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2014-0973

THE STATE OF TEXAS §
 §
COUNTY OF HARRIS §

I. PARTIES

A. Address

THIS AGREEMENT FOR SIP TRUNKING SERVICES is made on the date countersigned by the City Controller, by and between the **CITY OF HOUSTON, TEXAS** (the “City” or “Customer”), a Texas Home Rule City of the State of Texas principally situated in Harris County, and **VERIZON BUSINESS NETWORK SERVICES, INC. ON BEHALF OF MCI COMMUNICATIONS SERVICES, INC. D/B/A VERIZON BUSINESS SERVICES** (the “Contractor” or “Verizon”), a Delaware Corporation doing business in Texas.

The initial addresses of the parties, which one party may change by giving written notice to the other party, are as follows:

City
Director of HITS
or Designee
City of Houston
P.O. Box 1562
Houston, Texas 77002

Contractor
VERIZON BUSINESS NETWORK SERVICES,
INC. ON BEHALF OF MCI COMMUNICATIONS
SERVICES, INC. D/B/A VERIZON BUSINESS
SERVICES
Attn: NAME: Rod Boykin,
TITLE: Senior Client Executive
ADDRESS1: 5444 Westheimer, Suite 1900
ADDRESS2: Houston, TX 77056

Verizon Business Services
6415-6455 Business Center Drive
Highlands Ranch, CO 80130
Attn: Customer Service

Verizon Business Services
500 Summit Lake Drive - Office 4-04
Valhalla, NY 10595
Attn: Vice President, Legal

Email: notice@verizon.com with a subject of
‘OFFICIAL LEGAL NOTICE’

The Parties agree as follows:

B. Table of Contents

This Agreement consists of the following sections:

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LIST OF EXHIBITS

- Exhibit A – Network Access Services Attachment Ethernet
- Exhibit B – Global Private IP Service Level Agreement (“PIP SLA”)
- Exhibit C – Private IP Service Service Attachment VBSIII
- Exhibit D – Voice Over IP Service Service Attachment
- Exhibit E – Pricing and Rate Exhibit
- Exhibit F – Statement of Work
- Exhibit G – Equal Employment Opportunity
- Exhibit H – Drug Policy Compliance Agreement
- Exhibit I – Drug Policy Compliance Declaration
- Exhibit J – Contractor’s Certification of No Safety Impact Positions

C. Parts Incorporated

The above-described exhibits are incorporated into this Agreement.

D. Controlling Parts

If a conflict arises, the order of precedence is: (i) this Agreement (excluding the Guide), (ii) the Guide, and (iii) Service Attachments.

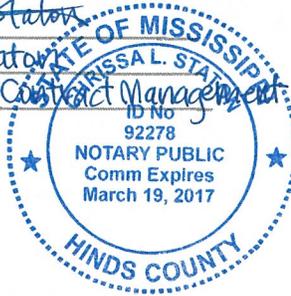
E. Signatures

The Parties have executed this Agreement in multiple copies, each of which is an original.

Remainder of Page Intentionally Left Blank; Signature Page to Follow

ATTEST/SEAL (if a corporation):
WITNESS (if not corporation):

By: Chrissa L. Stator
Name: Chrissa L. Stator
Title: Sr. Analyst, Contract Management



VERIZON BUSINESS NETWORK
SERVICES INC., on behalf of MCI
COMMUNICATIONS SERVICES, INC.
DBA VERIZON BUSINESS SERVICES

By: Patricia L. Myers 10/27/14
Name: Patricia L Myers
Title: Manager
Tax ID No.: 47-0751768
Pricing/Contract Management

ATTEST/SEAL:

CITY OF HOUSTON, TEXAS

Christa Russell
City Secretary

Arvise D. Parker
Mayor
Ammonda Washington

APPROVED:

Charles L. Perry
Chief Information Officer
Houston Information Technology Services

APPROVED:

John D. Wiles
City Purchasing Agent

APPROVED AS TO FORM:

Deidra Perry
Senior Assistant City Attorney
L.D. File No.: 0451400005001

COUNTERSIGNED:

Ronald C. Guss
City Controller Jenaid Polk

Date Countersigned:

11-7-14

II. DEFINITIONS

As used in this Agreement, the following terms have the meanings set out below:

“Addition(s)” means adding, upgrading, moving, or relocating the Services or like or similar services, including equipment, supplies, software, or locations, to the Services, or locations required or purchased under this Agreement. Additions shall also include all activities consistent with Article III(E).

“Affiliate” means any person or entity directly or indirectly controlling, controlled by, or under common control with a Party.

“Agreement” means this contract between the Parties, including all exhibits and any written amendments authorized by City Council and Contractor.

“City” is defined in the preamble of this Agreement and includes its successors and assigns.

“City Data” means all data, information, or Documents provided by City to Contractor, received, collected, or processed by Contractor, is in Contractor’s possession, or that Contractor may have access to in connection with this Agreement. City Data shall not mean or include Contractor’s Confidential Information, proprietary data, software or products.

“City Personnel” means all City employees, but not elected officials.

“City’s Confidential Information” means any City Data, documents, or information (in whatever form) that the City or Persons acting on the City’s behalf provides, makes available to, or transmits to Contractor in connection with this Agreement; and Documents Contractor receives, has access to, creates, develops, or prepares in connection with this Agreement. For purposes of this definition, the references to Contractor, the City, and Persons acting on the City’s behalf shall include the employees, agents, subcontractors, officers, directors, and other

Persons acting on behalf of Contractor, the City, or Persons acting on the City's behalf. The City's Confidential Information shall not include Contractor's Confidential Information, Contractor Data, proprietary software, products, or processes.

"City Purchasing Agent" is defined as the person or duly authorized successor, authorized in writing to act for the City. The term includes, except as otherwise provided in this Agreement, the authorized representative of the City Purchasing Agent acting within the limits of delegated authority.

"Consultant" means the professional Consultant or other professional entity subcontracted by Contractor to provide a portion of services required.

"Contract Year" means the period set forth in Article IV(B)(2) beginning on the Rate Effective Date and ending on 8 AM CST on the anniversary date of the Rate Effective Date.

"Contractor" is defined in the preamble of this Agreement and includes its successors and assigns.

"Contractor Confidential Information" means any Contractor Data; or information (in whatever form, whether written, tangible, or orally disclosed) designated as confidential by Contractor by conspicuous markings (if tangible Confidential Information) or by announcement at the time of initial disclosure (if oral Confidential Information) or if not so marked or announced should reasonably have been understood as confidential to the City, either because of legends or other markings, the circumstances of disclosure or the nature of the information itself, and that (i) relates to purposes stated in this Agreement or (ii) is received by the City from the Contractor during the term of this Agreement. In order to be considered Confidential Information, Contractor must summarize orally disclosed Confidential Information in a writing that is provided to the Director with 10 days of initial oral disclosure by the Contractor.

“Contractor Data” means all data, information, or Documents provided by Contractor to City, or that City may have access to in connection with this Agreement.

“Corrective Action Plan” means a detailed written corrective action plan provided by Contractor to City to correct or resolve an alleged material breach.

“Countersignature Date” means the date shown as the date countersigned by the City Controller on the signature page of this Agreement.

“CPNI” means Customer Proprietary Network Information and includes information relating to the quantity, technical configuration, type, destination, location, and amount of use of the telecommunications and interconnected voice over Internet Protocol services Customer purchases from the Verizon Companies, as well as related local and toll billing information, made available to the Verizon Companies solely by virtue of Customer’s relationship with the Verizon Companies.

“Deletion(s)” means deleting, downgrading, or excluding the Services or like or similar services, including equipment, supplies, software or locations, to the Services or locations required or purchased under this Agreement. Deletions shall also include all activities consistent with Article III(E).

“Deliverables” means any reports or other tangible deliverables delivered by Contractor as specified in the applicable Statement of Work (“SOW”).

“Director” means the Director of the Department of Houston Information Technology Services, or the person he or she designates.

“Documents” means any writing, record, or electronically stored information of whatever type and description on which information or data is recorded, produced, or reproduced in any way, including without limitation all handwritten, typed, printed, recorded, transcribed, taped,

filmed, graphic- or sound-reproduction material, magnetic cards or cartridges, optical storage devices, and includes without limitation computer or electronic records, notes, manuals, notebooks, plans, computations, computer databases and diskettes, software, emails, invoices, bills, receipts, records, contracts, tabulations, exhibits, reports, underlying data, data compilations, charts, analyses, maps, letters, facsimiles, forms, photographs, graphs, images, calendars, memoranda, interoffice communications, or correspondence.

“Guide” means the portions of Verizon’s “Service Publication and Price Guide” (“Guide”) at www.verizonbusiness.com/guide that are relevant to the Services provided under this Agreement and referenced herein.

“Include” and “including,” and words of similar import, shall be deemed to be followed by the words “without limitation.”

“Initial Term” has the meaning defined in Article V(A).

“Notice of Deficiency” means a written communication from the Director or Project Administrator that describes Contractor’s failure to perform a duty under this Agreement or a written communication from Contractor that describes City’s failure to perform a duty under this Agreement.

“Notice of Material Breach” means a written communication from the Director or Project Administrator that sets forth an alleged material breach by the Contractor under this Agreement or a written communication from the Contractor that sets forth an alleged material breach by the City under this Agreement.

“Notice to Proceed” means a written communication from the Director that authorizes Contractor to begin performance of work.

“Parties” means all the entities set out in the Preamble who are bound by this Agreement.

“Person” means an individual, corporation, organization, government or governmental subdivision or agency, business trust, estate, trust, partnership, association, or any other legal entity, but Person does not include the City.

“Proprietary Rights” means any one or more of the following: copyrights, patents, trademarks, trade secrets, intellectual property rights, and any other proprietary rights.

“Rate Effective Date” means the first day of the second full billing cycle following execution and delivery of this Agreement by City to Contractor, except where a Service Attachment in Exhibits A through D (inclusive) indicate otherwise for a particular service. For convenience of the Parties, if this Agreement is executed by City and delivered to Contractor in October 2014, the Rate Effective Date would be December 1, 2014, and if executed and delivered in November 2014, the Rate Effective Date would be January 1, 2015.

“Renewal Term” means the period of time during which this Agreement is renewed, if any; which Renewal Term starts on 12:01 AM CST on the day after the Initial Term ends.

“Services” means all of the services, functions, activities, support, maintenance, and service levels that are provided by Contractor under this Agreement or required under this Agreement.

“Term” means the entire period in which this Agreement is in effect, starting on the Countersignature Date and through and including the final date of termination or expiration, which Term shall include any renewals or extensions to this Agreement.

All other industry terms, definitions, and acronyms not specifically defined or addressed in this Agreement or the Guide shall be interpreted per the then-current or latest edit of Newton’s Telecom Dictionary.

III. DUTIES OF CONTRACTOR

A. Scope of Services

Services in General

In consideration of the payments specified in this Agreement, Contractor shall provide all labor, material, and supervision necessary to perform the services described in Exhibits “A” through “D” (inclusive).

B. Coordinate Performance

Contractor shall coordinate its performance with the Director and other persons that the Director designates. Contractor shall promptly inform the Director and other person(s) of all significant events relating to the performance of this Agreement.

C. Reports

At no cost to the City, Contractor shall provide standard and ad hoc reporting available through Contractor’s online portal and progress updates as included in the Statement of Work. As available, Contractor shall provide real-time, web accessible reporting or reporting dashboards to the Director, as mutually agreed upon. Upon the Director’s request, Contractor shall provide additional reports that are not part of the standard and ad-hoc reporting available through Contractor’s online portal, at prices to be mutually agreed upon and subject to the limit of appropriations clause stated herein.

Upon the Director’s request, Contractor shall provide access to data in a raw format wherever possible. The content, timing, format, and media type for each report or requested raw data will be determined by the Parties’ mutual agreement. The Parties shall mutually agree upon payment of all costs and expenses relating to assembling, reporting, and explaining data to the City.

D. Time Extensions

If Contractor requests an extension of time to complete its performance under the Agreement or if the Director determines that it is in the City's best interest for Contractor to provide Services for a carry-over or transition period beyond the expiration or termination of this Agreement, then the Director may, in his or her sole discretion, extend the time of performance under this Agreement so long as the extension does not exceed 6 months. The extension must be in writing and shall be upon the same terms and conditions of this Agreement, unless otherwise agreed to in writing by the Director and City Attorney; but the extension does not require amendment of this Agreement. Contractor is not entitled to damages for delay(s) regardless of the cause of the delay(s).

E. Additions and Deletions

1. Additional Services

a. The Director may request to add, move, or upgrade additional Services by giving written notification to Contractor. Currently additions, moves, deletions, and upgrades through the City's Telecom Expense Management System cannot be supported and will not be supported until mutual written agreement is obtained between the parties. The Parties will pursue adding this capability to the Agreement and agree to negotiate in good faith. For purposes of this section, "Effective Date" means the date on which the Service is installed or provisioned.

b. As of the Effective Date, each Service added, moved, or upgraded is subject to this Agreement as if it had originally been a part, but the charge for each item, Service starts to accrue only on the Effective Date and the charge shall be the same as specified in this Agreement.

c. The term for all Services added, moved, or upgraded under or in connection with this Agreement shall be coterminous with the Initial Term or Renewal Term in which it is added, moved, or upgraded, unless the Parties agree to a shorter time.

2. Deletion or Exclusion of Services

a. If a Service that is subject to this Agreement is cancelled, terminated, suspended, downgraded, deleted, lost, stolen, destroyed, damaged, sold, replaced, or otherwise disposed of, the Director may request exclusion from the operation of this Agreement by notifying Contractor in writing (e.g. exclusion notice).

b. More than one exclusion notice may be given. Contractor shall delete the charge for the excluded Service from the sum(s) otherwise due under this Agreement within 30 days of receipt of the exclusion notice unless otherwise specified in the exclusion notice.

3. Limitations on Changes

a. The total charges for Additions and Deletions to this Agreement, including moves, upgrades, and downgrades, must never exceed 25% of the original Agreement amount unless:

(1) The additions are exempt from the competitive bidding or proposal requirements, set forth in Tex. Local Govt. Code Chapter 252; or

(2) The City acquires the additions or upgrades from Contractor through a competitive bid or competitive proposal.

b. The Director may issue written notification (“Change Order”) to Contractor to add and delete Services as described in this subsection, changes, including Additions, Deletions, moves and upgrades, subject to all of the following limitations:

(1) If a Change Order describes Services that Contractor is otherwise required to provide under this Contract, the City is not obligated to pay any additional money to Contractor, unless the quantity of Services is increased from the original quantity ordered.

(2) Council expressly authorizes either the Director or the City Purchasing Agent to approve Additions or Deletions up to \$50,000, so long as the cumulative total of all Additions and Deletions does not exceed 5% of the original Agreement amount. Any Additions or Deletions of more than \$50,000 must be approved by the City Council. Additions or Deletions must be approved by City Council, regardless of the dollar amount of the individual Addition or Deletion, once the cumulative total of all Additions or Deletions authorized by the Director exceeds 5% of the original Agreement amount.

(3) The cumulative total of all Additions and Deletions as described in this section may not increase the original Agreement amount by more than 25%.

c. All Additions and Deletions are subject to the terms and conditions of this Agreement, including the Allocated Funds provisions of this Agreement.

This Agreement can be amended or modified only in accordance with the Written Amendment section hereunder. Except for an amendment in accordance with the Written Amendment section, no term or condition in any document (including any Change Order or other document relating to or authorizing Additions and Deletions), can amend, modify, conflict with or diminish any term or condition of this Agreement and any such term or condition is and shall be deemed void and unenforceable.

F. Prompt Payment of Subcontractors

Contractor shall make timely payments to all persons and entities supplying labor, materials, or equipment for the performance of this Agreement. **CONTRACTOR SHALL DEFEND AND INDEMNIFY THE CITY FROM ANY CLAIMS OR LIABILITY ARISING OUT OF CONTRACTOR'S FAILURE TO MAKE THESE PAYMENTS.**

G. Personnel of Contractor

In the event the City requests removal of any Contractor personnel for cause, the Director shall notify Contractor and Contractor will address such personnel changes in a timely manner.

H. Checkbook Credit (Regional Checkbook - Monthly Optionv2.0)

Subject to the conditions below, the City shall receive, from Contractor, a credit equal to 10% of the Total Contract Volume Commitment (defined as the Annual Volume Commitment multiplied by the number of years in the Initial Term) of the Agreement (the "Checkbook Credit"). Contractor shall issue the Checkbook Credit to the City in the following manner: 3/36th of the total credit amount will be applied to the City's invoice in the third month following the Rate Effective Date; the remaining Checkbook Credit will be divided into equal amounts and credited to each invoice every month thereafter until fully paid unless otherwise forfeited by the City as stated herein. The Checkbook Credit may not be applied against taxes, charges for unauthorized calls, termination or underutilization charges associated with term plans or program commitments, or disputed charges. If the City terminates this Agreement during the Initial Term, the City will not be eligible for the remaining, unapplied Checkbook Promotion Credits, and the City will forfeit any unused Checkbook Credit amounts at the time of termination of this Agreement.

I. RELEASE

CONTRACTOR AGREES TO AND SHALL RELEASE THE CITY, ITS AGENTS, EMPLOYEES, OFFICERS, AND LEGAL REPRESENTATIVES (COLLECTIVELY THE "CITY") FROM ALL LIABILITY FOR INJURY, DEATH, DAMAGE, OR LOSS TO REAL PROPERTY TO THE EXTENT CAUSED BY THE NEGLIGENT OR OTHERWISE TORTIOUS ACTS OR OMISSIONS OF CONTRACTOR, ITS AGENTS OR EMPLOYEES IN THE COURSE OF PERFORMANCE OF THE SERVICES UNDER THIS AGREEMENT.

J. INDEMNIFICATION

CONTRACTOR AGREES TO AND SHALL DEFEND, INDEMNIFY, AND HOLD THE CITY, ITS AGENTS, EMPLOYEES, OFFICERS, AND LEGAL REPRESENTATIVES (COLLECTIVELY THE "CITY") HARMLESS FOR ALL CLAIMS, CAUSES OF ACTION, LIABILITIES, FINES, DAMAGES AND INCURRED EXPENSES (INCLUDING, WITHOUT LIMITATION, REASONABLE AND INCURRED ATTORNEYS' FEES, COURT COSTS, AND ALL OTHER DEFENSE COSTS AND INTEREST), WHICH COSTS ARE FINALLY AWARDED, FOR INJURY, DEATH, DAMAGE, OR LOSS TO PERSONS OR REAL PROPERTY SUSTAINED IN CONNECTION WITH OR INCIDENTAL TO PERFORMANCE UNDER THIS AGREEMENT INCLUDING, WITHOUT LIMITATION, THOSE CAUSED BY:

1. CONTRACTOR'S AND/OR ITS AGENTS', EMPLOYEES', OFFICERS', DIRECTORS', CONTRACTORS', OR SUBCONTRACTORS' (COLLECTIVELY IN NUMBERED PARAGRAPHS 1-3, "CONTRACTOR")

ACTUAL OR ALLEGED NEGLIGENCE OR INTENTIONAL ACTS OR OMISSIONS;

2. THE CITY'S AND CONTRACTOR'S ACTUAL OR ALLEGED CONCURRENT NEGLIGENCE; AND

3. THE CITY'S AND CONTRACTOR'S ACTUAL OR ALLEGED STRICT PRODUCTS LIABILITY OR STRICT STATUTORY LIABILITY.

CONTRACTOR SHALL DEFEND, INDEMNIFY, AND HOLD THE CITY HARMLESS DURING THE TERM OF THIS AGREEMENT AND FOR FOUR YEARS AFTER THE AGREEMENT TERMINATES. CONTRACTOR'S INDEMNIFICATION IS LIMITED TO \$1,000,000 PER OCCURRENCE.

K. INTELLECTUAL PROPERTY INFRINGEMENT RELEASE AND INDEMNIFICATION

CONTRACTOR AGREES TO AND SHALL RELEASE AND DEFEND, INDEMNIFY, AND HOLD HARMLESS THE CITY, ITS AGENTS, EMPLOYEES, OFFICERS, AND LEGAL REPRESENTATIVES (COLLECTIVELY THE "CITY") FROM ALL CLAIMS OR CAUSES OF ACTION BROUGHT AGAINST THE CITY BY ANY PARTY, INCLUDING CONTRACTOR, ALLEGING THAT THE CITY'S USE OF ANY EQUIPMENT, SOFTWARE, PROCESS, OR DOCUMENTS CONTRACTOR FURNISHES DURING THE TERM OF THIS AGREEMENT INFRINGES ON AN US PATENT, COPYRIGHT, SERVICE MARK, OR TRADEMARK, OR MISAPPROPRIATES A TRADE SECRET. CONTRACTOR SHALL PAY ALL COSTS (INCLUDING, WITHOUT LIMITATION, ATTORNEYS' FEES, COURT COSTS, AND ALL OTHER DEFENSE COSTS, AND INTEREST) AND DAMAGES AWARDED.

CONTRACTOR SHALL NOT SETTLE ANY CLAIM ON TERMS WHICH PREVENT THE CITY FROM USING THE EQUIPMENT, SOFTWARE, PROCESS, AND DOCUMENTS WITHOUT THE CITY'S PRIOR WRITTEN CONSENT.

WITHIN 60 DAYS AFTER CONTRACTOR IS NOTIFIED OF A CLAIM, OR IF, AT ANY TIME, A PROCEEDING APPEARS TO CONTRACTOR TO BE LIKELY TO BE BROUGHT WITH RESPECT THERETO, OR IF ANY SERVICE IS HELD TO CONSTITUTE AN INFRINGEMENT OR MISAPPROPRIATION, OR THE USE THEREOF IS ENJOINED OR RESTRICTED, CONTRACTOR SHALL, AT ITS OWN EXPENSE, EITHER (1) OBTAIN FOR THE CITY THE RIGHT TO CONTINUE USING THE EQUIPMENT, SOFTWARE, PROCESS, AND DOCUMENTS OR, (2) IF BOTH PARTIES AGREE, REPLACE OR MODIFY THEM WITH COMPATIBLE AND FUNCTIONALLY EQUIVALENT PRODUCTS. IF NONE OF THESE ALTERNATIVES IS COMMERCIALY REASONABLY AVAILABLE, CONTRACTOR SHALL PROVIDE THE DIRECTOR WITH WRITTEN NOTICE REGARDING SAME IN WHICH EVENT THE CITY MAY RETURN THE EQUIPMENT, SOFTWARE, OR DOCUMENTS, OR DISCONTINUE THE PROCESS, TERMINATE THE SERVICES WITHOUT PENALTY OR FEES, AND CONTRACTOR SHALL REFUND ANY AMOUNTS PAID BY CITY TO CONTRACTOR UNDER THIS AGREEMENT FOR THE INFRINGING SERVICE.

CONTRACTOR IS NOT RESPONSIBLE FOR ANY CLAIMS TO THE EXTENT CAUSED BY:

1. CONTENT SUBMITTED TO THE SERVICE BY CITY (OR THEIR END USERS) INCLUDING BUT NOT LIMITED TO CONTENT INVOLVING LIBEL, SLANDER, AND INVASION OF PRIVACY; OR

2. MODIFICATIONS MADE TO THE SERVICE IN QUESTION BY ANY PARTY OTHER THAN CONTRACTOR OR ITS AGENTS OR SUBCONTRACTORS, OR BY CONTRACTOR WORKING AT THE DIRECTION OF CITY AND/OR THEIR AGENTS AND IN ACCORDANCE WITH ANOTHER VENDORS' SPECIFICATIONS; OR

3. THE COMBINATION, OPERATION, OR USE OF THE SERVICE WITH OTHER ITEMS IF CONTRACTOR DID NOT SUPPLY OR APPROVE FOR USE WITH THE ITEM TO THE EXTENT ANY INFRINGEMENT CLAIM IS ATTRIBUTABLE SOLELY TO THE OTHER ITEMS CONTRACTOR DID NOT SUPPLY OR APPROVE OF; OR

4. CONTRACTOR'S ADHERENCE TO WRITTEN SPECIFICATIONS PROVIDED BY CITY TO THE EXTENT THE INFRINGEMENT CLAIM IS ATTRIBUTABLE SOLELY TO THE CITY'S WRITTEN SPECIFICATIONS; OR

**5. USE OF THE SERVICE IN VIOLATION OF THIS CONTRACT;
OR**

6. CITY'S FAILURE TO USE ANY NEW OR CORRECTED VERSIONS OF THE SERVICE MADE AVAILABLE OR PROVIDED BY CONTRACTOR WITHIN A REASONABLE PERIOD OF TIME, PROVIDED THAT CONTRACTOR NOTIFIED THE DIRECTOR, IN WRITING, THAT ANY

NEW OR CORRECTED VERSIONS WERE MADE AVAILABLE OR PROVIDED IN CONNECTION WITH ANY POTENTIAL, ALLEGED, OR SUSPECTED CLAIMS OF INFRINGEMENT OR MISAPPROPRIATION.

THE FOREGOING STATES THE ENTIRE OBLIGATION OF CONTRACTOR TO CITY AND IS CITY'S SOLE AND EXCLUSIVE REMEDY WITH RESPECT TO ANY CLAIM OF INFRINGEMENT OF ANY INTELLECTUAL PROPERTY RIGHT OF ANY KIND, AND CONTRACTOR DISCLAIMS ALL OTHER WARRANTIES AND OBLIGATIONS WITH RESPECT THERETO.

L. INDEMNIFICATION - SUBCONTRACTOR'S INDEMNITY

CONTRACTOR SHALL REQUIRE ALL OF ITS SUBCONTRACTORS (AND THEIR SUBCONTRACTORS) TO RELEASE AND INDEMNIFY THE CITY TO THE SAME EXTENT AND IN SUBSTANTIALLY THE SAME FORM AS ITS RELEASE AND INDEMNITY TO THE CITY.

M. INDEMNIFICATION - PROCEDURES

1. Notice of Claims. If the City or Contractor receives notice of any claim or circumstances which could give rise to an indemnified loss, the receiving party shall give written notice to the other party within 30 days. The notice must include the following:

- a. A description of the indemnification event in reasonable detail,
- b. The basis on which indemnification may be due, and
- c. The anticipated amount of the indemnified loss.

This notice does not estop or prevent the City from later asserting a different basis for indemnification or a different amount of indemnified loss than that indicated in the initial notice. If the City does not provide this notice within the 30 day period, it does not waive

any right to indemnification except to the extent that Contractor is prejudiced, suffers loss, or incurs expense because of the delay.

2. Defense of Claims

a. Assumption of Defense. Contractor shall assume the defense of the claim at its own expense with counsel chosen by it that is reasonably satisfactory to the City. Contractor shall control the defense and any negotiations to settle the claim. If Contractor does not assume the defense within 10 days after receiving written notice of the indemnification request, the City Attorney shall notify Contractor again in writing; if Contractor does not assume the defense within 5 days of receipt of the City Attorney's notice, then the City shall assume and control the defense, and all defense expenses constitute an indemnification loss.

b. Continued Participation. If Contractor elects to defend the claim, the City may retain separate counsel, at City's expense, to participate in (but not control) the defense and to participate in (but not control) any settlement negotiations. Contractor may settle the claim without the consent or agreement of the City, unless it (i) would result in injunctive relief or other equitable remedies or otherwise require the City to comply with restrictions or limitations that adversely affect the City, (ii) would require the City to pay amounts that Contractor does not fund in full, (iii) would not result in the City's full and complete release from all liability to the plaintiffs or claimants who are parties to or otherwise bound by the settlement.

N. LIMITATION OF LIABILITY

1. **EXCEPT AS OTHERWISE STATED IN THIS SECTION AND TO THE EXTENT PERMITTED BY LAW, FOR ANY CLAIM OR CAUSE OF ACTION**

ARISING UNDER OR RELATED TO THE AGREEMENT, NEITHER PARTY WILL BE LIABLE TO THE OTHER PARTY FOR INDIRECT, PUNITIVE, SPECIAL, OR CONSEQUENTIAL DAMAGES, EVEN IF IT IS ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

2. CONTRACTOR'S LIABILITY TO THE CITY UNDER THIS AGREEMENT WILL NOT EXCEED THE TOTAL VALUE OF CONTRACTOR'S INVOICES TO CITY IN THE TWELVE (12) MONTHS PRECEDING THE ACCRUAL OF THE CLAIM OR CAUSE OF ACTION OR THE FILING OF A LAWSUIT, WHICHEVER OCCURS LATER.

3. Exceptions to Limitations of Liability. This limitation of liability shall not apply to: (a) losses occasioned by the fraud, willful misconduct, or gross negligence of Contractor and (b) losses that are the subject of indemnification under this Agreement. For losses excluded from the limitation of liability, the remedies provided in this Agreement are neither exclusive nor mutually exclusive, and the Parties shall be entitled to resort to any and all such remedies, and any other remedy or remedies available at law or in equity, by statute or otherwise, individually or in any combination thereof. No delay in exercising or failure to exercise any right or remedy shall operate as a waiver thereof except where specifically provided herein.

O. Insurance

Contractor shall provide and maintain certain insurance in full force and effect at all times during the term of this Contract and any extensions thereto. Such insurance is described as follows:

1. Risks and Limits of Liability

Contractor shall maintain the following coverage and limits of liability:

<u>COVERAGE</u>	<u>LIMIT OF LIABILITY</u>
Workers' Compensation	Statutory for Workers' Compensation
Employer's Liability	Bodily Injury by Accident: \$100,000 (each accident) Bodily Injury by Disease: \$100,000 (policy limit) Bodily Injury by Disease: \$100,000 (each employee)
Commercial General Liability: Including Contractual Liability Personal and Advertising Injury; Products and Completed Operations Coverage	Bodily Injury and Property Damage, Combined Single Limit of \$1,000,000 per Occurrence, and \$2,000,000 general aggregate
Automobile Liability Covering all owned, non-owned & hired vehicles	\$1,000,000 combined single limit per accident
Professional/Errors & Omissions Liability Coverage	\$2,000,000 per claim/aggregate
Crime Policy, which shall include but not be limited to coverage for the following: losses arising out of or in connection with fraudulent or dishonest acts committed by the employees of Contractor, acting alone or in collusion with others, including the property and funds of others in their care, custody or control; employee theft; counterfeit money; computer fraud coverage; funds transfer coverage; forgery or alteration coverage; money and securities coverage; and theft per loss coverage. The Crime Policy coverage shall also include an extension for property of others.	\$2,000,000 per loss

**Aggregate Limits are per 12-months policy period unless otherwise indicated.
(Defense Costs excluded from face value of the policy)**

If professional liability coverage is written on a "claims made" basis, Contractor shall also provide proof of renewal each year for two years after substantial completion of the Project, or in the alternative: evidence of extended reporting period coverage for a period of 2 years after substantial completion, or a project liability policy for the Project covered by this Contract with a duration of two years after substantial completion.

2. Form of Policies

The insurance may be evidenced by certificates of insurance the form of which must be approved by the Director and City Attorney, which approval shall not be unreasonably withheld; however such approval shall never excuse non-compliance with the terms of this Section.

3. Issuers of Policies

The issuer of any policy (1) shall have a Certificate of Authority to transact insurance business in Texas or (2) shall be an eligible non-admitted insurer in the State of Texas and have a Best's rating of at least B+ and a Best's Financial size Category of Class VI or better, according to the most current edition of Best's Key Rating Guide.

4. Insured Parties

Each policy, except those for Worker's Compensation, Employer's Liability, and Professional Liability, must provide a separate endorsement including the City (and its officers, and employees) as an additional insured as their interest may appear on the original policy and all renewals or replacement.

5. Deductibles

Contractor shall be responsible for and pay any claims or losses to the extent of any deductible amounts and waives any claim it may have for the same against the City, its officers, agents, or employees.

6. Cancellation

UPON RECEIPT OF NOTICE FROM ITS INSURER, CONTRACTOR SHALL PROVIDE THE CITY PURCHASING AGENT WITH THIRTY (30) DAYS PRIOR WRITTEN NOTICE OF CANCELLATION OF CONTRACTOR'S INSURANCE COVERAGE. WITHIN THE 30 DAY PERIOD, CONTRACTOR SHALL PROVIDE EVIDENCE OF OTHER SUITABLE POLICIES IN LIEU OF THOSE ABOUT TO BE CANCELED OR NONRENEWED SO AS TO MAINTAIN IN EFFECT THE REQUIRED COVERAGE. If Contractor does not comply with this requirement, the Director, at his or her sole discretion, may immediately suspend Contractor from any further performance under this Contract and begin procedures to terminate for default.

7. Subrogation

Each policy, except Professional Liability, must contain an endorsement to the effect that the issuer waives any claim or right of subrogation to recover against the City, its officers, agents, or employees.

8. Endorsement of Primary Insurance

Each policy, except those for Workers' Compensation and Employer's Liability, and Professional Liability, shall be primary and noncontributory to any other insurance available to the Additional Insured with respect to claims arising under this Agreement.

9. Liability for Premium

Contractor shall pay all insurance premiums, and the City shall not be obligated to pay any premiums.

10. Subcontractors

Contractor shall require all subcontractors to carry substantially the same insurance naming the City as an additional insured as their interests may appear, (excluding workers' compensation and employer's liability for purposes of additional insured status only) and meeting all of the above requirements stated above except amount. The amount must be commensurate with the amount of the subcontract, but no less than \$500,000 for each limit of liability listed in the chart above. Contractor shall provide copies of insurance certificates to the City Purchasing Agent.

11. Delivery of Certificates

a. At the time this Agreement is signed and as long as this Agreement continues, Contractor must furnish to the Director certificates of insurance and additional insured endorsements that meet the requirements of this Agreement. These certificates must bear the Contractor's name in which it is insured. Contractor shall provide updated certificates of insurance to the Director upon request. Every certificate of insurance Contractor delivers under this Agreement shall:

- (1) Be less than 12 months old;
- (2) Include all pertinent identification information for the Insurer, including the company name and address, policy number, NAIC or AMB number, if available from insurer, and authorized signature;
- (3) Include the Project name and reference numbers and indicates the name and address of the Project Manager in the Certificate Holder Box; and
- (4) Be appropriately marked to accurately identify:
 - (a) All coverages and limits of the policy;

(b) Effective and expiration dates; and

(c) Blanket endorsements for waivers of subrogation in favor of the City for Commercial General Liability, Automobile Liability, and Worker's Compensation/Employers' Liability.

b. Contractor shall continuously and without interruption, maintain in force the required insurance coverage specified in this Section. If Contractor does not comply with this requirement, the Director, at his or her sole discretion, may immediately suspend Contractor from any further performance under this Agreement and begin procedures to terminate for default.

c. The City shall never waive or be estopped to assert its rights to terminate this Agreement because of its acts or omissions regarding its review of insurance documents.

d. Contractor shall, upon the Director's request, deliver an assurance letter from Contractor's insurer stating that the insurer intends to issue Contractor a new policy that meets the terms of this Article.

12. Other Insurance

If requested, in writing, by the Director, Contractor shall furnish adequate evidence of Social Security and Unemployment Compensation Insurance, to the extent applicable to Contractor's operations under this Agreement.

P. DISCLAIMER OF WARRANTIES

1. Contractor represents and warrants that:

a. no amendment to this Agreement or additional cost or expense shall be required by Contractor during the Term for Contractor to be able to perform the Services as

contracted in this Agreement as of the Countersignature Date. Additional cost will be required if additional quantities of Service is ordered;

b. Contractor is capable in all respects of providing and shall provide all Services in accordance with Contractor's response to the Request for Proposals and this Agreement;

c. Contractor shall perform all work in a good and workmanlike manner;

d. Contractor shall perform all work and Services using trained and skilled Persons having experience performing the work and Services required under this Agreement; and

2. EXCEPT AS EXPRESSLY SET FORTH IN THIS AGREEMENT, NEITHER PARTY MAKES ANY REPRESENTATIONS, WARRANTIES, EXPRESS OR IMPLIED, AND EACH PARTY SPECIFICALLY DISCLAIMS ANY REPRESENTATION OR WARRANTY OF MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE, TITLE, NONINFRINGEMENT OF THIRD-PARTY RIGHTS, OR ANY WARRANTIES ARISING BY USAGE, OR TRADE PRACTICE OR FROM A COURSE OF DEALING.

Q. City Data

The City is, will be, and shall remain at all times the owner of all of the City's Data and the City's Confidential Information. Contractor expressly acknowledges that the City has all right, title, or other ownership interest in the City's Data and the City's Confidential Information and Contractor shall not possess or assert any lien or other right against the City's Data or the City's Confidential Information. City retains all right, title, and interest in and to the underlying factual data of the City gathered through the provision of Services.

Upon request by the Director at any time during the Term and upon expiration or termination of this Agreement, Contractor shall promptly provide to the Director, in the format and on the media reasonably requested by the Director, all or any part of the City Data in Contractor's possession, custody, or control.

R. Interruption of Services

Contractor may interrupt Services without notice if necessary to prevent or protect against fraud or otherwise protect Contractor's personnel, facilities or services in the event of an emergency. As soon as practicable after interrupting the Service, Contractor shall give the Director written notice of the circumstances giving rise to the interruption of Service. Contractor shall comply with the provisions of this section in the event that Contractor interrupts Services. If a Service is discontinued or interrupted to prevent or protect against fraud, City's AVC will be reduced, as appropriate, to accommodate the discontinuance or interruption, and if the Agreement is terminated, the City shall not be liable for any AVC or underutilization or early termination changes.

S. Use of Deliverables

1. License to use Deliverables. Contractor grants to City a non-exclusive, nontransferable, license to use any Deliverables solely for City's internal business purposes during the term of any related Contractor service, including the right to make a reasonable number of copies of such Deliverables, if applicable, except as otherwise agreed to in a SOW.

2. Ownership and Confidentiality of Deliverables. As between Contractor and City, all right, title and interest in any Deliverable is owned by Contractor and both the Deliverable and any information, materials, methodologies or know-how used by Contractor in connection with any Deliverable, is the Confidential Information of Contractor, except for (a)

any City Data, City Confidential Information, or City-owned materials, and (b) as otherwise agreed to in a SOW.

3. Contractor Reservation of Rights. Except as expressly granted herein, City receives no ownership, license, or other interest in any intellectual property or proprietary information created or delivered by Contractor in connection with its performance of this Agreement.

The terms of this provision shall survive the termination of this Agreement by either party for any reason.

T. Licenses and Permits

Contractor shall obtain, maintain, and pay for all licenses, permits, and certificates including all professional licenses required by any statute, ordinance, rule, or regulation. Contractor shall immediately notify the Director of any suspension, revocation, or other detrimental action against his or her license. For any prospective construction build-outs, the Parties shall mutually agree upon which party shall be responsible for providing the required for providing all applicable construction permits, licenses, bonds, etc. and to do so at a mutually agreeable cost.

U. Compliance with Laws

Contractor shall comply with all applicable local, state and federal laws and regulations and the City Charter and Code of Ordinances.

V. Compliance with Equal Opportunity Ordinance

Contractor shall comply with the City's Equal Employment Opportunity Ordinance as set out in Exhibit G.

W. MWBE Compliance

Contractor shall comply with the City's Minority and Women Business Enterprise ("MWBE") programs as set out in Chapter 15, Article V of the City of Houston Code of Ordinances. Contractor shall make good faith efforts to award subcontracts or supply agreements in at least 2% of the value of this Agreement to MWBEs. Contractor acknowledges that it has reviewed the requirements for good faith efforts on file with the City's Office of Business Opportunity ("OBO"), and will comply with them. Contractor's ability to make this good faith effort is contingent upon the City's execution of the Statement of Work for SIP Trunking Services Implementation (attached hereto).

X. Drug Abuse Detection and Deterrence

1. It is the policy of the City to achieve a drug-free workforce and workplace. The manufacture, distribution, dispensation, possession, sale, or use of illegal drugs or alcohol by contractors while on City Premises is prohibited. Contractor shall comply with all the requirements and procedures set forth in the Mayor's Drug Abuse Detection and Deterrence Procedures for Contractors, Executive Order No. 1-31 ("Executive Order"), which is incorporated into this Agreement and is on file in the City Secretary's Office.

2. Before the City signs this Agreement, Contractor shall file with the Contract Compliance Officer for Drug Testing ("CCODT"):

- a. a copy of its drug-free workplace policy,
- b. the Drug Policy Compliance Agreement substantially in the form set forth in Exhibit H, together with a written designation of all safety impact positions and,

c. if applicable (e.g. no safety impact positions), the Certification of No Safety Impact Positions, substantially in the form set forth in Exhibit J.

If Contractor files a written designation of safety impact positions with its Drug Policy Compliance Agreement, it also shall file every 6 months during the performance of this Agreement or on completion of this Agreement if performance is less than 6 months, a Drug Policy Compliance Declaration in a form substantially similar to Exhibit I. Contractor shall submit the Drug Policy Compliance Declaration to the CCODT within 30 days of the expiration of each 6-month period of performance and within 30 days of completion of this Agreement. The first 6-month period begins to run on the date the City issues its Notice to Proceed or if no Notice to Proceed is issued, on the first day Contractor begins work under this Agreement.

3. Contractor also shall file updated designations of safety impact positions with the CCODT if additional safety impact positions are added to Contractor's employee work force.

4. Contractor shall require that its subcontractors comply with the Executive Order, and Contractor shall secure and maintain the required documents for City inspection.

Y. Contractor's Performance

Contractor shall make citizen satisfaction a priority in providing Services under this Agreement. Contractor shall train its employees to be customer service-oriented and to positively and politely interact with citizens when performing contract services. Contractor's employees shall be clean, courteous, efficient, and neat in appearance and committed to offering the highest quality of service to the public. If, in the Director's opinion, Contractor is not

interacting in a positive and polite manner with citizens, he or she shall request Contractor to take all remedial steps to conform to these standards.

Z. Pay or Play

The requirements and terms of the City of Houston Pay or Play program, as set out in Executive Order 1-7, as revised from time to time, are incorporated into this Agreement for all purposes. Contractor has reviewed Executive Order No. 1-7, as revised, and shall comply with its terms and conditions as they are set out at the time of City Council approval of this Agreement.

IV. DUTIES OF CITY

A. Payment Terms

The City shall pay and Contractor shall accept fees at the unit prices provided in the applicable Exhibits, including the Service Attachments and the Statement of Work, for all Services rendered and the Deliverables furnished by Contractor. The fees must only be paid from Allocated Funds, as provided below.

B. Billings and Invoicing

1. Contractor shall not bill and City shall not pay a minimum charge for usage based Services.

2. Annual Volume Commitment. The City agrees to pay Contractor no less than Three Hundred Thousand Dollars (\$300,000.00) in Total Service Charges (defined below) in each twelve-month period during the Initial Term (“Contract Year”), which is the annual volume commitment (“AVC”). For purposes of this Agreement, the first Contract Year begins on the Rate Effective Date and each subsequent Contract Year shall begin on the anniversary of the Rate Effective Date, provided however, that the optional fifth Contract Year, if any, shall be

truncated and shall begin on the fifth anniversary of the Rate Effective Date and terminate on the anniversary of the fifth Countersignature Date. "Total Service Charges" means all charges, after application of all discounts and credits, incurred by the City for Services provided under this Agreement, excluding Taxes, Governmental Charges, equipment, Verizon ILEC, Verizon Wireless, non-recurring, the Statement of Work for SIP Trunking Services Implementation, goods and services acquired by Contractor as the City's agent, international access that is passed-through (Type 3/PTT) or provided by Contractor (Type 1) and other charges expressly excluded by this Agreement. If City does not meet their AVC in the first Contract Year due to a delay in the implementation of the Services beyond the first six months of the Initial Term and such delay is solely caused by Contractor, Contractor shall negotiate in good faith with the City a modified AVC for the first Contract Year.

3. Disconnect Notices

a. At any time during the Term of this Agreement, the Director is permitted to issue a written thirty (30) days' notice to Contractor directing Contractor to disconnect or suspend Services (the "Disconnect Notice").

b. All charges and fees shall cease to accrue for disconnected Services on the Disconnect Notice Effective Date. For purposes of this section, "Disconnect Notice Effective Date" means the date the Services are removed from service or thirty (30) days following the date Contractor receives the Disconnect Notice, whichever is earlier.

(1) All Disconnect Notices sent by certified mail, or given personally or by commercial express courier service shall be deemed received by Contractor when delivered.

(2) All Disconnect Notices sent to Contractor by mail shall be deemed received three (3) business days after the mail is deposited in the U.S. mail, first class postage prepaid, addressed to the party to be notified.

(3) All Disconnect Notices transmitted to Contractor by facsimile or email shall be deemed received when transmitted if transmitted before 5 P.M. CST, or on the immediately following business day if the facsimile or email is transmitted after 5 P.M. CST.

c. Upon receipt of a Disconnect Notice, Contractor shall promptly process disconnect orders. Contractor shall, as instructed by the Disconnect Notice, promptly disconnect, suspend, shut down, or remove Services on 12:01 A.M. CST on the Disconnect Effective Date which will be at least 30 days from the date of Disconnect Notice and on 12:01 A.M. CST on the date this Agreement terminates or expires.

d. On a monthly basis or as otherwise requested by the Director, Contractor, through the Contractor's online portal, shall provide the Director with a disconnect report that details all Services, including lines and circuits, that were disconnected in the preceding calendar month and any other data or information reasonably requested by the Director.

4. Underutilization and Early Termination Charges.

If City's Total Service Charges, do not reach the AVC on or before the last day in any Contract Year during the Initial Term, the City shall pay an "Underutilization Charge" equal to 75% of the unmet AVC. If, before the end of the Initial Term, the City terminates this Agreement for convenience or Contractor terminates this Agreement for cause, then the City will pay, within thirty (30) days after such termination: (i) an amount equal to 75% of the unsatisfied AVC remaining during the Contract Year of termination, and for each subsequent Contract Year

remaining in the Initial Term, plus (ii) a pro rata portion of any and all credits, excluding billing corrections, Service Level Agreement credits, and the Checkbook Credits, received by the City.

a. Subject to the provisions for underutilization and early termination charges, the City shall not be liable for payment of any charges, fees, costs, or expenses related to the Disconnect Notice, including disconnecting, suspending, shutting down, or removing Services. The City shall have no obligations to make any payments for any charges, fees, costs, or expenses for or associated with the disconnected Services where such charges, fees, costs, or expenses accrued, arose, or were incurred after the Disconnect Notice Effective Date or the date this Agreement expires or terminates.

b. SUBJECT TO THE PROVISIONS FOR UNDERUTILIZATION AND EARLY TERMINATION CHARGES, CONTRACTOR HEREBY WAIVES, RELEASES, AND DISCHARGES THE CITY FROM ALL CLAIMS OF ANY NATURE THAT CONTRACTOR MAY MAKE, NOW OR IN THE FUTURE, ARISING OUT OF CONTRACTOR'S FAILURE TO PROMPTLY DISCONNECT SERVICES ON THE DISCONNECT NOTICE EFFECTIVE DATE OR THE DATE THIS AGREEMENT EXPIRES OR TERMINATES.

c. Subject to the provisions for underutilization and early termination charges, in the event that the City pays Contractor for any charges, fees, or expenses for or associated with the disconnected Services where such charges, fees, costs, or expenses accrued, arose, or were incurred after the Disconnect Notice Effective Date, then Contractor shall issue a credit to the City in the total and cumulative amount the City paid starting from the Disconnect Notice Effective Date until the payments ceased for the disconnected Services. Contractor shall use commercially reasonable efforts to issue this credit to the City on the next monthly invoice it

sends to the City following Contractor's discovery of the overage or receipt of notice from the City requesting a refund for the overpaid amounts for disconnected Services.

C. Price Increase

1. Firm Pricing

a. Throughout the Initial Term, the prices, rates, and charges for all Services shall remain firm.

If Contractor makes any changes to the Guide (other than to Governmental Charges) that increase the prices or rates under this Agreement or otherwise affect the City in a material and adverse manner, the City may discontinue the affected Service without liability by providing Contractor with written notice of discontinuance within 60 days of the date the change is posted on the above website or within 60 days of receipt of an invoice reflecting the increases rate or price, whichever is later, unless within 60 days of receiving the City's discontinuance notice, Contractor agrees to remove the material adverse effect on the City.

If a Service is discontinued, the City's AVC, will be reduced, as appropriate, to accommodate the discontinuance. However, notwithstanding the foregoing, the rates and charges set forth in this Agreement do not include (without limitation) charges for all possible non-recurring charges, access service, local exchange service, charges imposed by a third party other than Contractor, on-site installation, Taxes (as defined in the Guide) and Governmental Charges (as defined below), network application fees, customer premises equipment or extended wiring to or at City's premises. Contractor may give City notice of such changes in rates or charges by posting them on the Guide, by invoice message, or by other reasonable means.

b. The Director is authorized to approve cost increases up to 10% of the then-current price or rates for the affected Services. Cost increases greater than 10% of the then-current price or rates for the affected Services must be approved by City Council.

2. Price Discussions

Contractor agrees to meet with the Director, at mutually agreed upon intervals, to discuss the pricing contained in this Agreement; however, Contractor will not commit to guaranteed price adjustments or associated remedies.

D. Renewal Term Price Adjustments

1. After the Initial Term, Contractor reserves the right to request a price adjustment on an annual basis, with prior written notification to the Director. Contractor shall provide the Director with written justification for any requested price adjustment, which documentation shall be sufficient to show the value proposition to the City associated with the price adjustment, and any other bases that justify or support the requested price adjustment.

2. The Director may approve an annual price adjustment, not to exceed 10% of the then-current rates for the affected Services. Annual price adjustments that exceed 10% of the then-current price or rates for the affected Services must be approved by City Council. No annual price adjustment shall be effective or take effect until approved in writing by the Director or City Council in accordance with this paragraph.

3. All price increases and adjustments shall be subject to the Allocated Funds provision set forth in this Agreement.

E. Taxes

The City is exempt from payment of Federal Excise and Transportation Tax and Texas Limited Sales and Use Tax. The Director will, upon Contractor's request, furnish the City's

exemption certificate and federal tax identification number to Contractor. Contractor acknowledges that the City has provided Contractor with a valid, duly executed exemption certificate and Contractor shall exempt City in accordance with the law, effective on the Countersignature Date. To the extent the City is not exempt as explained in this Section E, Contractor will invoice applicable Taxes (as defined in the Guide) and Governmental Charges (as defined herein), which City will pay. Contractor may add or adjust rates and charges in order to recover amounts it is required or permitted by governmental or quasi-governmental authorities to collect from or pay to others in support of statutory or regulatory programs (“Governmental Charges”).

F. Method of Payment - Payment for Services

The City shall pay Contractor the unit prices specified in the applicable Exhibits, including the Service Attachments, for all of Contractor’s Services under this Agreement, but such payments may only be made from Allocated Funds, as provided below.

The City shall pay Contractor on the basis of invoices submitted by Contractor and approved by the Director, showing the Services provided or as stated in a SOW. Contractor shall invoice by the same method for additional services. The City shall comply with the Texas Prompt Payment Act.

G. Method of Payment - Disputed Payments

If the City disputes any items in an invoice Contractor submits for any reason, including lack of supporting documentation, the Director shall temporarily delete the disputed item and pay the remainder of the invoice. The Director shall promptly notify Contractor of the dispute and request remedial action. After the dispute is settled, Contractor shall include the disputed amount on a subsequent regularly scheduled invoice or on a special invoice for the disputed item

only. If the City's account(s) reflect a credit balance, the City must designate, in writing, within such 60 days the account(s) and charges to which such credit balances are to be applied. A "Disputed" amount is one for which the City has given Contractor written notice, adequately supported by a written explanation and documentation. Any invoiced amount not Disputed by the Director within 12 months of the payment date is deemed correct and binding on the City. Contractor may invoice the City up to twelve months after the date a charge accrues.

H. Limit of Appropriation

1. The City's duty to pay money to Contractor for any purpose under this Agreement is limited in its entirety by the provisions of this section.

2. In order to comply with Article II, Sections 19 and 19a of the City's Charter and Article XI, Section 5 of the Texas Constitution, the City has appropriated and allocated the sum of \$638,029.00 to pay money due under this Agreement (the "Original Allocation"). The executive and legislative officers of the City, in their discretion, may allocate supplemental funds for this Agreement ("Supplemental Allocation"), but they are not obligated to do so. Therefore, the Parties have agreed to the following procedures and remedies.

3. The City makes a Supplemental Allocation by issuing to Contractor a service release order, or similar form approved by the City Controller, containing the language set out below. When necessary, the Supplemental Allocation shall be approved by motion or ordinance of City Council.

NOTICE OF SUPPLEMENTAL ALLOCATION OF FUNDS

By the signature below, the City Controller certifies that, upon the request of the responsible director, the supplemental sum set out below has been allocated for the purposes of the Agreement out of funds

appropriated for this purpose by the City Council of the City of Houston.

This supplemental allocation has been charged to such appropriation.

\$ _____

City Council delegates to either the Director or the City Purchasing Agent the authority to approve up to \$50,000 in supplemental allocations for this Agreement without returning to Council.

4. The Original Allocation plus all Supplemental Allocations are the Allocated Funds. The City shall never be obligated to pay any money under this Agreement in excess of the Allocated Funds. Contractor must assure itself that sufficient allocations have been made to pay for Services it provides. The Director will make commercially reasonable efforts to provide written notice to Contractor within thirty (30) business days of City's receipt of notice of non-appropriation. If Allocated Funds are exhausted, Contractor's only remedy is suspension or termination of its performance under this Agreement and it has no other remedy in law or in equity against the City and no right to damages of any kind. If the City terminates this Agreement due to lack of Allocated Funds, such termination shall not constitute a material breach by City.

I. Access to Site

Contractor may enter and leave the premises at all reasonable times without charge. Contractor and its employees may use the common areas and roadways of the premises where it is to perform the services together with all facilities, equipment, improvements, and services provided in connection with the premises for common use. This excludes parking for Contractor's personnel. Contractor shall repair any damage caused by it or its employees as a result of its use of the common areas.

J. Access to Data

The City shall, to the extent permitted by law, allow Contractor to access and make copies of documents in the possession or control of the City or available to it that are reasonably necessary for Contractor to perform under this Agreement.

The City does not, however, represent that all existing conditions are fully documented, nor is the City obligated to develop new documentation for Contractor's use. Contractor will not be responsible in the event Services are delayed or impacted as a direct result of the Director providing materially inaccurate or complete information.

K. Confidentiality

1. In order for Contractor or City Personnel to perform the obligations under this Agreement, it may become necessary for either party to receive or have access to specifications, designs, plans, drawings, software, data prototypes, or other technical or business information of the other party that either existed before performance of work or was subsequently developed independent of the parties performance of contract obligations ("Background Information"), which is considered proprietary or confidential by the other party. In addition, information developed in connection with the performance of this Agreement ("Delivered Information"), which is provided under this Agreement is proprietary and confidential. All Background Information and all Delivered Information are collectively referred to in this section as "Information".

2. The party to whom Information is disclosed shall for a period of two (2) years from the date of disclosure:

- a. hold the Information in confidence and protect it in accordance with the security regulations by which it protects its own proprietary or confidential information;
- b. restrict disclosure of the Information solely to those employees, agents and representatives with a need to know; and
- c. advise those employees, agents and representatives of their obligations with respect to the Information.

3. The party to whom Information is disclosed shall have no obligation to preserve the proprietary nature of any Information that:

- a. was previously known to it free and clear of any obligation to keep it confidential;
- b. except as otherwise provided under this Agreement, is disclosed to third parties by the disclosing party without restriction;
- c. is or becomes publicly available by other than unauthorized disclosure;
- d. is independently developed by it; or
- e. is disclosed in response to requests made under the Texas Public Information Act or a court order. However, the party ordered to disclose the Information shall, to the extent permissible by law, (i) give the disclosing party of the Information or Software prompt written notice of all such requests, and (ii) cooperate with the disclosing party's efforts to obtain a protective order protecting the Information or Software from disclosure.

4. Neither party shall be liable for the inadvertent or accidental disclosure of Information, if the disclosure occurs despite the exercise of a reasonable degree of care, which is at least as great as the care the party normally takes to preserve its own proprietary information of a similar nature.

5. All Information owned by Contractor or its suppliers and furnished to the City under this Agreement is the property of Contractor or the supplier, and unless otherwise expressly provided in the applicable Statement of Work, the City, its agents and representatives shall:

- a. use Information only to install, operate, or maintain the Service(s) for which originally furnished or to perform an audit conducted by City employees or a third party to assess Contractor's performance under the Agreement and the effectiveness of systems, software, and equipment provided by Contractor;
- b. use Information only for the City's internal business purposes;
- c. not reproduce or copy Information except as authorized under this Agreement unless the parties otherwise agree in writing;
- d. not use the Information to develop other software;
- e. return or destroy the Information and any copies when no longer needed or permitted for use with the Services for which initially furnished; and
- f. not remove Information from the United States.

6. Upon request, the receiving party shall return to the furnishing party all Background Information received in tangible form that is not part of the Delivered Information.

V. TERM AND TERMINATION

A. Contract Term

This Agreement is effective on the Countersignature Date and remains in effect until three (3) years and three months from the Countersignature Date (“Initial Term”) unless sooner terminated under this Agreement.

B. Notice to Proceed

Notice to proceed is a written communication from the Director that authorizes Contractor to begin performance of work.

C. Renewals

Upon expiration of the Initial Term, and so long as the City makes sufficient Supplemental Allocations, this Agreement will be automatically renewed for up to two (2) successive terms on the same terms and conditions, where the first renewal term shall be one-year and the second renewal term shall be 9 months (each a “Renewal Term”). If the Director or the Contractor chooses not to renew this Agreement, the non-renewing party shall notify the other party, in writing, of the non-renewing party’s intent to not renew at least 60 days before the expiration of the then-current term. For purposes of this Renewal provision, email notification to the Director (if Contractor is providing notice of non-renewal) or to Contractor (if the Director is providing notice of non-renewal) is sufficient, provided the email recipient replies to acknowledge the notifying email or otherwise provides affirmative written confirmation of receipt of the notifying email within 3 business days of the email sent date. Absent confirmation of the email within the specified 3 business day time period, the non-renewing party shall provide written notice in accordance with the Notice provision of this Agreement.

D. Termination for Convenience

This Agreement may be terminated by mutual agreement of the Parties. Such agreement must be in writing.

1. The Director or City Purchasing Agent may terminate this Agreement at any time by giving 30 days written notice to Contractor. The City's right to terminate this Agreement for convenience is cumulative of all rights and remedies which exist now or in the future.

2. On receiving the termination notice, Contractor shall, unless the notice directs otherwise, promptly discontinue and disconnect all Services under this Agreement and cancel all existing orders and subcontracts that are chargeable to this Agreement. As soon as practicable after receiving the termination notice, Contractor shall submit an invoice showing in detail the Services performed under this Agreement up to the termination date.

3. The City shall then pay the fees to Contractor for Services actually performed, but not already paid for and any applicable Underutilization and Early Termination Charges, in the same manner as prescribed in section, City's Payment of Fees, unless the fees exceed the allocated funds remaining under this Agreement. Notwithstanding anything hereunder, the City shall not pay for or be liable for any third-party charges incurred or assessed against Contractor as a result of the City's termination.

4. Within sixty (60) days of the termination date, Contractor shall refund any advance fees paid by the City for Services not rendered by Contractor.

5. SUBJECT TO THE AVC, UNDER UTILIZATION CHARGES AND EARLY TERMINATION LIABILITY, TERMINATION OF THIS AGREEMENT AND RECEIPT OF PAYMENT FOR SERVICES RENDERED ARE CONTRACTOR'S ONLY REMEDIES FOR THE CITY'S TERMINATION FOR CONVENIENCE, WHICH DOES NOT CONSTITUTE A

DEFAULT OR BREACH OF THIS AGREEMENT. CONTRACTOR WAIVES ANY CLAIM (OTHER THAN ITS CLAIM FOR PAYMENT AS SPECIFIED IN THIS SECTION), IT MAY HAVE NOW OR IN THE FUTURE FOR FINANCIAL LOSSES OR OTHER DAMAGES RESULTING FROM THE CITY'S TERMINATION FOR CONVENIENCE.

E. Termination for Cause

1. If a Party defaults under this Agreement and fails to cure the default as set forth below, the non-breaching Party may terminate this Agreement. The right to terminate this Agreement for default is cumulative of all rights and remedies which exist now or in the future.

2. Default by Contractor occurs if:

- a. Contractor fails to perform any of its material duties under this Agreement that Contractor has not cured within 30 days of receiving notice;
- b. Contractor becomes insolvent;
- c. all or a substantial part of Contractor's assets are assigned for the benefit of its creditors; or
- d. a receiver or trustee is appointed for Contractor.

3. Default by City occurs if:

- a. City's failure to pay any invoice (excluding Disputed amounts) within 60 days of receiving notice that payment is overdue ; or
- b. City abuses or misuses Contractor's network of Service in violation of this Agreement or City materially interferes with another customer's use of Contractor's network or Service and City has not ceased the behavior (i) within 7 City of Houston business days of receiving notice that the

behavior violates this provision or (ii) immediately if the City's violation is subject to Article III(R);

- c. Contractor acknowledges that a portion of the Services being provided impact health and safety services. In the event a default of the City cannot be resolved within the applicable cure period and the Services subject to breach are identified by the Federal Communications Commission ("FCC") as Telecommunications Service Priority (TSP), Contractor agrees to not automatically disconnect the Services and will pursue the Dispute Resolution Process in accordance with Article VI(R).

4. If a default occurs, the non-breaching party shall deliver a written notice to the breaching party describing the default and the proposed termination date. The proposed termination date must be at least one business day longer than the cure period applicable to the alleged breach. Either the Director or the City Purchasing Agent shall act on behalf of the City to receive default notices and to notify Contractor of a default and to effect termination. The non-breaching party, at its sole option, may extend the proposed termination date to a later date. If the breaching party cures the default to the non-breaching party's satisfaction before the proposed termination date, then the termination is ineffective. If the breaching party does not cure the default before the proposed termination date, then subject to paragraph E(3)(c) above, the non-breaching party may terminate this Agreement on the proposed termination date, at no further obligation of the non-breaching party.

5. To effect final termination, the non-breaching party must notify the breaching party in writing. In the case of Contractor's breach, after receiving the notice from either the Director or the City Purchasing Agent, Contractor shall, unless the notice directs otherwise,

immediately discontinue and disconnect all Services under this Agreement, and promptly cancel all orders or subcontracts chargeable to this Agreement. Within sixty (60) days of the termination date for cause, Contractor shall refund any advance fees paid by the City, if any, for Services not rendered by Contractor. Notwithstanding anything hereunder, the City shall not pay for or be liable for any AVC, underutilization, or early termination charges nor any third-party charges incurred or assessed against Contractor as a result of the City's termination for cause.

F. Responsibilities Upon Termination

In the event this Agreement terminates or is allowed to expire, Contractor and the City agree to the following:

Contractor shall provide Services until terminated in accordance with the Agreement.

1. Upon the Director's request and for no additional cost to the City, Contractor shall (i) provide necessary information to enable the City to have its new carrier port the City's phone numbers, and (ii) provide services required to be provided at no cost pursuant to the Local Number Portability Rules issued by the FCC.

2. Upon request and for a mutually agreed upon fee, Contractor can provide other transition services not described in this Agreement.

3. As soon as practicable after receipt of the termination notice or the City's decision not to renew this Agreement, Contractor shall notify the Director in writing, of any third-party contracts Contractor uses to provide Services under or in connection with this Agreement.

4. Contractor shall deliver to the Director all of the City's Data and the City's Confidential Information, held by Contractor, or in Contractor's possession, custody, or control. Notwithstanding the foregoing sentence, Contractor may retain one (1) copy of the documentation and data, for archival purposes, as required by law, or for warranty support.

VI. MISCELLANEOUS

A. Independent Contractor

Contractor shall perform its obligations under this Agreement as an independent contractor and not as an employee of the City.

B. Force Majeure

1. Neither party is liable for reasonable delays in performing its obligations under this Agreement to the extent the delay is caused by Force Majeure that directly impacts the City or Contractor. The event of Force Majeure may permit a reasonable delay in performance but does not excuse a party's obligations to complete performance under this Agreement. Force Majeure means: fires, interruption of utility services, unavailability of equipment, software or parts from vendors, unavailability, failure or malfunction of equipment or facilities provided by the City or third parties, epidemics in the City, floods, hurricanes, tornadoes, ice storms and other natural disasters, explosions, war, terrorist acts against the City or Contractor, riots, court orders, and the acts of superior governmental or military authority, unavailability or performance degradation of the Internet, preemption of service to restore service in compliance with Part 64, Subpart D, Appendix A, of the FCC's Rules and Regulations and which the affected party is unable to prevent by the exercise of reasonable diligence. The term does not include any changes in general economic conditions such as inflation, interest rates, economic downturn or other factors of general application; or an event that merely makes performance more difficult, expensive or impractical. Force Majeure does not entitle Contractor to extra reimbursable expenses or payment.

2. This relief is not applicable unless the affected party does the following:

a. uses due diligence to remove the effects of the Force Majeure as quickly as possible and to continue performance notwithstanding the Force Majeure; and

b. provides the other party with prompt written notice of the cause and its anticipated effect.

3. The Director will review claims that a Force Majeure that directly impacts the City or Contractor has occurred and render a written decision within 14 days. The decision of the Director is final. If the Contractor does not agree with the Director's decision, the parties shall comply with the Dispute Resolution provision of this Agreement.

4. The City may perform contract functions itself or contract them out during periods of Force Majeure. Such performance is not a default or breach of this Agreement by the City.

5. If the Force Majeure continues for more than 14 days from the date performance is affected, the Director may terminate this Agreement by giving 7 days' written notice to Contractor. This termination is not a default or breach of this Agreement. **CONTRACTOR WAIVES ANY CLAIM IT MAY HAVE FOR FINANCIAL LOSSES, AVC, EARLY TERMINATION OR UNDERUTILIZATION CHARGES, OR OTHER DAMAGES RESULTING FROM THE TERMINATION EXCEPT FOR AMOUNTS DUE UNDER THE AGREEMENT UP TO THE TIME THE WORK IS HALTED DUE TO FORCE MAJEURE.**

6. Contractor is not relieved from performing its obligations under this Agreement due to a strike or work slowdown of its employees. Contractor shall employ only appropriately trained and qualified personnel during a strike.

C. Severability

If any part of this Agreement is for any reason found to be unenforceable, all other parts remain enforceable unless the result materially prejudices either party.

D. Entire Agreement

This Agreement merges the prior negotiations and understandings of the Parties and embodies the entire agreement of the Parties. No other agreements, assurances, conditions, covenants (express or implied), or other terms of any kind, exist between the Parties regarding this Agreement.

E. Written Amendment

Unless otherwise specified elsewhere in this Agreement, this Agreement may be amended only by written instrument executed on behalf of the City (by authority of an ordinance adopted by the City Council) and Contractor. The Director is only authorized to perform the functions specifically delegated to him or her in this Agreement.

F. Applicable Laws

This Agreement is subject to the laws of the State of Texas, the City Charter and Ordinances, the laws of the federal government of the United States, and all rules and regulations of any regulatory body or officer having jurisdiction.

Venue for any litigation relating to this Agreement is Harris County, Texas.

G. Notices

All notices to either party to the Agreement must be in writing and must be delivered by hand, facsimile, United States registered or certified mail, return receipt requested, United States Express Mail, Federal Express, Airborne Express, UPS or any other national overnight express delivery service. The notice must be addressed to the party to whom the notice is given at its

address set out in Article I of this Agreement or other address the receiving party has designated previously by proper notice to the sending party. Postage or delivery charges must be paid by the party giving the notice. The City may enroll to receive email notifications of Guide changes at <http://www.verizonbusiness.com/guide/subscriptions>.

H. Captions

Captions contained in this Agreement are for reference only, and, therefore, have no effect in construing this Agreement. The captions are not restrictive of the subject matter of any section in this Agreement.

I. Non-Waiver

If either party fails to require the other to perform a term of this Agreement, that failure does not prevent the party from later enforcing that term and all other terms. If either party waives the other's breach of a term, that waiver does not waive a later breach of this Agreement.

An approval by the Director, or by any other employee or agent of the City, of any part of Contractor's performance does not waive compliance with this Agreement or establish a standard of performance other than that required by this Agreement and by law. The Director is not authorized to vary the terms of this Agreement.

J. Inspections and Audits

City representatives may perform, or have performed, (1) audits of Contractor's books and records in connection with Services, charges and fees as reflected in invoices to the City under this Agreement, (2) compliance with City programs (e.g. MWBE, Pay or Play, Equal Opportunity Ordinance and applicable laws), and (3) inspection of places where primary Services are provided in connection with this Agreement.

At its sole cost and expense, Contractor shall keep the billing records and all supporting documentation and shall make them available for inspection and audit purposes for at least four years after the completion of each Contract Year. Upon request from the Director and with reasonable advance notice of an audit, Contractor shall make its records and books available to the City for audit and inspection purposes during the Term of this Agreement. This provision does not affect the applicable statute of limitations.

The City may audit Contractor's books, records, and supporting documentation no more than once per Contract Year. The City will provide Contractor with reasonable advance written notice of any audit, and City's exercise of its audit rights hereunder will be subject to Contractor's reasonable security requirements. If Contractor has reasonable objections to the independent auditor designated by the City, if any, Contractor may so advise the Director and request that an alternate auditor be designated by the Director, which request the Director shall not unreasonably refuse.

The auditor providing assistance must execute a non-disclosure agreement with Contractor. Contractor may redact from the records provided to City hereunder information that is irrelevant to the purposes of the audit or that reveals the identity or confidential information of other customers of Contractor. If the City/auditor requests information that Contractor, in its reasonable discretion, determines is not readily accessible or would require significant effort and/or expense by Contractor to obtain or compile, then Contractor shall cooperate with the City/auditor to identify an alternate source of information.

Costs of any audits conducted under the authority of this right to audit and not addressed elsewhere in this Agreement will be borne by the City unless certain exemption criteria are met. If the City/auditor requests information that Contractor, in its reasonable discretion, determines is

not readily accessible or would require significant effort and/or expense by Contractor to obtain or compile, then Contractor may elect to provide the City/auditor with such information only if the City/auditor first agrees to pay Contractor a reasonable hourly fee plus reasonable expenses as determined by Contractor for obtaining or compiling such information. The City/auditor agrees to pay the fees and expenses should Contractor elect to provide the requested information, data, or documents. Subject to article IV, section G, in the event any review of Contractor's invoices or any audit, whether internal or external, determines that there was an overpayment, overpricing, or overcharging for which Contractor received payment from the City, Contractor shall promptly issue a credit to the City in an amount equal to the overage. Subject to article IV section G, if Contractor learns that it has incorrectly invoiced City less than the amount that should have been charged as a result of an audit, Contractor will invoice City for such undercharge.

K. Enforcement

The City Attorney or his or her designee may enforce all legal rights and obligations under this Agreement without further authorization. Contractor shall provide to the City Attorney all documents and records that the City Attorney reasonably requests to assist in determining Contractor's compliance with this Agreement, with the exception of those documents made confidential by federal or State law or regulation.

L. Ambiguities

If any term of this Agreement is ambiguous, it shall not be construed for or against any party on the basis that the party did or did not write it.

M. Survival

Contractor shall remain obligated to the City under all clauses of this Agreement that expressly or by their nature extend beyond the expiration or termination of this Agreement, including but not limited to, the indemnity provisions.

N. Publicity

Contractor shall make no announcement or release of information concerning this Agreement unless the release has been submitted to and approved, in writing, by the Director.

O. Parties In Interest

This Agreement does not bestow any rights upon any third party, but binds and benefits the City and Contractor only.

P. Successors and Assigns

This Agreement binds and benefits the Parties and their legal successors and permitted assigns; however, this provision does not alter the restrictions on assignment and disposal of assets set out in the following paragraph. This Agreement does not create any personal liability on the part of any officer or agent of the City.

Q. Business Structure and Assignments

Contractor may assign this Agreement or any of its rights hereunder to its affiliate or a successor approved by the Securities and Exchange Commission, upon notice to the other party. All other assignments without prior written consent are void. Nothing in this clause, however, prevents the assignment of accounts receivable or the creation of a security interest as described in Section 9.406 of the Texas Business & Commerce Code. In the case of such an assignment, Contractor shall immediately furnish the City with proof of the assignment and the name,

telephone number, and address of the Assignee and a clear identification of the fees to be paid to the Assignee.

R. Dispute Resolution

1. The Parties will use their reasonable best efforts to expeditiously and amicably resolve disputes arising in the normal course of business at the lowest organizational level between the City's and Contractor's staff with appropriate authority to resolve such disputes.

2. Before initiating any litigation or seeking any remedies available at law, except in an emergency or breach of confidentiality, the Parties shall submit eligible disputes to the Project Administrator as described in this section and obtain a final decision from the Director, if Contractor disputes the Project Administrator's decision. For purposes of this section "Project Administrator" means the person the Director designates to monitor the progress of all Parties' performance under this Agreement. The Project Administrator's written decision ("Decision") may include but is not limited to a Notice of Deficiency or Notice of Material Breach.

3. Except as may otherwise be provided by law, a dispute that (1) does not involve a question of law; (2) arises during the performance of this Agreement; and (3) is not resolved between the Project Administrator and Contractor must be handled as described below:

a. The Project Administrator shall put its Decision in writing and mail or otherwise furnish Contractor with a copy. Where the City is the breaching party or non-complainant, the Decision shall provide an explanation and the reasons for the dispute, deficiency or breach, the City's plan to address or cure the deficiency, breach, or disputed matter, and the date and time by which the deficiency, breach or disputed matter will be cured. Where the Contractor is the breaching party or non-complainant, within ten (10) working days of Contractor's receipt of the Decision, the Contractor shall provide a

written response that (1) explains the reasons for the dispute, deficiency or breach, breaching party's plan to address or cure the deficiency, breach, or disputed matter, and the date and time by which the deficiency, breach or disputed matter will be cured, or (2) in the event the Contractor is the breaching party, and Contractor disagrees with the Project Administrator's Decision, its reasons for disagreeing with the Project Administrator's findings.

b. In addition, for disputes involving an assertion of a material breach or where the Project Administrator's Decision includes or consists of a Notice of Material Breach, the breaching party will provide, within ten (10) working days of receipt of the Decision or written Notice of Material Breach, a written Corrective Action Plan which will provide:

- (1) detailed explanation of the reasons for the cited material breach;
- (2) breaching party's assessment or diagnosis of the cause of the material breach; and,
- (3) A specific proposal to cure or resolve the material breach promptly and completely.

b.1 The breaching party shall submit the Corrective Action Plan by the deadline set forth in the Decision or Notice of Material Breach. The Contractor's Corrective Action Plan is subject to approval or modification by the Director, which will not be unreasonably withheld. The City's Corrective Action Plan is subject to approval or modification of the Contractor, which will not be unreasonably withheld.

b.2 The Director will notify Contractor in writing of City's final disposition of the Corrective Action Plan.

c. If Contractor desires to appeal a Decision of the Project Administrator, Contractor must submit a written appeal to the Director. Contractor must file its written appeal within 10 working days following receipt of the Project Administrator's original Decision. The Director shall provide Contractor with a written response to the appeal within 14 working days following its receipt. The decision of the Director represents the final decision of the City. If Contractor disagrees with the Director's decision, then the Contractor is permitted to pursue any alleged breach of this Agreement in accordance with its remedies available at law.

S. Remedies Cumulative

Unless otherwise specified elsewhere in this Agreement, the rights and remedies contained in this Agreement are not exclusive, but are cumulative of all rights and remedies which exist now or in the future. Neither party may terminate its duties under this Agreement except in accordance with its provisions.

T. No Quantity Guarantees and Non-Exclusivity

1. This Agreement does not create an exclusive right in Contractor to perform all Services concerning the subject of this Agreement, including SIP Trunk and Transport Services or VoIP Services. The City may procure and execute contracts with other firms or vendors for the same, similar, additional, or related Services as those set forth in this Agreement.

2. Subject to the Annual Volume Commitment, the City further reserves the right to increase or decrease the number of lines, circuits, trunks, or other Services. The City makes no express or implied representations, warranties, or guarantees whatsoever, that any particular quantity, type, task area, or dollar amount of Services, will be procured or purchased from Contractor through this Agreement; nor does the City make any express or implied

representations, warranties, or guarantees, whatsoever for the amount or value of revenue that Contractor may ultimately derive from or through this Agreement.

U. CONTRACTOR DEBT

IF CONTRACTOR, AT ANY TIME DURING THE TERM OF THIS AGREEMENT, INCURS A DEBT, AS THE WORD IS DEFINED IN SECTION 15-122 OF THE HOUSTON CITY CODE OF ORDINANCES, IT SHALL IMMEDIATELY NOTIFY THE CITY CONTROLLER IN WRITING. IF THE CITY CONTROLLER BECOMES AWARE THAT CONTRACTOR HAS INCURRED A DEBT, SHE SHALL IMMEDIATELY NOTIFY CONTRACTOR IN WRITING. IF CONTRACTOR DOES NOT PAY THE DEBT WITHIN 30 DAYS OF EITHER SUCH NOTIFICATION, THE CITY CONTROLLER MAY DEDUCT FUNDS IN AN AMOUNT EQUAL TO THE DEBT FROM ANY PAYMENTS OWED TO CONTRACTOR UNDER THIS AGREEMENT, AND CONTRACTOR WAIVES ANY RECOURSE THEREFOR. CONTRACTOR SHALL FILE A NEW AFFIDAVIT OF OWNERSHIP, USING THE FORM DESIGNATED BY CITY, BETWEEN FEBRUARY 1 AND MARCH 1 OF EVERY YEAR DURING THE TERM OF THIS AGREEMENT.

EXHIBIT A

NETWORK ACCESS SERVICES

- 1. **Rates and Charges.** Customer will pay the monthly recurring charges ("MRC") and one-time charges related to Verizon Business Services III ("VBS III") network access services as follows:
 - 1.1 **Network Services Local Access Services.** Analog Local Access, DSO (Hubless) Access, T-1 (DS1) Digital Access, DS3 Local Access and SONET Access (collectively known as "Time Division Multiplexor ("TDM")-based access services") are provided pursuant to the Guide provisions relating to Network Services Local Access Services, VBS III. SONET Access is provided on a private carriage basis.
 - 1.2 **Ethernet Services.** Ethernet Access and Ethernet Private Line ("EPL") Access (collectively known as "Ethernet Access Services") are provided pursuant to the Guide provisions relating to Ethernet Services. Ethernet Access Services are provided on a private carriage basis.
 - 1.3 **Ethernet Access Service.** In lieu of all other rates, discounts and promotions, Customer will pay the following local loop MRC for Ethernet Access Service, which is fixed for the Term, based upon the facility type (i.e., Type 1, Type 2 or Type 3, Type 4 and Standard), interface, bandwidth, and CLLI Code. For all other circuits, Customer will pay the rates listed in the Guide based on the circuit term listed below.

Facility Type	Interface	Bandwidth	CLLI Code	Local Loop MRC	Circuit Term
Type 1	1000M	100M	HSTNTXCL	\$1,250.00	3 Year
EA Standard (CLEC Native Tier 11)	1000M	100M	HSTNTXFA	\$830.00	3 Year
EA Type 4 (CLEC Native Tier 5)	100M	30M	HSTNTXCL	\$562.00	3 Year
EA Type 4 (CLEC Native Tier 5)	100M	30M	HSTNTXMO	\$562.00	3 Year

- 2. **Terms and Conditions.** Customer commits to pay the applicable circuit MRC for any Network Services Local Access Service circuit of DS3 or larger for a minimum of 12 months (except if a longer commitment is specified), which Customer must pay even if the circuit is terminated sooner (unless terminated by Customer for Cause).
- 3. **Network Access Special Construction** Charges for special arrangements, including engineering, construction, labor, facility costs and other costs associated with making the interconnection compatible between the Customer's and the MCI Legacy Company's equipment and/or facilities are additional and at the expense of the Customer and shall be charged on an individual case basis.

Global Private IP Service Level Agreement

Version 2014-01

1. Service Level Agreement Summary. The Private IP Service Level Agreement (“PIP SLA”) covers Global Private IP Layer 3 and Private IP Layer 2 Services (collectively, the “Service” or “Private IP Service”). The PIP SLA consists of several service level standards (“Service Level Standards”). Customer may qualify for credits when the Verizon PIP Network performance fails to meet the stated thresholds established for a Service Level Standard.

The PIP SLA may also cover the transport components (not the CPE components) of the Managed Private IP Service product if offered as a part of a Managed Private IP solution. The managed service components of a Managed Private IP solution may be covered in a separate Managed Services, Service Level Agreement.

2. Definitions of Terms. Terms used in this document are defined in the Terms and Definitions section at the end of this document.

3. Service Level Standard Performance Measures. The PIP SLA Service Level Standards are:

Parameter	Access Type	Scope	U.S.	Global Tier A	Global Tier B	Global Tier C	Global Tier D
Availability	On-Net	End-to-End	100%	100%	100%	NA	NA
	Off-Net Premium	End-to-End	99.9%	99.9%	99.9%	99.5%	98.5%
	Off-Net Standard	End-to-End	99.5%	99.5%	99.5%	99.0%	NA
	Off-Net Basic	End-to-End	97.0%	97.0%	97.0%	97.0%	NA
Time To Repair (TTR)	On-net	End-to-End	2 Hours	4 Hours	4 Hours	NA	NA
	Off-Net Premium	End-to-End	4 Hours	5 Hours	8 Hours	8 Hours	8 Hours
	Off-Net Standard	End-to-End	4 Hours	8 Hours	8 Hours	8 Hours	NA
	Off-Net Basic	End-to-End	24 Hours	24 Hours	24 Hours	24 Hours	NA
Service Installation	On-Net, Off-Net	End-to-End	≤ 1.5M 30 Business Days ≤ 45M 45 Business Days Others 100% by Customer's Due Date	100% by Customer's Due Date			
Moves, Adds or Changes (MAC)	On-Net, Off-Net	End-to-End	10 Business Days (Excluding Local Access Requests)	100% by Customer's Due Date			

Core Network Transit Delay (C-NTD) *	On-Net, Off-Net	P-Core	≤ 36 ms	NA	NA	NA	NA
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* Core Network Transit Delay (C-NTD) is only applicable to the US P-Core Network. Measurements between distinct PE pairs are given by the Packet Transit Delay (PTD) Service Level Standard in the table below.

Parameter	Access Type	Scope	EF	AF4x	AF3x	AF2x	AF1x	BE
Packet Delivery Ratio (PDR)	On-Net, Off-Net	PE-to-PE	≥ 99.995%	≥ 99.99%	≥ 99.99%	≥ 99.99%	≥ 99.99%	≥ 99.5%
Packet Transit Delay (PTD)	On-Net, Off-Net	PE-to-PE	See Applicable Standard Below					
Jitter	On-Net, Off-Net	PE-to-PE	< 5 ms	< 15 ms	NA	NA	NA	NA
Mean Opinion Score (MOS) *	On-Net, Off-Net	P-Core	≥ 4.0	NA	NA	NA	NA	NA

* Mean Opinion Score (MOS) is only applicable to the US, EMEA and APAC regions.

The PIP SLA Performance Measures and exclusions are defined in detail below.

4. Coverage Categories. Service Level Standards vary by:

- Class of Service
- Access type
- Outage type
- Geographic location

These Service Level Standards are defined below.

4.1. Class of Service. The PIP SLA for Class of Service delivery methodology and traffic priority Class of Service are identified as follows:

Private IP Layer 3 Queue	Naming
EF *	Real Time / Voice
AF4 AF41, AF42/43	Video / Priority Data
AF3 AF31, AF32/33	Mission Critical Data
AF2 AF21, AF 22/23	Transactional Data

AF1 AF11, AF12/13	General Data
BE	General Business – Default

* The EF queues are not designed for packets larger than 300 bytes or Bursty Traffic.

4.2. Access Types. The PIP SLA covers the following access types: On-Net and Off-Net Access. The PIP SLA does not apply to the CPLL portion of Off-Net Access. Off-Net Levels are offered in three levels of performance classifications:

- Premium (Types 2*, 3, 4 and 5 network configurations)
 - Standard (Standard network configuration)
 - Basic (DSL Services)
- * Not Available for EMEA/ASIA PAC Sold Customers

4.3. Outage Type. The PIP SLA defines Service disruptions as:

- Hard Outage
- Service Issue

The Service restoration priority determines the ranking of the repair actions against other Service Issues.

Priority Level	Criteria
Priority 1	Total loss of Private IP Service or degraded Private IP Service to the extent that it is unusable by Customer and Customer is prepared to release its Private IP Service for immediate testing
Priority 2	Degraded Service, however Customer is able to use the Private IP Service and is not prepared to release its Private IP Service for immediate testing
Priority 3	A problem with the Private IP Service that does not impact the functionality of the Private IP Service; including a single non-circuit specific quality of Private IP Service inquiry.
Priority 4	Non Service affecting requests (e.g. a Customer request for an incident report) and all other queries not covered by Priority 1 – 3 above. Scheduled maintenance falls into this category.

A Hard Outage has Priority 1 Service restoration priority with the exception of Hard Outages for Off-Net Basic which is handled as a Priority 2 ticket. Availability and TTR apply to Hard Outages.

A Service Issue has Priority 2 Service restoration priority. PTD, PDR and Jitter apply to Service Issues.

Priority 3 and Priority 4 issues will be addressed by Verizon. However, Priority 3 and Priority 4 issues are not eligible for SLA credits.

4.4. Geographical Location. The PIP SLA covers Service in all countries where PIP Service is offered, except as specified in the exclusions and limitations stated below.

The PIP SLA is divided into geographic regions because Service Levels available from local access providers around the world differ between countries. The location and access method of a Customer Site will determine the applicable Service Levels.

The countries covered under this SLA are divided into the following categories:

- **U.S. Region:** Contiguous 48 United States, Hawaii, and Alaska

- **APAC Region:** Australia, China, Hong Kong, India, Indonesia, Japan, Malaysia, New Zealand, Pakistan, Philippines, Singapore, South Korea, Taiwan, Thailand.
- **EMEA Region:** Austria, Belgium, Czech Republic, Denmark, France, Finland, Germany, Hungary, Iceland, Ireland, Italy, Latvia, Luxemburg, Netherlands, Norway, Poland, Portugal, Romania, Russia, Slovenia, Slovakia, Spain, Sweden, Switzerland, United Kingdom, Ukraine.
- **Global Tier A:** Austria, Belgium, Canada, Denmark, Finland, France, Germany, Hong Kong, Ireland, Italy, Japan, Luxembourg, Netherlands, Norway, Singapore, South Korea, Spain, Sweden, Switzerland, United Kingdom.
- **Global Tier B:** Argentina, Australia, Brazil, Bermuda, Bulgaria, Chile, China, Colombia, Costa Rica, Czech Republic, Dominican Republic, Greece, Hungary, Iceland, India, Indonesia, Israel, Kuwait, Latvia, Malaysia, Mexico, Morocco, New Zealand, Panama, Peru, Philippines, Poland, Portugal, Puerto Rico, Romania, Russia, Serbia, Slovakia, Taiwan, Thailand, Turkey, Ukraine, United Arab Emirates (UAE), Uruguay, Venezuela, Alaska MVIC (via GCI), Brazil MVIC (via Embratel or Global Crossing), Italy MVIC (via Fastweb), and Mexico MVIC (via MetroRed).
- **Global Tier C:** Bahrain, Bolivia MVIC (via Tigo), Canada MVIC (via Telus), Canada MVIC (via Allstream), China MVIC (via CNC or China Telecom), Costa Rica MVIC (via Tigo), Egypt, Egypt MVIC (via TE Data), El Salvador MVIC (via Tigo), Guatemala MVIC (via Tigo), Honduras MVIC (via Tigo), India MVIC (via Bharti or Reliance), Japan MVIC (via Softbank), Nicaragua MVIC (via Tigo), Pakistan, Panama MVIC (via Tigo), Paraguay MVIC (via Tigo), Qatar, Saudi Arabia MVIC (via STC), Russia MVIC (via Beeline), Slovenia, South Africa, Tunisia (via Tunitel) and Vietnam.
- **Global Tier D:** Croatia, Ecuador, Estonia, Guam, Jordan, Kazakhstan, Lithuania, Sri Lanka.

Service in Croatia is provided via a backhaul to the Verizon Frankfurt, Germany Provider Edge, service in Estonia and Lithuania is provided via a backhaul to the Verizon Helsinki, Finland Provider Edge, service in Jordan is provided via a backhaul to the Verizon London Provider Edge, service in Ecuador is provided via a backhaul to the Verizon Colombia Provider Edge, service in Guam is provided via a backhaul to the Verizon Tokyo, Japan Provider Edge, service in Kazakhstan is provided via a backhaul to the Verizon Frankfurt, Germany Provider Edge, service in Serbia is provided via a backhaul to the Verizon Frankfurt, Germany or Budapest, Hungary Provider Edge, and service in Sri Lanka is provided via a backhaul to the Verizon Singapore Provider Edge. The Packet Transit Delay (PTD), Packet Delivery Ratio (PDR), and Jitter Service Level Standards for these locations are based on measurements at Verizon's Provider Edge device.

As a result of continuing expansion of the Verizon PIP network the listing of the Global Tier countries is dynamic and changes periodically as new countries are added. At the Customer's request Verizon will confirm country status and/or provide a listing of countries that fall into these categories.

Private IP Layer 2 service is not available for all countries listed above. Please refer to the Private IP Layer 2 exclusions in the General Exclusion Section below.

5. Service Level Standards Defined.

5.1. Availability.

5.1.1. Definition. End-to-end Circuit up-time.

5.1.2. Standard. See Service Level Standard table above in Section 3 for Performance Measurements.

Availability includes the local access from the Customer Edge (CE) to the Verizon PIP Provider Edge (PE) and the PIP Network. Availability excludes CPLL and the Customer CPE.

5.1.3. Calculation. Availability is determined by computing the total number of Eligible Hard Outage Minutes per Priority 1 trouble tickets in a calendar month for a specific Customer Circuit divided by the total number of minutes based on a 30-day calendar month.

Availability is calculated after a trouble ticket is opened with Verizon and represents the percentage of time that the Circuit is available within a given calendar month.

$$\text{Availability (\%)} = \left(1 - \left(\frac{\text{Total Eligible Hard Outage Minutes per Circuit per month}}{30 \text{ days} * 24 \text{ hours/day} * 60 \text{ minutes/hour}} \right) \right) * 100$$

5.1.4. Credit Structure. The credit is based on the number of Eligible Hard Outage Minutes.

Availability applies only in those cases in which a PIP trouble ticket is opened with Verizon and the Customer subsequently allows the necessary physical or logical access to its premises and facilities for testing if required by Verizon.

Availability credit table:

Availability				Credits as a percent of MRC				
PIP Network Down Time		% of Up Time		All Global Tiers and US	U.S. and Global Tier A	Global Tier B	Global Tier C	Global Tier D
From (Mins)	To (Mins)	From %	To %	On-Net	Off-Net (Premium, Standard or Basic)			
1	43	< 100%	≥ 99.9%	5%	NA	NA	NA	NA
44	86	< 99.9%	≥ 99.8%	10%	10%	5%	NA	NA
87	216	< 99.8%	≥ 99.5%	15%	10%	5%	NA	NA
217	432	< 99.5%	≥ 99.0%	25%	15%	10%	5%	NA
433	648	< 99.0%	≥ 98.5%	30%	15%	10%	10%	NA
649	864	< 98.5%	≥ 98.0%	40%	20%	10%	10%	5%
> 864		< 98.0%		50%	20%	10%	10%	10%

5.1.5. Exclusions. In addition to the General Exclusions, as set out in the General Exclusion Section below, Availability Service Level Standard measurements do not include the following:

- Any act or omission on the part of any third party other than a local access provider over which Verizon exercises control.
- Periods of Service degradation, such as slow data transmission, where a Priority 1 trouble ticket has not been opened with Verizon and Customer has not released its Service for immediate testing.
- Customer inquiry for circuit monitoring purposes only.
- Availability Service Level Standards for MVIC services are only applicable for MVIC locations where local access is provided by one of the corresponding MVIC partners identified above.
- Off-Net Basic hard outage to be handled as a Priority 2 ticket

5.2. Time To Repair (TTR).

5.2.1. Definition. Time, based on the trouble ticket timestamp, taken to restore end-to-end Services during a Hard Outage on a specific Circuit.

5.2.2. Standard. See Service Level Standard table in Section 3 above for Performance Measurements.

TTR includes the On-Net and Off-Net local access from the Customer Edge (CE) to the Verizon PIP Provider Edge (PE) and the PIP Network. TTR excludes CPLL and the Customer CPE.

5.2.3. Calculation. TTR is determined by computing the time taken to repair each Eligible Hard Outage Priority 1 trouble ticket in a calendar month for a specific Customer Circuit with the exception of Hard Outages for Off-Net Basic which is handled as a Priority 2 ticket.

The duration of each Hard Outage on a specific Circuit is calculated after a trouble ticket is opened with Verizon.

TTR (Hrs) = Time taken to repair a specific Circuit experiencing an Eligible Hard Outage Priority 1 trouble.

Off-Net Basic hard outage to be handled as a Priority 2 ticket.

5.2.4. Credit Structure. The credit is based on the number of Eligible Hard Outage Minutes.

TTR applies only in those cases in which a PIP Hard Outage Priority 1 trouble ticket is opened with Verizon and the Customer subsequently allows the necessary physical or logical access to its premises and facilities for testing if required by Verizon.

Off-Net Basic hard outage to be handled as a Priority 2 ticket.

Circuits may qualify for the TTR Service Level Standard in addition to the Availability Service Level Standard.

TTR credit table:

TTR		Credit as a Percent of MRC					
PIP Network Outage Time		U.S.	Global Tiers A & B	U.S.	Global Tier A	Global Tier B	Global Tiers C & D
From Hr:Min:Sec	To Hr:Min:Sec	On-Net	On-Net	Off-Net	Off-Net (Premium, Standard or Basic)	Off-Net (Premium, Standard or Basic)	Off-Net (Premium, Standard or Basic)
2:00:00	3:59:59	4%	NA	NA	NA	NA	NA
4:00:00	4:59:59	4%	4%	2%	NA	NA	NA
5:00:00	7:59:59	10%	10%	4%	4%	NA	NA
8:00:00	11:59:59	10%	10%	4%	4%	4%	4%
≥ 12:00:00		10%	10%	4%	4%	4%	4%

5.2.5. Exclusions. In addition to the General Exclusions, as set out in the General Exclusion Section below, TTR Service Level Standard measurements do not include the following:

- Any act or omission on the part of any third party, other than a local access provider over which Verizon exercises control.
- Periods of Service degradation, such as slow data transmission, where a Priority 1 trouble ticket has not been opened with Verizon and Customer has not released its Service for immediate testing.
- Customer inquiry for circuit monitoring purposes only.
- TTR Service Level Standards for MVIC services are only applicable for MVIC locations where local access is provided by one of the corresponding MVIC partners identified above.
- Off-Net Basic hard outage to be handled as a Priority 2 ticket.

5.3. Core Network Transit Delay (C-NTD).

5.3.1. Definition. Core Network round trip delay average between Verizon-designated core backbone network nodes across a specific region.

5.3.2. Standard. See Service Level Standard table above for Performance Measurements.

5.3.3. Calculation. Verizon calculates the C-NTD by using 64-byte packets for measuring round trip transit delay in milliseconds between Verizon-designated backbone network nodes across a specific region and averaging the results over a thirty day period. The measurements exclude any traffic that is re-routed as a result of a network outage or scheduled maintenance.

The monthly measurements are available at the following link:
<http://www.verizonbusiness.com/about/network/ntp/>

5.3.4. Credit Structure. To receive a credit, Customer must submit their request within 30 business days after the month in which the C-NTD Service Level Standard was not met. Such credit will equal the pro-rated charges for one day of the MRC for the Customer's Connections within the specific region during the calendar month in which the C-NTD Service Level Standard was not met.

C-NTD credit table:

For Standard not met	Credit
Core Network Transit Delay (C-NTD)	The pro-rated charges equal to one day's MRC for the Customer's Connections

5.3.5. Exclusions. In addition to the General Exclusions, as set out in the General Exclusion Section below, C-NTD Service Level Standard measurements do not include the following:

- All Customer data traffic that is marked EF by Customer and is not compliant with the subscribed EF Real Time CAR or any other data traffic that is not compliant with the applicable subscribed CAR.
- All Customer data traffic that is marked by Customer using IP Precedence/DSCP settings not supported by the Verizon PIP Network.
- Core Network Transit Delay (C-NTD) is only applicable to the US P-Core Network

5.4. Packet Transit Delay (PTD).

5.4.1. Definition. Round trip data packets delay between origination and destination ports.

5.4.2. Standard.

- **PE PTD** is the provider edge PE-to-PE monthly average round trip transit delay in milliseconds between respective Provider Edge device pairs on the Verizon PIP Network.

The PE PTD Service Level Standard is applicable for the following traffic priority classes:

- Standard PIP Service
- Enhanced Traffic Management (ETM) option

5.4.2.1. PE PTD Service Level Standard Performance Measurements for international and US locations are stated in the PIP PTD Matrix located in the Verizon Secure Guide portal at:
http://www.verizonbusiness.com/us/publications/service_guide/secure/cp_pip_sla_intro.htm

5.4.3. Calculation. PTD is determined by using 64-byte packets for measuring transit delay in milliseconds across the Verizon PIP Network and averaging the results over a thirty day period.

PTD calculation is as follows:

$$PTD = T2 - T1$$

Where:

T1 is the time in milliseconds when an IP packet leaves the Ingress Reference Point (i.e., Packet exit event) and T2 is the time in milliseconds when an IP packet arrives back at the Ingress Reference Point (i.e. Packet return event)

- **PE PTD** is measured between the respective origination and destination infrastructure ports, i.e. between the points where the packet enters and exits Verizon’s PIP Network, regardless of the mode of access to Verizon’s PIP Network. External factors, including, but not limited to, local access issues, are excluded from the measurement.

5.4.4. Credit Structure. If the PTD Service Level Standard is not met, it is a Service Issue and is considered a Service Restoration Priority 2.

If the PTD metric for a pair of Customer Connections or Customer Sites is not being met, Customer may be eligible for a credit.

To obtain a credit, a trouble ticket must be opened with Verizon when a PTD Service Level Standard is not being met or if a Service Issue is identified. Verizon will work with Customer to confirm that a PTD issue exists and repair the problem(s), as applicable. Once Verizon confirms that the PTD Service Level Standard is not being met, Verizon will have 30 calendar days to repair the Service to meet the PTD Service Level Standard and close the applicable trouble ticket, and in such an event, Customer will not be eligible for a credit. If, after 30 calendar days of opening the trouble ticket, the PTD Service Level Standard continues to not be met, Customer will qualify for a credit. Customer’s measurement of PTD prior to opening a trouble ticket may be considered by Verizon in determining the need to repair the Service.

PTD credit table:

For Standard not met	Credit as % of MRC
Packet Transit Delay (PTD)	20%

Service Issues occur between pair ports of the PIP Network. Consequently, two Customer Connections will be impacted by each Service Issue. For Service Issue Service Level Standard credit purposes, the MRC will be defined as the average of the MRCs for each of the two impacted Customer Connections.

5.4.5. Exclusions. In addition to the General Exclusions, as set out in the General Exclusion Section below, PTD Service Level Standard measurements do not include the following:

- All Customer data traffic that is marked EF by Customer and is not compliant with the subscribed EF Real Time CAR or any other data traffic that is not compliant with the applicable subscribed CAR.
- All Customer data traffic that is marked by Customer using IP Precedence/DSCP settings not supported by the Verizon PIP Network.
- PTD Service Level Standards for MVIC locations are based on measurements at the Verizon owned Provider Edge devices and not the MVIC partner location.

5.5. Packet Delivery Ratio (PDR).

5.5.1. Definition. Effectiveness in transporting and delivering Customer packets across the PIP Network

5.5.2. Standard.

- **PE PDR** is the PE-to-PE monthly average Packet Delivery Ratio.

The PE PDR Service Level Standard is applicable for the following traffic priority classes:

- Standard PIP Service
- Enhanced Traffic Management (ETM) option

5.5.2.1. PE PDR Service Level Standard is:

- For the EF traffic priority class: 99.995%
- For the AF traffic priority class: 99.99%
- For the BE traffic priority class: 99.5%

5.5.3. Calculation. PDR is determined by using 64-byte packets for measuring the number of packets within a specified traffic priority class that are successfully delivered divided by the total number of packets sent within the specified traffic priority class during a calendar month.

For data consisting of packets within the specified traffic priority class, the PDR is as follows:

$$\text{PDR (\%)} = \frac{\text{Packets Delivered}}{\text{Packets Offered}} \times 100$$

- **PE PDR** is measured between the respective origination and destination infrastructure ports, i.e. between the points where the packet enters and exits Verizon’s PIP Network, regardless of the mode of access to Verizon’s PIP Network. External factors, including, but not limited to, local access issues, are excluded from the measurement.

5.5.4. Credit Structure. If the PDR Service Level Standard is not met, it is a Service Issue and is considered Service Restoration Priority 2.

If the PDR metric for a pair of Customer Connections or Customer Sites is not being met, Customer may be eligible for a credit.

To obtain a credit, a trouble ticket must be opened with Verizon when a PDR Service Level Standard is not being met or if a Service Issue is identified. Verizon will work with Customer to confirm that a PDR issue exists and repair the problem(s), as applicable. Once Verizon confirms that the PDR Service Level Standard is not being met, Verizon will have 30 calendar days to repair the Service to meet the PDR Service Level Standard and close the applicable trouble ticket, and in such an event, Customer will not be eligible for a credit. If, after 30 calendar days of opening the trouble ticket, the PDR Service Level Standard continues to not be met, Customer will qualify for a credit. Customer’s measurement of PDR prior to opening a trouble ticket may be considered by Verizon in determining the need to repair the Service.

PDR credit table:

For Standard not met	Credit as % of MRC
Packet Delivery Ratio (PDR)	20%

Service Issues occur between pair ports of the PIP Network. Consequently, two Customer Connections will be impacted by each Service Issue. For Service Issue Service Level Standard credit purposes, the MRC will be defined as the average of the MRCs for each of the two impacted Customer Connections.

5.5.5. Exclusions. In addition to the General Exclusions, as set out in the General Exclusion Section below, PDR Service Level Standard measurements do not include any of the following:

- Packets that are not delivered due in whole or in part to factors unrelated to Verizon’s PIP/PIPL2 Network.
- Packets dropped at infrastructure ingress or egress due to improper Customer port speed specifications of Customer port speeds
- All Customer data traffic that is marked EF by Customer and is not compliant with the subscribed EF Real Time CAR or any other data traffic that is not compliant with the applicable subscribed CAR.
- All Customer data traffic that is marked by Customer using IP Precedence/DSCP settings not supported by the Verizon PIP Network.
- PDR Service Level Standards for MVIC locations are based on measurements at the Verizon owned Provider Edge devices and not the MVIC partner location.

5.6. Jitter.

5.6.1. Definition. Displacement of data packets from their ideal sequence or position in time.

5.6.2. Standard.

- **PE Jitter** is the monthly average mean deviation of the difference in packet arrival time at the receiver compared to the sender for a pair of packets one-way between respective Provider Edge Devices.

The Jitter Service Level Standard is applicable for the following traffic priority classes:

- Enhanced Traffic Management (ETM) option:
 - ◆ PE Jitter is applicable to data packets marked EF by Customer and compliant with the subscribed EF Real Time CAR.
 - ◆ PE Jitter is applicable to data packets in the AF4 traffic class and compliant with the AF4 forwarding priority.
 - ◆ Other traffic classes are not available for PE Jitter Service Level Standards

5.6.2.1. PE Jitter Service Level Standard provides that the maximum delay variance between Verizon Private IP PE devices is less than 5 ms one-way for the EF traffic class and less than 15 ms one-way for the AF4 traffic class.

If a Jitter issue is identified, packet fragmentation technologies or similar capability may be required to remedy the issue.

5.6.3. Calculation. Jitter is determined by using 64-byte packets for measuring the mean deviation of the difference in packet spacing at the receiver compared to the sender for a pair of packets. The mean is determined by sampling the PIP Network frequently and averaging the results over a thirty day period.

The calculation for Jitter (Ji) for two consecutive packets i and i+1 is as follows:

$$\text{Jitter (Ji)} = \Delta Ti - \Delta Ti'$$

Where:

Ti = time 1st byte of packet i is received by the source port (ingress time)

Ti+1 = time 1st byte of packet i+1 is received by the source port (ingress time)

Ti' = time 1st byte of packet i is received at the destination port (egress time)

Ti+1' = time 1st byte of packet i+1 is received at the destination port (egress time)

And:

$\Delta Ti = Ti+1 - Ti$ (ΔTi is the time interval between packets at ingress)

$\Delta Ti' = Ti+1' - Ti'$ ($\Delta Ti'$ is the time interval between packets at egress)

The Average Jitter (J-avg) is calculated as follows:

$$\text{Average Jitter (J-avg)} = \sum |J_i| / (N-1)$$

Where:

N is the number of sample packets over 30 day period

- **PE Jitter** is measured between the respective origination and destination infrastructure ports, i.e. between the points where the packet enters and exits Verizon’s PIP Network, regardless of the mode of access to Verizon’s PIP Network. External factors, including, but not limited to, local access issues, are excluded from the measurement.

5.6.4. Credit Structure. If the Jitter Service Level Standard is not met it is a Service Issue and is considered Service Restoration Priority 2.

If the Jitter metric for a pair of Customer Connections or Customer Sites is not being met, Customer may be eligible for a credit.

To obtain a credit, a trouble ticket must be opened with Verizon when a Jitter Service Level Standard is not being met or if a Service Issue is identified. Verizon will work with Customer to confirm that a Jitter issue exists and repair the problem(s), as applicable. Once Verizon confirms that the Jitter Service Level Standard is not being met, Verizon will have 30 calendar days to repair the Service to meet the Jitter Service Level Standard and close the applicable trouble ticket, and in such an event, Customer will not be eligible for a credit. If, after 30 calendar days of opening the trouble ticket, the Jitter Service Level Standard continues to not be met, Customer will qualify for a credit. Customer’s measurement of Jitter prior to opening a trouble ticket may be considered by Verizon in determining the need to repair the Service.

Jitter credit table:

For Standard not met	Credit as % of MRC
Jitter	20%

Service Issues occur between pair ports of the PIP Network. Consequently, two Customer Connections will be impacted by each Service Issue. For Service Issue Service Level Standard credit purposes, the MRC will be defined as the average of the MRCs for each of the two impacted Customer Connections.

5.6.5. Exclusions. In addition to the General Exclusions, as set out in the General Exclusion Section below, Jitter Service Level Standard measurements do not include any of the following:

- PE Jitter applicable to the AF4 traffic class is available only for Video traffic that uses either AF41 or CS4 classification when the AF4 queue facilitating such Video traffic is not mixed with any other type of traffic.
- All Customer data traffic that is marked EF by Customer and is not compliant with the subscribed EF Real Time CAR or any other data traffic that is not compliant with the applicable subscribed CAR.
- All Customer data traffic that is marked by Customer using IP Precedence/DSCP settings not supported by the Verizon Private IP Network.
- Jitter Service Level Standards for MVIC locations are based on measurements at the Verizon owned Provider Edge devices and not the MVIC partner location.
- Jitter Service Level Standard is not applicable to Private IP Layer 2 services

5.7. Service Installation.

5.7.1. Definition. Period of time beginning on the Order Acceptance date and ending on the date Verizon completes installation of the Service and the Service is up and billable.

Customer's Due Date is defined as the date to which Verizon commits to deliver the Service.

5.7.2. Standard. See Service Level Standard table above in Section 3 for Performance Measurements.

5.7.3. Calculation. The Service Installation Service Level Standard is calculated by computing the period of time beginning on the Order Acceptance date and ending on the date Verizon completes installation of the Service and the Service is up and billable.

5.7.4. Credit Structure. To obtain a credit, Customer must report the delay in Service installation to the Verizon account team as described in the Credit Section of the SLA.

Service Installation credit table:

For Standard not met	U.S.	Global Tier A	Global Tier B	Global Tier C & D
Service Installation	50% of the first month's MRC on the applicable Connection	50% of the first month's MRC on the applicable Connection	50% of the first month's MRC on the applicable Connection	50% of the first month's MRC on the applicable Connection

5.7.5. Exclusions. In addition to the General Exclusions, as set out in the General Exclusion Section below, the Service Installation Service Level Standard does not include any minutes associated with the following:

- Material delays in installation related to Customer actions, moves or scheduling difficulties.
- Delays resulting from changes to a previously accepted order for Service from Customer, its agents or vendors.
- Any delays resulting from unavailability of Customer's premises, equipment, or facilities required to install the Service.
- Delays attributed to extending the local access demarcation point.
- Delays resulting from inaccurate or incorrect order information from Customer.

Any periods of delay attributable to the reasons above will be deducted from the Service Installation time period.

5.8. Moves, Adds or Changes (MAC).

5.8.1. Definition. The MAC interval is the period of time beginning on the Order Acceptance date and ending on the date Verizon completes the Order for the Service.

Customer's Due Date is defined as the date to which Verizon commits to deliver the Service.

5.8.2. Standard. See Service Level Standard tables above in Section 3 for Performance Measurements.

5.8.3. Calculation. The MAC Service Level Standard is calculated by computing the period of time beginning on the Order Acceptance date and ending on the date Verizon completes the order for the Service.

5.8.4. Credit Structure. To obtain a credit, Customer must report the delay in Service order completion to the Verizon account team as described in the Credit Section of the SLA.

MAC credit table:

For Standard	U.S.	Global Tier A	Global Tier B	Global Tier C & D
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not met				
MAC	50% of MRC on the applicable Connection			

5.8.5. Exclusions. In addition to the General Exclusions, as set out in the General Exclusion Section below, the MAC Service Level Standard does not include any minutes associated with the following:

- Material delays in installation related to Customer actions, moves or scheduling difficulties.
- Delays resulting from changes to a previously accepted order for Service from Customer, its agents or vendors.
- Any delays resulting from unavailability of Customer’s premises, equipment, or facilities required to install the Service.
- Delays attributed to extending the local access demarcation point.
- Delays resulting from inaccurate or incorrect order information from Customer.
- Delays resulting from an order suspension due to credit issues involving Customer.
- MAC problems for services provided pursuant to any promotional Move, Add or Change offerings might not be eligible for credit refunds.

Any periods of delay attributable to the reasons above will be deducted from the MAC installation time period.

5.9. Mean Opinion Score (MOS).

5.9.1. Definition. Quality level of the audio fidelity and clarity of a voice call.

5.9.2. Standard. See Service Level Standard table above in Section 3 for Performance Measurements.

5.9.3. Calculation. Verizon calculates MOS by sampling performance scores for the EF traffic class, using the standards based ITU-T G.107 (E-model) and assuming a G.711 codec, between Verizon-designated core backbone network nodes and averaging the results over a thirty day period.

The monthly measurements are available at the following link:
<http://www.verizonbusiness.com/about/network/pip/>

5.9.4. Credit Structure. To receive a credit, Customer must submit their request within 30 business days after the month in which the MOS Service Level Standard was not met. Such credit will equal the pro-rated charges for one day of the MRC for the Customer’s Connections within the specific region during the calendar month in which the MOS Service Level Standard was not met.

MOS credit table:

For Standard not met	Credit
Mean Opinion Score (MOS)	The pro-rated charges equal to one day’s MRC for the Customer’s Connections

5.9.5. Exclusions. In addition to the General Exclusions, as set out in the General Exclusion Section below, MOS Service Level Standard measurements do not include the following:

- The MOS Service Level Standard applies only to data packets marked EF by Customer and compliant with the Customer’s subscribed EF Real Time CAR.

- The MOS Service Level Standard applies only to the US, EMEA and APAC regions.
- The MOS Service Level Standard is not applicable to the Private IP Layer 2 services

6. Credit Requests and Application Process.

6.1. Service Level Agreement Credit Application Structure. For any calendar month in which Verizon fails to meet any of the Service Level Standards stated in this document the credit structure for the Service Level Standards listed above will be applied to the corresponding net billing MRC for the specific Connection(s) affected by a PIP Network Hard Outage(s) or Service Issue(s).

The total of all credits within any one month is limited to a maximum of 100% of the MRC for the specific Connection or Site, as applicable, which was impacted by any non-compliance with the Service Level Standard(s). Credits are not cumulative month to month.

Credits for Hard Outages are determined based on Eligible Hard Outage Minutes and Customer may claim the TTR Service Level Standard credit in addition to the Availability Service Level Standard credit in a given calendar month. Customer may claim only one credit within a particular Service Issue Service Level Standard category during a given month. Customer cannot claim credits from both the Hard Outage and Service Issue categories for the same event. Customer can request to have compliance checked for all of the standard Service Level Standard commitments when requesting credits in any given month.

To receive a credit, a trouble ticket must be opened with Verizon and Customer must submit their credit request no later than the stipulated time allowed to claim the specific Service Level Standard credit. The appropriate refund amount will be credited to the Customer's account at the billing account number (BAN) level in one lump sum, as opposed to each individual circuit or all circuits under multiple BANs. The appropriate refund amount will be appearing as a line item on a bill delivered within 90 calendar days following Verizon's confirmation of non-compliance with the Service Level Standard.

Credits do not apply to local access or backhaul charges.

6.2. Process for Customer to Apply for Service Level Agreement Credits. The process to apply for SLA credits is provided below for each of the Service Level Standards.

6.2.1. Opening a Trouble Ticket. In the case that a trouble ticket is required to document an outage or service event for credit compliance, this can be done either through the Customer Service Center or through the web-based Verizon Enterprise Center. The number for the assigned Customer Service Center is printed on Customer's invoice. Access to the Verizon Enterprise Center can be requested at the first use by registering at the Verizon Enterprise Center portal <https://enterprisecenter.verizon.com/>

6.2.2. Submitting a Service Level Agreement Credit Request. The request for a SLA credit is submitted in writing from Customer to the account team. The timing and content of the request varies by Service Level Standard. This communication can be through email or by fax.

6.2.3. Trouble Ticket and Credit Request by Service Level Agreement.

6.2.3.1. Availability and Time To Repair (TTR). In order for the outage to qualify for an SLA credit Customer must do the following:

6.2.3.1.1. A trouble ticket is opened with Verizon within 72 hours of the time the Customer discovers the outage.

6.2.3.1.2. Customer submits SLA credit request to their Verizon account team in writing within 45 days of opening the trouble ticket

The written request must contain the following information:

- The date the outage occurred.
- The time the outage began and ended.
- The circuit ID(s) for each circuit(s) that was impacted.

6.2.3.2. Packet Transit Delay (PTD), Packet Delivery Ratio (PDR) and Jitter. In order for the outage to qualify for an SLA credit Customer must do the following:

6.2.3.2.1. A trouble ticket is opened with Verizon within 72 hours of the time the Service Issue arose.

6.2.3.2.2. Customer submits SLA credit request to the account team in writing within 45 days of the end of the repair period.

The written request must contain the following information:

- The date the Service Issue occurred.
- The time the Service Issue began and ended.
- The circuit ID(s) for each circuit(s) that was impacted.

6.2.3.3. Core Network Transit Delay (C-NTD) and Mean Opinion Score (MOS). To receive a credit, Customer must make a credit request in writing (e-mail or fax) to the Verizon account team within 30 business days after the month in which the C-NTD or MOS Service Level Standard was not met.

6.2.3.4. Service Installation and Moves, Adds, or Changes (MAC). Customer must report the delay in Service installation or MAC to the appropriate Customer Service Center when the target date is missed. Customer must make a credit request in writing (e-mail or fax) to Verizon account team within 45 days of the date that Verizon completes the installation of the circuit .

Customer must document the following information when requesting the credit:

- The date on which the Service Installation Period or MAC interval began.
- The date specified for Service Installation or Service order completion in the Customer's order.
- The date installation or Service order was completed.
- The port and access circuit ID numbers for the installed Service or the related Service order.

6.3. Service Level Agreement Credit Time Limitation. Service Credits made by Verizon to Customer under this Service Level Agreement are the sole and exclusive remedy available to Customer in respect of any failure to meet a Service Level Standard. Notwithstanding, Customer has options regarding the Service after three consecutive months of non-compliance on the part of Verizon PIP SLA:

6.3.1. Customer may elect to continue the Service for the affected connection inclusive of the credit. Customer can only receive a maximum of 6 months of credits for any individual Service Level Standard within a 12-month period regardless of the number of Connections.

6.3.2. Customer may elect to discontinue all PIP Service for an affected Connection without liability except for charges incurred prior to discontinuation of the Service. To cancel the Service for a Connection, Customer must submit a written disconnect notice to its Verizon account team

within 30 days following the end of either the third or subsequent consecutive month of Verizon's failure to meet the Service Level Standard.

7. General Exclusions. The following exclusions apply to all Service Level Standards contained in this document:

7.1. Service Level Standards are limited to measurements taken at and service events occurring at or within the Provider Edge for Private IP services delivered when using the following access methods to Private IP:

- ILEC Fast Packet Service
- Frame Relay Extension (FRE)
- Network to network interface (NNI) partner
- Satellite
- DSL
- Wireless
- ISDN
- Customer Provided Local Loops (CPLL)
- Cross Border Lease Line(CBLL)
- International Private Line(IPL)

7.2. No Service Level Standards are provided for the following nor will any Service Level Standard not met be considered for:

- Service installations prior to acceptances by Customer.
- Packets marked EF by Customers that are larger than 300 bytes.
- Bursty Traffic in the EF queue.

7.3. Private IP Layer 2 Specific Exclusions:

- Private IP Layer 2 excludes Mean Opinion Score (MOS) and Jitter Service Level Standards.
- Private IP Layer 2 Coverage Exclusions:
 - All MVIC locations.
 - All Frame Relay Extension ("FRE") network to network interface ("NNI") partner networks

7.4. Service Level Standard measurements do not include periods of PIP Network outage resulting in whole or in part from one or more of the following causes:

- Any Hard Outage minutes associated with failure of CPLL.
- CPE associated with the PIP Service.
- Any act or omission on the part of the Customer, its contractors or vendors, or any other entity over which the Customer exercises sole control or has the exclusive right to exercise control.
- Any scheduled maintenance on the part of Customer, Customer contractors or Customer vendors.
- Any scheduled maintenance on the part of Verizon or Verizon Service partners which are within Verizon's maintenance windows.
- Any scheduled maintenance on the part of Verizon's Service partners, including without limitations, MVICs.
- Any Force Majeure Events as defined in the Agreement.

8. Terms and Definitions.

Terms and Definitions	Definition
Assured Forwarding (AF)	A set of priority Class of Service types intended to support data prioritization and precedence
Best Effort (BE)	A Class of Service type intended to support General Business transactions
Billing Account Number (BAN)	The account number to which all the Service charges are linked.

Bursty Traffic	Traffic where the minimum packet arrival gap in ms is the same or less than [(the largest expected voice packet sizes in bytes)*8000/(link speed in bits/sec)]
Circuit	A circuit is a Connection, port, CAR and local access.
Class of Service (COS)	Priority classes that enable the network to differentiate data packages and assign routing precedence based on the customer data networking settings
Committed Access Rate (CAR)	Committed Access Rate (CAR) is the amount of bandwidth to which Customer subscribes on a logical port by logical port basis. CAR can be equal to or less than the logical port speed.
Connection	Connection is a port on Customer's virtual private network (VPN) connected to the Verizon PIP Network. Customer subscribes to a CAR for each Connection.
Core Network	The Core Network, also referred as the Provider Core or P-Core Network, is a dedicated and redundant backbone network with a resilient topology engineered to optimized network routes, maximize stability and minimize failover times. The Core Network has been designed to provide quality of service excellence and to enable intelligent adaptability to new generation technologies. The Core Network is a secure, reliable and fast backbone network platform dedicated solely to Private MPLS network traffic. The Core Network supports Private MPLS network traffic but does not support direct customer access connections.
CPE	Customer Premise Equipment. Telecommunications equipment located at the Customer Site.
Cross Border Lease Line(CBLL)	A lease line that crosses a border.
Customer Due Date (CDD)	The date to which Verizon commits to deliver the Service.
Customer Edge (CE)	Routers and CPE connected to the local access loop.
CE-to-CE	Customer Edge to Customer Edge. The network segment to and from the customer demarcation point that includes the local loop and the PIP network but excludes the customer CPE.
Customer Provided Local Loop (CPLL)	Customer remits payment for local access directly to their local access provider and Verizon does not invoice Customer for local access charges.
Customer Service Center	Verizon locations where Customer reports Service issues.
Eligible Hard Outage Minutes	Total number of Connection Hard Outage minutes less any Outage minutes attributed to events excluded by the PIP SLA
End-to-End	The network segment in which Verizon Business has control. It includes the Local Loops if it is furnish or ordered by Verizon Business or a Verizon Affiliate from a third party carrier, and where Verizon Business invoices the Local Access cost to Customer. It excludes the CPE.
Enhanced Traffic Management Service (ETM)	Service that provides priority traffic routing with Class of Service features
Expedited Forwarding (EF)	A priority Class of Service type intended to support applications that require real time traffic flows
Frame Relay Extension (FRE)	Frame relay services through sites where the Verizon partners with another regional provider. The Verizon does not own these geographic points of presence.
Hard Outage	Complete loss of Service where Customer cannot use the Service and is prepared to release it for immediate testing.
Indirect Access	Access into the PIP/PIP2 network that utilizes Frame Relay or ATM as the access method instead of directly connecting via a PIP Provider Edge device.
International Private Line(IPL)	Provides dedicated connections (point-to-point or point-to-multipoint circuits) between customer sites in numerous countries around the globe.
IP	Internet Protocol
Layer 2	The Data Link Layer of the OSI Model.
Layer 3	The Network Layer of the OSI Model.
Local Access	On-Net, Off-Net or Customer Provided connection from the Provider Edge to the Customer Edge.
Managed Services	A Verizon Service designed to provide customers with a range of management options, from the proactive monitoring to complete outsourcing, of the Customer's data or voice networks.
MCI Legacy Company	An affiliate of Verizon that was an affiliate of MCI, Inc. prior to the acquisition of MCI, Inc. by Verizon Communications, Inc., including one or more of the following entities (without limitation): MCI Communications Services, Inc. d/b/a Verizon Business Services; MCImetro Access Transmission Services LLC d/b/a Verizon Access Transmission Services; MCImetro Access Transmission Services of Virginia, Inc. d/b/a Verizon Access Transmission Services of Virginia; and MCImetro Access Transmission Services of Massachusetts, Inc. d/b/a Verizon

	Access Transmission Services of Massachusetts, and applicable affiliated operating companies outside the United States.
MPLS	Multi-Protocol Label Switching. An IETF standard.
MRC	Monthly Recurring Charge. MRC includes net port and CAR charge, less any applicable discounts, and does not include local access charges.
MVIC	Private IP MPLS VPN Interconnect Services provided through a partner network and interconnected with Verizon through the MVIC
Network	Verizon MPLS VPN Service, known as PIP. A network-based IP VPN service that utilizes IP-over-MPLS (Multi-Protocol Label Switching) technology to deliver IP VPN services to its customers in a secure, reliable and fast manner.
Network Outage	A Network Outage is defined as an unscheduled period in which the Service is interrupted and unavailable for use by Customer for 60 or more Unavailable Seconds (UAS). UAS is the American National Standards Institute standard (ANSI) T1.231.
NNI	Network to Network Interface (NNI) which provides an efficient interface between two data networks.
Off-Net	A location that is interconnected to Verizon Business using Local Access Circuits not wholly furnished via facilities owned or operated by Verizon Business or a Verizon Affiliate but ordered by Verizon Business or a Verizon Affiliate from a third party carrier. Off-net is offered at three levels of performance: Premium, Standard and Basic.
On-Net	A location that is interconnected to Verizon Business using Local Access Circuits wholly furnished via facilities owned or operated by Verizon Business or a Verizon Business Affiliate.
Order Acceptance	When Customer has provided all information required by Verizon, and Verizon's ordering systems has processed the Customer's information and have accepted the order as ready for provisioning.
OSI Model	Open Systems Interconnection Reference Model. A standard description for how data should be transmitted between any two points in a telecommunication network. Its main purpose is to define the networking framework for the consistent delivery of products and services over a telecommunications network. The reference model defines seven layers of functions that take place at each end of a telecommunication network: Application (Layer 7), Presentation (Layer 6), Session (Layer 5), Transport (Layer 4), Network (Layer 3), Data-Link (Layer 2) and Physical (Layer 1).
P-Core	Provider Core. Dedicated and redundant backbone network with a resilient topology engineered to optimized network routes, maximize stability and minimize failover times. The P-Core has been designed to provide quality of service excellence and to enable intelligent adaptability to new generation technologies. The P-Core is a secure, reliable and fast backbone network platform dedicated solely to Private MPLS network traffic. The P-Core supports Private MPLS network traffic but does not support direct customer access connections.
PIP	Private IP Service
PIP Network	The Verizon Private IP Network consisting of the devices and transport making up the MPLS cloud.
Port	An entrance to and/or exit from a network.
Provider Edge (PE)	The edge of the Verizon PIP Network. It is the point in which customer traffic enters or exits the Verizon PIP Network.
PE-to-PE	Provider Edge to Provider Edge. The network segment consisting of the PIP Network but excluding the Local Loops and the customer CPE
Private IP Layer 2	Private IP Layer 2 is a technology using Virtual Private Wire Services (VPWS) to provide point-to-point routing and to allow Customers to retain control of routing, architectural and topology changes.
Private IP Layer 3	Private IP Layer 3 is a Network-Based IP VPN service using IP-over-MPLS technology to deliver high-performance IP VPN solutions to customers in a secure, reliable and fast manner.
Service or PIP Service	Service or Private IP Service is defined as Customer port and CAR and Local Accesses.
SLA	Service Level Agreement.
Service Restoration Priorities	Process by which Service disruptions are ranked by the Customer Service Center.
Site	A site is Customer's Service location which includes CPE and a Connection.
Service Issue	A degradation of Service where Customer is able to use the Service and is not prepared to release the Service for immediate testing. Unless otherwise stated in the

	SLA or designated by Customer, Service Issues are a Priority 2 restoration priority.
Trouble Ticket	A trouble ticket is defined as the official method used to document a perceived problem with the Service or non-compliance with a Service Level Standard.
Virtual Private Network (VPN)	A virtual network that provides the equivalent of a dedicated private network service over a shared data telecommunications infrastructure. A VPN maintains privacy through security network protocols. A VPN uses a logical connection to route traffic between network sites. One of the key attributes of a VPN is that it can provide the same capabilities of a Private Network but usually at a much lower cost.

EXHIBIT C

Private IP Service Service Attachment VBSIII

1. Rates and Charges.

- 1.1 **U.S. Private IP.** Customer will pay Verizon's VBS III standard U.S. monthly recurring charges ("MRC") and non-recurring charges ("NRC") as specified in the Guide which is incorporated into the Agreement.

2. Special Pricing.

- 2.1 **U.S Private IP Service.** In lieu of all other rates, discounts and promotions, Customer will receive a **72%** discount off of the MRCs set forth in the Guide for U.S. Private IP Service. The discount will be applied to Customer's Bundled Port MRCs and Gold CAR MRCs originating from such ports as Dynamic Bandwidth MRCs and Multicasting CAR MRCs. This discount does not apply to the WAN Analysis MRCs or Multiple Virtual Routing and Forwarding MRCs.

3. Additional Terms and Conditions.

- 3.1 **Service Level Agreement.** The Service Level Agreement ("SLA") sets forth Customer's sole remedies for any claim relating to PIP Service, including any failure to meet the conditions set forth in the SLA and is set forth in the Guide. Nothing in this Section limits Customer's right to terminate the Services pursuant to the Agreement.
- 3.2 **Private IP Service Options.** Customer must choose from Standard or Enhanced Traffic Management Private IP Service options. Customer's selection may be modified at any time during the term of the Agreement. There is additional cost associated with Enhanced Traffic Management Private IP Service options, but no additional cost associated with the Standard Management Private IP Service option.
- 3.3 **WAN Analysis.** Customer's use of WAN Analysis is subject to the terms and conditions of the third party end user license agreement. Customer must choose one of four levels of reporting detail via the Verizon Customer Center software which collects system information from Customer premise equipment. Customer's selection may be modified at any time during the term of the Agreement. There may be additional cost dependent upon reporting level selected.
- 3.4 **Dynamic Bandwidth.** Customer's access circuits must be un-channelized. Dynamic changes to CAR values may be made not more than once per day. Dynamic changes to CAR values are set to occur based on the Greenwich Meridian Time Zone and not Customer's local time zone.
- 3.6 **No Resale.** The Service is provided only to Customer. Resale or use by another organization is prohibited.

Exhibit D
Voice Over IP Service
Service Attachment

1. Service Description

- 1.1 **VoIP Service Types.** Verizon will provide to Customer the following Voice Over IP Service (the "VoIP Service").

IP Trunking

The VoIP Service types are described in an individual Service Supplement attached hereto and made a part hereof. Terms and conditions specific to each VoIP Service type are set forth in the Agreement and the applicable Service Supplement.

- 1.2 **Burstable Enterprise Shared Trunks.** Subject to the terms and conditions herein and specifically the limitations set forth in Section 4.12, below, Customer's VoIP sites that are provisioned with Burstable Enterprise Shared Trunks will be able to share across Customer's enterprise the simultaneous calling capacity purchased by Customer.

- 1.3 **VoIP IP Enterprise Routing ("VIPER").** VIPER allows calls between Verizon VoIP customer locations to be terminated without incurring per-minute U.S.-domestic or international usage charges provided both the originating and terminating locations have the VIPER feature enabled.¹ There is no additional fee for VIPER, but Customer must order this feature to obtain its benefits.

- 1.4 **Verizon's Alternate Route Recovery Service ("VARRS").** VARRS provides a business continuity option for VoIP IP Trunking and VoIP IP Integrated Access that permits Customer to route inbound and outbound traffic through geographically-diverse Session Border Controller (SBC) High Availability (HA) pairs in the event of an outage on the primary Verizon SBC HA pair, or an outage affecting Customer's facilities or equipment that necessitates secondary routing.

- 1.4.1 If Customer purchases VARRS, the standard VoIP Network Availability Service Level Agreement ("SLA") threshold is enhanced to 100%. In the event Customer desires to make a VARRS SLA claim for credit, the Director must request such credit within 45 City of Houston business days after the month in which the VARRS Network Availability SLA was not met in accordance with the standard VoIP SLA process guidelines set forth at <http://www.verizonbusiness.com/terms> as of the date Customer purchases the service. For VARRS-related SLA claims, the Director should note in the Comments section of the on-line credit request form that this is a VARRS SLA Network Availability credit request.

- 1.4.2 The configuration of CPE required specifically for VARRS is the Customer's responsibility upon implementation. The configuration requirements will be noted in the Verizon-approved design. Failure to implement these requirements could result in VARRS not working properly.

¹ So long as both the origination and termination endpoints are VIPER-enabled, VIPER calls are delivered from the originating endpoint to the terminating endpoint without conversion to PSTN protocols. However, if one of the locations has a device (e.g., an IP-PBX) that does not register with Verizon's application server, that device must interoperate with the other device originating or terminating the call. In some instances, the two devices do not interoperate successfully. One instance is where a non-registering device needs to re-negotiate an agreed-upon protocol (i.e., a "codec") in the middle of a call. If this re-negotiation is not successful, a dropped call will result. Codec re-negotiation could be triggered by a variety of causes, including but not limited to placing a call on hold, transferring a call to voicemail, the playing of a network announcement, or placing a call into an IP-enabled conference bridge. Verizon is not responsible or liable for calls dropped due to failure of endpoints to interoperate successfully.

2. **Rate and Charges – VoIP Service.** Monthly recurring charges (“MRC”) and non-recurring charges (“NRC”) and other charges specific to each VoIP Service type are set forth in the applicable Service Supplement. Rates and charges for VoIP Service that are designated as “fixed for the Term” are subject to change if VoIP Service is subjected to regulation by any State, or if Federal regulation of VoIP Service is expanded, except that any such changes are subject to the price limitations stated in the Agreement.

2.1 **Supplemental Services.** In addition to the rates and charges specified in the Guide, selected MRCs, NRCs and other charges applicable to supplemental services for all VoIP Service types are set forth below.

Supplemental Services	Rates and Charges
CNAM (Caller Name Display)	MRC per simultaneous call unit – \$1.50
Installation Expedite Fee	See Administrative NRC rates in the Guide.

2.2 **Outbound International Calls.** Outbound international calls are subject to the following discounts:

Agreement Term	Discount off Outbound International (per minute) Rates
3 years or longer	10%

3. [INTENTIONALLY LEFT BLANK]

4. **Terms and Conditions**

4.1 **Business Application.** VoIP Service is offered only to commercial business customers.

4.2 **Letter of Agreement.** To the extent Customer’s VoIP Service includes the provision of Verizon’s Local voice service and Customer implements PS/ALI, Customer will execute, upon appropriate Director review, Verizon’s Letter of Agreement (“LOA”) that lists affected telephone numbers (via range, if applicable) and the attendant street addresses. Verizon will use the LOA to notify the appropriate Incumbent Local Exchange Carrier (ILEC) that Customer, not Verizon, is now responsible for building, loading, and maintaining the location-specific ALI database for the call CPNs (calling party numbers) associated with the BTNs.

4.3 **No Resale Qualification.** Notwithstanding the general prohibition against resale, if Customer subscribes to a tiered or metered pricing plan for VoIP Service, Customer may provide to and be compensated by end-users for VoIP-based services as a component of a larger service offering provided, for example, to a retirement home, campus-living facility, or hotel.

4.4 **Auto Dialers.** Customer may not utilize auto-dialers or any similar type of device in connection with any VoIP Service unless the Director and Verizon mutually agree otherwise in a written amendment to the Agreement.

4.5 **Customer-Obtained Facilities.** Except as otherwise expressly stated herein or in another Verizon Service Attachment, Customer is responsible for obtaining, installing, configuring and maintaining all equipment (including, but not limited to, SIP Phones, gateways and firewalls), software, wiring, power sources, telephone connections and/or communications services necessary for inter-connection with Verizon’s network or otherwise for use in conjunction with VoIP Service (“Facilities”). Customer is responsible for ensuring that such Facilities are compatible with Verizon’s requirements (including being certified by Verizon for use with VoIP Service or successful completion of Verizon’s VoIP Interoperability Program, where applicable), and that they continue to be compatible with subsequent revision levels of Verizon-provided equipment, software and services. Customer is responsible for operation and configuration of its computer(s) and LAN/WAN. If Customer uses its WAN to connect multiple remote sites through a single site (“hub” site) to the Verizon VoIP network, Customer will be responsible for

the quality of VoIP Service ("QOS") on its WAN. The demarcation for VoIP Service QOS will be the hub site. If Customer connects any Facilities to VoIP Service that Customer reasonably should know may not be compatible with VoIP service, Customer is solely responsible for any effects that arise from that connection on VoIP service, equipment or software of Verizon, Customer, or any third party, and Customer waives any claims against Verizon relating to the performance of VoIP service.

4.6 **Design Approval.** Notwithstanding the inclusion of this VoIP Service Attachment in Customer's contract, availability of VoIP Service on a site-by-site basis is subject to having a site design reviewed and approved, in writing (including email), by Verizon and the Director.

4.7 **Unified Site.** Customer can provision its multi-building campus as a single VoIP termination to maximize network and billing efficiencies provided (i) all the buildings within its campus are in the same rate center; (ii) its PBX is able to send DID level information for 911 calls; and (iii) Customer implements PS/ALI (see the 911 Appendix). For example, if Customer's campus is comprised of 20 buildings all within the same rate center, the 20 buildings can be provisioned as a single Verizon VoIP site subject to the above.

4.8 **Service Disclaimer.** Verizon is not responsible for certain conditions or equipment that may affect VoIP Service, including, without limitation:

- Failure or poor performance of Customer's Domain Name Server ("DNS Server") and/or local area network ("LAN") upon which VoIP Service relies. Network-related outages also may occur, and service restoration intervals may vary from those associated with traditional telecommunications service.
- Communications from analog modems may have protocol interaction issues when used over VoIP technology (due to their handshake and error-checking rules) and cannot be assured of the same quality as other communications;
- Modems – Modems may not be used on VoIP Service except with Codec G.711 without silence suppression.
- Facsimile devices – Fax transmission is highly dependent on Customer's facsimile device, its ability to disable error correction, and other factors.
- Alarm lines (whether or not they use modems) are wholly unsupported on VoIP Service (with respect to both service and wiring, without limitation).
- All inside wiring and special construction.

4.9 **Geographic Coverage**

4.9.1 VoIP Service is not available in Alaska and may not be available in other states or regions. Verizon currently provides VoIP Services within Texas. Availability of VoIP Services and underlying transport may vary based on Customer's location(s).

4.9.2 The VoIP service described herein is provided only to Customer locations within the U.S. Mainland and Hawaii. Customer expressly acknowledges that it is solely responsible for any extension of VoIP service beyond the U.S. Mainland and Hawaii and the legal and regulatory ramifications of extending such calls into foreign jurisdictions.

4.10 **Restrictions**

4.10.1 Customer shall not modify the Verizon-installed design and/or configuration without the previous written consent of Verizon. Customer expressly acknowledges Verizon may immediately suspend Customer's use of VoIP Service if Customer violates the foregoing restriction. Verizon security will contact Customer in the event of Service suspension.

4.10.2 At any given time, Customer may only place as many concurrent calls as it has purchased.

- 4.11 **Call Origination Information.** Customer acknowledges that Verizon classifies local and long distance calls to determine appropriate rate allocation (i.e., local or interstate). Verizon bases this classification on the information in Verizon's systems identifying each call's originating location. As accurate information regarding the origination point of calls is necessary to make the appropriate rate allocation, it is a material condition of this Service Attachment that the Director provide Verizon with accurate information reflecting its calls' originating location.
- 4.12 **Burstable Enterprise Shared Trunks (BEST).** To the extent Burstable Enterprise Shared Trunks are available to Customer, the following terms and conditions apply:
- 4.12.1 When all VoIP traffic is aggregated at Customer's hub location, Customer will only be able to make as many simultaneous calls across its enterprise as is supported via the data access at such hub location.
- 4.12.2 Customer is solely responsible for purchasing sufficient simultaneous calls across its enterprise to support traffic for its hub and remote locations. Customer acknowledges and understands that purchasing, say, 800 simultaneous calls across its enterprise to serve, say, 800 sites, may diminish the end-user experience, resulting in such occurrences as busy lines.
- 4.12.3 BEST is only available at locations that use metered or tiered pricing models. If Customer purchases VoIP Service that includes the availability of BEST, all locations receiving VoIP Service within Customer's enterprise must be metered or tiered. That is, only metered or tiered locations within Customer's enterprise will be able to burst using available simultaneous call capacity from other Customer sites that use a metered or tiered pricing model.
- 4.12.4 BEST does not allow for the sharing of simultaneous calling capacity between Customer locations receiving Local and LD VoIP Service and Customer locations receiving only LD service.
- 4.12.5 BEST includes a sharing of simultaneous call capacity, not minutes. If Customer uses BEST to share simultaneous call capacity between sites billed on tiered pricing models, the included number of LD minutes per concurrent call will not be shared between sites. For example, if Customer purchases two 250-minute simultaneous call capacity tiers at location A and three 250-minute simultaneous call capacity tiers at location B, location A is entitled to a total of 500 LD minutes in a month before the overage rate applies, and location B is entitled to a total of 750 LD minutes in a month before the overage rate applies; location A is not entitled to share Location B's 750 minutes even if the two locations are using BEST.
- 4.12.6 BEST is not available with Hosted IP Centrex services with unlimited LD pricing.
- 4.12.7 BEST is only available to U.S. sites and only the simultaneous call units at U.S. sites contribute to the total available concurrent call capacity. BEST is implemented at the enterprise level; if Customer desires to obtain BEST, it will apply to all Customer sites obtaining VoIP service.
- 4.12.8 The maximum bursting capacity of each VoIP IP Trunking location is based on two factors – the maximum number of calls that can be supported within the location's data bandwidth and the total number of simultaneous calling units purchased by Customer across its enterprise – and is subject in any case to a maximum of fifty (50) simultaneous calls in addition to what is provisioned at any single location. Two examples are provided:

If Customer's Location A buys 20 simultaneous calling units on a T1 and Customer's Location B buys 40 simultaneous calls on a DS3, assuming availability, Location A

could burst through its allocation of 20 simultaneous calling units up to a maximum of 41 simultaneous calling units because that's the maximum simultaneous calls supportable on a T1.

If Customer's Location C buys 60 simultaneous calling units on a DS3 and Customer's Location D also buys 60 simultaneous calling units on a DS3, assuming availability, Location C could burst through its allocation of 60 simultaneous calling units up to a maximum of 110 simultaneous calling units because any single location is limited to bursting to an additional 50 simultaneous calling units.

- 4.12.9 The Director must inform Verizon of its data bandwidth at each location so that Verizon can properly configure the maximum simultaneous call setting based on Customer's bandwidth. Verizon will perform a periodic review of Customer's actual simultaneous call bursting and reserves the right, after consulting with Customer, to reallocate simultaneous calling capacity among Customer locations to better reflect actual use.
 - 4.12.10 If Customer changes its data bandwidth and desires more simultaneous calls to be supported at a particular location, it must process a change order with Verizon to increase the number of available simultaneous calling units.
 - 4.12.11 Every remote site must receive an allocation of at least one simultaneous call on a metered or tiered basis to be able to participate in BEST.
 - 4.12.12 Verizon Technical Support will be able to identify call failures or blockage if Customer exceeds its aggregate (enterprise-level) simultaneous calling capacity. However, Verizon is not responsible for monitoring utilization. Customer is responsible for monitoring location-level traffic requirements to identify sites which require additional simultaneous call capacity to meet traffic requirements.
- 4.13 **Additional Terms and Conditions for BUNDLED Pricing Model.** The BUNDLED pricing model is subject to the following additional terms and conditions.
- 4.13.1 Verizon may interrupt BUNDLED Internet Dedicated Services for scheduled or emergency maintenance or as otherwise set forth in the Agreement.
 - 4.13.2 BUNDLED Pricing is not available for Customer facilities located in the following states: Kentucky, Maine, New Hampshire, North Dakota, South Dakota, Vermont, West Virginia, and Wyoming.
 - 4.13.3 **VoIP Service Equipment**
 - 4.13.3.1 **General.** At all times, title to any equipment provided by Verizon as part of VoIP Service ("VoIP Service Equipment") will remain with Verizon. Customer shall (i) maintain the VoIP Service Equipment and any associated software, systems, cabling and facilities in accordance with the reasonable instructions of Verizon as may be given from time to time; (ii) not modify, relocate, or in any way interfere with the VoIP Service Equipment unless expressly authorized by a representative of Verizon to do so; and (iii) not cause the VoIP Service Equipment to be repaired, serviced, or otherwise accessed except by an authorized representative of Verizon. Failure of Customer to permit Verizon representatives entry, upon reasonable request, to Customer premises or service locations to repair or maintain VoIP Service or equipment will discharge Verizon from its service obligation. Upon termination or expiration of this Agreement, Customer will return the VoIP Service Equipment to Verizon at Verizon's expense in the manner set forth in the Guide.

- 4.13.3.2 **Maintenance.** With respect to the VoIP Service Equipment only, Verizon will provide the following maintenance services ("Maintenance Services"): (i) Use commercially reasonable efforts to isolate any problems with the VoIP Service Equipment that resides on Customer's site and send a technician to Customer's site if necessary; (ii) replacement of affected components if Verizon, in its sole discretion, determines that any VoIP Service Equipment that resides on Customer's premise needs to be replaced; such component to be replaced with a component in good working order and of like kind and functionality from a manufacturer of Verizon's choice at the time of replacement.
- 4.13.3.3 **Normal Use Limitation.** Maintenance Services only apply to problems arising out of the normal use of the VoIP Service Equipment and do not apply if the VoIP Service Equipment is damaged as a result of the negligence or willful misconduct of Customer. If repair and/or replacement is required because of damage caused by Customer's negligence or willful misconduct, Customer will be charged time at a rate of \$125 per hour during normal business hours to repair the VoIP Service Equipment, and Customer will be charged the replacement cost of VoIP Service Equipment requiring replacement.
- 4.14 **LNP.** Customer can arrange to port its numbers using LNP (Local Number Portability) at the same time VoIP service is made available for use, or delay LNP for up to 20 days afterwards. However, billing for VoIP Service will commence in accordance with the Agreement.
- 4.15 **Billing Initiation.** Billing for VoIP service will begin when the VoIP service is available for use, even if Customer's numbers have not been ported to the VoIP service (see "LNP" above).
- 4.16 **Service Level Agreement**
- 4.16.1 Subject to Section 4.16.2 below, the Service Level Agreement ("SLA") for VoIP Service sets forth Customer's sole remedies for any claim relating to VoIP Service (including the related Internet Dedicated Service or Private IP Service), including any failure to meet the conditions set forth in these SLAs and in the Guide. Nothing in this Section limits Customers right to terminate the Services pursuant to the Agreement and to seek or recover remedies associated with the termination, to the extent allowed by law.
- 4.16.2 **Limitations on VoIP Voice Quality SLA.** Verizon's VoIP Voice Quality SLA applies only if an end-user is using VoIP Service via Verizon's Internet Dedicated Service or Private IP Service at a Customer location covered by Verizon VoIP Service. However, Verizon's VoIP Voice Quality SLA never applies to soft-phone use.
- 4.17 **Access to CPNI.** Customer's use of VoIP Service may enable access to Customer Proprietary Network Information ("CPNI"). As a condition of such access, Customer agrees:
- To execute a "Designation Of Customer VoIP Administrator(s) With CPNI Authorizer" form provided by Verizon (see [Appendix II](#)), designating in writing one or more Customer "Administrators" authorized to access CPNI and to identify end-users authorized to access CPNI either directly or via an online application such as the Integrated Communications Package (ICP), if applicable; and
 - To cooperate with Verizon's reasonable authentication and security procedures for access to CPNI, including, without limitation, password resets and re-authentication of authorized end-users.
- 4.18 **E-911 – Emergency Calling.** The FCC's requirements regarding "interconnected VoIP service" are addressed in [Appendix I](#) (E-911 – Emergency Calling Terms and Conditions) attached hereto.

**Service Supplement No. 1
VoIP Service Type – IP Trunking**

Rates and Charges. Current rates and charges for VoIP IP Trunking Service are described below. VoIP IP Trunking Service is available via the A LA CARTE pricing model with Tiered and metered pricing options. Rates and charges for International calls, certain Local features, directory assistance, and related items are set forth in the Guide.

- 1. Tiered Pricing – Simultaneous Calling Capacity Charge.** Customer will pay the following MRC – which is fixed for the Term – per simultaneous calling unit multiplied by the number of simultaneous call units Customer selects. A minimum of one unit must be purchased for each VoIP IP Trunking location. Each such simultaneous calling unit includes unlimited intra-enterprise VoIP calling (VoIP origination and termination within Customer’s enterprise), unlimited local calling, and an allotment of inter-enterprise VoIP (termination is non-VoIP and/or outside Customer’s enterprise) long distance (“LD”) minutes as set forth below. Overage charges will apply as outlined below for minutes in excess of established limits. Minutes cannot be shared between locations (multiple buildings on a campus with a single VoIP connection comprise a single location) nor can they be rolled over from month to month. Calls to international locations can also be made but are billed at metered rates as set forth in the Guide.

Service Type	MRC Per Simultaneous Call	Intra-enterprise VoIP mins included	Local Calls included	Inter-enterprise VoIP LD Mins included	BEST	Domestic Long Distance
250 Local and LD	\$28	Unlimited	Unlimited	250	n/a	\$0.025/min
250 Local and LD with BEST	\$38	Unlimited	Unlimited	250	Included	\$0.025/min
750 Local and LD	\$38	Unlimited	Unlimited	750	n/a	\$0.025/min
750 Local and LD with BEST	\$48	Unlimited	Unlimited	750	Included	\$0.025/min
250 LD only	\$12	Unlimited	n/a	250	n/a	\$0.025/min
250 LD only with BEST	\$22	Unlimited	n/a	250	Included	\$0.025/min
750 LD only	\$22	Unlimited	n/a	750	n/a	\$0.025/min
750 LD only with BEST	\$32	Unlimited	n/a	750	Included	\$0.025/min

- 2. Metered Pricing – Simultaneous Calling Capacity Charge.** Customer will pay the following MRC – which is fixed for the Term – per simultaneous calling unit multiplied by the number of simultaneous call units Customer selects. A minimum of one (1) unit must be purchased for each VoIP IP Trunking hub and remote location. Each such simultaneous calling unit includes unlimited intra-enterprise VoIP calling (VoIP origination and termination within Customer’s enterprise) and unlimited local calling, while all outbound long distance (“LD”) inter-enterprise calls (termination is non-VoIP and/or outside Customer’s enterprise) will be billed a per-minute charge, as set forth below. Calls to international locations can also be made but are billed at metered rates as set forth in the Guide.

Service Type	MRC Per Simultaneous Call	Intra-enterprise VoIP mins included	Local Calls included	Inter-enterprise VoIP LD Mins included	BEST	Domestic Long Distance
Local and LD	\$25	Unlimited	Unlimited	0	n/a	\$0.023/min
Local and LD with BEST	\$35	Unlimited	Unlimited	0	Included	\$0.023/min
LD only	\$7	Unlimited	n/a	0	n/a	\$0.023/min
LD only with BEST	\$17	Unlimited	n/a	0	Included	\$0.023/min

- 3. Change in Simultaneous Call Count.** Customer must maintain its provisioned simultaneous call count for at least a 30-day period before requesting a decrease in simultaneous call count.

4. **Equipment and Access**

- 4.1 In addition to the fees set forth above, Customer will pay the applicable fees (not included here) for the gateway, access or transport service (e.g., port and permanent virtual circuit charges), CPE, or any other services or equipment not explicitly described as part of the A LA CARTE pricing. Such fees will be described in the separate Service Attachment (Private IP Service Service Attachment VBSIII) for the attendant service and/or CPE.
- 4.2 A LA CARTE pricing does not include Verizon Private IP Service which must be purchased separately by Customer as transport for use with IP Trunking VoIP Service. Such fees will be described in the separate Service Attachment (Private IP Service Service Attachment VBSIII) for the Verizon Private IP Service.

5. **Service Establishment Fee.** Customer will pay NRCs for service establishment as set forth in the VoIP Rates and Charges section of the Guide for VoIP IP Trunking.

6. **Optional Network Features.** If Customer elects to purchase optional network features and subject to the appropriation of sufficient funds, Customer will pay for the optional network features at the following rates, which are fixed for the Term:

Optional Network Features(s)	Charges
Auto Attendant	\$30/instance ¹
Hybrid Intermediate Package – provides the following telephony features: Call Forwarding; Remote Office; Find Me / Follow Me; Call Blast (an incoming call rings a number of devices simultaneously; also known as “simultaneous ring”).	\$5.50/configured DID user
Redirect to Telephone Number – PBX Group Unreachable	NRC of \$1.50/DID in a configured PBX group ² plus \$2.00/DID/month in a configured PBX group ²
Verizon Alternate Route Recovery Service (VARRS)	MRC – \$4.00 per simultaneous calling unit ³
<p>1. "Instance" means each menu of options that a caller may choose to access. Each separate listing of touch tone options presented to a caller is considered a separate menu.</p> <p>2. PBX group is defined by groupings of numbers. When Redirect to Telephone Number (PBX Group Unreachable) is provisioned on a PBX group, all numbers in that group will be provisioned and billed with the feature.</p> <p>3. While the charge for VARRS is based on the number of simultaneous calling units at each location, if Customer selects to receive VARRS, it will be applied and provisioned for <u>all</u> simultaneous calling units at all Customer locations receiving VoIP IP Trunking Service.</p>	

7. **Discounts.** Customer shall receive the following discount percentage, based on the Term of the Agreement and Customer’s AVC, applicable only to the IP Trunking BEST and non-BEST Simultaneous Calling Capacity Charges (MRC and Domestic Long Distance rates), Optional Network Features and DID blocks, including those rates described in sections 1, 2, and 6 above in this Service Supplement 1: 40%.

This discount is not available for any other IP Trunking services, charges, or features.

Appendix I

E-911 – Emergency Calling Terms and Conditions

1. **Requirement.** A provider of “interconnected VoIP service” is required by the Federal Communications Commission to route emergency 911 calls in conjunction with such VoIP service where such 911 calling is available. “Interconnected VoIP service” means the VoIP service (1) enables real-time, two-way voice communications; (2) requires a broadband connection from the end-user’s location; (3) requires IP-compatible CPE; and (4) permits end-users generally to receive calls that originate on the PSTN and to terminate calls to the PSTN. **911 emergency calling service laws may also apply to Customer and it is solely Customer’s responsibility to understand and comply with such laws.**
2. **E-911 Routing.** Enhanced 911 calling (“E-911”) enables end-users to access an appropriate public safety answering point (“PSAP”) by dialing 911 with Automatic Number Identification (“ANI”) and Automatic Location Identification (“ALI”) displayed at the PSAP. The ANI may be the calling party number (“CPN”) or the billing telephone number (“BTN”) depending on Customer’s configuration. **Pursuant to FCC requirements, Verizon enables the routing of E-911 calls only in locations where such 911 calling is available and only in the limited circumstances described below.** An end-user’s ability to access an appropriate PSAP depends on the type, configuration and location of the phone used. Furthermore, much like access to 911 emergency service via traditional PSTN local service, access to a PSAP will be unavailable if Customer’s access circuit or local gateway fails.
 - 2.1 **ANI/ALI.** E-911 provided via any of the four types of Verizon VoIP Service will pass ANI and the registered primary service address of that ANI as ALI. If VoIP Service is provided to a campus environment where all buildings are within the same rate center, then when 911 is dialed, the call will be routed to the appropriate PSAP based on the primary service address of the calling ANI.
 - 2.2 **Long Distance Service/Limitations on E-911.** Long Distance Voice Service does not provide access to E-911 calling. Thus, to obtain E-911 access and support, Customer must purchase separate Local service when only Long Distance Voice Service is ordered from Verizon (an option with IP Integrated Access, Hosted IP Centrex, and IP Trunking). If Customer purchases VoIP service for a geographically-distributed multi-site environment and has remote locations outside the Local service footprint covered by VoIP Service, or Customer chooses not to purchase Local service with its VoIP Service at certain remote locations, Customer agrees that it is responsible for obtaining separate Local service at each such location in the Service Attachment to the extent it desires or is required to provide E-911.
 - 2.3 **PS/ALI.** If Customer requires delivery of location-specific ALI (such as floor and room number within a building) to the PSAP, or otherwise desires E-911 to be provided for multiple user configurations, Customer must implement Private Switch/Automatic Location Identification (PS/ALI). **Customer may obtain the software and support that enable PS/ALI from a third-party provider or Verizon pursuant to a separate contract.** In all cases, VoIP Service can only support the delivery of the caller’s station level phone number to a PSAP when such telephone numbers are ported to Verizon during the initial provisioning process or are numbers assigned by Verizon. Before Verizon will support Customer’s use of PS/ALI, Customer must execute Verizon’s LOA in accordance with Section 4.2 in the Service Attachment. Once PS/ALI is implemented, Verizon will continue to send 911 calls to the PSAP; **however, Customer and not Verizon will be entirely responsible for the content of the information delivered in ALI to the PSAP and for any liability arising from the provision of, or the failure to provide, accurate and up-to-date information.**

State or local laws may require Customer to implement PS/ALI to ensure required E-911 support for multiple user configurations to enable station-specific 911 ANI and ALI display.

- 2.4 **Other Access Limitations.** Common events that can limit access to E-911 via VoIP Service include but are not limited to:
 - **Loss of Electric Service.** A loss of electric service will interrupt VoIP Service. Customers are urged to implement a battery backup system for VoIP Service.
 - **Loss of Broadband Service.** VoIP Service will be interrupted if the attendant broadband connection is not available.
 - **Failure of Equipment.** The malfunction or failure of equipment, software or hardware necessary for end-to-end Internet functionality (e.g., routers, IP phones, analog gateways, etc.) can limit access to E-911.

- **Failure to Register New Location of Equipment.** For IP Integrated Access and IP Trunking VoIP services, Verizon is able to provide access to E-911 only at the end-user's registered primary service location. For these VoIP service types, if a VoIP phone is used at a location other than at the end-user's registered primary service location, E-911 will not be available. For Hosted IP Centrex service, mobility is supported for the end-user's IP phone or soft-phone (phone in the PC), but the end-user may only place calls from a location that is, in fact, the end-user's registered address. Otherwise, E-911 calls will not be sent to the correct PSAP. If the end-user's registered address is at a location different from the end-user's "office phone" (the dedicated hand-set that remains at the end-user's registered primary service location), use of the end-user's land-line for 911 calls will not contact the correct PSAP. Customer must inform end-users that it is entirely their responsibility to use the tools available with VoIP Service to update their registered address.
- **Non-Recognition of Phone Number.** If an end-user uses a non-native telephone number (i.e., a telephone number from a local exchange area different from where the caller is located), E-911 access may be limited.

2.5 **End-User Notice Requirements.** Customer agrees to notify all of its end-users of Verizon VoIP of the interaction and/or limitations of E-911 with Verizon VoIP as set forth in the Service Attachment and this Appendix, and with respect to Hosted IP Centrex end-users, (i) what procedures such end-users must follow for registering a new location prior to moving an IP phone or soft-phone; and (ii) of the effects of re-registration of end-user addresses on existing end-user office phones and E-911. Customer shall be solely responsible for any third-party claims and liability arising from Customer's failure to so notify its end-users.

3. **E-911 and VoIP IP Trunking Service.** Because Customer's IP Trunking may permit end-users to use VoIP Service at other than Customer's or the end-users' primary service location, and Verizon may not detect when an end-user uses the service at a non-primary service location, Customer agrees, with respect to IP Trunking:
- detect when an end-user has moved his or her VoIP phone (i.e., any device used for VoIP calling) to a non-primary service location, and suspend VoIP Service unless and until either Customer (a) verifies that the end-user is at the location for which the VoIP phone is registered for service or (b) re-registers the VoIP phone for service ("nomadic service") at the end-user's current location;
 - only permit nomadic service when E-911 calls made via the nomadic service include the information needed to route that call to the PSAP serving that location in the manner required by the FCC's E-911 requirements for Interconnected VoIP service; and
 - otherwise block all VoIP calls attempted to be made via the nomadic service.

Customer shall be solely responsible for all third-party claims and liability arising from Customer's failure to do as required in this Section 3.

4. **E-911 and Hosted IP Centrex Service**

Hosted IP Centrex Service is not being provided.

5. **Provider Parity.** For purposes of 47 U.S.C. 615a (*Service provider parity of protection*) and with respect to the provision of Verizon VoIP Service, Verizon is an IP-enabled voice service provider.

Appendix II

Designation of Customer VOIP Administrator(s) with CPNI Authorization

Customer	City of Houston
Signature	
Name	Charles T. Thompson
Title	Chief Information Officer
Date:	
NASP ID AND GUDUNS ID (where available)	

A. Administrator Access to CPNI and Designation as CPNI Authorizer for Users. The Director named above, through its authorized representative's signature, hereby designates the individuals listed below or in an attachment containing the same data elements, as VOIP Administrators, with the authority to designate end users authorized to access CPNI of Customer and its affiliates, as specified below (collectively "Administrators") for MCI Communications Services, Inc., d/b/a Verizon Business Services and its affiliates set forth in the Service Publication and Price Guide located at www.verizonbusiness.com/guide (collectively or individually "Verizon").

Administrator Name	Title	Tel. No.	Email	Postal Address	Add	Remove
					<input type="checkbox"/>	<input type="checkbox"/>
					<input type="checkbox"/>	<input type="checkbox"/>
					<input type="checkbox"/>	<input type="checkbox"/>

Customer will so designate as Administrators all representatives who are authorized to manage Customer's use of Verizon VOIP service, including through the online applications made available by Verizon to Customer for its use. This designation, and any subsequent additions or removals of Administrators, will be effective within a reasonable period after Verizon has received a signed writing with the content set out above. Administrators are authorized to access the Customer Proprietary Network Information ("CPNI")* of Customer and its affiliates.

B. User Access to CPNI via Online Applications. Customer representatives ("Users") designated by Administrators as authorized to access "ICP" (Integrated Communications Package) or other online applications made available by Verizon in connection with VOIP service are also authorized to access the CPNI of Customer through those online applications. This VOIP-specific CPNI access authorization is independent of any general CPNI authorization or deauthorization, and this authorization is not withdrawn by the withdrawal of a general CPNI authorization. In order to withdraw the VOIP-specific CPNI authorization established hereby, a Customer Administrator must permanently withdraw the User(s) access to ICP and all other VOIP-related online applications that may provide access to CPNI.

* CPNI includes information about the quantity, technical configuration, type, destination, location, and amount of use of telecommunications or interconnected voice over Internet Protocol services

purchased from Verizon or its affiliates that is made available to Verizon or its affiliates solely by virtue of your relationship with Verizon or its affiliates and related local exchange or toll billing information.

This Pricing and Rate Exhibit is for illustrative purposes only. Invoices will reflect the quantities of Service which are provisioned and the rates and charges set forth in the Agreement. In the event of a discrepancy between the rates and charges set forth herein and the rates and charges applicable pursuant to the Agreement, the rates and charges applicable pursuant to the Agreement shall apply.

Location/Service	Qty	Unit		Extended	
		MRC	NRC	MRC	NRC
1301 Fannin Street Houston, TX 77002					
Corporate					
<i>Network Transport</i>					
100 Mbps Type 1 GigE Access (VZ)	1	\$1,250.00	\$0.00	\$1,250.00	\$0.00
80 Mbps Private IP Port (MPLS)	1	\$2,029.44	\$0.00	\$2,029.44	\$0.00
50 Mbps Gold CAR (QoS)	1	\$799.12	\$0.00	\$799.12	\$0.00
<i>SIP Trunking</i>					
IP Trunking Tiered - 250 Local and LD w/BEST	660	\$22.80	\$0.00	\$15,048.00	\$0.00
Caller ID with Name (CNAM)	660	\$0.90	\$0.00	\$593.75	\$0.00
Direct Inward Dial (DID) blocks (Blocks of 20)	475	\$3.75	\$5.00	\$1,781.25	\$2,375.00
Service Establishment Fee (5,001-12,500 DIDs - After Hours Implementation)	1	\$0.00	\$3,750.00	\$0.00	\$3,750.00
Corporate Sub-Total		\$4,106.01	\$3,755.00	\$21,501.56	\$6,125.00
Contact Center					
<i>Network Transport</i>					
30 Mbps Type 4 FastE Access (L3)	1	\$562.00	\$0.00	\$562.00	\$0.00
30 Mbps Private IP Port (MPLS)	1	\$1,176.00	\$0.00	\$1,176.00	\$0.00
20 Mbps Gold CAR (QoS)	1	\$553.28	\$0.00	\$553.28	\$0.00
<i>SIP Trunking</i>					
IP Trunking Tiered - 250 Local and LD w/BEST	250	\$22.80	\$0.00	\$5,700.00	\$0.00
Caller ID with Name (CNAM)	250	\$0.90	\$0.00	\$225.00	\$0.00
Direct Inward Dial (DID) blocks (Blocks of 20)	13	\$3.75	\$5.00	\$48.75	\$65.00
Service Establishment Fee (76-300 DIDs - After Hours Implementation)	1	\$0.00	\$750.00	\$0.00	\$750.00
Contact Center Sub-Total		\$2,318.73	\$755.00	\$8,265.03	\$815.00
Location Total		\$6,424.74	\$4,510.00	\$29,766.59	\$6,940.00
5150 Westway Park Blvd Houston, TX 77041					
Corporate					
<i>Network Transport</i>					
100 Mbps Type 4 GigE Access (TwT)	1	\$830.00	\$0.00	\$830.00	\$0.00
80 Mbps Private IP Port (MPLS)	1	\$2,029.44	\$0.00	\$2,029.44	\$0.00
50 Mbps Gold CAR (QoS)	1	\$799.12	\$0.00	\$799.12	\$0.00
<i>SIP Trunking</i>					
IP Trunking Tiered - 250 Local and LD w/BEST	660	\$22.80	\$0.00	\$15,041.67	\$0.00
Caller ID with Name (CNAM)	660	\$0.90	\$0.00	\$593.75	\$0.00
Direct Inward Dial (DID) blocks (Blocks of 20)	475	\$3.75	\$5.00	\$1,781.25	\$2,375.00
Service Establishment Fee (5,001-12,500 DIDs - After Hours Implementation)	1	\$0.00	\$3,750.00	\$0.00	\$3,750.00
Corporate Sub-Total		\$3,686.01	\$3,755.00	\$21,075.23	\$6,125.00
Contact Center					
<i>Network Transport</i>					
30 Mbps Type 4 FastE Access (L3)	1	\$562.00	\$0.00	\$562.00	\$0.00
30 Mbps Private IP Port (MPLS)	1	\$1,176.00	\$0.00	\$1,176.00	\$0.00
20 Mbps Gold CAR (QoS)	1	\$553.28	\$0.00	\$553.28	\$0.00
<i>SIP Trunking</i>					
IP Trunking Tiered - 250 Local and LD w/BEST	250	\$22.80	\$0.00	\$5,700.00	\$0.00
Caller ID with Name (CNAM)	250	\$0.90	\$0.00	\$225.00	\$0.00
Direct Inward Dial (DID) blocks (Blocks of 20)	13	\$3.75	\$5.00	\$48.75	\$65.00
Service Establishment Fee (76-300 DIDs - After Hours Implementation)	1	\$0.00	\$750.00	\$0.00	\$750.00
Contact Center Sub-Total		\$2,318.73	\$755.00	\$8,265.03	\$815.00
Location Total		\$6,004.74	\$4,510.00	\$29,340.26	\$6,940.00
Estimated LD Overage	0	\$0.0150	\$0.000	\$0.000	\$0.000
Project Management for 90 Days (MBWBE Participation)	1	\$0.000	\$89,397.00	\$0.000	\$89,397.00
Month-to-Month Project Management (After Initial 90 Days)	0	\$0.000	\$29,799.00	\$0.000	\$29,799.00
Total		\$12,429.48	\$98,417.00	\$59,106.85	\$103,277.00

Annual Pricing (MRC + NRC)	\$812,559.16
36 Month Pricing (MRC Only)	\$2,127,846.48
Checkbook Credit Promotion	\$90,000.00
Revised 36 Month Pricing	\$2,037,846.48

Bundled CCP Pricing \$23.70



The rates specified herein do not include applicable taxes, fees, and surcharges.

10/28/2014

City of Houston

**Exhibit E
Pricing and Rates**

IP Transport for Fannin Street	\$4,078.56
IP Transport for Westway Park Blvd	\$3,658.56
Annual Volume Commitment (AVC)	\$300,000.00



The rates specified herein do not include applicable taxes, fees, and surcharges.

10/28/2014

VoIP Service Rates					
VoIP Trunking Services. In lieu of all other rates, discounts and promotions, Customer will pay the following MRCs and NRCs plus Access Service, shown separately, for VoIP Services and related optional features/services. Charges are fixed for the Term, based upon the service type. All other rates are for illustrative purposes only.					
VoIP Service Elements					
<i>VoIP Components</i>					
			IP Integrated Access/IP Trunking (Minimum of 2 Concurrent Call Paths)		
			LD Overage/Usage		
			Optional Network and Add-On Features		
			Service Establishment Fee		
			VoIP International (International Termination Usage)		
<i>Transport Components</i>					
			Required Verizon MPLS Port		
			Verizon Ethernet Access Service		
VoIP Components					
Service Description	Guide / List		End User Pricing		
	MRC	Discount	MRC	NRC	
IP Integrated Access/IP Trunking					
Concurrent Call Charge					
<i>Tiered</i>					
250 Local and LD	\$28.00	40%	\$16.80	N/A	
250 Local and LD with BEST	\$38.00	40%	\$22.80	N/A	
750 Local and LD	\$38.00	40%	\$22.80	N/A	
750 Local and LD with BEST	\$48.00	40%	\$28.80	N/A	
250 LD only	\$12.00	40%	\$7.20	N/A	
250 LD only with BEST	\$22.00	40%	\$13.20	N/A	
750 LD only	\$22.00	40%	\$13.20	N/A	
750 LD only with BEST	\$32.00	40%	\$19.20	N/A	
LD Overage	\$0.0250	40%	\$0.0150	N/A	
Optional Network and Add-On Features					
CNAM	\$1.50	40%	\$0.90	N/A	
Redirect to TN (Per TN)	\$2.00	40%	\$1.20	\$1.50	
Alternate Route Recovery Service	\$4.00	40%	\$2.40	N/A	
DID Blocks of 20 (only sold in blocks of 20)	\$6.25	40%	\$3.75	\$5.00	
Service Establishment Fees					
<i>Number of Active DIDs</i>					
Service Establishment Fee (per location)					
0 - 24	\$100.00	0%	N/A	\$100.00	
25 - 75	\$250.00	0%	N/A	\$250.00	
76 - 300	\$500.00	0%	N/A	\$500.00	
301 - 1,000	\$750.00	0%	N/A	\$750.00	
1001 - 5,000	\$1,000.00	0%	N/A	\$1,000.00	
5,001 - 12,500	\$2,500.00	0%	N/A	\$2,500.00	
12,501 - 20,000	\$4,000.00	0%	N/A	\$4,000.00	
>20,001 DIDs	ICB	ICB	ICB	ICB	
Service Establishment Fee if customer requests after hours implementation					
0 - 24	\$150.00	0%	N/A	\$150.00	
25 - 75	\$375.00	0%	N/A	\$375.00	
76 - 300	\$750.00	0%	N/A	\$750.00	
301 - 1,000	\$1,125.00	0%	N/A	\$1,125.00	
1001 - 5,000	\$1,500.00	0%	N/A	\$1,500.00	
5,001 - 12,500	\$3,750.00	0%	N/A	\$3,750.00	
12,501 - 20,000	\$6,000.00	0%	N/A	\$6,000.00	
>20,001 DIDs	ICB	ICB	ICB	ICB	
Transport Components					
Service Description	Guide / List		End User Pricing		
	MRC	Discount	MRC	NRC	
MPLS Port					
<i>Port Bandwidth (VBSIII Plan B)</i>					
64 Kbps (DS0)	\$175.00	72%	\$49.00	N/A	
256 Kbps (Sub-Rate DS1)	\$373.00	72%	\$104.44	N/A	
512 Kbps (Sub-Rate DS1)	\$589.00	72%	\$164.92	N/A	
1 Mbps (Ethernet or Sub-Rate DS1)	\$772.00	72%	\$216.16	N/A	
1.536 Mbps (DS1)	\$833.00	72%	\$233.24	N/A	
2 Mbps (Ethernet)	\$1,075.00	72%	\$301.00	N/A	
3 Mbps (Ethernet)	\$1,600.00	72%	\$448.00	N/A	



The rates specified herein do not include applicable taxes, fees, and surcharges.

Service Description	Guide / List		End User Pricing	
	MRC	Discount	MRC	NRC
3.072 Mbps (2xDS1)	\$1,605.00	72%	\$449.40	N/A
4 Mbps (Ethernet)	\$1,775.00	72%	\$497.00	N/A
4.608 Mbps (3xDS1)	\$1,880.00	72%	\$526.40	N/A
6 Mbps (Ethernet)	\$2,050.00	72%	\$574.00	N/A
6.144 Mbps (4xDS1)	\$2,055.00	72%	\$575.40	N/A
7 Mbps (Ethernet)	\$2,200.00	72%	\$616.00	N/A
8 Mbps (Ethernet or Sub-Rate DS3)	\$2,315.00	72%	\$648.20	N/A
10 Mbps (Ethernet or Sub-Rate DS3)	\$2,500.00	72%	\$700.00	N/A
15 Mbps (Ethernet or Sub-Rate DS3)	\$3,176.00	72%	\$889.28	N/A
20 Mbps (Ethernet or Sub-Rate DS3)	\$3,909.00	72%	\$1,094.52	N/A
30 Mbps (Ethernet or Sub-Rate DS3)	\$4,200.00	72%	\$1,176.00	N/A
40 Mbps (Ethernet or Sub-Rate DS3)	\$4,664.00	72%	\$1,305.92	N/A
44.184 Mbps (DS3)	\$4,703.00	72%	\$1,316.84	N/A
50 Mbps (Ethernet or Sub-Rate OC3)	\$5,033.00	72%	\$1,409.24	N/A
80 Mbps (Ethernet or Sub-Rate OC3)	\$7,248.00	72%	\$2,029.44	N/A
100 Mbps (Ethernet or Sub-Rate OC3)	\$8,390.00	72%	\$2,349.20	N/A
150/155 Mbps (Ethernet or OC3)	\$12,750.00	72%	\$3,570.00	N/A
200 Mbps (Ethernet)	\$15,338.00	72%	\$4,294.64	N/A
300 Mbps (Ethernet or Sub-Rate OC12)	\$23,151.00	72%	\$6,482.28	N/A
400 Mbps (Ethernet or Sub-Rate OC12)	\$29,526.00	72%	\$8,267.28	N/A
500 Mbps (Ethernet or Sub-Rate OC12)	\$33,553.00	72%	\$9,394.84	N/A
600 Mbps (Ethernet or Sub-Rate OC12)	\$40,161.00	72%	\$11,245.08	N/A
622.08 Mbps (OC12)	\$41,148.00	72%	\$11,521.44	N/A
800 Mbps (Ethernet)	\$47,914.00	72%	\$13,415.92	N/A
1000 Mbps (Ethernet)	\$52,847.00	72%	\$14,797.16	N/A
Gold Committed Access Rate (EF or Real-Time QoS)				
0 Kbps	\$0.00	72%	\$0.00	N/A
8 Kbps	\$31.00	72%	\$8.68	N/A
16 Kbps	\$31.00	72%	\$8.68	N/A
32 Kbps	\$31.00	72%	\$8.68	N/A
128 Kbps	\$31.00	72%	\$8.68	N/A
256 Kbps	\$31.00	72%	\$8.68	N/A
384 Kbps	\$31.00	72%	\$8.68	N/A
512 Kbps	\$31.00	72%	\$8.68	N/A
768 Kbps	\$31.00	72%	\$8.68	N/A
1,024 Mbps	\$31.00	72%	\$8.68	N/A
1.376 Mbps	\$31.00	72%	\$8.68	N/A
1.536 Mbps	\$31.00	72%	\$8.68	N/A
1.728 Mbps	\$31.00	72%	\$8.68	N/A
2,000 Mbps	\$263.00	72%	\$73.64	N/A
3,000 Mbps	\$263.00	72%	\$73.64	N/A
3,500 Mbps	\$439.00	72%	\$122.92	N/A
4,096 Mbps	\$439.00	72%	\$122.92	N/A
5,000 Mbps	\$702.00	72%	\$196.56	N/A
7,200 Mbps	\$702.00	72%	\$196.56	N/A
9,216 Mbps	\$702.00	72%	\$196.56	N/A
10,000 Mbps	\$1,098.00	72%	\$307.44	N/A
13,488 Mbps	\$1,976.00	72%	\$553.28	N/A
15,360 Mbps	\$1,976.00	72%	\$553.28	N/A
17,808 Mbps	\$1,976.00	72%	\$553.28	N/A
18,432 Mbps	\$1,976.00	72%	\$553.28	N/A
20,000 Mbps	\$1,976.00	72%	\$553.28	N/A
24,576 Mbps	\$2,854.00	72%	\$799.12	N/A
30,000 Mbps	\$2,854.00	72%	\$799.12	N/A
40,000 Mbps	\$3,293.00	72%	\$922.04	N/A
44,992 Mbps	\$3,293.00	72%	\$922.04	N/A
50,000 Mbps	\$5,268.00	72%	\$1,475.04	N/A
72,000 Mbps	\$5,268.00	72%	\$1,475.04	N/A
90,000 Mbps	\$5,268.00	72%	\$1,475.04	N/A
110,500 Mbps	\$9,658.00	72%	\$2,704.24	N/A
139,936 Mbps	\$9,658.00	72%	\$2,704.24	N/A
180,000 Mbps	\$9,658.00	72%	\$2,704.24	N/A
248,800 Mbps	\$14,926.00	72%	\$4,179.28	N/A
450,000 Mbps	\$26,340.00	72%	\$7,375.20	N/A
700,000 Mbps	\$43,022.00	72%	\$12,046.16	N/A
900,000 Mbps	\$52,241.00	72%	\$14,627.48	N/A
Geographic Gateway / Router Diversity				
64 Kbps (DS0)	\$25.00	0%	N/A	\$25.00
128 Kbps (Sub-Rate DS1)	\$50.00	0%	N/A	\$50.00



The rates specified herein do not include applicable taxes, fees, and surcharges.

Service Description	Guide / List		End User Pricing	
	MRC	Discount	MRC	NRC
256 Kbps (Sub-Rate DS1)	\$50.00	0%	N/A	\$50.00
512 Kbps (Sub-Rate DS1)	\$50.00	0%	N/A	\$50.00
1.024 Mbps (Sub-Rate DS1)	\$50.00	0%	N/A	\$50.00
1.536 Mbps (DS1)	\$100.00	0%	N/A	\$100.00
3.072 Mbps (2xDS1)	\$300.00	0%	N/A	\$300.00
4.608 Mbps (3xDS1)	\$300.00	0%	N/A	\$300.00
6.144 Mbps (4xDS1)	\$300.00	0%	N/A	\$300.00
44.184 Mbps (DS3)	\$300.00	0%	N/A	\$300.00
Dynamic Bandwidth				
Dport	\$0.00	N/A	\$0.00	N/A
DCAR	\$0.00	N/A	\$0.00	N/A
Scheduler	\$0.00	N/A	\$0.00	N/A
Multicasting				
Bandwidth Range				
Multicast Tier 0 - 0Kbps-15Kbps	\$0.00	N/A	\$0.00	N/A
Multicast Tier 1 - 16Kbps-511Kbps	\$0.00	N/A	\$0.00	N/A
Multicast Tier 2 - 512Kbps-1.499Mbps	\$0.00	N/A	\$0.00	N/A
Multicast Tier 3 - 1.5Mbps-2.99Mbps	\$0.00	N/A	\$0.00	N/A
Multicast Tier 4 - 3Mbps-5.99Mbps	\$0.00	N/A	\$0.00	N/A
Multicast Tier 5 - 6Mbps-14.99Mbps	\$0.00	N/A	\$0.00	N/A
Multicast Tier 6 - 15Mbps-44.99Mbps	\$0.00	N/A	\$0.00	N/A
Multicast Tier 7 - 45Mbps-99.99Mbps	\$0.00	N/A	\$0.00	N/A
Multicast Tier 8 - 100Mbps-499.99Mbps	\$75,000.00	0%	\$75,000.00	N/A
Multicast Tier 9 - 500Mbps-999.99Mbps	\$150,000.00	0%	\$150,000.00	N/A
Multicast Tier 10 - 1Gbps-4.99Gbps	ICB	ICB	ICB	ICB
Multicast Tier 11 - 5Gbps-9.99Gbps	ICB	ICB	ICB	ICB
Private IP Service Port Only Cross Connect				
200 Mbps	\$500.00	0%	\$500.00	\$500.00
250 Mbps	\$500.00	0%	\$500.00	\$500.00
300 Mbps	\$500.00	0%	\$500.00	\$500.00
350 Mbps	\$500.00	0%	\$500.00	\$500.00
400 Mbps	\$500.00	0%	\$500.00	\$500.00
450 Mbps	\$500.00	0%	\$500.00	\$500.00
500 Mbps	\$500.00	0%	\$500.00	\$500.00
600 Mbps	\$500.00	0%	\$500.00	\$500.00
700 Mbps	\$500.00	0%	\$500.00	\$500.00
800 Mbps	\$500.00	0%	\$500.00	\$500.00
900 Mbps	\$500.00	0%	\$500.00	\$500.00
1000 Mbps	\$500.00	0%	\$500.00	\$500.00
1.5 Gbps	\$500.00	0%	\$500.00	\$500.00
2.0 Gbps	\$500.00	0%	\$500.00	\$500.00
2.5 Gbps	\$500.00	0%	\$500.00	\$500.00
3.0 Gbps	\$500.00	0%	\$500.00	\$500.00
3.5 Gbps	\$500.00	0%	\$500.00	\$500.00
4.0 Gbps	\$500.00	0%	\$500.00	\$500.00
4.5 Gbps	\$500.00	0%	\$500.00	\$500.00
5.0 Gbps	\$500.00	0%	\$500.00	\$500.00
5.5 Gbps	\$500.00	0%	\$500.00	\$500.00
6.0 Gbps	\$500.00	0%	\$500.00	\$500.00
6.5 Gbps	\$500.00	0%	\$500.00	\$500.00
7.0 Gbps	\$500.00	0%	\$500.00	\$500.00
7.5 Gbps	\$500.00	0%	\$500.00	\$500.00
8.0 Gbps	\$500.00	0%	\$500.00	\$500.00
8.5 Gbps	\$500.00	0%	\$500.00	\$500.00
9.0 Gbps	\$500.00	0%	\$500.00	\$500.00
9.5 Gbps	\$500.00	0%	\$500.00	\$500.00
10 Gbps	\$500.00	0%	\$500.00	\$500.00
Ethernet Access Service				
Ethernet Access	ICB	ICB	ICB	ICB
Optional Services***				
*** All Optional Services will be provided pursuant to the Guide.				



**STATEMENT OF WORK (SOW) FOR SIP TRUNKING SERVICES IMPLEMENTATION
TO MASTER AGREEMENT BETWEEN THE CITY OF HOUSTON AND VERIZON**

Customer: City of Houston	Quote: N/A
Contract ID: (TBD)	Date:

**Verizon Business Network Services Inc., on behalf of
MCI Communications Services, Inc. dba Verizon
Business Services**

**One Verizon Way
Basking Ridge, N.J. 07920**

**CUSTOMER'S LEGAL NAME: City of Houston
Address: 901 Bagby St., Houston, Texas 77002**

By: _____
Name: Anthony Recine
Title: Vice President
Date: _____

By: _____
Name: Charles T. Thompson
Title: Chief Information Officer
Date: _____

This Statement of Work ("SOW") is issued under and is a part of the Master Agreement ("Agreement"), entered into between **MCI Communications Services, Inc. dba Verizon Business Services**. ("Verizon"), and the **City of Houston** ("Customer"), Contract ID number as shown above.

Description of Project

Introduction

The City ("The City") has selected Verizon to provide a Session Initiated Protocol (SIP) Trunk and Transport to converge voice and data for the City. The trunks will connect to Controllers at the locations described in this Statement of Work ("SOW"), all of which are located in the metropolitan area of Houston, Texas.

The City has approximately 15,000 telephones in over 400 locations to support staff operations, meeting rooms and conference rooms. Current service is through a variety of providers with traditional POTS (Plain Old Telephone Service) and PRI (Primary Rate Interface) service. Long distance codes are used for calls outside of the local area. The City is in the process of expanding and upgrading a VoIP (Voice over IP) phone system to include all users, except the three locations that comprise the Houston Airport System. The new VoIP system will have capacity for basic telephony features such as inbound and outbound dialing, voicemail, call forwarding/transfer, caller ID/caller hold and conferencing capabilities.

The call types for the City are defined as follows:

- Local calls
- Long distance calls
- Inbound calls
- Emergency calls – E911 to local PSAP (public-safety answering point)
- Emergency notification of situations/events to all phones
- 311 Citizen Help

General Requirements

Verizon has been selected to provide the services as outlined with the SOW:

In support of the City's mission and in an effort to maintain the highest quality services for its citizens, the City plans to implement Session Initiated Protocol (SIP) Trunk and Transport system with the following features and to provide services to meet the following minimum requirements:

- Provide SIP Trunk and Transport to converge voice and data networks with the City.
- Provide SIP services for all City locations through two physical locations detailed below:
 - 1301 Fannin, 77002
 - 5150 Westway Park Blvd., 77041
- Provide a trunk to include, but not be limited to the following technical requirements:
 - Emergency 911 Calling
 - E911 (Enhanced 911)
 - Provide 10 digits inbound
 - Support for T.37 Fax (provide G.711 for faxing if T.38 not supported)
 - Allow forwarding of Alien telephone numbers (for mobility purposes)
 - Allow for blocks of DIDs (Direct Inward Dialing) to be terminated on different SBCs (Session Border Controls), and to allow the City to have DIDs for the Call Center to terminate on its own set of SBCs, and to maintain existing operational independence between the clusters
 - Provide calling-party name and number (Caller ID)
 - Domestic and international calling
 - PS/ALI services (Private Switch & Automatic Location Identification)
 - 900/976 blocking
 - T.38 protocol
 - X11 Services (311, 511, 911, etc.)
 - Operator Services
 - G.711 and G.729 protocols
 - Pass telephone numbers from all City blocks out of all provider SBCs (for failover purposes)
 - Support load balancing of all lines and each shall be capable of supporting at a minimum 50% of the total inbound/outbound call traffic at any given time.
 - Allow for local and long distance calls on the same trunk.
 - Support local number portability.
 - Provide web-based traffic, monitoring and reporting to include but not be limited to historic usage, traffic analysis, and trunking analysis.
 - Secure access circuit provided over a private connection and must be engineered for voice Quality of Service (QOS).
 - Provide service to support the capability to fully back each location in case of a failure for inbound and outbound dialing.
 - Ability to scale the number of IP trunks required to allow the City to increase or decrease trunks on a monthly basis, determined by seasonal needs.
 - All trunking will be registered with Telecommunication Service Priority (TSP) program through the FCC (Federal Communications Commission), and Department of Homeland Security.
- Service and Support Requirements
 - Reporting and auditing requirements;
 - Service Level Agreements (SLA's), including response and repair times, and service level objectives for emergency services;
 - Performance measures;
 - Call quality and completion guarantees; and
 - Support for multiple physical connection options.
 - Sending electronic bills through an electronic Telecom Expense Management Software (TEMS) system already set up with the City, and accepts automated payments (or) provides good faith effort.
 - The platform will interface with the Verizon Enterprise Center portal to receive a raw data file with required billing information.
 - Payments will continued to be process by the City's Accounts Payable group until the Telesoft or equivalent TEMS platform can support automated payments using Verizon's EDI services.

Solution Overview

The following provides an overview of SIP Trunking solution:

- MPLS Transport
 - Corporate
 - (2) 100 Mbps GigE Access
 - (2) 80 Mbps PIP Port with 50 Mbps Gold CAR (QoS)
 - Contact Centers
 - (2) 30 Mbps FastE Access
 - (2) 30 Mbps PIP Port with 20 Mbps Gold CAR (QoS)
- SIP Trunking
 - Trunking Type: IP Trunking – Local and LD Tiered with BEST
- Trunking Ratio: 20:1
- Total Number of Concurrent Calls
 - Corporate
 - Per Site: 660 Concurrent Calls with capacity to support 1,320
 - Contact Centers
 - Per Site: 250 Concurrent Calls with capacity to support 500
- Codec: G.729a (38 Kbps/Compressed Voice over Ethernet)
- Load Balancing via Round Robin

Solution Assumptions

The following provides an overview of solution assumptions:

- Total Number of Sites: 2
- Total Number of Networked Sites: 400
- Total number of DIDs: 42,000 (21,000 per location)
- Total number of Phones/Users: 19,000
- Inbound/Outbound Traffic: 75% Inbound/25% Outbound
- Local and LD Calls: Assuming 75% Local/25% LD
- Estimated Monthly Minutes of LD Usage: 500,000
- Customer-Provided Hardware
 - Access Router: (TBD)
 - SBC: Cisco CUBE ASR platform IOS Version (TBD)
 - IP PBX: Cisco CUCM Rel. 9.1 (Dual Cluster)

Solution Description

In-bound call flows are as follows; when a SIP enabled DID is dialed, it passes over the PSTN to a Verizon Point of Presents local to the call and is forwarded to the VoIP platform for forwarding and call conditioning. The SIP DID handling is a condition of where the DID is registered and associate and is passed to that Verizon Session Border controller. It is then forwarded to the City's CUBE of destination and handed off to the Intelligent PBX. At that point the call flow and conditioning is a function of the IP PBX, (in this case the CUCM).

Out-bound calls are handled first by the City's IP-PBX which makes the decision as to what Cisco IP gateway to send the call out of. If it is a SIP call the CUBE will be the gateway of choice which will send the call to its peered Verizon SBC. The DID is authenticated as a "City" SIP DID and handled and forwarded to the PSTN gateway and to the dialed number on the Public Switched Telephone Network.

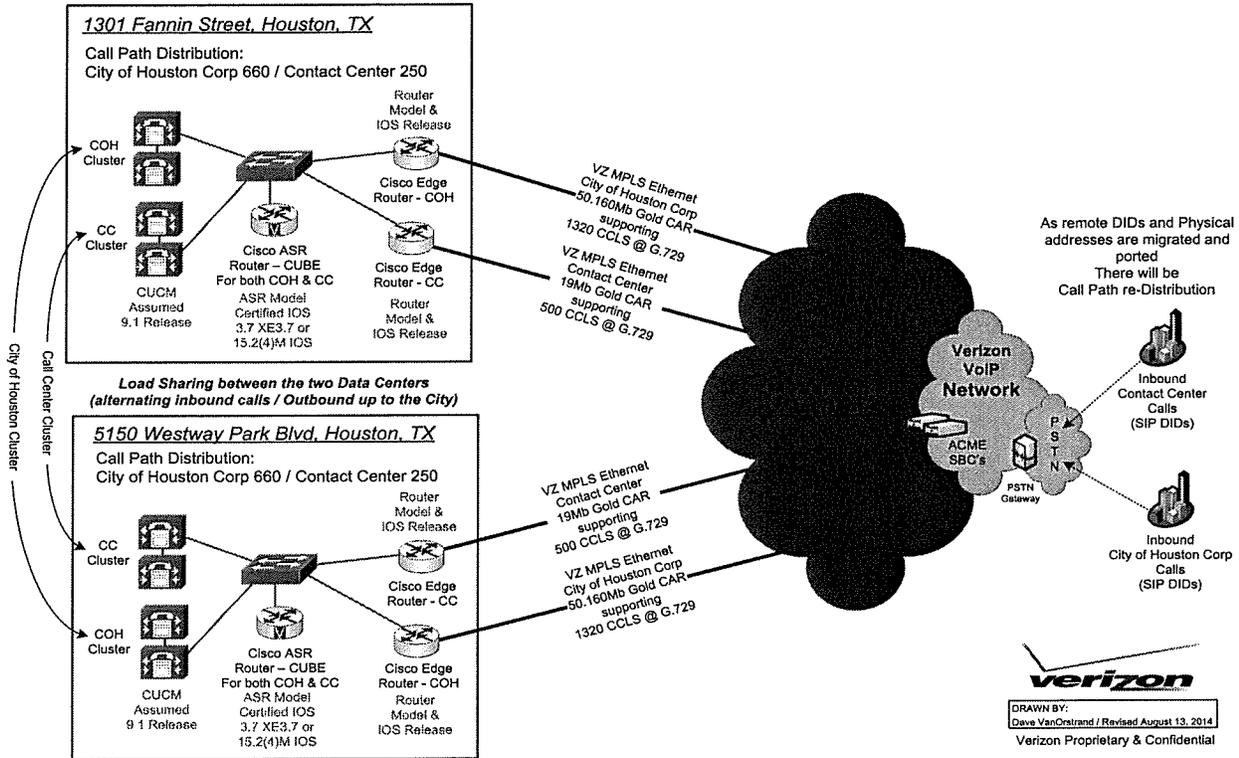
The specific devices, switched facilities, Session Border Controllers and VoIP platform Servers that become part of the City's Enterprise are dependent upon available bandwidth, network capacity and voice quality parameter at the time of provisioning.

City of Houston -Verizon IP Trunking Design Diagram

500 Call Paths for Contact Center & 1320 Call Paths for City of Houston Corporate.

BEST - Burstable Enterprise Shared Trunking will be used with a Load Sharing / (Round Robin) Design.

Dual Enterprises - City of Houston Corp as one & The Contact Center as the other. Call Path distribution is shown below per site.



High-Level Overview of Verizon's Solution

The connection consists of, in its purest sense, a peering/connection between Verizon Session Border Controllers and The City's Session border Controllers (in this case Cisco Unified Border Elements or CUBEs), over a dedicated MPLS connection using UDP transport for the SIP signaling and RTP for the voice packets.

Verizon Session Border Controllers, (SBCs), are ACME SBCs, designed in High Available pairs providing a failover capability as part of the service out of facilities across the United States on the Verizon network.

The Verizon connection supports Geo-Diverse Failover to the premises, Load Sharing and Redundancy to The City's Cisco CUBEs. The design being proposed is an H/A pairs of ACME's in the Verizon Network, load-sharing to two (2) geo-diverse City locations at 1301 Fannin and 5150 Westway Park Blvd.

The Verizon connection supports Geo-Diverse Failover, Load Sharing and Redundancy to The City's Cisco CUBEs. The design being proposed is an H/A pairs of ACME's in the Verizon Network, load-sharing to two (2) geo-diverse City locations at 1301 Fannin and 5150 Westway Park Blvd.

The Verizon network is a highly sophisticated network infrastructure with nearly fifty redundant network gateways to the PSTN and dozens of application servers, network, and redirect servers as the back end intelligence. Verizon VoIP has hundreds of thousands of network SBC ports available today with continuous expansion as part of Verizon's capacity planning and monitoring.

Verizon supports both in-bound and out-bound calling based on DIDs ported to the service. In-bound calls are forwarded to the designated City CUBE to be handled by the SIP gateway and hand the call off to the IP enabled PBX, (CUCM). Outbound calls are forwarded to either of the City's CUBE of choice, (acting as a SIP gateway to the CUCM), and forwarded to the Verizon SBC, where it is authenticated and forwarded to a Verizon PSTN gateway.

The dedicated access, (Verizon MPLS) is sized with a "voice priority queue", providing expedited forwarding of voice packets, specific to the number of "total" concurrent calls being utilized by the City. Even though the design is a load-share solution, with fifty percent of all calls being sent between to the two (2) City CUBEs,

Verizon builds in the capacity to maintain expected voice quality for the situation that communications to one of the City's CUBEs is interrupted.

Besides providing and supporting the Geo Diverse redundancy and High available Session Border Controllers, Verizon can also support and provide redundant access, DID forwarding, either on a specific DID or at a site level forwarding to any other DID and Geo-Diversity in the Verizon network itself.

Project Scope

This project plan presents a generalization of Verizon's processes and procedures covering the implementation of an IP Trunking Solution for the City.

This section of the project scope will detail an overview of the products and services decided upon by the City. These details are being developed as those decisions are being made. Changes at this stage are expected. The Services presently under consideration are:

- Ethernet Access
- Private IP
- IP Trunking

Implementation of the Verizon IP Trunking will be performed through the successful achievement of milestones. These milestones are presented in this document.

Scope of Work

The City SIP Trunking project will begin pending agreement of the contract. Verizon assumes that the City will agree to sign the contract pending review and satisfactory agreement by Verizon and the City whereby full implementation can commence upon contract signature. Verizon and the City will jointly participate in the Design Phase in which an acceptable post contract signature network design will be developed and agreed upon. Upon completion of the Design Phase, the implementation will begin with ordering of circuits for the data portion of the network. Upon final acceptance of the network by the City, the project will be deemed complete.

Deliverables

- Project Implementation Tracking Spreadsheet
- Implementation Project Plan
- Open Action Item Listing
- Implementation of Private IP Service at two sites
- Implementation of IP trunking at two sites designated by The City
- Porting or transition of approximately 42,000 DIDs

Constraints and Assumptions

Verizon Project Assumptions

Below are the assumptions for the project:

- All order information received from the City is complete and accurate IP Termination
- The City will provide all relevant data necessary to facilitate design creation. At minimum The City must provide CPE configuration to include vendor, product, release level and current or future access design.
- The City will provide all relevant data necessary to support testing and turn up of IP termination to include resources for CPE side configuration.
- The City will acquire or confirm CPE vendor agreement to support CPE to Verizon IP Trunking design when utilizing IP Terms and is responsible for all tickets required for CPE side issues.
- In-flight design changes may result in re-start of order interval
- The City must order and use Verizon Access for delivery of the IP TRUNKING solution

- The standard order interval starts once an accurate order is accepted by Verizon Order Entry
- For local number porting back-out procedures are not supported and the City and Verizon will partner to develop proper Risk and Mitigation in event incorrect or missing information is provided by the City
- Network Maintenance Activity may impact roll-out schedule
- Full planned network maintenance schedule to be documented during project schedule development
- Preferred method is to avoid work within 4 hours of a maintenance window.
- Changes in order information may restart and certainly delay the lead-time for the implementation of the changed item

Implementation Time Frame

Standard IP Trunking Intervals are used to determine the project schedule. Current intervals for standard services are 45 to 90 business days. Actual schedule will be developed after contract execution.

*Interval begins once a clean order is submitted to Verizon Order Entry.

Expedites are based on individual case by case basis. Expedite requested dates are not guaranteed and are best effort only.

Transition for Web Portal, Reporting and Invoicing

The Verizon Enterprise Center (VEC) is the one stop for accessing critical reports and information 24x7x365. Access to important business functions is streamlined into task-oriented groupings: Orders, Invoices, Repairs, Network Tools, and Resources. The portal provides access to network management, service ordering, invoice review and pay, network event monitoring, report trouble, performance reporting, and customer service contacts. Verizon encourages customers to use the VEC for a variety of tasks and functions for more efficiency and control at the customer's fingertips. Our approach to migrating the City is to make the portal available and provide the necessary training to get you up and running as quickly as possible. During the Data Gathering/Design phase an exact plan will be mutually agreed upon.

Network Manager Access

The City's has the option of using Network Manager to maintain their VoIP Inbound Service. Network Manager is a powerful web-based Verizon Enterprise Center application that gives VoIP Inbound customers a view of their toll-free network routing data as well as the capability to make quick changes to routing plans. The City can examine current routing plans and customize their features on a near real-time basis. Changes to inbound numbers or activation of new routing plans are effective within minutes of submitting the request.

Network Manager is also a Windows GUI application complete with color displays, easy-to-read icons, pop-up windows, and a convenient toolbar. So it's quick and easy to view entire network configurations, make changes, or order new features. Network Manager provides near real-time traffic management by providing definition and control of origination, routing, and termination features.

Network Manager provides near real-time traffic management for both basic and advanced toll-free services. This is accomplished by providing definition and control of origination, routing, and termination features. Dynamically manage and configure inbound network resources.

- Provides a hierarchical view of network and routing options.
- Offers geographical routing, scheduled routing, load balancing, contingency planning, and call blocking.
- Construct, edit, and delete plans for greater routing flexibility.
- Implement alternate routing plans in response to changing requirements.
- Modify percent allocation and terminations within minutes.
- Track your order changes

VEC Customer Support and Training

Customer Support

Contact Customer Support for any Verizon Enterprise Center issues. They can assist you with product and general platform questions, errors, and password resets.

Training

Go to <http://customertraining.verizonbusiness.com> to enroll in training and/or download user and reference guides.

Risk Management Plan

Below are the known risks that may affect the execution and schedule of the project and which may have a direct impact to missing any agreed upon installation SLA intervals.

General Risk/Risk Mitigation

RISK: Inaccurate Addresses/Phone Numbers

LEC will reject orders that are submitted with inaccurate or mismatched addresses and/or site phone numbers. An address is considered a mismatch if it does not match the physical address recorded in the 911 database as used by the LEC (US only) inability to validate the address information. This will delay the order process for as long as it takes to obtain the correct information plus the time to reprocess the order. The City will be responsible to contact each location to verify order information. Additionally, the City will confirm to Verizon that the sites have been notified and made aware of the project. Order interval will restart from the beginning when correct information is provided to Verizon.

Risk Mitigation Strategy

The City will submit orders with address information as contained in their most current database. Verification should include confirmation of address as recorded in the 911 database (US) The VoIP Inbound Centralized Order Management (VICOM) will contact the City's POC to advise of any address discrepancies.

RISK: Inaccurate LCON Contacts

LEC will reject orders if the site contact and/or contact phone number is no longer valid. This will delay the order process for as long as it takes to get the correct information plus the time to reprocess the order. Order interval will restart from the beginning when the correct information is provided to Verizon.

Risk Mitigation Strategy

The City will submit orders with contact information as contained in their most current database. The City will notify all locations to advise LCON and verify LCON phone numbers before submitting orders to Verizon whenever possible.

RISK: Demarcation May Not Be Extended to Correct Location

Extended Demarcation information must, whenever possible, be correct when the new order is sent from the City's POC to VICOM. If LEC fails to extend the demarcation and a demarcation extension is required, depending on which LEC is working the order, they may tack on up to 10 business days to re-dispatch. LEC may also refuse to dispatch and the City will need to contract a vendor to complete this work or extend it itself. If the City is unable to provide specific demarcation termination information, the circuit will be delivered to the Minimum Point of Entry (MPOE) and the City will be responsible for contracting with an outside vendor to extend the demarcation or completing the extension themselves. (See Attachment I below, for further information regarding LEC demarcation and extensions.)

Risk Mitigation Strategy

The IM or Customer Care Center representative will notify the City's POC of LEC tentative dispatch date. Verizon Operations Circuit Delivery Project Manager will closely coordinate to ensure that the LCON is on site the day the loop is delivered so that the circuit is demarc'd in the correct location.

RISK: The Local Contacts (LCON) Are Not On-site and Do Not Know About Pending Order and LEC Gets Turned Away

If the Local Contact will be out of the office, an alternate contact must be designated.

LEC field technicians are not obligated to call in advance the day they are scheduled to dispatch. Time to re-dispatch LEC could take 5-10 business days domestically, and indefinitely on international orders!

Risk Mitigation Strategy

The City should call each LCON prior to loop delivery and advise them of the loop delivery date. The Verizon Operations Circuit Delivery Project Manager, will also contact the LCON when authorized by the City. The loop delivery date can be found in the circuit order tracking spreadsheet distributed from the Verizon Project Team. The Verizon Operations Circuit Delivery Project Manager will also contact the LCONs prior to the scheduled LEC loop delivery date to assist in preventing LEC from being turned away. The pager number of the IM or Customer Care Center representative or Project Manager for Operations and LEC Issues will be provided on the access service requests sent to the LECs. The LEC technician or LCON may page the IM or Customer Care Center representatives or project managers to request assistance in preventing the LEC technician from abandoning the local loop installation.

RISK: There May Be a LEC Facility Issue Preventing Timely Delivery of Circuits from LEC

There is always the risk that the LEC loop delivery commitment date comes back with an exceptionally long lead-time (in excess of 20 business days) due to facilities issues (e.g., failed cable, lack of cable pairs, lack of central office capacity, etc.). All capacity issues will be reported to Verizon and forwarded to the City and options will be discussed to determine if a work around can be implemented. Since capacity cannot be reserved, it will not be secured until a firm order is placed.

Risk Mitigation Strategy

To minimize any LEC capacity issues, Verizon requests that the City place orders for each location as far in advance as possible. After the orders have been submitted, if LEC capacity causes an order to be put on hold, Verizon will report the situation to the City's POC and will work cooperatively to resolve the situation.

Risk: Priority 1 tickets take precedence over an install dispatch and may affect the due date requested, or completion on scheduled due date.

Risk Mitigation Strategy

PC or PM will contact the respective Verizon ORC Manager to see if other resources are available.

RISK: There May Be a Lack of Verizon Capacity to Engineer and Implement Any Given Circuit

Risk Mitigation Strategy

To minimize any Verizon capacity issues, Verizon requests that the City place orders for each location as far in advance as possible. The Verizon Sales Engineer (SE) will work with Verizon's capacity planning to verify existing capacity and arrange for capacity expansion if necessary. In addition, if location information can be provided by the City, in advance of the actual order submission, the Verizon SE will complete an inquiry to identify any potential situations where facilities will not be available. They will provide an overview of major facility capacity issues to be taken into consideration until specific site information is provided to Verizon.

RISK: Faulty or damaged CPE

Risk Mitigation Strategy

Verizon technicians have a field failure process if any CPE does not work at time of deployment.

Optional Risk Mitigation Strategy

The City could order spare phones on the original order to mitigate this risk.

RISK: PIP Service cannot be activated at scheduled activation time

To activate PIP services, specific PIP circuit parameter information shall be needed by Verizon. If this information is missing or inaccurate, the PIP circuit activation will be delayed until the information is received and /or is made correct.

Risk Mitigation Strategy

Prior to activation, Verizon will generate a configlet to be used as a "Guide" for the City router configuration. This Guide should be reviewed by the City and used to establish the specifics for setup configuration of the PIP circuit. Any parameter mismatches or modifications should be immediately communicated to the IM or Customer Care Center representative.

RISK: PIP Service Cannot Be Tested Until the Time of [the City]'s Conversion

Risk Mitigation Strategy

It is understood that the PIP service cannot be tested until the scheduled conversion. If trouble is found, the IM or Customer Care Center representative will open a trouble ticket with the appropriate LEC. The trouble resolution process will be managed by the IM or Customer Care Center representative.

VoIP – Risk Management

RISK: LSR being rejected by carrier due to incomplete or inaccurate information as pertaining to existing CSR

Risk Mitigation Strategy

Verizon will successfully retrieve CSRs based on accurate BTN and provider information as provided by the City. Verizon cannot work with the LECs without accurate BTN information. Once CSR data is retrieved, the City should thoroughly review and confirm disposition of each TN. the City should researching any missing TNs within their own records.

RISK: Incomplete or inaccurate information could potentially cause a delay for install.

Risk Mitigation Strategy

Verizon conducts an Order Verification Call to review order information before order submission.

RISK: Changes made to the order during implementation phase.

Risk Mitigation Strategy

After the Order Verification Call has been completed, Verizon will evaluate the change requested and advise the City project lead if this affects the overall completion date of the order and/or project.

RISK: the City postponement or cancelation of LNP within 96 hours. Verizon cannot guarantee that the LEC order can be cancelled and/or rescheduled without the potential risk of having an out of service condition.

Risk Mitigation Strategy

In the event of a postponement or cancelation of LNP, Verizon will implement a Code Red procedure that provides notification to the LEC. To minimize risk, 96 hours of notification must be provided, along with a rescheduling date, for any LNP changes from the City.

RISK: Unplanned future growth or overage exceeding allotted capacity (usage) of the IP TRUNKING network facilities may result in an outage. Example: Company acquisitions or Mergers, extended site outages causing traffic spike beyond customer approved capacity request.

Risk Mitigation Strategy

Proactive planning and notification to Verizon via formal capacity request for all future growth and expansion.

Project Communication Plan

The Project Communication Plan, as detailed below, highlights the following:

Information Flow

During this project there will be several documents passed between Verizon and the City, communicating updates to the team on weekly progress. The Project Implementation Manager will be the central point of contact for the communications to the project team.

The standard documentation is listed below:



Project Plan – The purpose of this document is to provide a comprehensive plan that outlines required processes and timeframes for implementing Private IP services for the City. The sequence and time frames are proposed by Verizon based upon investigations between the Verizon Account Team and the City project team. The Project Implementation Manager owns the Project Plan and has the responsibility to update and communicate all updates to the team members.

The City's Order Tracking Spreadsheet – This document will contain all necessary information for Verizon to order requested services. It will show the location name, (customize to your tracker) The Verizon Project Implementation Manager owns the Order Tracking Spreadsheet and is responsible for its update and dissemination to the team and all parties of concern.

Action Items (OAI) and Meeting Minutes – The Project Manager is responsible for tracking all project open action items and meeting minutes. This information will be sent to the entire project team in Email format to include the following:

- OAI #
- Task
- Owner
- Critical Resolution Date
- Status: OPEN, CLOSED, LATE
- Comments

Trouble Handling Document – The Verizon Service Support Manual contains information pertinent to trouble handling procedures. The Account Team will provide the City with the proper Service Center numbers to dial for reporting trouble tickets.

Project Review Schedule

Conference calls are conducted with the City and Verizon to review status of orders, outstanding issues, and concerns. The project team will determine the frequency of the calls.

Weekly Conference Calls

The following are regularly scheduled and mandatory calls:

Customer Conference Call

- Call Leader: VoIP Project Manager
- Attendees Required
- Verizon Business Team, City Team
- Conference Bridge Information
- Weekly
- Time
- Bridge
- Pass

Purpose. This customer call is to review open/closed action items; resolve any internal or external issues; review pending week install reports and open discussion.

Progress Reporting

Progression of the order will be reported via the City's Master Tracking Spreadsheet. If a circuit is at risk of missing the scheduled completion date, a jeopardy flag will be placed in the Project Implementation Tracking Spreadsheet for that particular site/order. An order will be flagged as a jeopardy whenever any of the order tracking milestones (order sent for order entry into Verizon system, ASR sent to LEC, FOC received, LEC loop delivered, etc.) dates are missed.

Master Order Tracking Spreadsheet

The VoIP Project Manager will update the City VoIP Tracking Spreadsheet.xls file and will distribute this project file each week by close of business the day prior to the scheduled meeting.

The Site List Scheduler Tab of this spreadsheet details the schedule of pending and activated sites.

- Recurrence: Weekly updates
- Owner: PM Name, VoIP Project Manager
- Distribution: City Team, Verizon Team
- Open Action Items (OAI)

The VoIP Project Manager will maintain the open/closed action item list and distribute as part of the VoIP Tracking Spreadsheet. The PM will utilize this format to record, monitor, evaluate, and manage project team activities. All items have a critical due date and a status of OPEN or CLOSED. An archive section will be used for all closed action items. Please refer to the Open/Closed action item tab of the Master VoIP Tracking Spreadsheet. Each owner of the issue will be solely responsible for completing or resolving the action item. The owner will report status back to PM and team.

Jeopardy Situations

Jeopardies will be categorized as Order Jeopardies.

Order Jeopardies

Order Jeopardies will be reported via the Project Implementation Tracking Spreadsheet updated by the Project Implementation Manager. A jeopardy status will be assigned to an order which is affected by anything which may jeopardize the timely delivery of the service including site not ready, demarcation installed in wrong location, circuit reconfiguration, etc.

System Maintenance Notifications

Periodically, system maintenance windows, both internal to Verizon or by the City may impact scheduling or conducting activations. The City will be notified of all such maintenance windows as soon as the Implementation Team is notified. Notification will be via e-mail message to the entire project team.

Implementation Escalations

Point of Contact

The Project Manager is the point of contact on all implementation issues. The PM will escalate as necessary and provide the customer with current information. The PM will also notify the account team of any escalation.

Cutover Completion Notices

Verizon Cutover Status – Owner: PM Name, Project Manager

*Dependent upon Project Requirements

The Project Manager will send out a Verizon Cutover Status email to the account team and/or customer detailing the project site, cutover date, and summary of the conversion.

Verizon Completion Letter – Owner: Project Consultant

The Project Consultant will complete the order and this will generate a completion letter to the customer detailing the order specifications and trouble reporting instructions.

Roles and Responsibilities

This section of the Project Plan details the roles and responsibilities of the City and Verizon project teams.

City/Verizon Implementation Team

The successful, overall delivery of this entire project will require the participation of combined teams consisting of the City and Verizon personnel. The following descriptions will give the team an understanding of how all members will work together.



Management Teams

Management teams represent the functional management for the City and Verizon. Each management team is responsible for providing the required resources to complete the project.

Implementation Teams

In order to successfully implement data services in an efficient manner, a matrix managed implementation team environment has been established. These implementation teams will include team members from the functional organizations from the City and Verizon. These teams include:

- Design Team
- Circuit Order Team
- Circuit Delivery Team
- Circuit Activation Team
- Change Management Team
- Billing Team

Each of these teams is described below.

Design Team

The Design Team is comprised of the City and the Verizon Sales Engineer and will be responsible for all elements of the network design. These responsibilities include collecting design requirements, creating the design, receiving required approvals within the City on the final design, providing pricing for the City purchase orders, providing design scalability and technical, and design support.

Circuit Order Team

The Circuit Order Team consists of the City designees and Verizon Project Implementation Manager (IM) or Customer Care Center representative. The Circuit Order Team will be led by the IM or Customer Care Center representative. The City's designees will forward complete orders to the IM or Customer Care Center representative. The IM or Customer Care Center representative will verify the order information and, if there are any questions regarding the order, the IM or Customer Care Center representative will contact the appropriate City team member to resolve. If there are no initial issues regarding the order, the IM or Customer Care Center representative will submit the order to be entered into Verizon's systems for provisioning. Should any address or LCON issues occur with an order, the IM or Customer Care Center representative will be notified and will forward that information to the City's POC. Once the issue is resolved, the IM or Customer Care Center representative will have the order entered into the Verizon order systems.

Circuit Delivery Team

The Circuit Delivery Team is comprised of Verizon Project IM or Customer Care Center representative and the City's designees. The Circuit Delivery Team is responsible for ensuring that circuits are delivered on time once they have been entered into Verizon's systems. The team will be led by the IM or Customer Care Center representative. The IM or Customer Care Center representative will track the order until the circuit is ready to schedule for activation. IM or Customer Care Center representative will again verify that circuits are ready for activation. The status of each order will be provided via the Project Implementation Tracking Spreadsheet provided by the IM or Customer Care Center representative. Should any issue arise regarding circuit delivery, the IM or Customer Care Center representative will work with the City to ensure they are aware of the issue so the issue may be resolved promptly.

Circuit Activation Team

The Circuit Activation Team is comprised of the Verizon Project Implementation Manager (IM) or Customer Care Center representative. The City, and equipment vendors. The Circuit Activation Team is responsible for activating circuits. The IM or Customer Care Center representative will lead the team. The IM or Customer Care Center representative will notify the City's POC that a circuit is ready to schedule for activation via e-mail. The City's POC will notify the City when circuits are ready to schedule for activation. The City's POC will provide the IM or Customer Care Center representative with the requested activation schedule at least 10 business days prior to the requested activation date by responding to email confirmation. The IM or Customer Care Center representative will coordinate final testing on the circuit 48 hours prior to activation to ensure the circuit is ready.



If the circuit fails testing, the Verizon activator will notify the IM or Customer Care Center representative. The IM or Customer Care Center representative will notify the City's POC. Whenever Verizon detects an issue, the IM or Customer Care Center representative will work with the appropriate Verizon departments as required, to resolve all issues preventing circuit activation.

Any supplemental orders will be worked by the IM or Customer Care Center representative. Once all issues are resolved, the activator will advise the City's POC who will then notify all necessary City personnel.

Change Management Team

The Change Management Team is comprised of the Verizon Sales Engineer, the City's POC and all Verizon functional project team leads. The Change Management Team will be responsible for reviewing all project change requests from the City and determine how the change will impact the project. Based on the impact of each requested change, the Change Management Team will work in conjunction with the City to determine if the change is still desired.

Billing Team

The Billing Team will consist of a billing specialist from the City and a Verizon Service Manager (SM). Once a circuit has been completed, the SM will consult with the Circuit Activation Team to determine when billing began and what credits are warranted.

Verizon Roles and Responsibilities

Specific roles and responsibilities for team members appear below.

All work other than the Project Manager will be performed remotely. The Project Manager will provide services for The City at 611 Walker, Houston, TX 77002.

Project Manager

Responsibilities

The Project Manager from Virtuo Group or subcontractor is responsible for the successful execution of the implementation project. The Project Manager is the primary point of contact for performing overall project management services for the implementation of the client services.

- Manage all client transition project management activities including resources
- Manage the planning, scheduling, coordinating, monitoring, reporting, and control of projects
- Facilitates site survey/readiness activities in support of transition
- Facilitates implementation/transition pre-planning workshops.
- Develop Implementation Plan.
- Work with the Director to ensure business needs are met
- Manage central resources for the project teams
- Develop relationships with appropriate work groups within Verizon to facilitate timely solutions to any project issues
- Escalate any critical issues.
- Develop effective corrective actions to resolve issues
- Ensure a clean and clear hand-over at the close of each project
- Conducts weekly project status meetings, tracks open items and risks, creates risk mitigation plans

Term

Project Management Services will be provided for a period of three (3) months.

Stakeholders

- VZ
 - Client Partner
 - Solutions Architect
 - UCC Emerging Technology Consultant
 - UCC Solutions Architect
 - Solution Delivery Architect



- Design Team
- Circuit Order Team
- Circuit Delivery Team
- Circuit Activation Team
- Change Management Team
- Billing Team
- City of Houston
 - Project Manager
 - IT Support

Client Partner

The Client Partner is responsible for directing Account Team resources to provide the optimum level of service to the City. Their responsibilities include:

- Maintaining overall relationship between the City and Verizon
- Acquisition of all account team resources necessary for completing pre-order implementation tasks – see contact list of resources required
- Facilitates communication between the City and Verizon
- Participating in evaluation of network topology, diversity, and connectivity issues
- Providing the City with pricing information
- Maintaining overall responsibility for sales, support, and operations
- Negotiates and disseminates contractual information

Solution Architect (SA)

The Solution Architect is responsible for:

- Providing design input and recommendations to the City based on their analysis of the City's network design
- Providing pricing and proposals
- Conducting technical presentations and briefings
- Acting as liaison to Verizon engineering and product management organizations.
- Providing information related to telecommunication products, services, and issues
- Ongoing consultation related to implementation of new services
- Ongoing support for existing services

Verizon Implementation Manager (IM) or Customer Care

The Implementation Manager is responsible for:

- Receiving orders from the City
- Verifying orders are accurate and complete
- Notifying the Director or City project lead if orders are not accurate or complete.
- Submitting orders for order entry.
- Assisting the City in resolution of any local contact issues, as needed.
- Updating the Project Implementation Tracking Spreadsheet and providing status reports to the City
- Acting as the point of contact for the City and Verizon internal organizations in order to ensure a smooth implementation.
- Assists the City in the resolution of any extended demarcation issues, as needed.
- Verifying circuits are ready for activation prior to the scheduled activation time

- Oversees activations with Verizon, the City and their associated vendors.
- Providing activation status reports within 24 hours of scheduled activations.
- Hosting conference calls and meetings as required.
- Acting as point of contact for any failure after implementation issues develop, should they occur 24 hours after the City has accepted the circuit.

Circuit Delivery Coordinator

For this project, these responsibilities will be coordinated by the IM or Customer Care Center representative.

- Notifies the LCON of impending LEC delivery.
- Determines if there are security issues that need to be considered.
- Ensures LEC delivers access loops on time and escalates if late.
- Ensures Verizon operations complete an order as soon as possible upon LEC delivery.
- Will accept calls from LCONs or LECs to coordinate the City, and LEC personnel so that LEC can successfully install the circuit at the correct demarcation during the first dispatch.

Verizon Services Manager (SM, Billing Specialist)

The Verizon Billing Specialist is responsible for:

- Assisting the City in setting up billing structure.
- Resolving any billing issues.
- Providing tracking and status reports for all open issues related to billing.
- Developing Account Team Service Plans quarterly.
- Providing initial inventory.
- Delivering SCA Standard Reporting Packages.
- First Invoice Reviews with the City.
- Scheduling the City training on certain Verizon tools.
- Monitoring contract commitments.

City Responsibilities

To meet the estimated time frames and successfully execute the project plan, the following are the responsibilities of the City:

- Define project requirements including complete project size and timeline.
- The City may provide site survey information prior to order submission.
- Provide complete and accurate order information.
- Ensure that all local contacts/alternate contacts are aware of the project and are aware of pending LEC delivery date.
- Ensure that demarcation locations are specifically located and tagged.
- Ensure that the local contacts and alternate contacts are aware of demarcation locations and do not accept local loops demarcated at any other location.
- Ensure any changes in local contacts and alternate contacts are communicated to Verizon.
- Ensure that sufficient internal wiring and conduit is available at each site.
- Provide access to site facilities for both LECs and vendors.

- Attend service activation calls, as needed.
- Advise Verizon of acceptance of services installed at each site.
- To the extent the City's VoIP Service includes the provision of Verizon's Local voice service and the City implements PS/ALI, the City will execute Verizon's Letter of Agreement ("LOA") that lists affected telephone numbers (via range, if applicable) and the attendant street addresses. Verizon will use the LOA to notify the appropriate Incumbent Local Exchange Carrier (ILEC) that the City, not Verizon, is now responsible for building, loading, and maintaining the location-specific ALI database for the call CPNs (calling party numbers) associated with the BTNs.
- The City may not utilize auto-dialers or any similar type of device in connection with any VoIP Service, unless the Director and Verizon mutually agree otherwise in a written amendment to the Agreement.
- The City is responsible for obtaining, installing, configuring and maintaining all equipment (including, but not limited to, SIP Phones, gateways and firewalls), software, wiring, power sources, telephone connections and/or communications services necessary for inter-connection with Verizon's network or otherwise for use in conjunction with VoIP Service ("Facilities"). The City is responsible for ensuring that such Facilities are compatible with Verizon's requirements (including being certified by Verizon for use with VoIP Service or successful completion of Verizon's VoIP Interoperability Program, where applicable), and that they continue to be compatible with subsequent revision levels of Verizon services. The City is responsible for operation and configuration of its computer(s) and LAN/WAN. If the City uses its WAN to connect multiple remote sites through a single site ("hub" site) to the Verizon VoIP network, the City will be responsible for the quality of VoIP Service ("QOS") on its WAN. The demarcation for VoIP Service QOS will be the hub site. If the City connects any Facilities to VoIP Service that the City reasonably should know may not be compatible with VoIP service, the City is solely responsible for any effects that arise from that connection on VoIP service, equipment or software.
- Availability of VoIP Service on a site-by-site basis is subject to having a site design reviewed and approved by Verizon.
- The City can provision its multi-building campus as a single VoIP termination to maximize network and billing efficiencies provided (i) all the buildings within its campus are in the same rate center; (ii) its PBX is able to send DID level information for 911 calls; and (iii) the City implements PS/ALI (see the 911 section).

Service Disclaimer

Verizon is not responsible for certain conditions or equipment that may affect VoIP Service, including, without limitation:

- Failure or poor performance of the City's Domain Name Server ("DNS Server") and/or local area network ("LAN") upon which VoIP Service relies. Network-related outages also may occur, and service restoration intervals may vary from those associated with traditional telecommunications service.
- Communications from analog modems may have protocol interaction issues when used over VoIP technology (due to their handshake and error-checking rules) and cannot be assured of the same quality as other communications;
- Modems may not be used on VoIP Service except with Codec G.711 without silence suppression.
- Facsimile devices – Fax transmission is highly dependent on Customer's facsimile device, its ability to disable error correction, and other factors.
- Alarm lines (whether or not they use modems) are wholly unsupported on VoIP Service (with respect to both service and wiring, without limitation).
- All inside wiring and special construction.
- The City shall not modify the Verizon-installed design and/or configuration without the previous written consent of Verizon, which will not unreasonably be withheld.
- At any given time, the City may only place as many concurrent calls as it has purchased.
- The City acknowledges that Verizon classifies local and long distance calls to determine appropriate rate allocation (i.e., local or interstate). Verizon bases this classification on the information in Verizon's systems identifying each call's originating location. As accurate information regarding the origination point of calls is necessary to make the appropriate rate allocation, it is a material condition that the City provides Verizon with accurate information reflecting its calls' originating location.

E-911 – Emergency Calling



Requirement

A provider of “interconnected VoIP service” is required by the Federal Communications Commission to route emergency 911 calls in conjunction with such VoIP service where such 911 calling is available. “Interconnected VoIP service” means the VoIP service (1) enables real-time, two-way voice communications; (2) requires a broadband connection from the end-user’s location; (3) requires IP-compatible CPE; and (4) permits end-users generally to receive calls that originate on the PSTN and to terminate calls to the PSTN. **911 emergency calling service laws may also apply to the City and it is solely the City’s responsibility to understand and comply with such laws.**

E-911 Routing

Enhanced 911 calling (“E-911”) enables end-users to access an appropriate public safety answering point (“PSAP”) by dialing 911 with Automatic Number Identification (“ANI”) and Automatic Location Identification (“ALI”) displayed at the PSAP. The ANI may be the calling party number (“CPN”) or the billing telephone number (“BTN”) depending on the City’s configuration. **Pursuant to FCC requirements, Verizon enables the routing of E-911 calls only in locations where such 911 calling is available and only in the limited circumstances described below.** An end-user’s ability to access an appropriate PSAP depends on the type, configuration and location of the phone used. Furthermore, much like access to 911 emergency service via traditional PSTN local service, access to a PSAP will be unavailable if the City’s access circuit or local gateway fails.

ANI/ALI

E-911 provided via any of the four types of Verizon VoIP Service will pass ANI and the registered primary service address of that ANI as ALI. If VoIP Service is provided to a campus environment where all buildings are within the same rate center, then when 911 is dialed, the call will be routed to the appropriate PSAP based on the primary service address of the calling ANI.

Long Distance Service/Limitations on E-911

Long Distance Voice Service does not provide access to E-911 calling. Thus, to obtain E-911 access and support, The City must purchase separate Local service when only Long Distance Voice Service is ordered from Verizon (an option with IP Trunking). If the City purchases VoIP service for a geographically-distributed multi-site environment and has remote locations outside the Local service footprint covered by VoIP Service, or the City chooses not to purchase Local service with its VoIP Service at certain remote locations, the City agrees that it is responsible for obtaining separate Local service at each such location to the extent it desires or is required to provide E-911.

PS/ALI

If the City requires delivery of location-specific ALI (such as floor and room number within a building) to the PSAP, or otherwise desires E-911 to be provided for multiple user configurations, the City must implement Private Switch/Automatic Location Identification (PS/ALI). **The City must obtain the software and support that enable PS/ALI from a third-party provider.** In all cases, VoIP Service can only support the delivery of the caller’s station level phone number to a PSAP when such telephone numbers are ported to Verizon during the initial provisioning process or are numbers assigned by Verizon. Before Verizon will support the City’s use of PS/ALI, the City must execute Verizon’s LOA. Once PS/ALI is implemented, Verizon will continue to send 911 calls to the PSAP; **however, the City and not Verizon will be entirely responsible for the content of the information delivered in ALI to the PSAP and for any liability arising from the provision of, or the failure to provide, accurate and up-to-date information.**

State or local laws may require the City to implement PS/ALI to ensure required E-911 support for multiple user configurations to enable station-specific 911 ANI and ALI display.

Other Access Limitations

Common events that can limit access to E-911 via VoIP Service include but are not limited to:

- A loss of electric service will interrupt VoIP Service. The City is urged to implement a battery backup system for VoIP Service.
- VoIP Service will be interrupted if the attendant broadband connection is not available.
- The malfunction or failure of equipment, software or hardware necessary for end-to-end Internet functionality (e.g., routers, IP phones, analog gateways, etc.) can limit access to E-911.

- For IP Trunking VoIP services, Verizon is able to provide access to E-911 only at the end-user's registered primary service location. For these VoIP service types, if a VoIP phone is used at a location other than at the end-user's registered primary service location, E-911 will not be available. Otherwise, E-911 calls will not be sent to the correct PSAP. If the end-user's registered address is at a location different from the end-user's "office phone" (the dedicated hand-set that remains at the end-user's registered primary service location), use of the end-user's land-line for 911 calls will not contact the correct PSAP. The City must inform end-users that it is entirely their responsibility to use the tools available with VoIP Service to update their registered address.
- If an end-user uses a non-native telephone number (i.e., a telephone number from a local exchange area different from where the caller is located), E-911 access may be limited.

E-911 and VoIP IP Trunking Service

Because the City's IP Trunking may permit end-users to use VoIP Service at other than the City's or the end-users' primary service location, and Verizon may not detect when an end-user uses the service at a non-primary service location; detect when an end-user has moved his or her VoIP phone (i.e., any device used for VoIP calling) to a non-primary service location, and suspend VoIP Service unless and until either the City (a) verifies that the end-user is at the location for which the VoIP phone is registered for service or (b) re-registers the VoIP phone for service ("nomadic service") at the end-user's current location; only permit nomadic service when E-911 calls made via the nomadic service include the information needed to route that call to the PSAP serving that location in the manner required by the FCC's E-911 requirements for Interconnected VoIP service; and otherwise block all VoIP calls attempted to be made via the nomadic service.

Escalations

Path

During Project implementation, the City may feel it necessary to request their own escalations when the implementation is not progressing in accordance with recommended guidelines previously stated (reference paragraph 3.0). When this occurs, the City may use the following escalation procedures to gain issue resolution and satisfaction:

ESC Level 1: Project Implementation Manager

Name: TBD

Verizon Project Implementation Manager (or Customer Care Center representative)

The Verizon Project Implementation Manager (IM) IM Customer Care Center representative will be responsible for placing all service orders, tracking all order milestones utilizing Verizon's workflow systems and ensuring that all services are activated in a timely manner meeting all agreed upon install intervals. The IM or Customer Care Center representative will have dotted line responsibility to the Project Manager and will be responsible for providing all updates regarding the services pending installation. The IM or Customer Care Center representative will escalate with-in the Verizon Service Delivery teams any issues that would cause a delay in the proposed implementation of services for the City.

If, for any reason the City is not satisfied with an update of any ordered service, the Director may request that the issue be escalated directly to the Project Manager.

ESC Level 2: Project Manager

Name: TBD

If, for any reason the City is not satisfied with an update of any ordered service, the Director may request that the issue be escalated directly to the Senior Manager of Implementations.

ESC Level 3: Senior Manager of Implementations

Name: TBD

If, for any reason the City is not satisfied with an update of any ordered service, the Director may request that the issue be escalated directly to the Director of Implementation Services.

ESC Level 4: Director of Implementation Services

Name: TBD

If, for any reason the City is not satisfied with an update of any ordered service, the Director may request that the issue be escalated directly to the Vice President of Service Support.

ESC Level 5: Vice President of Service Support

Name: TBD

NOTE: Name, contact telephone, fax, pager, and cellular numbers for the personnel will be supplied upon request, after contract signature.

Escalation Methodology

Escalations may be communicated to the responsive Verizon personnel listed in the escalation paths provided (see above) by means of email, direct telephone call or fax.

Trouble Reporting

Automated ticket Via Web:

Verizon Enterprise Center (VEC) or Quick Functions repair function

When opening ticket:

Service ID – enter IP TRUNKING Toll Free/local number (ensure put a 1 in front)

In Comments section: Add “IP TRUNKING”

Note: For VoIP Inbound Local Origination, the Account team must have submitted a CORTS Form 30 to add IASA Customer ID in to their customer repair profile in order for tickets to be opened and routed properly.

Help Desk - Customers or Account Teams can contact the Help Desk at vec-support@verizonbusiness.com, or 800-569-8799 (and ask for the group that supports the “Manage My Inbound Routing” task on the VEC), can assist with further questions about ordering.

Questions about Network Manager training can be directed to CTD at (800) 662-1049 or CTD-COS@verizonbusiness.com.

Close-Out

Project Close-Out

The Project Manager will formally “close-out” the project at the completion of the last VoIP Inbound Port order.

A transition document will be developed to show any and all issues that will be transitioned to the account team, including final tracking spreadsheets and all project documentation.

Project Acceptance

Verizon and the Director will develop and reduce to writing a mutually acceptable test and acceptance procedure with specific metrics for success prior to installation of any of the required services. Minimum metrics include, but they are not limited to:

- Core Network Transit Delay (NTD)
- Mean Opinion Score (MOS)
- Packet Transit Delay (PTD)
- Packet Delivery Ratio (PDR)
- Jitter

The test and acceptance procedures including performance testing must adhere to Verizon's service standards and policies.

Upon Verizon's notice that installation and diagnostic testing of each phase have been completed, the Director will subject the Services and each component to performance trials. The Director and Verizon will design the performance trials to demonstrate conformity with the requirements of this Agreement. The City shall accept the Services and Verizon's contract requirements for delivery and installation are met when (i) the Services has

been completely delivered and installed, and (ii) each phase of the Services has successfully completed performance testing for 5 consecutive business days.

The performance testing period is 5 consecutive business days, but the Director may extend the time no more than an additional 5 business days if the City, a third party, or a Force Majeure has delayed successful completion of performance testing. If the Services fails to pass performance testing, Verizon and/or its subcontractor agree to re-perform the contracted services at no additional cost if the non-performance was required as direct result of actions by Verizon and/or its subcontractors. The City will be responsible for costs during the re-performance period if the re-performance was caused due to actions by the City.

Rates and Charges.

The fixed price for the Professional Services in this SOW is **\$89,397.00** payable upon execution of this SOW. This fee supports a 3 month resource commitment. Should The City require additional time beyond 3 months an extension of services can be contracted via change request subject to the parties mutual written agreement and the City's appropriation of funds (if necessary).

EXHIBIT "G"
EQUAL EMPLOYMENT OPPORTUNITY

1. The contractor, subcontractor, vendor, supplier, or lessee will not discriminate against any employee or applicant for employment because of race, religion, color, sex, national origin, or age. The contractor, subcontractor, vendor, supplier, or lessee will take affirmative action to ensure that applicants are employed and that employees are treated during employment without regard to their race, religion, color, sex, national origin, or age. Such action will include, but not be limited to, the following: employment; upgrading; demotion or transfer; recruitment advertising; layoff or termination; rates of pay or other forms of compensation and selection for training, including apprenticeship. The contractor, subcontractor, vendor, supplier or lessee agrees to post in conspicuous places available to employees, and applicants for employment, notices to be provided by the City setting forth the provisions of this Equal Employment Opportunity Clause.

2. The contractor, subcontractor, vendor, supplier, or lessee states that all qualified applicants will receive consideration for employment without regard to race, religion, color, sex, national origin or age.

3. The contractor, subcontractor, vendor, supplier, or lessee will send to each labor union or representatives of workers with which it has a collective bargaining agreement or other contract or understanding, a notice to be provided by the agency contracting officer advising the said labor union or worker's representative of the contractor's and subcontractor's commitments under Section 202 of Executive Order No. 11246, as amended and superseded, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

4. The contractor, subcontractor, vendor, supplier, or lessee will comply with all provisions of Executive Order No. 11246, as amended and superseded, and the rules, regulations, and relevant orders of the Secretary of Labor or other Federal Agency responsible for enforcement of the equal employment opportunity and affirmative action provisions applicable and will likewise furnish all information and reports required by the Mayor and/or Contract Administrator(s) for purposes of investigation to ascertain and effect compliance with this program.

5. The contractor, subcontractor, vendor, supplier, or lessee will furnish all information and reports required by Executive Order No. 11246, as amended and superseded, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to all books, records, and accounts by the appropriate City and Federal Officials for purposes of investigations to ascertain compliance with such rules, regulations, and orders. Compliance reports filed at such times as directed shall contain information as to the employment practice policies, program, and work force statistics of the contractor, subcontractor, vendor, supplier, or lessee.

6. In the event of the contractor's, subcontractor's, vendor's, supplier's, or lessee's non-compliance with the non-discrimination clause of this contract or with any of such rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part, and the contractor, subcontractor, vendor, supplier, or lessee may be declared ineligible for further City contracts in accordance with procedures provided in Executive Order No. 11246, as amended and superseded, and such other sanctions may be imposed and remedies invoked as provided in the said Executive Order, or by rule, regulation, or order of the Secretary of Labor, or as may otherwise be provided by law.

7. The contractor shall include the provisions of paragraphs 1-8 of this Equal Employment Opportunity Clause in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order No. 11246 of September 24, 1965, as amended and superseded, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontractor or purchase order as the contracting agency may direct as a means of enforcing such provisions including sanctions for noncompliance; provided, however, that in the event the contractor becomes involved in, or is threatened with litigation with a subcontractor or vendor as a result of such direction by the contracting agency, the contractor may request the United States to enter into such litigation to protect the interests of the United States.

8. The contractor shall file and shall cause his or her subcontractors, if any, to file compliance reports with the City in the form and to the extent as may be prescribed by the Mayor. Compliance reports filed at such times as directed shall contain information as to the practices, policies, programs, and employment policies and employment statistics of the contractor and each subcontractor.

(Title)

**EXHIBIT H
DRUG POLICY COMPLIANCE AGREEMENT**

I, _____ as an owner or officer of
(Name) (Print/Type) (Title)

_____ (Contractor)
(Name of Company)

have authority to bind Contractor with respect to its bid, offer or performance of any and all contracts it may enter into with the City of Houston; and that by making this Agreement, I affirm that the Contractor is aware of and by the time the contract is awarded will be bound by and agree to designate appropriate safety impact positions for company employee positions, and to comply with the following requirements before the City issues a notice to proceed:

1. Develop and implement a written Drug Free Workplace Policy and related drug testing procedures for the Contractor that meet the criteria and requirements established by the Mayor's Amended Policy on Drug Detection and Deterrence (Mayor's Drug Policy) and the Mayor's Drug Detection and Deterrence Procedures for Contractors (Executive Order No. 1-31).
2. Obtain a facility to collect urine samples consistent with Health and Human Services (HHS) guidelines and a HHS certified drug testing laboratory to perform the drug tests.
3. Monitor and keep records of drug tests given and the results; and upon request from the City of Houston, provide confirmation of such testing and results.
4. Submit semi-annual Drug Policy Compliance Declarations.

I affirm on behalf of the Contractor that full compliance with the Mayor's Drug Policy and Executive Order No. 1-31 is a material condition of the contract with the City of Houston.

I further acknowledge that falsification, failure to comply with or failure to timely submit declarations and/or documentation in compliance with the Mayor's Drug Policy and/or Executive Order No. 1-31 will be considered a breach of the contract with the City and may result in non-award or termination of the contract by the City of Houston.

Date

Contractor Name

Signature

Title

**EXHIBIT I
DRUG POLICY COMPLIANCE DECLARATION**

I, _____ as an owner or officer of

 (Name) (Print/Type) (Title)
 _____ (Contractor)

 (Name of Company)

have personal knowledge and full authority to make the following declarations:

This reporting period covers the preceding 6 months from _____ to _____, 20____.

_____ A written Drug Free Workplace Policy has been implemented and employees
 Initials notified. The policy meets the criteria established by the Mayor's Amended Policy on Drug
 Detection and Deterrence (Mayor's Policy).

_____ Written drug testing procedures have been implemented in conformity with the
 Initials Mayor's Drug Detection and Deterrence Procedures for Contractors, Executive Order No. 1-31.
 Employees have been notified of such procedures.

_____ Collection/testing has been conducted in compliance with federal Health and
 Initials Human Services (HHS) guidelines.

_____ Appropriate safety impact positions have been designated for employee
 Initials positions performing on the City of Houston contract. The number of employees in safety
 impact positions during this reporting period is _____.

_____ From _____ to _____ the following test has occurred:
 Initials (Start date) (End date)

	Random	Reasonable Suspicion	Post-Accident	Total
Number Employees Tested				
Number Employees Positive				
Percent Employees Positive				

_____ Any employee who tested positive was immediately removed from the City
 Initials worksite consistent with the Mayor's Policy and Executive Order No. 1-31.

_____ I affirm that falsification or failure to submit this declaration timely in
 Initials accordance with established guidelines will be considered a breach of contract.

I declare under penalty of perjury that the affirmations made herein and all information contained in this declaration are within my personal knowledge and are true and correct.

Date

Contractor Name

Signature

Title

**EXHIBIT J
CONTRACTOR'S CERTIFICATION OF NO SAFETY IMPACT POSITIONS
IN PERFORMANCE OF A CITY CONTRACT**

I, _____
(Name - Print/Type) (Title)

as an owner or officer of _____ (Contractor) have authority to bind the Contractor with respect to its bid, and I hereby certify that Contractor has no employee safety impact positions as defined in §5.18 of Executive Order No. 1-31 that will be involved in performing this City Contract. Contractor agrees and covenants that it shall immediately notify the City's Director of Personnel if any safety impact positions are established to provide services in performing this City Contract.

Date

Contractor Name

Signature

Title

**CONTRACTOR'S CERTIFICATION OF NON-APPLICATION OF CITY OF HOUSTON DRUG
DETECTION AND DETERRENCE PROCEDURES FOR CONTRACTORS**

I, _____
(Name - Print/Type) (Title)

as an owner or officer of _____ (Contractor) have authority to bind the Contractor with respect to its bid, and I hereby certify that Contractor has fewer than fifteen (15) employees during any 20-week period during a calendar year and also certify that Contractor has no employee safety impact positions as defined in §5.18 of Executive Order No. 1-31 that will be involved in performing this City Contract. Safety impact position means a Contractor's employment position involving job duties that if performed with inattentiveness, errors in judgment, or diminished coordination, dexterity, or composure may result in mistakes that could present a real and/or imminent threat to the personal health or safety of the employee, co-workers, and/or the public.

Date

Contractor Name

Signature

Title