff, as mutually agreed by the Parties in a written amendment to the Agreement that, upon the request of either Party, the Parties shall negotiate in accordance with the requirements of Section 252 of the Act. In no event shall Verizon be required to provide any such Service in the absence of such a Verizon Tariff or amendment.
- 4.7 Notwithstanding anything in this Agreement to the contrary, if, as a result of any legislative, judicial, regulatory or other governmental decision, order, determination or action, or any change in Applicable Law, Verizon is not required by Applicable Law to provide any Service, payment or benefit, otherwise required to be provided to DISH hereunder, then Verizon may discontinue the provision of any such Service, payment or benefit, and DISH shall reimburse Verizon for any payment previously made by Verizon to DISH that was not required by Applicable Law. Verizon will provide thirty (30) days prior written notice to DISH of any such discontinuance of a Service, unless a different notice period or different conditions are specified in this Agreement (including, but not limited to, in an applicable Tariff) or Applicable Law for termination of such Service in which event such specified period and/or conditions shall apply. For the avoidance of any doubt, this Section 4.7 is self-effectuating and no amendment to this Agreement shall be required to implement it.

5. Assignment

Neither Party may assign this Agreement or any right or interest under this Agreement, nor delegate any obligation under this Agreement, without the prior written consent of the other Party, which consent shall not be unreasonably withheld, conditioned or delayed. Any attempted assignment or delegation in violation of this Section 5 shall be void and ineffective and constitute default of this Agreement. Notwithstanding the foregoing, either Party may assign this Agreement without the other Party's consent: (a) to any parent, subsidiary or Affiliate entity; or (b) to any successor in interest of all or substantially all of the assets, stock or business of that Party to which this Agreement pertains; provided, however, that in each such case under this Section 5 the assignee assumes all of the assigning Party's liabilities and duties under the Agreement.

6. Assurance of Payment

- 6.1 Upon request by Verizon, DISH shall, at any time and from time to time, provide to Verizon adequate assurance of payment of amounts due (or to become due) to Verizon hereunder.
- 6.2 Assurance of payment of charges may be requested by Verizon if DISH or its Affiliates (a) prior to the Effective Date, has failed to timely pay a bill rendered to DISH by Verizon or its Affiliates, (b) on or after the Effective Date, fails to timely pay a bill rendered to DISH by Verizon or its Affiliates, (c) in Verizon's reasonable judgment, at the Effective Date or at any time thereafter, is unable to demonstrate that it is creditworthy, or (d) admits its inability to pay its debts as such debts become due, has commenced a voluntary case (or has had a case commenced against it) under the U.S. Bankruptcy Code or any other law relating to bankruptcy, insolvency, reorganization, winding-up, composition or adjustment of debts or the like, has made an assignment for the benefit of creditors or is subject to a receivership or similar proceeding.

Unless otherwise agreed by the Parties, the assurance of payment shall consist of an unconditional, irrevocable standby letter of credit naming Verizon as the beneficiary thereof and otherwise in form and substance satisfactory to Verizon from a financial institution acceptable to Verizon. The letter of credit shall be in an amount equal to two (2) months anticipated charges (including, but not limited to, both recurring and non-recurring charges), as reasonably determined by Verizon, for the Services to be provided by Verizon to DISH in connection with this Agreement. If DISH or its Affiliates meets the condition in subsection 6.2(d) above or has failed to timely pay two or more bills rendered by Verizon or a Verizon Affiliate in any twelve (12)-month period, Verizon may, at its option, demand (and DISH shall provide) additional assurance of payment, including monthly advanced payments of estimated charges as reasonably determined by Verizon, with appropriate true-up against actual billed charges no more frequently than once per Calendar Quarter.

- 6.3 Verizon may (but is not obligated to) draw on the letter of credit upon notice to DISH in respect of any amounts to be paid by DISH hereunder that are not paid within thirty (30) days of the date that payment of such amounts is required by this Agreement.
- 6.4 If Verizon draws on the letter of credit, upon request by Verizon, DISH shall provide a replacement or supplemental letter of credit conforming to the requirements of Section 0.
- 6.5 Notwithstanding anything else set forth in this Agreement, if Verizon makes a request for assurance of payment in accordance with the terms of this Section,

then Verizon shall have no obligation thereafter to perform under this Agreement until such time as DISH has provided Verizon with such assurance of payment.

- 6.6 The fact that a letter of credit is requested by Verizon hereunder shall in no way relieve DISH from compliance with the requirements of this Agreement (including, but not limited to, any applicable Tariffs) as to advance payments and payment for Services, nor constitute a waiver or modification of the terms herein pertaining to the discontinuance of Services for nonpayment of any amounts payment of which is required by this Agreement.

7. Authorization

- 7.1 Verizon represents and warrants that it is a limited liability company duly organized, validly existing and in good standing under the laws of the State of Delaware and has full power and authority to execute and deliver this Agreement and to perform its obligations under this Agreement.
- 7.2 DISH represents and warrants that it is a limited liability company duly organized, validly existing and in good standing under the laws of the State of Colorado, and has full power and authority to execute and deliver this Agreement and to perform its obligations under this Agreement.
- 7.3 DISH Certification.

Notwithstanding any other provision of this Agreement, Verizon shall have no obligation to perform under this Agreement until such time as DISH has obtained such FCC and Commission authorization as may be required by Applicable Law for conducting its business in the Commonwealth of Pennsylvania. DISH shall not place any Orders under this Agreement until it has obtained such authorization. DISH shall provide proof of such authorization to Verizon upon request.

8. Billing and Payment; Disputed Amounts

- 8.1 Except as otherwise provided in this Agreement, each Party shall submit to the other Party on a monthly basis in an itemized form, statement(s) of charges incurred by the other Party under this Agreement, if any.
- 8.2 Except as otherwise provided in this Agreement, payment of amounts billed for Services provided under this Agreement, whether billed on a monthly basis or as otherwise provided in this Agreement, shall be due, in immediately available U.S. funds, on the later of the following dates (the "Due Date"): (a) the due date specified on the billing Party's statement; or (b) twenty (20) days after the date the statement is received by the billed Party. The billed Party shall pay by the Due Date all undisputed amounts. Payments shall be transmitted by electronic funds transfer.
- 8.3 If any portion of an amount billed by a Party under this Agreement is subject to a good faith dispute between the Parties, the billed Party shall give notice to the billing Party of the amounts it disputes ("Disputed Amounts") and include in such notice the specific details and reasons for disputing each item. A Party may also dispute prospectively with a single notice a class of charges that it disputes. Notice of a dispute may be given by a Party at any time, either before or after an amount is paid, and a Party's payment of an amount shall not constitute a waiver of such Party's right to subsequently dispute its obligation to pay such amount or to seek a refund of any amount paid. Billing disputes shall be subject to the terms of Section 13, Dispute Resolution.

- 8.4 Charges due to the billing Party that are not paid by the Due Date, shall be subject to a late payment charge. The late payment charge shall be in an amount specified by the billing Party which shall not exceed a rate of one-and-one-half percent (1.5%) of the overdue amount (including any unpaid previously billed late payment charges) per month.
- 8.5 Although it is the intent of both Parties to submit timely statements of charges, failure by either Party to present statements to the other Party in a timely manner shall not constitute a breach or default, or a waiver of the right to payment of the incurred charges, by the billing Party under this Agreement, and, except for assertion of a provision of Applicable Law that limits the period in which a suit or other proceeding can be brought before a court or other governmental entity of appropriate jurisdiction to collect amounts due, the billed Party shall not be entitled to dispute the billing Party's statement(s) based on the billing Party's failure to submit them in a timely fashion.

9. Confidentiality

- 9.1 As used in this Section 9, "Confidential Information" means the following information that is disclosed by one Party ("Disclosing Party") to the other Party ("Receiving Party") in connection with, or anticipation of, this Agreement:
- 9.1.1 Books, records, documents and other information disclosed in an audit;
 - 9.1.2 Any forecasting information provided pursuant to this Agreement;
 - 9.1.3 Customer Information (except to the extent that (a) the Customer information is published in a directory, (b) the Customer information is disclosed through or in the course of furnishing a Telecommunications Service, such as directory assistance, operator service, Caller ID or similar service, or (c) the Customer to whom the Customer Information is related has authorized the Receiving Party to use and/or disclose the Customer Information);
 - 9.1.4 information related to specific facilities or equipment (including, but not limited to, cable and pair information);
 - 9.1.5 any information that is in written, graphic, electromagnetic, or other tangible form, and marked at the time of disclosure as "Confidential" or "Proprietary"; and
 - 9.1.6 any information that is communicated orally or visually and declared to the Receiving Party at the time of disclosure to be "Confidential" or "Proprietary".

Notwithstanding any other provision of this Agreement, a Party shall have the right to refuse to accept receipt of information which the other Party has identified as Confidential Information pursuant to Sections 9.1.5 or 9.1.6.

- 9.2 Except as otherwise provided in this Agreement, the Receiving Party shall:
- 9.2.1 use the Confidential Information received from the Disclosing Party only in performance of this Agreement; and
 - 9.2.2 using the same degree of care that it uses with similar confidential information of its own (but in no case a degree of care that is less than commercially reasonable), hold Confidential Information received from

the Disclosing Party in confidence and restrict disclosure of the Confidential Information solely to those of the Receiving Party's Affiliates and the directors, officers, employees, Agents and contractors of the Receiving Party and the Receiving Party's Affiliates, that have a need to receive such Confidential Information in order to perform the Receiving Party's obligations under this Agreement. The Receiving Party's Affiliates and the directors, officers, employees, Agents and contractors of the Receiving Party and the Receiving Party's Affiliates, shall be required by the Receiving Party to comply with the provisions of this Section 9 in the same manner as the Receiving Party. The Receiving Party shall be liable for any failure of the Receiving Party's Affiliates or the directors, officers, employees, Agents or contractors of the Receiving Party or the Receiving Party's Affiliates, to comply with the provisions of this Section 9.

- 9.3 The Receiving Party shall return or destroy all Confidential Information received from the Disclosing Party, including any copies made by the Receiving Party, within thirty (30) days after a written request by the Disclosing Party is delivered to the Receiving Party, except for (a) Confidential Information that the Receiving Party reasonably requires to perform its obligations under this Agreement, and (b) one copy for archival purposes only.
- 9.4 Unless otherwise agreed, the obligations of Sections 9.2 and 9.3 do not apply to information that:
- 9.4.1 was, at the time of receipt, already in the possession of or known to the Receiving Party free of any obligation of confidentiality and restriction on use;
 - 9.4.2 is or becomes publicly available or known through no wrongful act of the Receiving Party, the Receiving Party's Affiliates, or the directors, officers, employees, Agents or contractors of the Receiving Party or the Receiving Party's Affiliates;
 - 9.4.3 is rightfully received from a third person having no direct or indirect obligation of confidentiality or restriction on use to the Disclosing Party with respect to such information;
 - 9.4.4 is independently developed by the Receiving Party;
 - 9.4.5 is approved for disclosure or use by written authorization of the Disclosing Party (including, but not limited to, in this Agreement); or
 - 9.4.6 is required to be disclosed by the Receiving Party pursuant to Applicable Law, provided that the Receiving Party shall have made commercially reasonable efforts to give adequate notice of the requirement to the Disclosing Party in order to enable the Disclosing Party to seek protective arrangements.
- 9.5 Notwithstanding the provisions of Sections 9.1 through 9.4, the Receiving Party may use and disclose Confidential Information received from the Disclosing Party to the extent necessary to enforce the Receiving Party's rights under this Agreement or Applicable Law. In making any such disclosure, the Receiving Party shall make reasonable efforts to preserve the confidentiality and restrict the use of the Confidential Information while it is in the possession of any person to whom it is disclosed, including, but not limited to, by requesting any governmental entity to whom the Confidential Information is disclosed to treat it

as confidential and restrict its use to purposes related to the proceeding pending before it.

- 9.6 The Disclosing Party shall retain all of the Disclosing Party's right, title and interest in any Confidential Information disclosed by the Disclosing Party to the Receiving Party. Except as otherwise expressly provided in this Agreement, no license is granted by this Agreement with respect to any Confidential Information (including, but not limited to, under any patent, trademark or copyright), nor is any such license to be implied solely by virtue of the disclosure of Confidential Information.
- 9.7 The provisions of this Section 9 shall be in addition to and not in derogation of any provisions of Applicable Law, including, but not limited to, 47 U.S.C. § 222, and are not intended to constitute a waiver by a Party of any right with regard to the use, or protection of the confidentiality of, CPNI provided by Applicable Law.
- 9.8 Each Party has implemented and shall maintain a commercially reasonable written information security program intended to prevent unauthorized access to or use of the Party's network and business systems and to protect the security of information on the Party's network and business systems. A Party shall immediately notify the other Party if it learns of any situation that may have resulted in the unauthorized use or disclosure of the other Party's Confidential Information and assist that Party in investigating, assessing and mitigating the extent and nature of the unauthorized use or disclosure.
- 9.9 Each Party represents and warrants that its arrangements with its subcontractors and interconnecting carriers with respect to transport and delivery of network based communications are consistent with customary practice and usage in the telecommunications industry with respect to implementing appropriate safeguards intended to protect the security and confidentiality of the information transmitted over shared networks, and comply with Applicable Law including, without limitation, the customer proprietary network information requirements under Section 222 of the Act, and the Electronic Communications Privacy Act, as amended.
- 9.10 Each Party's obligations under this Section 9 shall survive expiration, cancellation or termination of this Agreement.

10. Counterparts and Electronic Signatures

This Agreement may be executed in two or more counterparts, each of which shall be deemed an original and all of which together shall constitute one and the same instrument. This Agreement may be executed electronically and this Agreement and the signatures may be recorded and stored in an electronic form.

11. Default

If either Party ("Defaulting Party") fails to make a payment required by this Agreement (including, but not limited to, any payment required by Section 8.3 of undisputed amounts to the billing Party) or materially breaches any other material provision of this Agreement, and such failure or breach continues for thirty (30) days after written notice thereof from the other Party, the other Party may, by written notice to the Defaulting Party, (a) suspend the provision of any or all Services hereunder, or (b) terminate this Agreement and the provision of all Services hereunder.

12. Discontinuance of Service by DISH

- 12.1 If DISH proposes to discontinue, or actually discontinues, its provision of service to all or substantially all of its Customers, whether voluntarily, as a result of bankruptcy, or for any other reason, DISH shall send written notice of such discontinuance to Verizon, the Commission, and each of DISH's Customers. DISH shall provide such notice such number of days in advance of discontinuance of its service as shall be required by Applicable Law. Unless the period for advance notice of discontinuance of service required by Applicable Law is more than thirty (30) days, to the extent commercially feasible, DISH shall send such notice at least thirty (30) days prior to its discontinuance of service.
- 12.2 Nothing in this Section 12 shall limit Verizon's right to cancel or terminate this Agreement or suspend provision of Services under this Agreement.

13. Dispute Resolution

- 13.1 Except as otherwise provided in this Agreement, any dispute between the Parties regarding the interpretation or enforcement of this Agreement or any of its terms shall be addressed by good faith negotiation between the Parties. To initiate such negotiation, a Party must provide to the other Party written notice of the dispute that includes both a detailed description of the dispute or alleged nonperformance and the name of an individual who will serve as the initiating Party's representative in the negotiation. The other Party shall have ten Business Days to designate its own representative in the negotiation. The Parties' representatives shall meet at least once within 45 days after the date of the initiating Party's written notice in an attempt to reach a good faith resolution of the dispute. Upon agreement, the Parties' representatives may utilize other alternative dispute resolution procedures such as private mediation to assist in the negotiations.
- 13.2 If the Parties have been unable to resolve the dispute within 45 days of the date of the initiating Party's written notice, either Party may pursue any remedies available to it under this Agreement, at law, in equity, or otherwise, including, but not limited to, instituting an appropriate proceeding before the Commission, the FCC, or a court of competent jurisdiction.

14. Force Majeure

- 14.1 Neither Party shall be responsible for any delay or failure in performance which results from causes beyond its reasonable control ("Force Majeure Events"), whether or not foreseeable by such Party. Such Force Majeure Events include, but are not limited to, adverse weather conditions, flood, fire, explosion, earthquake, volcanic action, power failure, embargo, boycott, war, revolution, civil commotion, act of public enemies, labor unrest (including, but not limited to, strikes, work stoppages, slowdowns, picketing or boycotts), inability to obtain equipment, parts, software or repairs thereof, acts or omissions of the other Party, and acts of God.
- 14.2 If a Force Majeure Event occurs, the non-performing Party shall give prompt notification of its inability to perform to the other Party. During the period that the non-performing Party is unable to perform, the other Party shall also be excused from performance of its obligations to the extent such obligations are reciprocal to, or depend upon, the performance of the non-performing Party that has been prevented by the Force Majeure Event. The non-performing Party shall use commercially reasonable efforts to avoid or remove the cause(s) of its non-performance and both Parties shall proceed to perform once the cause(s) are removed or cease.

14.3 Notwithstanding the provisions of Sections 14.1 and 14.2, in no case shall a Force Majeure Event excuse either Party from an obligation to pay money as required by this Agreement.

14.4 Nothing in this Agreement shall require the non-performing Party to settle any labor dispute except as the non-performing Party, in its sole discretion, determines appropriate.

15. Forecasts

In addition to any other forecasts required by this Agreement, upon request by Verizon, DISH shall provide to Verizon forecasts regarding the Services that DISH expects to purchase from Verizon, including, but not limited to, forecasts regarding the types and volumes of Services that DISH expects to purchase and the locations where such Services will be purchased.

16. Fraud

16.1 DISH assumes responsibility for all fraud associated with its Customers and accounts. Verizon shall bear no responsibility for, and shall have no obligation to investigate or make adjustments to DISH's account in cases of, fraud by DISH's Customers or other third parties.

16.2 Verizon assumes responsibility for all fraud associated with its Customers and accounts. DISH shall bear no responsibility for, and shall have no obligation to investigate or make adjustments to Verizon's account in cases of, fraud by Verizon's Customers or other third parties.

17. Good Faith Performance

The Parties shall act in good faith in their performance of this Agreement. Except as otherwise expressly stated in this Agreement (including, but not limited to, where consent, approval, agreement or a similar action is stated to be within a Party's sole discretion), where consent, approval, mutual agreement or a similar action is required by any provision of this Agreement, such action shall not be unreasonably withheld, conditioned or delayed. If and, to the extent that, Verizon, prior to the Effective Date of this Agreement, has not provided in the Commonwealth of Pennsylvania a Service offered under this Agreement, Verizon reserves the right to negotiate in good faith with DISH reasonable terms and conditions (including, without limitation, rates and implementation timeframes) for such Service; and, if the Parties cannot agree to such terms and conditions (including, without limitation, rates and implementation timeframes), either Party may utilize the Agreement's dispute resolution procedures.

18. Headings

The headings used in the Principal Document are inserted for convenience of reference only and are not intended to be a part of or to affect the meaning of the Principal Document.

19. Indemnification

19.1 Each Party ("Indemnifying Party") shall indemnify, defend and hold harmless the other Party ("Indemnified Party"), the Indemnified Party's Affiliates, and the directors, officers and employees of the Indemnified Party and the Indemnified Party's Affiliates, from and against any and all Claims that arise out of bodily injury to or death of any person, or damage to, or destruction or loss of, tangible real and/or personal property of any person, to the extent such injury, death,

damage, destruction or loss, was proximately caused by the grossly negligent or intentionally wrongful acts or omissions of the Indemnifying Party, the Indemnifying Party's Affiliates, or the directors, officers, employees, Agents or contractors (excluding the Indemnified Party) of the Indemnifying Party or the Indemnifying Party's Affiliates, in connection with this Agreement.

19.2 Indemnification Process.

- 19.2.1 As used in this Section 19, "Indemnified Person" means a person whom an Indemnifying Party is obligated to indemnify, defend and/or hold harmless under Section 19.1.
- 19.2.2 An Indemnifying Party's obligations under Section 19.1 shall be conditioned upon the following:
- 19.2.3 The Indemnified Person: (a) shall give the Indemnifying Party notice of the Claim promptly after becoming aware thereof (including a statement of facts known to the Indemnified Person related to the Claim and an estimate of the amount thereof); (b) prior to taking any material action with respect to a Third Party Claim, shall consult with the Indemnifying Party as to the procedure to be followed in defending, settling, or compromising the Claim; (c) shall not consent to any settlement or compromise of a Third Party Claim without the written consent of the Indemnifying Party; (d) shall permit the Indemnifying Party to assume the defense of a Third Party Claim (including, except as provided below, the compromise or settlement thereof) at the Indemnifying Party's own cost and expense, provided, however, that the Indemnified Person shall have the right to approve the Indemnifying Party's choice of legal counsel.
- 19.2.4 If the Indemnified Person fails to comply with Section 19.2.3 with respect to a Claim, to the extent such failure shall have a material adverse effect upon the Indemnifying Party, the Indemnifying Party shall be relieved of its obligation to indemnify, defend and hold harmless the Indemnified Person with respect to such Claim under this Agreement.
- 19.2.5 Subject to 19.2.6 and 19.2.7, below, the Indemnifying Party shall have the authority to defend and settle any Third Party Claim.
- 19.2.6 With respect to any Third Party Claim, the Indemnified Person shall be entitled to participate with the Indemnifying Party in the defense of the Claim if the Claim requests equitable relief or other relief that could affect the rights of the Indemnified Person. In so participating, the Indemnified Person shall be entitled to employ separate counsel for the defense at the Indemnified Person's expense. The Indemnified Person shall also be entitled to participate, at its own expense, in the defense of any Claim, as to any portion of the Claim as to which it is not entitled to be indemnified, defended and held harmless by the Indemnifying Party.
- 19.2.7 In no event shall the Indemnifying Party settle a Third Party Claim or consent to any judgment with regard to a Third Party Claim without the prior written consent of the Indemnified Party, which shall not be unreasonably withheld, conditioned or delayed. In the event the settlement or judgment requires a contribution from or affects the rights of an Indemnified Person, the Indemnified Person shall have the

right to refuse such settlement or judgment with respect to itself and, at its own cost and expense, take over the defense against the Third Party Claim, provided that in such event the Indemnifying Party shall not be responsible for, nor shall it be obligated to indemnify or hold harmless the Indemnified Person against, the Third Party Claim for any amount in excess of such refused settlement or judgment.

- 19.2.8 The Indemnified Person shall, in all cases, assert any and all provisions in applicable Tariffs and Customer contracts that limit liability to third persons as a bar to, or limitation on, any recovery by a third-person claimant.
- 19.2.9 The Indemnifying Party and the Indemnified Person shall offer each other all reasonable cooperation and assistance in the defense of any Third Party Claim.
- 19.3 Each Party agrees that it will not implead or bring any action against the other Party, the other Party's Affiliates, or any of the directors, officers or employees of the other Party or the other Party's Affiliates, based on any claim by any person for personal injury or death that occurs in the course or scope of employment of such person by the other Party or the other Party's Affiliate and that arises out of performance of this Agreement.
- 19.4 Each Party's obligations under this Section 19 shall survive expiration, cancellation or termination of this Agreement.

20. Insurance

- 20.1 DISH shall maintain during the term of this Agreement and for a period of two years thereafter all insurance required to satisfy its obligations under this Agreement (including, but not limited to, its obligations set forth in Section 19 hereof) and all insurance required by Applicable Law. The insurance shall be obtained from an insurer having an A.M. Best insurance rating of at least A-, financial size category VII or greater. At a minimum and without limiting the foregoing undertaking, DISH shall maintain the following insurance:
 - 20.1.1 Commercial General Liability Insurance, on an occurrence basis, including but not limited to, premises-operations, broad form property damage, products/completed operations, contractual liability, independent contractors, and personal injury, with limits of at least \$2,000,000 combined single limit for each occurrence.
 - 20.1.2 Commercial Motor Vehicle Liability Insurance covering all owned, hired and non-owned vehicles, with limits of at least \$2,000,000 combined single limit for each occurrence.
 - 20.1.3 Excess Liability Insurance, in the umbrella form, with limits of at least \$10,000,000 combined single limit for each occurrence.
 - 20.1.4 Worker's Compensation Insurance as required by Applicable Law and Employer's Liability Insurance with limits of not less than \$2,000,000 per occurrence.
 - 20.1.5 All risk property insurance on a full replacement cost basis for all of DISH's real and personal property located at any Collocation site or otherwise located on or in any Verizon premises (whether owned,

leased or otherwise occupied by Verizon), facility, equipment or right-of-way.

- 20.2 Any deductibles, self-insured retentions or loss limits (“Retentions”) for the foregoing insurance must be disclosed on the certificates of insurance to be provided to Verizon pursuant to Sections 20.4 and 20.5. All Retentions shall be the responsibility of DISH.
- 20.3 DISH shall name Verizon and Verizon’s Affiliates as additional insureds on the foregoing liability insurance.
- 20.4 DISH shall, within two (2) weeks of the Effective Date hereof, at the time of each renewal of, or material change in, DISH’s insurance policies, and at such other times as Verizon may reasonably specify, furnish certificates or other proof of the foregoing insurance reasonably acceptable to Verizon. The certificates or other proof of the foregoing insurance shall be sent to: Verizon Partner Solutions, Wholesale Contract Management, 6929 North Lakewood Avenue, Tulsa, OK 74117, as well as to vpscontracts@verizon.com.
- 20.5 DISH shall require its contractors, if any, that may enter upon the premises or access the facilities or equipment of Verizon or Verizon’s affiliates to maintain insurance in accordance with Sections 20.1 through 20.3 and, if requested, to furnish Verizon certificates or other adequate proof of such insurance acceptable to Verizon in accordance with Section 20.4.
- 20.6 Failure of DISH or DISH’s contractors to maintain insurance and provide certificates of insurance as required in Sections 20.1 through 20.5, above, shall be deemed a material breach of this Agreement.
- 20.7 Certificates furnished by DISH or DISH’s contractors shall contain a clause stating: “Verizon Pennsylvania LLC shall be notified in writing at least thirty (30) days prior to cancellation of, or any material change in, the insurance.”

21. Intellectual Property

- 21.1 Except as expressly stated in this Agreement, this Agreement shall not be construed as granting a license with respect to any patent, copyright, trade name, trademark, service mark, trade secret or any other intellectual property, now or hereafter owned, controlled or licensable by either Party. Except as expressly stated in this Agreement, neither Party may use any patent, copyrightable materials, trademark, trade name, trade secret or other intellectual property right, of the other Party except in accordance with the terms of a separate license agreement between the Parties granting such rights.
- 21.2 Except as stated in Section 21.4, neither Party shall have any obligation to defend, indemnify or hold harmless, or acquire any license or right for the benefit of, or owe any other obligation or have any liability to, the other Party or its Affiliates or Customers based on or arising from any Third Party Claim alleging or asserting that the provision or use of any service, facility, arrangement, or software by either Party under this Agreement, or the performance of any service or method, either alone or in combination with the other Party, constitutes direct, vicarious or contributory infringement or inducement to infringe, or misuse or misappropriation of any patent, copyright, trademark, trade secret, or any other proprietary or intellectual property right of any Party or third person. Each Party, however, shall offer to the other reasonable cooperation and assistance in the defense of any such claim.

- 21.3 NOTWITHSTANDING ANY OTHER PROVISION OF THIS AGREEMENT, THE PARTIES AGREE THAT NEITHER PARTY HAS MADE, AND THAT THERE DOES NOT EXIST, ANY WARRANTY, EXPRESS OR IMPLIED, THAT THE USE BY EACH PARTY OF THE OTHER'S SERVICES PROVIDED UNDER THIS AGREEMENT SHALL NOT GIVE RISE TO A CLAIM OF INFRINGEMENT, MISUSE, OR MISAPPROPRIATION OF ANY INTELLECTUAL PROPERTY RIGHT.
- 21.4 DISH agrees that the Services provided by Verizon hereunder shall be subject to the terms, conditions and restrictions contained in any applicable agreements (including, but not limited to software or other intellectual property license agreements) between Verizon and Verizon's vendors. Verizon agrees to advise DISH, directly or through a third party, of any such terms, conditions or restrictions that may limit any DISH use of a Service provided by Verizon that is otherwise permitted by this Agreement. At DISH's written request, to the extent required by Applicable Law, Verizon will use Verizon's best efforts, as commercially practicable, to obtain intellectual property rights from Verizon's vendor to allow DISH to use the Service in the same manner as Verizon that are coextensive with Verizon's intellectual property rights, on terms and conditions that are equal in quality to the terms and conditions under which Verizon has obtained Verizon's intellectual property rights. DISH shall reimburse Verizon for the cost of obtaining such rights.

22. Joint Work Product

The Principal Document is the joint work product of the Parties, has been negotiated by the Parties, and shall be fairly interpreted in accordance with its terms. In the event of any ambiguities, no inferences shall be drawn against either Party.

23. Law Enforcement

- 23.1 Each Party may cooperate with law enforcement authorities and national security authorities to the full extent required or permitted by Applicable Law in matters related to Services provided by it under this Agreement, including, but not limited to, the production of records, the establishment of new lines or the installation of new services on an existing line in order to support law enforcement and/or national security operations, and, the installation of wiretaps, trap-and-trace facilities and equipment, and dialed number recording facilities and equipment.
- 23.2 A Party shall not have the obligation to inform the other Party or the Customers of the other Party of actions taken in cooperating with law enforcement or national security authorities, except to the extent required by Applicable Law.
- 23.3 Where a law enforcement or national security request relates to the establishment of lines (including, but not limited to, lines established to support interception of communications on other lines), or the installation of other services, facilities or arrangements, a Party may act to prevent the other Party from obtaining access to information concerning such lines, services, facilities and arrangements, through operations support system interfaces.

24. Liability

- 24.1 As used in this Section 24, "Service Failure" means a failure to comply with a direction to install, restore or terminate Services under this Agreement, a failure to provide Services under this Agreement, and failures, mistakes, omissions, interruptions, delays, errors, defects or the like, occurring in the course of the provision of any Services under this Agreement.

- 24.2 Except as otherwise stated in Section 24.5, the liability, if any, of a Party, a Party's Affiliates, and the directors, officers and employees of a Party and a Party's Affiliates, to the other Party, the other Party's Customers, and to any other person, for Claims arising out of a Service Failure shall not exceed an amount equal to the pro rata applicable monthly charge for the Services that are subject to the Service Failure for the period in which such Service Failure occurs.
- 24.3 Except as otherwise stated in Section 24.5, a Party, a Party's Affiliates, and the directors, officers and employees of a Party and a Party's Affiliates, shall not be liable to the other Party, the other Party's Customers, or to any other person, in connection with this Agreement (including, but not limited to, in connection with a Service Failure or any breach, delay or failure in performance, of this Agreement) for special, indirect, incidental, consequential, reliance, exemplary, punitive, or like damages, including, but not limited to, damages for lost revenues, profits or savings, or other commercial or economic loss, even if the person whose liability is excluded by this Section has been advised of the possibility of such damages.
- 24.4 The limitations and exclusions of liability stated in Sections 24.1 through 24.3 shall apply regardless of the form of a claim or action, whether statutory, in contract, warranty, strict liability, tort (including, but not limited to, negligence of a Party), or otherwise.
- 24.5 Nothing contained in Sections 24.1 through 24.4 shall exclude or limit liability:
- 24.5.1 under Sections 9 Confidentiality 19, Indemnification, or 39, Taxes.
 - 24.5.2 for any obligation to indemnify, defend and/or hold harmless that a Party may have under this Agreement.
 - 24.5.3 for damages arising out of or resulting from bodily injury to or death of any person, or damage to, or destruction or loss of, tangible real and/or personal property of any person, or Toxic or Hazardous Substances, to the extent such damages are otherwise recoverable under Applicable Law;
 - 24.5.4 for a claim for infringement of any patent, copyright, trade name, trade mark, service mark, or other intellectual property interest;
 - 24.5.5 under Section 258 of the Act or any order of FCC or the Commission implementing Section 258; or
 - 24.5.6 under the financial incentive or remedy provisions of any service quality plan required by the FCC or the Commission.
- 24.6 In the event that the liability of a Party, a Party's Affiliate, or a director, officer or employee of a Party or a Party's Affiliate, is limited and/or excluded under both this Section 24 and a provision of an applicable Tariff, the liability of the Party or other person shall be limited to the smaller of the amounts for which such Party or other person would be liable under this Section or the Tariff provision.
- 24.7 Each Party shall, in its tariffs and other contracts with its Customers, provide that in no case shall the other Party, the other Party's Affiliates, or the directors, officers or employees of the other Party or the other Party's Affiliates, be liable to such Customers or other third-persons for any special, indirect, incidental, consequential, reliance, exemplary, punitive or other damages, arising out of a Service Failure.

25. Network Management

- 25.1 Cooperation. The Parties will work cooperatively in a commercially reasonable manner to install and maintain a reliable network. DISH and Verizon will exchange appropriate information (e.g., network information, maintenance contact numbers, escalation procedures, and information required to comply with requirements of law enforcement and national security agencies) to achieve this desired reliability. In addition, the Parties will work cooperatively in a commercially reasonable manner to apply sound network management principles to alleviate or to prevent traffic congestion and subject to Section 16, to minimize fraud associated with third number billed calls, calling card calls, and other services related to this Agreement.
- 25.2 Responsibility for Following Standards. Each Party recognizes a responsibility to follow the standards that may be agreed to between the Parties and to employ characteristics and methods of operation that will not interfere with or impair the service, network or facilities of the other Party or any third parties connected with or involved directly in the network or facilities of the other.
- 25.3 Interference or Impairment. If a Party ("Impaired Party") reasonably determines that the services, network, facilities, or methods of operation, of the other Party ("Interfering Party") will or are likely to interfere with or impair the Impaired Party's provision of services or the operation of the Impaired Party's network or facilities, the Impaired Party may interrupt or suspend any Service provided to the Interfering Party to the extent necessary to prevent such interference or impairment, subject to the following:
- 25.3.1 Except in emergency situations (e.g., situations involving a risk of bodily injury to persons or damage to tangible property, or an interruption in Customer service) or as otherwise provided in this Agreement, the Impaired Party shall have given the Interfering Party at least ten (10) days' prior written notice of the interference or impairment or potential interference or impairment and the need to correct the condition within said time period; and taken other actions, if any, required by Applicable Law; and,
- 25.3.2 Upon correction of the interference or impairment, the Impaired Party will promptly restore the interrupted or suspended Service. The Impaired Party shall not be obligated to provide an out-of-service credit allowance or other compensation to the Interfering Party in connection with the suspended Service.
- 25.4 Outage Repair Standard. In the event of an outage or trouble in any Service being provided by a Party hereunder, the Providing Party will follow Verizon's standard procedures for isolating and clearing the outage or trouble.

26. Non-Exclusive Remedies

Except as otherwise expressly provided in this Agreement, each of the remedies provided under this Agreement is cumulative and is in addition to any other remedies that may be available under this Agreement or at law or in equity.

27. Notice of Network Changes

If a Party makes a change in the information necessary for the transmission and routing of services using that Party's facilities or network, or any other change in its facilities or network that will materially affect the interoperability of its facilities or network with the

other Party's facilities or network, the Party making the change shall publish notice of the change at least ninety (90) days in advance of such change, and shall use reasonable efforts, as commercially practicable, to publish such notice at least one hundred eighty (180) days in advance of the change; provided, however, that if an earlier publication of notice of a change is required by Applicable Law (including, but not limited to, 47 CFR 51.325 through 51.335) notice shall be given at the time required by Applicable Law.

28. Notices

28.1 Except as otherwise provided in this Agreement, notices given by one Party to the other Party under this Agreement:

28.1.1 shall be in writing;

28.1.2 shall be delivered (a) by email, (b) by express delivery service (by a nationally recognized firm in this business) with next Business Day delivery; and

28.1.3 shall be delivered to the following addresses of the Parties:

To DISH:

DISH Wireless LLC
Attn: Head of Telecom and Transport

If by nationally recognized courier service:
5701 S. Santa Fe Drive
Littleton, CO 80120

If by first-class certified mail:
P.O. Box 6655
Englewood, CO 80155

with a copy to:

Office of the General Counsel
DISH Purchasing Corporation

If by nationally recognized courier service:
5701 S. Santa Fe Drive
Littleton, CO 80120

If by first-class certified mail:
P.O. Box 6655
Englewood, CO 80155

To Verizon:

Verizon Partner Solutions
Wholesale Contract Management
6929 North Lakewood Avenue
Tulsa, OK 74117
Internet Address: ypscontracts@verizon.com

with a copy to:

ATTN: Verizon Legal Wholesale

1300 I Street, NW
5th Floor
Washington, DC 20005
Email: VZLegalWholesale@verizon.com

or to such other address as either Party shall designate by proper notice.

Notices will be deemed given as of the earlier of (1) where the notice is sent via email, if the notice is sent on a Business Day and before 5 P.M. in the time zone where it is received, on the date set forth on the telecopy or email delivery confirmation, or if the notice is sent on a non-Business Day or if the notice is sent after 5 P.M. in the time zone where it is received, the next Business Day after the date set forth on the telecopy or email delivery confirmation; and (2) where the notice is sent via express delivery service for next Business Day delivery, the next Business Day after the notice is sent.

DISH shall notify Verizon, by written notice pursuant to this Section 28, of any changes in the addresses or other DISH contact information identified under Section 28.1.3 above.

29. Ordering and Maintenance

DISH shall use Verizon's electronic Operations Support System access platforms to submit Orders and requests for maintenance and repair of Services, and to engage in other pre-ordering, ordering, provisioning, maintenance and repair transactions. If Verizon has not yet deployed an electronic capability for DISH to perform a pre-ordering, ordering, provisioning, maintenance or repair, transaction offered by Verizon, DISH shall use such other processes as Verizon has made available for performing such transaction (including, but not limited, to placing trouble reports by voice telephone transmission).

30. Performance Standards

30.1 Verizon shall provide Services under this Agreement in accordance with the performance standards required by Applicable Law, including, but not limited to, Section 251(c) of the Act.

30.2 DISH shall provide Services under this Agreement in accordance with the performance standards required by Applicable Law.

31. Point of Contact for DISH Customers

31.1 DISH shall establish telephone numbers and mailing addresses at which DISH Customers may communicate with DISH and shall advise DISH Customers of these telephone numbers and mailing addresses.

31.2 Except as otherwise agreed to by Verizon, Verizon shall have no obligation, and may decline, to accept a communication from a DISH Customer, including, but

not limited to, a DISH Customer request for repair or maintenance of a Verizon Service provided to DISH.

32. Publicity and Use of Trademarks or Service Marks

- 32.1 A Party, its Affiliates, and their respective contractors and Agents, shall not use the other Party's trademarks, service marks, logos or other proprietary trade dress, in connection with the sale of products or services, or in any advertising, press releases, publicity matters or other promotional materials, unless the other Party has given its written consent for such use, which consent the other Party may grant or withhold in its sole discretion.
- 32.2 Neither Party may imply any direct or indirect affiliation with or sponsorship or endorsement of it or its services or products by the other Party.
- 32.3 Any violation of this Section 32 shall be considered a material breach of this Agreement.

33. References

- 33.1 All references to Sections, Appendices and Exhibits shall be deemed to be references to Sections, Appendices and Exhibits of this Agreement unless the context shall otherwise require.
- 33.2 Unless the context shall otherwise require, any reference to a Tariff, agreement, technical or other document (including Verizon or third party guides, practices or handbooks), or provision of Applicable Law, is to such Tariff, agreement, document, or provision of Applicable Law, as amended and supplemented from time to time (and, in the case of a Tariff or provision of Applicable Law, to any successor Tariff or provision).

34. Relationship of the Parties

- 34.1 The relationship of the Parties under this Agreement shall be that of independent contractors and nothing herein shall be construed as creating any other relationship between the Parties.
- 34.2 Nothing contained in this Agreement shall make either Party the employee of the other, create a partnership, joint venture, or other similar relationship between the Parties, or grant to either Party a franchise, distributorship or similar interest.
- 34.3 Except for provisions herein expressly authorizing a Party to act for another Party, nothing in this Agreement shall constitute a Party as a legal representative or Agent of the other Party, nor shall a Party have the right or authority to assume, create or incur any liability or any obligation of any kind, express or implied, against, in the name or on behalf of the other Party unless otherwise expressly permitted by such other Party in writing, which permission may be granted or withheld by the other Party in its sole discretion.
- 34.4 Each Party shall have sole authority and responsibility to hire, fire, compensate, supervise, and otherwise control its employees, Agents and contractors. Each Party shall be solely responsible for payment of any Social Security or other taxes that it is required by Applicable Law to pay in conjunction with its employees, Agents and contractors, and for withholding and remitting to the applicable taxing authorities any taxes that it is required by Applicable Law to collect from its employees.

- 34.5 Except as otherwise expressly provided in this Agreement, no Party undertakes to perform any obligation of the other Party, whether regulatory or contractual, or to assume any responsibility for the management of the other Party's business.
- 34.6 The relationship of the Parties under this Agreement is a non-exclusive relationship.

35. Reservation of Rights

- 35.1 Notwithstanding anything to the contrary in this Agreement, neither Party waives, and each Party hereby expressly reserves, its rights: (a) to appeal or otherwise seek the reversal of and changes in any arbitration decision associated with this Agreement; (b) to challenge the lawfulness of this Agreement and any provision of this Agreement; (c) to seek changes in this Agreement (including, but not limited to, changes in rates, charges and the Services that must be offered) through changes in Applicable Law; (d) to challenge the lawfulness and propriety of, and to seek to change, any Applicable Law, including, but not limited to any rule, regulation, order or decision of the Commission, the FCC, or a court of applicable jurisdiction; and (e) to collect debts owed to it under any prior interconnection or resale agreements. Nothing in this Agreement shall be deemed to limit or prejudice any position a Party has taken or may take before the Commission, the FCC, any other state or federal regulatory or legislative bodies, courts of applicable jurisdiction, or industry fora. The provisions of this Section shall survive the expiration, cancellation or termination of this Agreement.
- 35.2 DISH acknowledges DISH has been advised by Verizon that it is Verizon's position that this Agreement contains certain provisions which are intended to reflect Applicable Law and Commission and/or FCC arbitration decisions.

36. Subcontractors

A Party may use a contractor of the Party (including, but not limited to, an Affiliate of the Party) to perform the Party's obligations under this Agreement; provided, that a Party's use of a contractor shall not release the Party from any duty or liability to fulfill the Party's obligations under this Agreement.

37. Successors and Assigns

This Agreement shall be binding on and inure to the benefit of the Parties and their respective legal successors and permitted assigns.

38. Survival

The rights, liabilities and obligations of a Party for acts or omissions occurring prior to the expiration, cancellation or termination of this Agreement, the rights, liabilities and obligations of a Party under any provision of this Agreement regarding confidential information (including but not limited to, Section 9), indemnification or defense (including, but not limited to, Section 19), or limitation or exclusion of liability (including, but not limited to, Section 24), and the rights, liabilities and obligations of a Party under any provision of this Agreement which by its terms or nature is intended to continue beyond or to be performed after the expiration, cancellation or termination of this Agreement, shall survive the expiration, cancellation or termination of this Agreement.

39. Taxes

- 39.1 In General. With respect to any purchase of Services under this Agreement, if any federal, state or local tax, fee, surcharge or other tax-like charge, excluding any tax levied on property or net income, (a "Tax") is required or permitted by Applicable Law or a Tariff to be collected from the Purchasing Party by the Providing Party, then (a) the Providing Party shall bill the Purchasing Party for such Tax, as a separately stated item on the invoice, (b) the Purchasing Party shall timely remit such Tax to the Providing Party and (c) the Providing Party shall timely remit such collected Tax to the applicable taxing authority as and to the extent required by Applicable Law.
- 39.2 Taxes Imposed on the Providing Party or Receipts. With respect to any purchase of Services under this Agreement, if any federal, state or local Tax is imposed by Applicable Law on the receipts of the Providing Party, and such Applicable Law permits the Providing Party to exclude certain receipts received from sales to a public utility, distributor, telephone company, local exchange carrier, telecommunications company or other communications company ("Telecommunications Company"), such exclusion being based on the fact that the Purchasing Party is also subject to a tax based upon receipts ("Receipts Tax"), then the Purchasing Party shall provide appropriate exemption documentation to Providing Party and pay and remit the Receipts Tax as required by Applicable Law.
- 39.3 Taxes Imposed on Subscriber. With respect to any purchase of Services under this Agreement that are resold to a third party, if any federal, state or local Tax is imposed by Applicable Law on the subscriber, end-user, customer or ultimate consumer ("Subscriber") in connection with any such purchase, which a Telecommunications Company is required to impose and/or collect from a Subscriber, or if any federal, state or local Tax is imposed on the Providing Party and required by Applicable Law to be passed through to the Subscriber, then the Purchasing Party (a) shall impose and/or collect such Tax from the Subscriber and (b) shall timely remit such Tax to the applicable taxing authority.
- 39.4 Tax Exemptions and Exemption Certificates. If Applicable Law clearly exempts a purchase hereunder from a Tax, and if such Applicable Law also provides an exemption procedure, such as an exemption certificate requirement, then, if the Purchasing Party complies with such procedure, the Providing Party shall not collect such Tax during the effective period of such exemption. Such exemption shall be effective upon receipt of the exemption certificate or affidavit in accordance with the terms set forth in Section 41.7. If Applicable Law clearly exempts a purchase hereunder from a Tax, but does not also provide an exemption procedure, then the Providing Party shall not collect such Tax if the Purchasing Party (a) furnishes the Providing Party with a letter signed by an officer requesting such an exemption and citing the provision in the Applicable Law which clearly allows such exemption and (b) supplies the Providing Party with an indemnification agreement, acceptable to the Providing Party, which holds the Providing Party harmless on an after-tax basis with respect to its forbearing to collect such Tax.
- 39.5 Liability for Uncollected Tax, Interest and Penalty.
- 39.5.1 If the Providing Party has not received an exemption certificate or other appropriate exemption documentation from the Purchasing Party and the Providing Party fails to bill the Purchasing Party for any Tax as required by Section 41.1, then, as between the Providing Party and the Purchasing Party, (a) the Purchasing Party shall remain liable for such unbilled Tax and any interest assessed thereon and (b) the

Providing Party shall be liable for any penalty assessed with respect to such unbilled Tax by a taxing authority.

- 39.5.2 If the Providing Party properly bills the Purchasing Party for any Tax but the Purchasing Party fails to remit such Tax to the Providing Party as required by Section 41.2, then, as between the Providing Party and the Purchasing Party, the Purchasing Party shall be liable for such uncollected Tax and any interest assessed thereon, as well as any penalty assessed with respect to such uncollected Tax by the applicable taxing authority.
- 39.5.3 If the Providing Party does not collect any Tax as required by Section 41.1 because the Purchasing Party has provided such Providing Party with an exemption certificate that is later found to be inadequate, invalid or inapplicable by a taxing authority, then, as between the Providing Party and the Purchasing Party, the Purchasing Party shall be liable for such uncollected Tax and any interest assessed thereon, as well as any penalty assessed with respect to such uncollected Tax by the applicable taxing authority.
- 39.5.4 If the Purchasing Party fails to impose and/or collect any Tax from Subscribers as required by Section 41.3, then, as between the Providing Party and the Purchasing Party, the Purchasing Party shall remain liable for such uncollected Tax and any interest assessed thereon, as well as any penalty assessed with respect to such uncollected Tax by the applicable taxing authority. With respect to any Tax that the Purchasing Party has agreed to pay, or is required to impose on and/or collect from Subscribers, the Purchasing Party agrees to indemnify and hold the Providing Party harmless on an after-tax basis for any costs incurred by the Providing Party as a result of actions taken by the applicable taxing authority to recover the Tax from the Providing Party due to the failure of the Purchasing Party to timely pay, or collect and timely remit, such Tax to such authority.
- 39.6 Audit Cooperation. In the event either Party is audited by a taxing authority, the other Party agrees to cooperate fully with the Party being audited in order to respond to any audit inquiries in a proper and timely manner so that the audit and/or any resulting controversy may be resolved expeditiously.
- 39.7 Notices. All notices, affidavits, exemption-certificates or other communications required or permitted to be given by either Party to the other, for purposes of this Section 39, shall be made in writing and shall be delivered in person or sent by certified mail, return receipt requested, or registered mail, or a courier service providing proof of service, and sent to the addressees set forth in Section 28 as well as to the following:

To Verizon:

Verizon Communications
Tax Department
One Verizon Way, VC53S-221
Basking Ridge, NJ 07920

To DISH:

DISH Wireless LLC
Attn: Head of Telecom and Transport

If by nationally recognized courier service:
5701 S. Santa Fe Drive
Littleton, CO 80120

If by first-class certified mail:
P.O. Box 6655
Englewood, CO 80155

with a copy to:

Office of the General Counsel
DISH Purchasing Corporation

If by nationally recognized courier service:
5701 S. Santa Fe Drive
Littleton, CO 80120

If by first-class certified mail:
P.O. Box 6655
Englewood, CO 80155

Each Party may from time to time designate another address or other addressees by giving notice in accordance with the terms of this Section. Any notice or other communication shall be deemed to be given when received.

40. Technology Upgrades

Notwithstanding any other provision of this Agreement, each Party shall have the right to deploy, upgrade, migrate and maintain its network at its discretion. Nothing in this Agreement shall limit each Party's ability to modify its network through the incorporation of new equipment or software or otherwise.

41. Territory

41.1 This Agreement applies to the territory in which Verizon operates as an Incumbent Local Exchange Carrier in the Commonwealth of PA. Verizon shall be obligated to provide Services under this Agreement only within this territory.

41.2 Notwithstanding any other provision of this Agreement, Verizon may terminate this Agreement as to a specific operating territory or portion thereof if Verizon sells or otherwise transfers its operations in such territory or portion thereof to a third-person. Verizon shall provide DISH with at least 90 calendar days prior written notice of such termination, which shall be effective upon the date specified in the notice.

42. Third Party Beneficiaries

Except as expressly set forth in this Agreement, this Agreement is for the sole benefit of the Parties and their permitted assigns, and nothing herein shall create or be construed to provide any third-persons (including, but not limited to, Customers or contractors of a Party) with any rights (including, but not limited to, any third-party beneficiary rights) hereunder. Except as expressly set forth in this Agreement, a Party shall have no liability under this Agreement to the Customers of the other Party or to any other third person.

43. 252(i) Obligations

To the extent required by Applicable Law, each Party shall comply with Section 252(i) of the Act. To the extent that the exercise by DISH of any rights it may have under Section 252(i) results in the rearrangement of Services by Verizon, DISH shall be solely liable for all costs associated therewith, as well as for any termination charges associated with the termination of existing Verizon Services.

44. Use of Service

Each Party shall make commercially reasonable efforts to ensure that its Customers comply with the provisions of this Agreement (including, but not limited to the provisions of applicable Tariffs) applicable to the use of Services purchased by it under this Agreement.

45. Waiver

A failure or delay of either Party to enforce any of the provisions of this Agreement, or any right or remedy available under this Agreement or at law or in equity, or to require performance of any of the provisions of this Agreement, or to exercise any option which is provided under this Agreement, shall in no way be construed to be a waiver of such provisions, rights, remedies or options.

46. Warranties

EXCEPT AS EXPRESSLY STATED IN THIS AGREEMENT, NEITHER PARTY MAKES OR RECEIVES ANY WARRANTY, EXPRESS OR IMPLIED, WITH RESPECT TO THE SERVICES PROVIDED, OR TO BE PROVIDED, UNDER THIS AGREEMENT AND THE PARTIES DISCLAIM ANY OTHER WARRANTIES, INCLUDING BUT NOT LIMITED TO, **WARRANTIES OF MERCHANTABILITY, WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE** WARRANTIES AGAINST INFRINGEMENT, AND WARRANTIES ARISING BY TRADE CUSTOM, TRADE USAGE, COURSE OF DEALING OR PERFORMANCE, OR OTHERWISE.

47. Withdrawal of Services

47.1 Notwithstanding anything contained in this Agreement, except as otherwise required by Applicable Law, Verizon may terminate its offering and/or provision of any Service under this Agreement upon thirty (30) days prior written notice to DISH.

SIGNATURE PAGE

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

DISH WIRELESS L.L.C.

VERIZON PENNSYLVANIA LLC

Signature: *Jeff McSchooler*
Jeff McSchooler (May 12, 2021 14:53 MDT)

Signature: *Rachelle Blevins*

Name: Jeff McSchooler

Name: Rachelle Blevins

Title: EVP

Title: Contract Management

Date: May 12, 2021

Date: May 12, 2021

GLOSSARY

1. General Rule

- 1.1 The provisions of Sections 1.2 through 1.4 and Section 2 apply with regard to the Principal Document. Terms used in a Tariff shall have the meanings stated in the Tariff.
- 1.2 Unless the context clearly indicates otherwise, when a term listed in this Glossary is used in the Principal Document, the term shall have the meaning stated in this Glossary. A defined term intended to convey the meaning stated in this Glossary is capitalized when used. Other terms that are capitalized, and not defined in this Glossary or elsewhere in the Principal Document, shall have the meaning stated in the Act. Additional definitions that are specific to the matters covered in a particular provision of the Principal Document may appear in that provision. To the extent that there may be any conflict between a definition set forth in this Glossary and any definition in a specific provision, the definition set forth in the specific provision shall control with respect to that provision.
- 1.3 Unless the context clearly indicates otherwise, any term defined in this Glossary which is defined or used in the singular shall include the plural, and any term defined in this Glossary which is defined or used in the plural shall include the singular.
- 1.4 The words “shall” and “will” are used interchangeably throughout the Principal Document and the use of either indicates a mandatory requirement. The use of one or the other shall not confer a different degree of right or obligation for either Party.

2. Definitions

- 2.1 Act.
The Communications Act of 1934 (47 U.S.C. §151 et seq.), as from time to time amended (including, but not limited to, by the Telecommunications Act of 1996).
- 2.2 Affiliate.
Shall have the meaning set forth in the Act.
- 2.3 Agent.
An agent or servant.
- 2.4 Agreement.
This Agreement, as defined in Section 1 of the General Terms and Conditions.
- 2.5 ALI (Automatic Location Identification) Database.
The emergency services (E-911) database managed by Verizon that contains company ID, Call Back Number, pANI number, and other information used to process caller location records.
- 2.6 Ancillary Traffic.

All traffic that is destined for ancillary services, or that may have special billing requirements, including but not limited to the following: directory assistance, 911/E-911, operator services (IntraLATA call completion), IntraLATA third party, collect and calling card, and 800/888 database query.

2.7 Applicable Law.

All effective laws, government regulations and government orders, applicable to each Party's performance of its obligations under this Agreement.

2.8 ASR (Access Service Request).

An industry standard form, which contains data elements and usage rules used by the Parties to add, establish, change or disconnect services or trunks for the purposes of interconnection.

2.9 ATIS.

The Alliance for Telecommunications Industry Solutions.

2.10 Business Day.

Monday through Friday, except for holidays observed by Verizon.

2.11 Calendar Quarter.

January through March, April through June, July through September, or October through December.

2.12 Calendar Year.

January through December.

2.13 Call Back Number.

A telephone number that can be used by the PSAP to re-contact the location from which a 911/E-911 Call was placed. The telephone number may or may not be the telephone number of the station used to originate the 911/E-911 Call.

2.14 CCS (Common Channel Signaling).

A method of transmitting call set-up and network control data over a digital signaling network separate from the public switched telephone network facilities that carry the actual voice or data content of the call.

2.15 Cell Sector.

A geographic area defined by DISH (according to DISH's own radio frequency coverage data), and consisting of a certain portion or all of the total coverage area of a Cell Site.

2.16 Cell Site.

The DISH's fixed radio transmitting and receiving facilities for carrying wireless traffic from/to the DISH Wireless End User.

2.17 Central Office.

An End Office or Tandem. Sometimes this term is used to refer to a telephone company building in which switching systems and telephone equipment are installed.

2.18 Claims.

Any and all claims, demands, suits, actions, settlements, judgments, fines, penalties, liabilities, injuries, damages, losses, costs (including, but not limited to, court costs), and expenses (including, but not limited to, reasonable attorney's fees).

2.19 CLEC (Competitive Local Exchange Carrier).

Any Local Exchange Carrier other than Verizon that is operating as a Local Exchange Carrier in the territory in which Verizon operates as an ILEC in the State of Pennsylvania.

2.20 CLLI Codes.

Common Language Location Identifier Codes.

2.21 CMRS (Commercial Mobile Radio Services).

A radio communications service between mobile stations or receivers and land stations, or by mobile stations communicating among themselves that is provided for profit and that make interconnected service available to the public or to such classes of eligible users as to be effectively available to a substantial portion of the public. DISH is or shortly will become a CMRS provider.

2.22 Commission.

Pennsylvania Public Utility Commission.

2.23 Controlling 911 Authority.

The duly authorized state, county or local government agency empowered by law to oversee the 911/E-911 services, operations and systems within a defined jurisdiction.

2.24 CPN (Calling Party Number).

A CCS parameter that identifies the calling party's telephone number.

2.25 CPNI (Customer Proprietary Network Information).

Shall have the meaning set forth in Section 222 of the Act, 47 U.S.C. § 222.

2.26 Customer.

A third party residence or business end-user subscriber to Telephone Exchange Services provided by either of the Parties.

2.27 Default PSAP.

The PSAP designated by the Controlling 911 Authority to receive a 911/E-911 Call when it is not feasible to route that 911/E-911 Call to the Designated PSAP.

- 2.28 Designated PSAP.
The primary PSAP designated by the Controlling 911 Authority to receive a 911/E-911 Call based upon the pANI passed with the 911/E-911 Call.
- 2.29 Digital Signal Level.
One of several transmission rates in the time-division multiplex hierarchy.
- 2.30 DS1 (Digital Signal Level 1).
The 1.544 Mbps first-level signal in the time-division multiplex hierarchy.
- 2.31 DS3 (Digital Signal Level 3).
The 44.736 Mbps third-level signal in the time-division multiplex hierarchy.
- 2.32 EMI (Exchange Message Interface).
Standard used for the interexchange of telecommunications message information between local exchange carriers and interexchange carriers for billable, non-billable, sample, settlement and study data. Data is provided between companies via a unique record layout that contains Customer billing information, account summary and tracking analysis. EMI format is contained in document SR-320 published by ATIS.
- 2.33 End Office.
A switching entity that is used for connecting lines to lines or lines to trunks for the purpose of originating/terminating calls. Sometimes this term is used to refer to a telephone company building in which switching systems and telephone equipment are installed.
- 2.34 ESRD (Emergency Service Routing Digits).
A 10-digit North American Numbering plan that uniquely identifies a base station, Cell Site, or sector that may be used to route emergency call through the network.
- 2.35 Exchange Access.
Shall have the meaning set forth in the Act.
- 2.36 FCC.
The Federal Communications Commission.
- 2.37 FCC Regulations.
The unstayed, effective regulations promulgated by the FCC, as amended from time to time.
- 2.38 Fixed Wireless Service.
Wireless service that is not Commercial Mobile Radio Service.
- 2.39 Host ALI Record.

A data record resident in the primary i.e., host, ALI system for a PSAP.

2.40 ILEC (Incumbent Local Exchange Carrier).

Shall have the meaning stated in the Act.

2.41 Information Access.

The provision of specialized exchange telecommunications services in connection with the origination, termination, transmission, switching, forwarding or routing of telecommunications traffic to or from the facilities of a provider of information services, including a provider of Internet access or Internet transmission services.

2.42 Internet Traffic.

Any traffic that is transmitted to or returned from the Internet at any point during the duration of the transmission.

2.43 InterLATA Service.

Shall have the meaning set forth in the Act.

2.44 IntraLATA.

Telecommunications that originate and terminate within the same LATA.

2.45 InterMTA Traffic.

CMRS traffic originated by a Customer of one Party on that Party's network in an MTA and terminated to a Customer of the other Party on that Party's network outside the MTA in which the call originated. InterMTA Traffic is not Reciprocal Compensation Traffic. For purposes of determining originating and terminating points of a call under this Agreement, DISH will use the Cell Site to which the DISH Customer placing or receiving the call is connected at the beginning of the call.

2.46 IntraMTA Traffic.

CMRS traffic originated by a Customer of one Party on that Party's network in an MTA and terminated to a Customer of the other Party on that Party's network in the same MTA in which the call originated. For purposes of determining originating and terminating points of a call under this Agreement, DISH will use the Cell Site to which the DISH Customer placing or receiving the call is connected at the beginning of the call.

2.47 IXC (Interexchange Carrier).

A Telecommunications Carrier that provides, directly or indirectly, InterLATA or IntraLATA Telephone Toll Services.

2.48 LATA (Local Access and Transport Area).

Shall have the meaning set forth in the Act.

2.49 LEC (Local Exchange Carrier).

Shall have the meaning set forth in the Act.

2.50 LERG (Local Exchange Routing Guide).

A Telcordia Technologies reference containing NPA/NXX routing and homing information.

2.51 MECAB (Multiple Exchange Carrier Access Billing).

A document prepared by the Billing Committee of the Ordering and Billing Forum (OBF), which functions under the auspices of the Carrier Liaison Committee (CLC) of ATIS. The MECAB document, published by ATIS as "ATIS/OBF-MECAB", as revised from time to time, contains the recommended guidelines for the billing of an Exchange Access Service provided by two or more LECs, or by one LEC in two or more states, within a single LATA.

2.52 MECOD (Multiple Exchange Carriers Ordering and Design Guidelines for Access Services - Industry Support Interface).

A document developed by the Ordering/Provisioning Committee under the auspices of the Ordering and Billing Forum (OBF), which functions under the auspices of the Carrier Liaison Committee (CLC) of the Alliance for Telecommunications Industry Solutions (ATIS). The MECOD document, published by Telcordia Technologies as Special Report SR-STS-002643, establishes methods for processing orders for Exchange Access Service that is to be provided by two or more LECs.

2.53 MTA (Major Trading Area).

Major Trading Area as defined by the FCC Regulations, Part 24.202(a).

2.54 NANP (North American Numbering Plan).

The system of telephone numbering employed in the United States, Canada, Bermuda, Puerto Rico and certain Caribbean islands. The NANP format is a 10-digit number that consist of a 3-digit NPA Code (commonly referred to as the area code), followed by a 3-digit NXX Code and 4 digit line number.

2.55 NCAS.

Non-Call Path Associated Signaling.

2.56 911/E-911 Call(s).

Call(s) made by DISH end user by dialing the three digit telephone number "911" (and, as necessary, pressing the "Send" or analogous transmitting button) on a wireless handset to facilitate the reporting of an emergency requiring response by a public safety agency.

2.57 911/E-911 Service Provider.

An entity authorized to provide 911/E-911 network and database services within a particular jurisdiction.

2.58 NPA (Numbering Plan Area).

Also sometimes referred to as an area code, is the first three-digit indicator of

each 10-digit telephone number within the NANP. There are two general categories of NPA, "Geographic NPAs" and "Non-Geographic NPAs". A Geographic NPA is associated with a defined geographic area, and all telephone numbers bearing such NPA are associated with services provided within that geographic area. A Non-Geographic NPA, also known as a "Service Access Code" or "SAC Code" is typically associated with a specialized Telecommunications Service that may be provided across multiple geographic NPA areas. 500, 700, 800, 888 and 900 are examples of Non-Geographic NPAs.

2.59 NPA/NXX.

The NPA followed by the NXX (i.e., the first six digits of a ten-digit telephone number).

2.60 NXX, NXX Code, Central Office Code or CO Code.

The three-digit switch entity indicator (i.e. the first three digits of a seven-digit telephone number).

2.61 Order.

An order or application to provide, change or terminate a Service (including, but not limited to, a commitment to purchase a stated number or minimum number of lines or other Services for a stated period or minimum period of time).

2.62 Originating Switched Access Detail Usage Data.

A category 1101XX record as defined in the EMI Telcordia Practice BR-010-200-010.

2.63 PAM Protocol.

The bi-directional ALI-to-ALI real-time steering interface which supports intersystem queries. This interface allows an ALI database serving a PSAP to query a second ALI database for ALI data that is not resident in the ALI Database serving the PSAP.

2.64 pANI (Pseudo Automatic Number Identification).

A non-dialable telephone number used to support routing of wireless 911/E-911 Calls to a PSAP. pANI may identify a wireless cell, Cell Sector or PSAP to which the call should be routed. pANI is also known as routing number, Emergency Service Routing Digits (ESRD) and Emergency Service Routing Key (ESRK).

2.65 Phase II.

Shall have the meaning stated in Report and Order and Further Notice of Proposed Rulemaking, In the Matter of Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems, CC Docket 94-102, RM-8143 (rel. July 26, 1996).

2.66 POI (Point of Interconnection).

The physical location where the Parties' respective facilities physically interconnect for the purpose of mutually exchanging their traffic. As set forth in the Two-Way Wireless Attachment, a Point of Interconnection shall be at (i) a

technically feasible point on Verizon's network in a LATA and/or (ii) a fiber meet point to which the Parties mutually agree under the terms of this Agreement. By way of example, a technically feasible Point of Interconnection on Verizon's network in a LATA would include an applicable Verizon Tandem Wire Center or Verizon End Office Wire Center but, notwithstanding any other provision of this Agreement or otherwise, would not include a DISH Wire Center, DISH switch or any portion of a transport facility provided by Verizon to DISH or another party between (x) a Verizon Wire Center or switch and (y) the Wire Center or switch of DISH or another party.

2.67 Principal Document.

This document, including, but not limited to, the Title Page, the Table of Contents, the Preface, the General Terms and Conditions, the signature page, this Glossary, the Attachments, and the Appendices to the Attachments.

2.68 Providing Party.

A Party offering or providing a Service to the other Party under this Agreement.

2.69 PSAP.

Public Safety Answering Points.

2.70 Purchasing Party.

A Party requesting or receiving a Service from the other Party under this Agreement.

2.71 Rate Center Area.

The geographic area that has been identified by a given LEC as being associated with a particular NPA-NXX code assigned to the LEC for its provision of Telephone Exchange Services. The Rate Center Area is the exclusive geographic area that the LEC has identified as the area within which it will provide Telephone Exchange Services bearing the particular NPA-NXX designation associated with the specific Rate Center Area.

2.72 Rate Center Point.

A specific geographic point, defined by a V&H coordinate, located within the Rate Center Area and used to measure distance for the purpose of billing for distance-sensitive Telephone Exchange Services and Toll Traffic. Pursuant to Telcordia Practice BR-795-100-100, the Rate Center Point may be an End Office location, or a "LEC Consortium Point of Interconnection".

2.73 Reciprocal Compensation.

The arrangement for recovering, in accordance with Section 251(b)(5) of the Act, and other applicable FCC orders and FCC Regulations, costs incurred for the transport and termination of Reciprocal Compensation Traffic originating on one Party's network and terminating on the other Party's network (as set forth in Section 7 of the Two-Way Wireless Attachment).

2.74 Reciprocal Compensation Traffic.

Telecommunications traffic originated by a Customer of one Party on that Party's

network and terminated to a Customer of the other Party on that other Party's network within the same MTA (i.e. intraMTA), except for Telecommunications traffic that is interstate or intrastate Exchange Access, Information Access, or exchange services for Exchange Access or Information Access. Reciprocal Compensation Traffic does not include the following traffic (it being understood that certain traffic types will fall into more than one (1) of the categories below that do not constitute Reciprocal Compensation Traffic): (1) InterMTA Traffic, including but not limited to, calls originated on a 1+ presubscription basis, or on a casual dialed (10XXX/101XXXX) basis, based on the actual originating and terminating points of the complete end-to-end communication; (2) special access, private line, Frame Relay, ATM, or any other traffic that is not switched by the terminating Party; or (3) Tandem Transit Traffic.

2.75 Routing Number.

The number used to support the routing of wireless 911 Calls. It may identify a wireless Cell Sector or PSAP to which the call should be routed. In NCAS, the Routing Number (identified in standard documents as Emergency Services Routing Key "ESRK") is a ten-digit number translated and out pulsed from a Cell Sector identifier at the service control point that routes the 911 Call to the appropriate PSAP. The Routing Number is also the search-key from a PSAP query to an ALI database for a Host ALI Record with a matching Routing Number.

2.76 Routing Point.

A specific geographic point identified by a specific V&H coordinate. The Routing Point is used to route inbound traffic to specified NPA-NXXs. The Routing Point must be located within the LATA in which the corresponding NPA-NXX is located. However, the Routing Point associated with each NPA-NXX need not be the same as the corresponding Rate Center Point, nor must it be located within the corresponding Rate Center Area, nor must there be a unique and separate Routing Point corresponding to each unique and separate Rate Center Area.

2.77 Service.

Any Interconnection arrangement, Telecommunications Service, Collocation arrangement, or other service, facility or arrangement, offered by a Party under this Agreement.

2.78 SS7 (Signaling System 7).

The common channel out-of-band signaling protocol developed by the Consultative Committee for International Telephone and Telegraph (CCITT) and the American National Standards Institute (ANSI). Verizon and DISH utilize this out-of-band signaling protocol in relation to their routing and completion of traffic.

2.79 Switched Exchange Access Service.

The offering of transmission and switching services for the purpose of the origination or termination of Toll Traffic. Switched Exchange Access Services include but may not be limited to: Feature Group A, Feature Group B, Feature Group D, 700 access, 800 access, 888 access and 900 access.

2.80 Tandem Switch.

A switching entity that has billing and recording capabilities and is used to connect and switch trunk circuits between and among End Office Switches and between and among End Office Switches and carriers' aggregation points, points of termination, or points of presence, and to provide Switched Exchange Access Services.

2.81 Tariff.

2.81.1 Any applicable Federal or state tariff of Verizon, as amended from time to time; or

2.81.2 Any standard agreement or other document, as amended from time to time, that sets forth the generally available terms, conditions and prices under which Verizon offers a Service.

The term "Tariff" does not include any Verizon Statement of Generally Available Terms (SGAT) which has been approved or is pending approval by the Commission pursuant to Section 252(f) of the Act.

2.82 Telcordia Technologies.

Telcordia Technologies, Inc., formerly known as Bell Communications Research, Inc. (Bellcore).

2.83 Telecommunications Carrier.

Shall have the meaning set forth in the Act.

2.84 Telecommunications Services.

Shall have the meaning set forth in the Act.

2.85 Telephone Exchange Service.

Shall have the meaning set forth in the Act.

2.86 Terminating Switched Access Detail Usage Data.

A category 1101XX record as defined in the EMI Telcordia Practice BR-010-200-010.

2.87 Third Party Claim.

A Claim where there is (a) a claim, demand, suit or action by a person who is not a Party, (b) a settlement with, judgment by, or liability to, a person who is not a Party, or (c) a fine or penalty imposed by a person who is not a Party.

2.88 Toxic or Hazardous Substance.

Any substance designated or defined as toxic or hazardous under any "Environmental Law" or that poses a risk to human health or safety, or the environment, and products and materials containing such substance. "Environmental Laws" means the Comprehensive Environmental Response, Compensation, and Liability Act, the Emergency Planning and Community Right-to-Know Act, the Water Pollution Control Act, the Air Pollution Control Act, the Toxic Substances Control Act, the Resource Conservation and Recovery Act, the Occupational Safety and Health Act, and all other Federal, State or local laws or

governmental regulations or requirements, that are similar to the above-referenced laws or that otherwise govern releases, chemicals, products, materials or wastes that may pose risks to human health or safety, or the environment, or that relate to the protection of wetlands or other natural resources.

2.89 Traffic Factor 1.

For traffic exchanged via Interconnection Trunks, a percentage calculated by dividing the number of minutes of interstate InterMTA traffic by the total number of minutes of interstate InterMTA and intrastate InterMTA traffic. ($\frac{\text{Interstate InterMTA Traffic Total Minutes of Use}}{\text{Interstate InterMTA Traffic Total Minutes of Use} + \text{Intrastate InterMTA Traffic Total Minutes of Use}} \times 100$). Until the form of a Party's bills is updated to use the term "Traffic Factor 1", the term "Traffic Factor 1" may be referred to on the Party's bills and in billing related communications as "Percent Interstate Usage" or "PIU".

2.90 Traffic Factor 2.

For traffic exchanged via Interconnection Trunks, a percentage calculated by dividing the combined total number of minutes of Reciprocal Compensation Traffic by the total number of minutes of use. ($\frac{\text{Reciprocal Compensation Traffic Total Minutes of Use}}{\text{Total Minutes of Use}} \times 100$). Until the form of a Party's bills is updated to use the term "Traffic Factor 2", the term "Traffic Factor 2" may be referred to on the Party's bills and in billing related communications as "Percent Local Usage" or "PLU".

2.91 Wire Center.

A building or portion thereof which serves as the premises for one or more Central Offices Switches and related facilities.

ADDITIONAL SERVICES ATTACHMENT

1. **Dialing Parity - Section 251(b)(3)**

Each Party shall provide the other Party with nondiscriminatory access to such services and information as are necessary to allow the other Party to implement local Dialing Parity in accordance with the requirements of Section 251(b)(3) of the Act.

2. **Directory Assistance (DA) and Operator Services (OS)**

2.1 Either Party may request that the other Party provide the requesting Party with nondiscriminatory access to the other Party's directory assistance services (DA), IntraLATA operator call completion services (OS), and/or directory assistance listings database. If either Party makes such a request, the Parties shall enter into a mutually acceptable written agreement for such access. In the case of such a request, DISH shall contact its Verizon Account Manager for purpose of obtaining a draft of such an arrangement.

2.2 DISH shall arrange, at its own expense, the trunking and other facilities required to transport traffic to and from the designated DA and OS switch locations.

3. **Poles, Ducts, Conduits and Rights-of-Way**

3.1 Verizon shall afford DISH non-discriminatory access to poles, ducts, conduits and rights-of-way owned or controlled by Verizon. Such access shall be provided in accordance with, but only to the extent required by, Applicable Law, pursuant to Verizon's applicable Tariffs, or, in the absence of an applicable Verizon Tariff, Verizon's generally offered form of license agreement, or, in the absence of such a Tariff and license agreement, a mutually acceptable agreement to be negotiated by the Parties.

3.2 DISH shall afford Verizon non-discriminatory access to poles, ducts, conduits and rights-of-way owned or controlled by DISH. Such access shall be provided pursuant to DISH's generally offered form of license agreement, or, in the absence of such a license agreement, a mutually acceptable agreement to be negotiated by the Parties. The terms, conditions and prices offered to Verizon by DISH for such access shall be no less favorable than the terms, conditions and prices offered to DISH by Verizon for access to poles, ducts, conduits and rights of way owned or controlled by Verizon.

4. **Good Faith Performance**

If and, to the extent that, Verizon, prior to the Effective Date of this Agreement, has not provided in the Commonwealth of Pennsylvania a Service offered under this Attachment, Verizon reserves the right to negotiate in good faith with DISH reasonable terms and conditions (including, without limitation, rates and implementation timeframes) for such Service; and, if the Parties cannot agree to such terms and conditions (including, without limitation, rates and implementation timeframes), either Party may utilize the Agreement's dispute resolution procedures.

TWO-WAY WIRELESS ATTACHMENT

1. General

Each Party shall provide to the other Party, in accordance with this Agreement, but only to the extent required by Applicable Law, interconnection at (i) any technically feasible Point(s) of Interconnection on Verizon's network in a LATA and/or (ii) a fiber meet point to which the Parties mutually agree under the terms of this Agreement, for the transmission and routing of Telephone Exchange Service and Exchange Access. By way of example, a technically feasible Point of Interconnection on Verizon's network in a LATA would include an applicable Verizon Tandem Wire Center or Verizon End Office Wire Center but, notwithstanding any other provision of this Agreement or otherwise, would not include a DISH Wire Center, DISH switch or any portion of a transport facility provided by Verizon to DISH or another party between (x) a Verizon Wire Center or switch and (y) the Wire Center or switch of DISH or another party. For brevity's sake, the foregoing examples of locations that, respectively, are and are not "on Verizon's network" shall apply (and are hereby incorporated by reference) each time the term "on Verizon's network" is used in this Agreement.

2. Points of Interconnection and Trunk Types

2.1 Point(s) of Interconnection.

2.1.1 Each Party, at its own expense, shall provide transport facilities to the technically feasible Point(s) of Interconnection on Verizon's network in a LATA selected by DISH.

2.2 Trunk Types.

2.2.1 In interconnecting their networks pursuant to this Attachment, the Parties will use, as appropriate, the following separate and distinct trunk groups:

2.2.1.1 Type 2A Interconnection Trunks for the transmission and routing of Reciprocal Compensation Traffic, Tandem Transit Traffic, translated LEC IntraLATA toll free service access code (e.g., 800/888/877) traffic, and InterMTA Traffic, all in accordance with Sections 5 through 8 of this Attachment Type 2A arrangements and variations are in accordance with Telcordia Technologies Technical Reference GR-145-Core, Issue 2, May 1998, as in effect from time to time (or any successor thereto). In the event of a conflict between GR-145-Core and requirements of this Agreement, this Agreement shall govern.

2.2.1.2 Type 2B Interconnection Trunks for the transmission and routing of Reciprocal Compensation Traffic, and InterMTA Traffic, all in accordance with Sections 5 through 8 of this Attachment. Type 2B arrangements and variations are in accordance with Telcordia Technologies Technical Reference GR-145-Core, Issue 2, May 1998, as in effect from time to time (or any successor thereto). In the event of a conflict between GR-145-Core and requirements of this Agreement, this Agreement shall govern.

- 2.2.1.3 Access Toll Connecting Trunks for the transmission and routing of Exchange Access traffic, including translated InterLATA toll free service access code (e.g., 800/888/877) traffic, between DISH Customers and purchasers of Switched Exchange Access Service via a Verizon access Tandem in accordance with Sections 9 through 11 of this Attachment; and
- 2.2.1.4 Auxiliary Connections to a Verizon End Office used on a one-way basis by DISH for access to services provided by Verizon pursuant to a Verizon Tariff including, but not limited to, basic 911, operator services and directory assistance. Any use of an Auxiliary Connection other than as specified in this Agreement is outside the scope of this Agreement and such usage is subject to charges associated with the services for which such Auxiliary Connection is used by DISH. SS7 signaling may not be available with a Verizon Auxiliary Connection. Where feasible, Verizon and DISH will use commercially reasonable efforts to replace Auxiliary Connections with Type 2A or 2B Interconnection Trunks.
- 2.2.1.5 Miscellaneous Trunk Groups as mutually agreed to by the Parties, including, but not limited to: (a) choke trunks for traffic congestion and testing; and, (b) untranslated IntraLATA/InterLATA toll free service access code (e.g. 800/888/877) traffic.
- 2.2.2 Other types of trunk groups may be used by the Parties as provided in other Attachments to this Agreement (e.g., 911/E-911 Trunks) or in other separate agreements between the Parties.
- 2.2.3 In accordance with the terms of this Agreement, the Parties will deploy One-Way Interconnection Trunks (trunks with traffic going in one direction, including one-way trunks and uni-directional two-way trunks) and/or Two-Way Interconnection Trunks (trunks with traffic going in both directions).
- 2.2.4 DISH shall establish, at the technically feasible Point(s) of Interconnection on Verizon's network in a LATA, separate Interconnection Trunk group(s) between such POI(s) and each Verizon Tandem in a LATA with a subtending End Office(s) to which DISH originates calls for Verizon to terminate.
- 2.2.5 In the event the volume of traffic between a Verizon End Office and a technically feasible Point of Interconnection on Verizon's network in a LATA, which is carried by a Final Tandem Interconnection Trunk group, exceeds (a) the Centum Call Seconds (Hundred Call Seconds) busy hour equivalent of one (1) DS1 at any time; (b) 200,000 minutes of use for a single month; and/or; (c) 600 busy hour Centum Call Seconds (BHCCS) of use for a single month: (i) if One-Way Interconnection Trunks are used, the originating Party shall promptly establish new or augment existing End Office One-Way Interconnection Trunk groups between the Verizon End Office and the technically feasible Point of Interconnection on Verizon's network; or, (ii) if Two-Way Interconnection Trunks are used, DISH shall promptly submit an ASR to Verizon to establish new or augment existing End

Office Two-Way Interconnection Trunk group(s) between that Verizon End Office and the technically feasible Point of Interconnection on Verizon's network.

2.2.6 Except as otherwise agreed in writing by the Parties, the total number of Tandem Interconnection Trunks between a technically feasible Point of Interconnection on Verizon's network and a Verizon Tandem will be limited to a maximum of 672 trunks. In the event that the volume of traffic between a technically feasible Point of Interconnection on Verizon's network and a Verizon Tandem exceeds, or reasonably can be expected to exceed, the capacity of the 672 trunks, DISH shall promptly submit an ASR to Verizon to establish new or additional End Office Trunks to insure that the volume of traffic between the technically feasible Point of Interconnection on Verizon's network and the Verizon Tandem does not exceed the capacity of the 672 trunks.

2.3 One-Way Interconnection Trunks.

2.3.1 Where the Parties use One-Way Interconnection Trunks for the delivery of traffic from DISH to Verizon, DISH, at DISH's own expense, shall:

2.3.1.1 provide its own facilities for delivery of the traffic to the technically feasible Point(s) of Interconnection on Verizon's network in a LATA; and/or

2.3.1.2 obtain transport for delivery of the traffic to the technically feasible Point(s) of Interconnection on Verizon's network in a LATA (a) from a third party, or (b) if Verizon offers such transport pursuant to a Verizon access Tariff, from Verizon.

2.3.2 For each Tandem or End Office One-Way Interconnection Trunk group for delivery of traffic from DISH to Verizon with a utilization level of less than sixty percent (60%) for final trunk groups and eighty-five percent (85%) for high usage trunk groups, unless the Parties agree otherwise, DISH will promptly submit ASRs to disconnect a sufficient number of Interconnection Trunks to attain a utilization level of approximately sixty percent (60%) for all final trunk groups and eighty-five percent (85%) for all high usage trunk groups. In the event DISH fails to submit an ASR to disconnect One-Way Interconnection Trunks as required by this Section, Verizon may disconnect the excess Interconnection Trunks or bill (and DISH shall pay) for the excess Interconnection Trunks at the rates set forth in the Pricing Attachment.

2.3.3 Where the Parties use One-Way Interconnection Trunks for the delivery of traffic from Verizon to DISH, Verizon, at Verizon's own expense, shall provide its own facilities for delivery of the traffic to the technically feasible Point(s) of Interconnection on Verizon's network in a LATA.

2.4 Two-Way Interconnection Trunks.

2.4.1 Where the Parties use Two-Way Interconnection Trunks for the exchange of traffic between Verizon and DISH, DISH, at its own expense, shall:

- 2.4.1.1 provide its own facilities to the technically feasible Point(s) of Interconnection on Verizon's network in a LATA; and/or
- 2.4.1.2 obtain transport to the technically feasible Point(s) of Interconnection on Verizon's network in a LATA (a) from a third party, or, (b) if Verizon offers such transport pursuant to a Verizon access Tariff, from Verizon.
- 2.4.2 Where the Parties use Two-Way Interconnection Trunks for the exchange of traffic between Verizon and DISH, Verizon, at its own expense, shall provide its own facilities to the technically feasible Point(s) of Interconnection on Verizon's network in a LATA.
- 2.4.3 Prior to establishing any Two-Way Interconnection Trunks, DISH shall meet with Verizon to conduct a joint planning meeting ("Joint Planning Meeting"). At that Joint Planning Meeting, each Party shall provide to the other Party originating Centum Call Seconds (Hundred Call Seconds) information, and the Parties shall mutually agree on the appropriate initial number of End Office and Tandem Two-Way Interconnection Trunks and the interface specifications at the technically feasible Point(s) of Interconnection on Verizon's network in a LATA at which the Parties interconnect for the exchange of traffic. Where the Parties have agreed to convert existing One-Way Interconnection Trunks to Two-Way Interconnection Trunks, at the Joint Planning Meeting, the Parties shall also mutually agree on the conversion process and project intervals for conversion of such One-Way Interconnection Trunks to Two-Way Interconnection Trunks.
- 2.4.4 On a semi-annual basis, DISH shall submit a good faith forecast to Verizon of the number of End Office and Tandem Two-Way Interconnection Trunks that DISH anticipates Verizon will need to provide during the ensuing two (2) year period for the exchange of traffic between DISH and Verizon. DISH's trunk forecasts shall conform to the Verizon CLEC trunk forecasting guidelines as in effect at that time.
- 2.4.5 The Parties shall meet (telephonically or in person) from time to time, as needed, to review data on End Office and Tandem Two-Way Interconnection Trunks to determine the need for new trunk groups and to plan any necessary changes in the number of Two-Way Interconnection Trunks.
- 2.4.6 Two-Way Interconnection Trunks shall have SS7 Common Channel Signaling. The Parties agree to utilize B8ZS and Extended Super Frame (ESF) DS1 facilities, where available.
- 2.4.7 With respect to End Office Two-Way Interconnection Trunks, both Parties shall use an economic Centum Call Seconds (Hundred Call Seconds) equal to five (5). Either Party may disconnect End Office Two-Way Interconnection Trunks that, based on reasonable engineering criteria and capacity constraints, are not warranted by the actual traffic volume experienced.
- 2.4.8 Two-Way Interconnection Trunk groups that connect to a Verizon access Tandem shall be engineered using a design blocking objective of Neal-Wilkinson B.005 during the average time consistent busy hour. Two-Way Interconnection Trunk groups that connect to a Verizon local

Tandem shall be engineered using a design blocking objective of Neal-Wilkinson B.01 during the average time consistent busy hour. Verizon and DISH shall engineer Two-Way Interconnection Trunks using Telcordia Notes on the Networks SR 2275 (formerly known as BOC Notes on the LEC Networks SR-TSV-002275).

- 2.4.9 The performance standard for final Two-Way Interconnection Trunk groups shall be that no such Interconnection Trunk group will exceed its design blocking objective (B.005 or B.01, as applicable) for three (3) consecutive calendar traffic study months.
- 2.4.10 DISH shall determine and order the number of Two-Way Interconnection Trunks that are required to meet the applicable design blocking objective for all traffic carried on each Two-Way Interconnection Trunk group. DISH shall order Two-Way Interconnection Trunks by submitting ASRs to Verizon setting forth the number of Two-Way Interconnection Trunks to be installed and the requested installation dates within Verizon's effective standard intervals or negotiated intervals, as appropriate. DISH shall complete ASRs in accordance with OBF Guidelines as in effect from time to time.
- 2.4.11 Verizon may (but shall not be obligated to) monitor Two-Way Interconnection Trunk groups using service results for the applicable design blocking objective. If Verizon observes blocking in excess of the applicable design objective on any Tandem Two-Way Interconnection Trunk group and DISH has not notified Verizon that it has corrected such blocking, Verizon may submit to DISH a Trunk Group Service Request directing DISH to remedy the blocking. Upon receipt of a Trunk Group Service Request, DISH will complete an ASR to establish or augment the End Office Two-Way Interconnection Trunk group(s), or, if mutually agreed, to augment the Tandem Two-Way Interconnection Trunk group with excessive blocking and submit the ASR to Verizon within five (5) Business Days.
- 2.4.12 The Parties will review all Tandem Two-Way Interconnection Trunk groups that reach a utilization level of seventy percent (70%), or greater, to determine whether those groups should be augmented. DISH will promptly augment all Tandem Two-Way Interconnection Trunk groups that reach a utilization level of eighty percent (80%) by submitting ASRs for additional trunks sufficient to attain a utilization level of approximately seventy percent (70%), unless the Parties agree that additional trunking is not required. For each Tandem Two-Way Interconnection Trunk group with a utilization level of less than sixty percent (60%), unless the Parties agree otherwise, DISH will promptly submit ASRs to disconnect a sufficient number of Interconnection Trunks to attain a utilization level of approximately sixty percent (60%) for each respective group, unless the Parties agree that the Two-Way Interconnection Trunks should not be disconnected. In the event DISH fails to submit an ASR for Two-Way Interconnection Trunks in conformance with this Section, Verizon may disconnect the excess Interconnection Trunks or bill (and DISH shall pay) for the excess Interconnection Trunks at the applicable Verizon rates.
- 2.4.13 Because Verizon will not be in control of when and how many Two-Way Interconnection Trunks are established between its network and DISH's network, Verizon's performance in connection with these Two-

Way Interconnection Trunk groups shall not be subject to any performance measurements and remedies under this Agreement, and, except as otherwise required by Applicable Law, under any FCC or Commission approved carrier-to-carrier performance assurance guidelines or plan.

- 2.4.14 DISH will route its traffic to Verizon over the End Office and Tandem Two-Way Interconnection Trunks in accordance with SR-TAP-000191, including but not limited to those standards requiring that a call from DISH to a Verizon End Office will first be routed to the End Office Interconnection Trunk group between DISH and the Verizon End Office.

3. Alternative Interconnection Arrangements

- 3.1 In addition to the foregoing methods of Interconnection, and subject to mutual agreement of the Parties, the Parties may agree to establish a Fiber Meet arrangement.
- 3.2 The establishment of any Fiber Meet arrangement is expressly conditioned upon the Parties' reaching prior written agreement on routing, appropriate sizing and forecasting, equipment, ordering, provisioning, maintenance, repair, testing, augment, and compensation procedures and arrangements, reasonable distance limitations, and on any other arrangements necessary to implement the Fiber Meet arrangement.
- 3.3 Except as otherwise agreed by the Parties, Fiber Meet arrangements shall be used only for the termination of Reciprocal Compensation Traffic (IntraMTA Traffic) and InterMTA Traffic.

4. Initiating Interconnection

- 4.1 If DISH determines to interconnect with Verizon in any LATA in which Verizon also offers Telephone Exchange Services and in which the Parties are not already interconnected pursuant to this Agreement, DISH shall provide written notice to Verizon of the need to establish Interconnection in such LATA pursuant to this Agreement.
- 4.2 The notice provided in Section 4.1 of this Attachment shall include (a) the initial Routing Point(s); (b) the applicable technically feasible Point(s) of Interconnection on Verizon's network to be established in the relevant LATA in accordance with this Agreement; (c) DISH's intended Interconnection activation date; (d) a forecast of DISH's trunking requirements conforming to Section 14.2 of this Attachment; and (e) such other information as Verizon shall reasonably request in order to facilitate Interconnection.
- 4.3 The interconnection activation date in the new LATA shall be mutually agreed to by the Parties after receipt by Verizon of all necessary information as indicated above. Within ten (10) Business Days of Verizon's receipt of DISH's notice provided for in Section 4.1 of this Attachment, Verizon and DISH shall confirm the technically feasible Point of Interconnection on Verizon's network in the new LATA and the mutually agreed upon Interconnection activation date for the new LATA.

5. Transmission and Routing of Telephone Exchange Service Traffic

- 5.1 Scope of Traffic.

Section 5 prescribes parameters for Interconnection Trunks used for Interconnection pursuant to Sections 2 through 4 of this Attachment.

5.2 Trunk Group Connections and Ordering.

5.2.1 For both One-Way and Two-Way Interconnection Trunks, if DISH wishes to use a technically feasible interface other than a DS1 or a DS3 facility at the POI, the Parties shall negotiate reasonable terms and conditions (including, without limitation, rates and implementation timeframes) for such arrangement; and, if the Parties cannot agree to such terms and conditions (including, without limitation, rates and implementation timeframes), either Party may utilize the Agreement's dispute resolution procedures.

5.2.2 When One-Way or Two-Way Interconnection Trunks are provisioned using a DS3 interface facility, if DISH orders the multiplexed DS3 facilities to a Verizon Central Office that is not designated in the NECA 4 Tariff as the appropriate Intermediate Hub location (i.e., the Intermediate Hub location in the appropriate Tandem subtending area based on the LERG), and the provision of such facilities to the subject Central Office is technically feasible, the Parties shall negotiate in good faith reasonable terms and conditions (including, without limitation, rates and implementation timeframes) for such arrangement; and, if the Parties cannot agree to such terms and conditions (including, without limitation, rates and implementation timeframes), either Party may utilize the Agreement's dispute resolution procedures.

5.2.3 Each Party will use commercially reasonable efforts to monitor trunk groups under its control and to augment those groups using generally accepted trunk-engineering standards so as to not exceed blocking objectives. Each Party agrees to use modular trunk-engineering techniques for trunks subject to this Attachment.

5.3 Switching System Hierarchy and Trunking Requirements.

For purposes of routing DISH traffic to Verizon, the subtending arrangements between Verizon Tandems and Verizon End Offices shall be the same as the Tandem/End Office subtending arrangements Verizon maintains for the routing of its own or other carriers' traffic (i.e., traffic will be routed to the appropriate Verizon Tandem subtended by the terminating End Office serving the Verizon Customer). For purposes of routing Verizon traffic to DISH, the subtending arrangements between DISH Tandems and DISH End Offices shall be the same as the Tandem/End Office subtending arrangements that DISH maintains for the routing of its own or other carriers' traffic.

5.4 Signaling.

5.4.1 Each Party will provide the other Party with access to its databases and associated signaling necessary for the routing and completion of the other Party's traffic in accordance with the provisions of this Agreement and any applicable Tariff.

5.4.2 Each Party shall have the capability to exchange signaling messages to facilitate full interoperability of all SS7 or other signaling features, as applicable.

5.4.3 The Parties shall cooperate fully and shall use commercially reasonable efforts to obtain cooperation from any underlying carrier in the downstream/egress call processing in investigating any issues relating to the processing or delivery of call signaling information.

5.5 Grades of Service.

The Parties shall initially engineer and shall monitor and augment all trunk groups consistent with the Joint Process as set forth in Section 14.1 of this Attachment.

5.6 Call Routing Restrictions.

Neither Party shall deliver back to any switched service provided by the originating Party any call delivered by the originating Party to the other Party under this Agreement. To the extent call looping or other technical issues arise, the Parties shall use commercially reasonable efforts to resolve such issues in an expeditious manner.

5.7 Abnormal Traffic Patterns.

When either Party detects that the other Party is generating traffic or call attempts with duplicate, or repeated, numbers dialed in succession and/or abnormally short duration calls, such Party may give notice to the other Party and both Parties shall use commercially reasonable efforts to resolve such issue in an expeditious manner. Each Party reserves the right to take action to protect the integrity of its network.

6. Traffic Measurement and Billing over Interconnection Trunks

6.1 For billing purposes, each Party shall pass Calling Party Number (CPN) information on at least ninety-five percent (95%) of calls carried over the Interconnection Trunks.

6.1.1 As used in this Section 6, "Traffic Rate" means the applicable Reciprocal Compensation Traffic rate, intrastate Switched Exchange Access Service rate, interstate Switched Exchange Access Service rate, or intrastate/interstate Tandem Transit Traffic rate, as provided in the Pricing Attachment or an applicable Tariff.

6.1.2 If the originating Party passes CPN on ninety-five percent (95%) or more of its calls, the receiving Party shall bill the originating Party the Traffic Rate applicable to each relevant minute of traffic for which CPN is passed. For any remaining (up to 5%) calls without CPN information, the receiving Party shall bill the originating Party for such traffic at the Traffic Rate applicable to each relevant minute of traffic, in direct proportion to the minutes of use of calls passed with CPN information.

6.1.3 If the originating Party passes CPN on less than ninety-five percent (95%) of its calls and the originating Party chooses to combine Reciprocal Compensation Traffic and InterMTA Traffic on the same trunk group, the receiving Party shall bill the higher of its interstate Switched Exchange Access Service rates or its intrastate Switched Exchange Access Services rates for all traffic that is passed without

CPN, unless the Parties agree that other rates should apply to such traffic.

- 6.2 At such time as a receiving Party has the capability, on an automated basis, to use such CPN to classify traffic delivered over Interconnection Trunks by the other Party by Traffic Rate type (e.g., Reciprocal Compensation Traffic, intrastate Switched Exchange Access Service, interstate Switched Exchange Access Service, or intrastate/interstate Tandem Transit Traffic), such receiving Party shall bill the originating Party the Traffic Rate applicable to each relevant minute of traffic for which CPN is passed. If the receiving Party lacks the capability, on an automated basis, to use CPN information on an automated basis to classify traffic delivered by the other Party by Traffic Rate type, the originating Party will supply Traffic Factor 1 and Traffic Factor 2. The Traffic Factors shall be supplied in writing by the originating Party within thirty (30) days of the Effective Date and shall be updated in writing by the originating Party quarterly. Measurement of billing minutes for purposes of determining terminating compensation shall be in conversation seconds (the time in seconds that the Parties equipment is used for a completed call, measured from the receipt of answer supervision to the receipt of disconnect supervision). Measurement of billing minutes for originating toll free service access code (e.g., 800/888/877) calls shall be in accordance with applicable Tariffs.
- 6.3 Each Party reserves the right to audit all Traffic, up to a maximum of two audits per Calendar Year, to ensure that rates are being applied appropriately; provided, however, that either Party shall have the right to conduct additional audit(s) if the preceding audit disclosed material errors or discrepancies. Each Party agrees to provide the necessary Traffic data in conjunction with any such audit in a timely manner.
- 6.4 Nothing in this Agreement shall be construed to limit either Party's ability to designate the areas within which that Party's Customers may make calls which that Party rates as "local" in its Customer Tariffs.

7. Reciprocal Compensation Arrangements Pursuant to Section 251(b)(5) of the Act

7.1 Reciprocal Compensation.

The Parties shall exchange Reciprocal Compensation Traffic (IntraMTA Traffic) at the technically feasible Point(s) of Interconnection on Verizon's network in a LATA designated in accordance with the terms of this Agreement. The Parties shall exchange Reciprocal Compensation on a bill and keep basis. No additional charges shall be assessed by the terminating Party for the transport and termination of such traffic from the technically feasible Point(s) of Interconnection on Verizon's network in a LATA to its Customer; *provided, however*, for the avoidance of any doubt, DISH shall also pay Verizon, at the rates set forth in the Pricing Attachment, for any multiplexing, cross connects or other related Services that DISH obtains from Verizon. When such Reciprocal Compensation Traffic is delivered over the same Interconnection Trunks as InterMTA Traffic, any port, transport or other applicable access charges related to the delivery of InterMTA Traffic from the technically feasible Point of Interconnection on Verizon's network in a LATA to the terminating Party's Customer shall be prorated so as to apply only to the InterMTA Traffic. The designation of traffic as Reciprocal Compensation Traffic for purposes of Reciprocal Compensation shall be based on the actual originating and terminating points of the complete end-to-end communication.

7.2 Traffic Not Subject to Reciprocal Compensation.

- 7.2.1 Reciprocal Compensation shall not apply to interstate or intrastate Exchange Access, Information Access, or exchange services for Exchange Access or Information Access.
- 7.2.2 Reciprocal Compensation shall not apply to InterMTA Traffic, including, but not limited to, calls originated on a 1+ presubscription basis, or on a casual dialed (10XXX/101XXXX) basis.
- 7.2.3 Reciprocal Compensation shall not apply to special access, private line, or any other traffic that is not switched by the terminating Party.
- 7.2.4 Reciprocal Compensation shall not apply to Tandem Transit Traffic.
- 7.2.5 Reciprocal Compensation shall not apply to traffic that is not subject to Reciprocal Compensation under Section 251(b)(5) of the Act.

8. Other Types of Traffic

- 8.1 Interstate and intrastate Exchange Access, Information Access, exchange services for Exchange Access or Information Access, and InterMTA Traffic shall be governed by the applicable provisions of this Agreement and applicable Tariffs.
- 8.2 For any traffic originating with a third party carrier and delivered by DISH to Verizon, DISH shall pay Verizon the same amount that such third party carrier would have been obligated to pay Verizon for termination of that traffic at the location the traffic is delivered to Verizon by DISH.
- 8.3 Any traffic not specifically addressed in this Agreement shall be treated as required by the applicable Tariff of the Party transporting and/or terminating the traffic, and Applicable Law.

9. Transmission and Routing of Exchange Access Traffic

- 9.1 Scope of Traffic.

Section 9 prescribes parameters for certain trunks to be established over the Interconnections specified in Sections 2 through 5 of this Attachment for the transmission and routing of traffic between DISH Customers and Interexchange Carriers ("Access Toll Connecting Trunks"), in any case where DISH elects to have its End Office Switch subtend a Verizon Tandem. This includes casually-dialed (1010XXX and 101XXXX) traffic.

- 9.2 Access Toll Connecting Trunk Group Architecture.
 - 9.2.1 If DISH chooses to have its NPA/NXX Code subtend a Verizon access Tandem, DISH's NPA/NXX must be assigned by DISH to a Rate Center Area that Verizon has associated with such Verizon access Tandem.
 - 9.2.2 DISH shall establish Access Toll Connecting Trunks by which it will provide Switched Exchange Access Services to Interexchange Carriers to enable such Interexchange Carriers to originate and terminate traffic to and from DISH's Customers.
 - 9.2.3 The Access Toll Connecting Trunks shall be two-way trunks. Such trunks shall connect the End Office DISH utilizes to provide Telephone Exchange Service and Switched Exchange Access to its Customers in

a given LATA to the access Tandem(s) Verizon utilizes to provide Exchange Access in such LATA.

- 9.2.4 Access Toll Connecting Trunks shall be used solely for the transmission and routing of Exchange Access to allow DISH's Customers to connect to or be connected to the interexchange trunks of any Interexchange Carrier which is connected to a Verizon access Tandem.

10. [INTENTIONALLY LEFT BLANK]

11. Toll Free Service Access Code (e.g., 800/888/877) Traffic

The following terms shall apply when either Party delivers toll free service access code (e.g., 800/877/888)("8YY") calls to the other Party. For the purposes of this Section 11, the terms "translated" and "untranslated" refers to those toll free service access code calls that have been queried ("translated") or have not been queried ("untranslated") to an 8YY database. Except as otherwise agreed to by the Parties, all DISH originating "untranslated" 8YY traffic will be routed over a separate One-Way miscellaneous Trunk group.

- 11.1 When DISH delivers translated 8YY calls to Verizon to be completed by
- 11.1.1 an IXC:
 - 11.1.1.1 DISH will provide an appropriate EMI record to Verizon;
 - 11.1.1.2 DISH will bill the IXC the DISH's applicable Switched Exchange Access Tariff charges and the DISH's applicable Tariff query charges; and
 - 11.1.1.3 Verizon will bill the IXC Verizon's applicable Switched Exchange Access Tariff charges.
 - 11.1.2 Verizon:
 - 11.1.2.1 DISH will provide an appropriate EMI record to Verizon; and
 - 11.1.2.2 DISH will bill Verizon the DISH's Switched Exchange Access Tariff charges and the DISH's applicable Tariff query charge.
 - 11.1.3 a toll free service access code service provider in that LATA:
 - 11.1.3.1 DISH will provide an appropriate EMI record to Verizon and the toll free service access code service provider;
 - 11.1.3.2 DISH will bill the toll free service access code service provider the DISH's applicable Switched Exchange Access Tariff charges and the DISH's applicable Tariff query charges; and
 - 11.1.3.3 Verizon will bill the toll free service access code service provider Verizon's applicable Switched Exchange Access Tariff charges.
- 11.2 When Verizon performs the query and delivers translated 8YY calls, originated by Verizon's Customer or another LEC's Customer to DISH to be completed by

- 11.2.1 DISH:
 - 11.2.1.1 Verizon will provide an appropriate EMI record to DISH; and
 - 11.2.1.2 Verizon will bill DISH Verizon's applicable Switched Exchange Access Tariff charges and Verizon's applicable Tariff query charges.
- 11.2.2 a toll free service access code service provider in that LATA:
 - 11.2.2.1 Verizon will provide an appropriate EMI record to DISH and the toll free service access code service provider;
 - 11.2.2.2 Verizon will bill the toll free service access code service provider Verizon's applicable Switched Exchange Access Tariff charges and Verizon's applicable Tariff query charges; and
 - 11.2.2.3 DISH will bill the toll free service access code service provider the DISH's applicable Switched Exchange Access Tariff charges.
- 11.3 When DISH delivers untranslated 8YY calls to Verizon to be completed by
 - 11.3.1 an IXC:
 - 11.3.1.1 Verizon will query the call and route the call to the appropriate IXC;
 - 11.3.1.2 Verizon will provide an appropriate EMI record to DISH;
 - 11.3.1.3 Verizon will bill the IXC Verizon's applicable Switched Exchange Access Tariff charges and Verizon's applicable Tariff query charges; and
 - 11.3.1.4 DISH will bill the IXC DISH's applicable Switched Exchange Access Tariff charges.
 - 11.3.2 Verizon:
 - 11.3.2.1 Verizon will query the call and complete the call;
 - 11.3.2.2 Verizon will provide an appropriate EMI record to DISH;
 - 11.3.2.3 DISH will bill Verizon the DISH's applicable Switched Exchange Access Tariff charges.
 - 11.3.3 a toll free service access code service provider in that LATA:
 - 11.3.3.1 Verizon will query the call and route the call to the appropriate toll free service access code service provider;
 - 11.3.3.2 Verizon will provide an appropriate EMI record to DISH and the toll free service access code service provider;
 - 11.3.3.3 Verizon will bill the toll free service access code service provider Verizon's applicable Switched Exchange Access Tariff and Verizon's applicable Tariff query charges; and

11.3.3.4 DISH will bill the toll free service access code service provider the DISH's applicable Switched Exchange Access Tariff charges.

11.4 Verizon will not direct untranslated toll free service access code calls to DISH.

12. Tandem Transit Traffic

- 12.1 As used in this Section, Tandem Transit Traffic is Telephone Exchange Service traffic that originates on DISH's network, and is transported through Verizon's Tandem to the subtending End Office or its equivalent of another carrier (CLEC, ILEC other than Verizon, Commercial Mobile Radio Service (CMRS) carrier, or other LEC ("Other Carrier"), when neither the originating nor terminating customer is a Customer of Verizon. For the avoidance of any doubt, under no circumstances shall Verizon be required to transit traffic through a Verizon Tandem to an End Office that does not have local interconnection facilities and direct trunks to that particular Verizon Tandem. Switched Exchange Access Service traffic is not Tandem Transit Traffic.
- 12.2 Tandem Transit Traffic Service provides DISH with the transport of Tandem Transit Traffic as provided below.
- 12.3 Tandem Transit Traffic may be routed over the Interconnection Trunks described in Sections 2 through 6 of this Attachment. DISH shall deliver each Tandem Transit Traffic call to Verizon's Tandem with CCS and the appropriate Transactional Capabilities Application Part ("TCAP") message to facilitate full interoperability of CLASS Features and billing functions.
- 12.4 DISH may use Tandem Transit Traffic Service only for traffic that originates on DISH's network and only to send traffic to an Other Carrier with whom DISH has a reciprocal traffic exchange arrangement (either via written agreement or mutual tariffs) that provides for the Other Carrier, to terminate or complete traffic originated by DISH and to bill DISH, and not to bill Verizon, for such traffic. DISH agrees not to use Verizon's Tandem Transit Traffic Service to send traffic to an Other Carrier with whom DISH does not have such a reciprocal traffic exchange arrangement or to send traffic that does not originate on DISH's network.
- 12.5 DISH shall pay Verizon for Tandem Transit Traffic Service at the rates specified in the Pricing Attachment. Verizon will not be liable for compensation to any Other Carrier for any traffic that is transported through Verizon's Tandem and Verizon reserves the right to assess to DISH any additional charges or costs any Other Carrier imposes or levies on Verizon for the delivery or termination of such traffic, including any Switched Exchange Access Service charges. If Verizon is billed by any Other Carrier for any traffic originated by DISH, Verizon may provide notice to DISH of such billing. Upon receipt of such notice, DISH shall immediately stop using Verizon's Tandem Transit Traffic Service to send any traffic to such Other Carrier until it has provided to Verizon certification that the Other Carrier has removed such billed charges from its bill to Verizon and that the Other Carrier will not bill Verizon for any traffic originated by DISH. Such certification must be signed by an authorized officer or agent of the Other Carrier and must be in a form acceptable to Verizon.
- 12.6 If DISH uses Tandem Transit Traffic Service for traffic volumes that exceed the Centum Call Seconds (Hundred Call Seconds) busy hour equivalent of 200,000 combined minutes of use per month (a DS1 equivalent) to the subtending End Office of a particular Other Carrier for any month (the "Threshold Level"). DISH shall use good faith efforts to establish direct interconnection with such Other

Carrier and reduce such traffic volumes below the Threshold Level. If Verizon believes that DISH has not exercised good faith efforts promptly to obtain such direct interconnection, either Party may use the Dispute Resolution processes of this Agreement.

- 12.7 If DISH fails to comply with Section 12 of this Attachment, such failure shall be a material breach of a material provision of this Agreement and Verizon may exercise any and all remedies under this Agreement and Applicable Law for such breach.
- 12.8 If or when a third party carrier plans to subtenant a DISH switch, then DISH shall provide written notice to Verizon at least ninety (90) days before such subtenanting service arrangement becomes effective so that Verizon may negotiate and establish direct interconnection with such third party carrier. Upon written request from Verizon, DISH shall offer to Verizon a service arrangement equivalent to or the same as Tandem Transit Traffic Service provided by Verizon to DISH as defined in this Section such that Verizon may terminate calls to a Central Office or its equivalent of a CLEC, ILEC other than Verizon, CMRS carrier, or other LEC, that subtenants a DISH Central Office or its equivalent ("Reciprocal Tandem Transit Service"). DISH shall offer such Reciprocal Transit Service arrangements under terms and conditions of an amendment to this Agreement or a separate agreement no less favorable than those provided in this Section.
- 12.9 Neither Party shall take any actions to prevent the other Party from entering into a direct and reciprocal traffic exchange arrangement with any carrier to which it originates, or from which it terminates, traffic.

13. Number Resources, Rate Center Areas and Routing Points

- 13.1 Nothing in this Agreement shall be construed to limit or otherwise adversely affect in any manner either Party's right to employ or to request and be assigned any Central Office Codes pursuant to the Central Office Code Assignment Guidelines and any relevant FCC or Commission orders, as may be amended from time to time, or to establish, by Tariff or otherwise, Rate Center Areas and Routing Points corresponding to such NXX Codes.
- 13.2 It shall be the responsibility of each Party to program and update its own switches and network systems in order to recognize and route traffic to the other Party's assigned NPA/NXX Codes. Except as expressly set forth in this Agreement, neither Party shall impose any fees or charges whatsoever on the other Party for such activities.
- 13.3 Unless otherwise required by Commission order, the Rate Center Areas will be the same for each Party. During the term of this Agreement, DISH shall adopt the Rate Center Area and Rate Center Points that the Commission has approved for Verizon within the LATA and Tandem serving area. DISH shall assign whole NPA/NXX Codes to each Rate Center Area unless otherwise ordered by the FCC, the Commission or another governmental entity of appropriate jurisdiction, or the LEC industry adopts alternative methods of utilizing NXXs.
- 13.4 DISH will also designate a Routing Point for each assigned NXX Code. DISH shall designate one location for each Rate Center Area in which the DISH has established NXX Code(s) as the Routing Point for the NPA-NXXs associated with that Rate Center Area, and such Routing Point shall be within the same LATA as the Rate Center Area but not necessarily within the Rate Center Area itself.

Unless specified otherwise, calls to subsequent NXX Code(s) of DISH will be routed in the same manner as calls to DISH's initial NXX Code(s).

- 13.5 Notwithstanding anything to the contrary contained herein, nothing in this Agreement is intended, and nothing in this Agreement shall be construed, to in any way constrain DISH's choices regarding the size of the local calling area(s) that DISH may establish for its Customers, which local calling areas may be larger than, smaller than, or identical to Verizon's local calling areas.

14. Joint Network Implementation and Grooming Process; Forecasting

14.1 Joint Network Implementation and Grooming Process.

Upon request of either Party, the Parties shall jointly develop an implementation and grooming process (the "Joint Grooming Process" or "Joint Process") which may define and detail, inter alia:

- 14.1.1 standards to ensure that Interconnection Trunks experience a grade of service, availability and quality which is comparable to that achieved on interoffice trunks within Verizon's network and in accord with all appropriate relevant industry-accepted quality, reliability and availability standards. Except as otherwise stated in this Agreement, trunks provided by either Party for Interconnection services will be engineered using a design-blocking objective of B.01.
- 14.1.2 the respective duties and responsibilities of the Parties with respect to the administration and maintenance of the trunk groups, including, but not limited to, standards and procedures for notification and discoveries of trunk disconnects;
- 14.1.3 disaster recovery provision escalations;
- 14.1.4 additional technically feasible Point(s) of Interconnection on Verizon's network in a LATA as provided in Section 2 of this Attachment; and
- 14.1.5 such other matters as the Parties may agree, including, e.g., End Office to End Office high usage trunks as good engineering practices may dictate.

14.2 Trunk Forecasting Requirements.

- 14.2.1 Initial Trunk Forecast Requirements. At least ninety (90) days before initiating interconnection in a LATA, DISH shall provide Verizon a two (2)-year traffic forecast that complies with the Verizon Interconnection Trunking Forecast Guide, as revised from time to time. This initial traffic forecast will provide the amount of traffic to be delivered to and from Verizon over each of the Interconnection Trunk groups in the LATA over the next eight (8) quarters.
- 14.2.2 Ongoing Trunk Forecast Requirements. Where the Parties have already established interconnection in a LATA, DISH shall provide a new or revised traffic forecast that complies with the Verizon Interconnection Trunking Forecast Guide when DISH develops plans or becomes aware of information that will materially affect the Parties' interconnection in that LATA. Instances that require a new or revised forecast include, but are not limited to: (a) DISH plans to deploy a new switch; (b) DISH plans to implement a new POI or network

architecture; (c) DISH plans to rearrange its network; (d) DISH plans to convert a One-Way Interconnection Trunk group to a Two-Way Interconnection Trunk group; (e) DISH plans to convert a Two-Way Interconnection Trunk group to a One-Way Interconnection Trunk group; or (f) DISH expects a significant change in interconnection traffic volume. In addition, upon request by either Party, the Parties shall meet to: (i) review traffic and usage data on End Office and Tandem Interconnection Trunk groups and (ii) determine whether the Parties should establish new Interconnection Trunk groups, augment existing Interconnection Trunk groups, or disconnect existing Interconnection Trunks.

14.2.3 Use of Trunk Forecasts. Trunk forecasts provided pursuant to this Agreement must be prepared in good faith but are not otherwise binding on DISH or Verizon.

15. Good Faith Performance

If and, to the extent that, Verizon, prior to the Effective Date of this Agreement, has not provided in the Commonwealth of Pennsylvania a Service offered under this Attachment, Verizon reserves the right to negotiate in good faith with DISH reasonable terms and conditions (including, without limitation, rates and implementation timeframes) for such Service; and, if the Parties cannot agree to such terms and conditions (including, without limitation, rates and implementation timeframes), either Party may utilize the Agreement's dispute resolution procedures.

911 WIRELESS ATTACHMENT

1. **911/E-911 Arrangements for CMRS Not Constituting Fixed Wireless Services**
 - 1.1 911/E-911 arrangements provide a caller access to the appropriate PSAP by dialing the 3–digit universal telephone number “911” on a wireless handset. Verizon provides and maintains such equipment and software at the 911/E-911 Tandem Office(s)/Selective Router(s), Verizon interface point(s) and ALI Database as necessary for 911/E-911 Calls in areas where Verizon is the designated 911/E-911 Service Provider in the State.
 - 1.2 The terms and conditions of this Section apply to the provision of 911/E-911 Services by Verizon to DISH for CMRS services in the State and do not apply to Fixed Wireless Services or any other services. Notwithstanding any other provision of this Section or otherwise, these provisions shall apply only in those jurisdictions in which Verizon is the designated 911/E-911 Service Provider at such time as DISH notifies Verizon that it has received notification from the Controlling 911 Authority to begin providing Phase II wireless services within the jurisdiction and only so long as Verizon remains the designated 911/E-911 Service Provider therein.
 - 1.3 Verizon shall have no obligation to provide 911/E-911 Services pursuant to this 911 Wireless Attachment prior to its receipt of the notice referenced in Section 1.2 of this Attachment.
 - 1.4 Verizon shall make the following information available to DISH, to the extent permitted by Applicable Law. Such information is provided at the Verizon Partner Solutions website:
 - 1.4.1 a listing of the CLLI code (and SS7 point code when applicable) of each 911/E-911 Tandem Office(s)/Selective Router(s) and associated geographic location served for areas where Verizon is the designated 911/E-911 Service Provider;
 - 1.4.2 a listing of appropriate Verizon contact telephone numbers and organizations that currently have responsibility for operations and support of Verizon’s 911/E-911 network and ALI Database systems; and
 - 1.4.3 where Verizon maintains a Master Street Address Guide (MSAG) on behalf of the Controlling 911 Authority, Verizon shall provide to DISH a complete copy of such MSAG annually upon written request for each county within the LATA(s) in the State of Pennsylvania, where DISH is providing CMRS services, provided that Verizon is permitted to do so by Controlling 911 Authority.
2. **ALI Database**
 - 2.1 Where Verizon manages the ALI Database, information regarding the ALI Database is provided electronically at the Verizon Partner Solutions website).
 - 2.2 Where Verizon manages the ALI Database, Verizon shall:
 - 2.2.1 store DISH end user data provided by DISH in the ALI Database;
 - 2.2.2 provide DISH access to the ALI Database for the initial loading and updating of DISH pANI records in accordance with information

contained in the Verizon Partner Solutions website (formerly referred to as the Verizon Global Wholesale website); and

- 2.2.3 provide DISH an error and status report based on updates to the ALI Database received from DISH.
- 2.3 Where Verizon manages the ALI Database, DISH shall:
 - 2.3.1 provide MSAG valid E-911 data for each of its end users for the initial loading of, and any and all updates to, DISH pANI records in the ALI database;
 - 2.3.2 utilize the appropriate Verizon electronic interface to update its pANI records in the ALI Database related to its end users (and all such database information in the ALI Database shall conform to Verizon standards, which are provided at the Verizon Partner Solutions website);
 - 2.3.3 use its company ID on all DISH pANI records in accordance with NENA standards;
 - 2.3.4 correct any errors that occur during the entry of E-911 data and pANI records in the ALI Database; and
 - 2.3.5 enter E-911 data into the ALI Database in accordance with NENA standards for LNP. This includes, but is not limited to, using DISH's NENA ID to lock and unlock records and the posting of the DISH NENA ID to the ALI Database record where such locking and unlocking feature for E-911 records is available, or as defined by local standards. DISH is required to promptly unlock and migrate its E-911 records in accordance with NENA standards. In the event that DISH discontinues providing Telephone Exchange Service to any of its end users, it shall ensure that its E-911 records for such end users are unlocked in accordance with NENA standards.
- 2.4 In the event DISH uses an Agent to input its pANI records to the ALI Database through the appropriate Verizon electronic interface, DISH shall provide a Letter of Authorization, in a form acceptable to Verizon, identifying and authorizing its Agent.

3. 911/E-911 Interconnection

- 3.1 DISH may, in accordance with Applicable Law, interconnect to the Verizon 911/E-911 Tandem Office(s)/Selective Router(s) or Verizon interface point(s). Verizon shall designate interface point(s), e.g., digital cross connect systems (DCS), where DISH may interconnect with Verizon for the transmission and routing of 911/E-911 Calls to all subtending PSAPs that serve the areas in which DISH provides CMRS services.
- 3.2 In order to interconnect with Verizon for the transmission and routing of 911/E-911 Calls, DISH shall:
 - 3.2.1 interconnect with each Verizon 911/E-911 Tandem Office/Selective Router or Verizon interface point that serves the exchange areas in which DISH is authorized to and will provide CMRS service;
 - 3.2.2 provide a minimum of two (2) one-way outgoing 911/E-911 trunks over diversely routed facilities that are dedicated for originating 911/E-911

Calls from the DISH switch to each designated Verizon 911/E-911 Tandem Office/Selective Router or Verizon interface point, using SS7 signaling where available, as necessary;

- 3.2.3 provide sufficient trunks and facilities to route 911/E-911 Calls from DISH to the designated Verizon 911/E-911 Tandem Office(s)/Selective Router(s) or Verizon interface point(s). DISH is responsible for requesting that trunks and facilities be routed diversely for 911/E-911 interconnection;
- 3.2.4 determine the proper quantity of trunks and facilities from its switch(es) to the Verizon 911/E-911 Tandem Office(s)/Selective Router(s) or Verizon interface point(s);
- 3.2.5 engineer its 911/E-911 trunks and facilities to attain a minimum P.01 grade of service as measured using the “busy day/busy hour” criteria or at such other minimum grade of service as required by Applicable Law or the Controlling 911 Authority;
- 3.2.6 monitor its 911/E-911 trunks and facilities for the purpose of determining originating network traffic volumes. If the DISH traffic study indicates that additional trunks and/or facilities are needed to meet the current level of 911/E-911 Call volumes, DISH shall order or otherwise provide adequate additional trunks and/or facilities;
- 3.2.7 promptly test all 911/E-911 trunks and facilities between the DISH network and the Verizon 911/E-911 Tandem Office(s)/Selective Router(s) or Verizon interface point(s) to assure proper functioning of 911/E-911 arrangements. DISH shall not transmit or route live 911/E-911 Calls until successful testing is completed; and
- 3.2.8 isolate, coordinate and restore all 911/E-911 network maintenance problems from its switch(es) to the Verizon 911/E-911 Tandem Office(s)/Selective Router(s) or Verizon interface points. DISH shall advise Verizon of the circuit identification when notifying Verizon of a failure or outage.

4. 911/E-911 General

- 4.1 Verizon and DISH shall work cooperatively to arrange meetings with the Controlling 911 Authorities to answer any technical questions the PSAPs, or county or municipal coordinators may have regarding the initial 911/E-911 arrangements
- 4.2 DISH shall compensate Verizon for provision of 911/E-911 Services pursuant to the Pricing Attachment of this Agreement.
- 4.3 DISH and Verizon shall comply with all Applicable Law (including 911 taxes and surcharges as defined by Applicable Law) pertaining to 911/E-911 arrangements.
- 4.4 DISH shall collect and remit, as required, any 911/E-911 applicable surcharges from its end users in accordance with Applicable Law.

5. Phase II Wireless Arrangements

- 5.1 The following services may be used by DISH, where available, in order to comply with the FCC's rules and regulations regarding Phase II wireless implementation.

- 5.2 Non-Call Path Associated Signaling (NCAS).
- 5.2.1 Where DISH forwards a 911/E-911 Call to the Verizon 911/E-911 Tandem Office(s)/Selective Router(s) or Verizon interface point(s), DISH shall pass the pANI for that 911/E -911 Call.
 - 5.2.2 Routing of 911/E-911 Calls will be based on the pANI delivered with the 911/E-911 Call, or at Verizon's discretion, the location coordinates obtained during call setup. Where feasible, Verizon will route the 911/E-911 Call and pass its corresponding pANI to the Designated PSAP. If it is not feasible to route the 911/E-911 Call to the Designated PSAP due to the PSAP trunks being busy or out of service, Verizon will route the call to a Default PSAP or busy tone, as directed by the Controlling 911 Authority. If it is not feasible to route the 911/E-911 Call to the Designated PSAP due to a failure in delivery of the pANI, Verizon will route the call to a Default PSAP designated by the Controlling 911 Authority. Both Parties' network architecture and routing responsibilities will be in accordance with Applicable Law.
 - 5.2.3 Upon receipt of a PSAP query to the ALI Database to obtain the Call Back Number and Phase II location information for a 911/E-911 Call, provided by DISH, the ALI Database shall route the query to the DISH-controlled or third party database designated by DISH.
 - 5.2.4 The ALI Database shall then automatically receive from the DISH-controlled or third party database the Call Back Number and Phase II location information as provided by the CLEC associated with the 911/E-911 Call.
 - 5.2.5 The ALI Database shall then automatically transmit the data received from the DISH-controlled or third party database to the PSAP.
 - 5.2.6 DISH will terminate at least two data circuits from the DISH-controlled or third party database to each ALI Database.
 - 5.2.7 Verizon shall place the necessary CSU/DSU at each ALI Database to receive the data provided by DISH.
 - 5.2.8 DISH shall provision its DISH-controlled or third party databases such that the exchange of data between these DISH-controlled or third party databases and the ALI Database shall use the PAM Protocol or other agreed upon interface.

6. Good Faith Performance

If and, to the extent that, Verizon, prior to the Effective Date, has not provided in the Commonwealth of Pennsylvania a Service offered under this Attachment, Verizon reserves the right to negotiate in good faith with DISH reasonable terms and conditions (including, without limitation, rates and implementation timeframes) for such Service; and, if the Parties cannot agree to such terms and conditions (including, without limitation, rates and implementation timeframes), either Party may utilize the Agreement's dispute resolution procedures.

PRICING ATTACHMENT

1. General

- 1.1 As used in this Attachment, the term "Charges" means the rates, fees, charges and prices for a Service.
- 1.2 Except as stated in Section 2 of this Attachment, Charges for Services shall be as stated in this Section 1.
- 1.3 The Charges for a Service shall be the Charges for the Service stated in the Providing Party's applicable Tariff.
- 1.4 The Charges stated in Appendix A of this Pricing Attachment shall be automatically superseded by any applicable Tariff Charges. The Charges stated in Appendix A of this Pricing Attachment also shall be automatically superseded by any new Charge(s) when such new Charge(s) are required by any order of the Commission or the FCC, approved by the Commission or the FCC, or otherwise allowed to go into effect by the Commission or the FCC (including, but not limited to, in a Tariff that has been filed with the Commission or the FCC), provided such new Charge(s) are not subject to a stay issued by any court of competent jurisdiction.
- 1.5 In the absence of Charges for a Service established pursuant to Sections 1.3 through 1.4 of this Attachment, if Charges for a Service are otherwise expressly provided for in this Agreement, such Charges shall apply.
- 1.6 In the absence of Charges for a Service established pursuant to Sections 1.3 through 1.5 of this Attachment, the Charges for the Service shall be the Providing Party's FCC or Commission approved Charges.
- 1.7 In the absence of Charges for a Service established pursuant to Sections 1.3 through 1.6 of this Attachment, the Charges for the Service shall be mutually agreed to by the Parties in writing.

2. DISH Prices

Notwithstanding any other provision of this Agreement, the Charges that DISH bills Verizon for DISH's Services shall not exceed the Charges for Verizon's comparable Services, except to the extent that DISH's cost to provide such DISH's Services to Verizon exceeds the Charges for Verizon's comparable Services and DISH has demonstrated such cost to Verizon, or, at Verizon's request, to the Commission or the FCC.

3. Regulatory Review of Prices

Notwithstanding any other provision of this Agreement, each Party reserves its respective rights to institute an appropriate proceeding with the FCC, the Commission or other governmental body of appropriate jurisdiction: (a) with regard to the Charges for its Services (including, but not limited to, a proceeding to change the Charges for its services, whether provided for in any of its Tariffs, in Appendix A, or otherwise); and (b) with regard to the Charges of the other Party (including, but not limited to, a proceeding to obtain a reduction in such Charges and a refund of any amounts paid in excess of any Charges that are reduced).

APPENDIX A TO THE PRICING ATTACHMENT¹
(PENNSYLVANIA—EAST)
v1.8

I. VERIZON SERVICES, FACILITIES AND ARRANGEMENTS²

A. INTERCONNECTION

Service Description:	Recurring Charges:	Non-Recurring Charges:
1. Reciprocal Compensation Traffic Termination		
Reciprocal Compensation Traffic End Office Rate	\$0.000000/MOU	Not Applicable
Reciprocal Compensation Traffic Tandem Rate	\$0.000000/MOU	Not Applicable
2. Entrance Facilities and Transport for Interconnection Entrance facilities, and transport, as appropriate, for Interconnection at Verizon Tandem Wire Center, Verizon End Office Wire Center, Verizon Tandem Switch, Verizon End Office Switch, or other Point of Interconnection	Per Verizon Tariff F.C.C. No. 1 for Feature Group D service, as amended from time-to-time. Per Verizon Tariff Pa. P.U.C.-No. 302 for Feature Group D service, as amended from time-to-time.	

¹ All rates and charges set forth in this Appendix shall apply until such time as they are replaced by new rates and/or charges as the Commission or the FCC may approve or allow to go into effect from time-to-time, subject however, to any stay or other order issued by any court of competent jurisdiction.

² This Appendix may contain rates for (and/or reference) services, facilities, arrangements and the like that Verizon does not have an obligation to provide under the Agreement (e.g., services, facilities, arrangements and the like that Verizon is not required to provide under Section 251 of the Act). Notwithstanding any such rates (and/or references), and for the avoidance of any doubt, nothing in this Appendix shall be deemed to require Verizon to provide a service, facility, arrangement or the like that the Agreement does not require Verizon to provide, or to provide a service, facility, arrangement or the like upon rates, terms or conditions other than those that may be required by the Agreement.

Unless a citation is provided to a generally applicable Verizon Tariff, all listed rates and services are available only to DISH when purchasing these services for use in the provision of Commercial Mobile Radio Service or Telephone Exchange Service, and, except as otherwise expressly stated in this Appendix, apply only to Reciprocal Compensation Traffic and local Ancillary Traffic. Verizon rates and services for use by DISH in the carriage of Toll or InterMTA Traffic shall be subject to Verizon's Tariffs for Exchange Access Service. Adherence to these limitations is subject to a reasonable periodic audit by Verizon.

Service Description:	Recurring Charges:	Non-Recurring Charges:
3. Exchange Access Service		
Interstate	Per Verizon Tariff F.C.C. No. 1 for Feature Group D service, as amended from time-to-time.	
Intrastate	Per Verizon Tariff Pa. P.U.C.-No. 302 for Feature Group D service, as amended from time-to-time.	
4. Tandem Transit Traffic Service		
Tandem Switching	\$.001146/MOU	Per Section II. above, as applicable
Switched Transport	\$.000206/MOU \$.000010/MOU/Mile	
5. SS7 (including, but not limited to, STP Access and STP Port Termination)	Per Verizon Tariff F.C.C. No. 1, Sections 6 and 20, as amended from time-to-time. Per Verizon Tariff Pa. P.U.C.-No. 302, Section 6, as amended from time-to-time.	

Service Description:	Recurring Charges:	Non-Recurring Charges:
6. 911/E911		
Transport	Per Section I.A.2, "Entrance Facilities and Transport for Interconnection," above.	

II. DISH SERVICES, FACILITIES AND ARRANGEMENTS

A. INTERCONNECTION

Service Description:	Recurring Charges:	Non-Recurring Charges:
I. Reciprocal Compensation Traffic Termination		
Reciprocal Compensation Traffic End Office Rate	\$0.000000/MOU	Not Applicable
Reciprocal Compensation Traffic Tandem Rate	\$0.000000/MOU	Not Applicable