



CONTRACT

BY AND BETWEEN

COUNTY OF LOS ANGELES

AND

SBC GLOBAL SERVICES, INC. DBA

AT&T GLOBAL SERVICES

FOR

TELECOMMUNICATIONS SERVICES

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(not attached)

**CONTRACT BETWEEN
COUNTY OF LOS ANGELES
AND
SBC GLOBAL SERVICES, INC. DBA AT&T GLOBAL SERVICES
FOR
TELECOMMUNICATIONS SERVICES**

This Contract ("Contract") is made and entered into this 18th day of MARCH, 2008 by and between the County of Los Angeles ("County") and SBC Global Services, Inc. dba AT&T Global Services for itself and on behalf of its Affiliates identified in this Contract, ("Contractor") located at 2600 Camino Ramon, San Ramon, California.

RECITALS

WHEREAS, County may contract with private businesses for telecommunications services (the "Services") when certain requirements are met;

WHEREAS, the Contractor is a private firm specializing in providing the Services and will arrange to have an Affiliate identified in this Contract provide the Services in accordance with this Contract; and

WHEREAS, County desires to employ Contractor to provide the Services to various County departments.

NOW THEREFORE, in consideration of the mutual covenants contained herein, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties agree as follows:

1.0 APPLICABLE DOCUMENTS

Contract. This base document along with Exhibits A through M and any schedules attached hereto or thereto collectively constitute and throughout and hereinafter are referred to as the "Contract." Contractor maintains (i) Tariffs containing the standard descriptions, pricing, and other terms and conditions for a Service that AT&T files with regulatory commissions, (ii) Guidebooks or Catalogs containing the standard descriptions, pricing, and other terms and conditions for a Service that were, but no longer are, filed with regulatory commissions, (iii) AT&T's Acceptable Use Policy ("AUP") that applies to Services provided over or accessing the Internet, and (iv) Service Guides containing description, pricing, and other terms and conditions for the Service not covered by a Tariff, Guidebook or Catalog. The Tariffs, Guidebooks and Catalogs, AUP, and Service Guides, as modified from time to

time, are incorporated into this Contract by reference. The Tariffs, Guidebooks and Catalogs may be found at att.sbc.com/search/tariffs.jsp, serviceguide.att.com/ABS/ext/index.cfm, or other locations Contractor may designate. The AUP may be found at att.com/aup, or other locations AT&T may designate. The Service Guides may be found at new.serviceguide.att.com, or other locations AT&T may designate. The Service Guides may be found at *new.serviceguide.att.com*, or other locations AT&T may designate. This Contract shall constitute the complete and exclusive statement of understanding between County and Contractor and supersedes any and all prior or contemporaneous agreements, written or oral, and all communications between the parties relating to the subject matter of this Contract. This Contract and Exhibits attached hereto, or hereafter executed, shall be filed with, to the extent required by law, and approved by the California Public Utilities Commission (“CPUC”) and/or the Federal Communications Commission (“FCC”). This Contract shall at all times be subject to such modifications as the CPUC and/or the FCC may, from time to time, require under their respective jurisdictions.

- 1.1 **Interpretation.** In the event of any conflict or inconsistency in the definition or interpretation of any word, responsibility, schedule, or the contents or description of any task, subtask, deliverable, Service, or other work, or otherwise, such conflict or inconsistency shall be resolved by giving precedence first to this base document, and then to the Exhibits according to the following priority, and then to the applicable Tariff, Guidebook and Catalog, AUP or Service Guides:

- 1.2.1 EXHIBIT A-1 - Statement of Work for Local Services
- 1.2.2 EXHIBIT A-2 - Statement of Work for Long Distance Services
- 1.2.3 EXHIBIT A-3 - Statement of Work for Managed IP Services
- 1.2.4 EXHIBIT B-1 - Pricing Schedule for Local Services
- 1.2.5 EXHIBIT B-2 - Pricing Schedule for Long Distance Services
- 1.2.6 EXHIBIT B-3 - Pricing Schedule for Managed IP Services
- 1.2.7 EXHIBIT C - Intentionally Omitted
- 1.2.8 EXHIBIT D - Contractor’s EEO Certification
- 1.2.9 EXHIBIT E - County’s Administration
- 1.2.10 EXHIBIT F - Contractor’s Administration
- 1.2.11 EXHIBIT G - Contractor Employee Acknowledgement, Confidentiality Agreement and Assignment of Copyright
- 1.2.12 EXHIBIT H - Jury Service Ordinance
- 1.2.13 EXHIBIT I - Safely Surrendered Baby Law
- 1.2.14 EXHIBIT J - Contractor’s Obligations as a “Contractor” Under the Health Insurance Portability & Accountability Act of 1996 (HIPAA)
- 1.2.15 EXHIBIT K - Contractor’s List of Affiliates
- 1.2.16 EXHIBIT L - Sample Change Notice
- 1.2.17 EXHIBIT M - Contractor’s Proposal for Telecommunications Services (not attached)

- 1.2 **Construction.** The words “herein”, “hereof”, and “hereunder” and words of similar import used in this Contract refer to this Contract, including all annexes, attachments, Exhibits, and schedules as the context may require. Wherever from the context it appears appropriate, each term stated in either the singular or plural shall include the singular and the plural. Whenever examples are used in this Contract with the words “including”, “for example”, “e.g.”, “such as”, “etc.”, or any derivation of such words, such examples are intended to be illustrative and not limiting. References in this Contract to federal, State, County and/or other governmental laws, rules, regulations, ordinances, guidelines, directives, policies and/or procedures shall mean such laws, rules, regulations, ordinances, guidelines, directives policies and/or procedures as amended from time to time.

Any use of the masculine gender shall be construed to include the feminine, and vice versa.

Unless expressly stated otherwise, all approvals, consents, or determinations by or on behalf of County under this Contract, will be in writing, and may be given or withheld in the sole discretion or judgment of the person or entity authorized to provide or make such approval consent, or determination.

2.0 DEFINITIONS

The following words and phrases in bold-faced type and with the initial letters capitalized shall have the following specific meaning when used in this Contract unless otherwise apparent from the context in which they are used:

- 2.1 **Amendment:** The term “Amendment” shall have the meaning set forth in Paragraph 8.1 (Amendments).
- 2.2 **Board:** The term “Board” shall mean County’s Board of Supervisors, acting as governing body, with the legal authority to enter into contracts.
- 2.3 **Contract Rates:** The term “Contract Rates” shall mean the contract rates set forth in Exhibit B (Pricing Schedule).
- 2.4 **Contract:** The term “Contract” shall have the meaning set forth in Paragraph 1.1 (Contract).
- 2.5 **Contractor:** The term “Contractor” shall have the meaning set forth in the preamble to this Contract.
- 2.6 **County’s Program Director:** The term “County’s Program Director” shall have the meaning set forth in Paragraph 6.1 (County’s Program Director).
- 2.7 **County’s Program Manager:** The term “County’s Program Manager” shall have the meaning set forth in Paragraph 6.2 (County’s Program Manager).

- 2.8 **County's Project Manager:** The term "County's Project Manager" shall have the meaning set forth in Paragraph 6.3 (County's Project Manager).
- 2.9 **Business Day(s):** The term "Business Day(s)" shall mean business day(s) which is Monday through Friday, exclusive of holidays observed by County. Any use of the term "day(s)" or "Day(s)" by itself shall mean calendar day(s).
- 2.10 **Director:** The term "Director" shall mean the director of County's Internal Services Department.
- 2.11 **Effective Date:** The term "Effective Date" shall mean the effective date on which this Contract takes effect.
- 2.12 **Fiscal Year:** The term "Fiscal Year" shall mean County's fiscal year which is the twelve (12) month period beginning July 1st and ending the following June 30th.
- 2.13 **ISD:** The term "ISD" shall mean County's Internal Services Department which is responsible for administration of this Contract.
- 2.14 **Affiliate:** The term "Affiliate" means any entity identified in Exhibit K (Contractor's List of Affiliates) that controls, is controlled by, or is under common control with Contractor. Contractor reserves the right to add or delete service-providing Affiliates during the term of the Contract. Contractor acknowledges that such addition or deletion of service-providing Affiliates does not change Contractor's duties and obligations under the terms of this Contract. Contractor shall give County prior written notice of any such addition or deletion.
- 2.15 **Special Construction:** The term "Special Construction" means construction or rearrangement of facilities for regulated services where facilities are not reusable or one or more of the following criteria applies; i) construction is expedited based upon the request of County; ii) County requests a route or type of facility that is other than normal; iii) County requests more facilities than required per Contractor policies and procedures; iv) County requests a service where the revenue to be derived is not sufficient to warrant Contractor assuming the unusual cost of providing the necessary facilities (only applies to services purchased from tariffs other than the FCC tariffs).

3.0 WORK

- 3.1 Pursuant to the provisions of this Contract, the Contractor shall fully perform, complete and deliver on time, all tasks, deliverables, Services and other work as set forth herein or arrange to have an Affiliate provide such Services and other work in accordance with this Contract. Each such Affiliate performing work under this Contract shall be financially responsible, consistent with the terms and conditions of this Agreement, with Contractor for the specific work to be performed by the Affiliate. Where required, an Affiliate authorized by the appropriate regulatory authority will provide the Services and other work.

- 3.2 If the Contractor provides any tasks, deliverables, goods, Services, or other work, other than as specified in this Contract, the same shall be deemed to be a gratuitous effort on the part of the Contractor, and the Contractor shall have no claim whatsoever against the County.

4.0 TERM OF CONTRACT

- 4.1 The initial term of this Contract shall be five (5) years commencing on May 2, 2008 if this Contract is executed by the Board on or before May 2, 2008, or upon execution by the Board, if execution occurs subsequent to May 2, 2008, unless sooner terminated or extended, in whole or in part, as provided in this Contract.
- 4.2 County shall have the sole and unilateral option to extend the term of this Contract for one additional five (5) year period or one additional two (2) year period commencing at the end of the initial term. If County exercises the option to extend the initial term of this Contract for one additional five (5) year period, then County shall have the sole and unilateral option to extend the term of this Contract for one additional two (2) year period commencing at the end of the extended term, for a maximum possible total Contract term of twelve (12) years. If County exercises the option to extend the initial term of this Contract for one additional two (2) year period, then County shall not have an additional option to extend the term. Each such option to extend the term of the Contract shall be exercised at the sole discretion of the Director, or his/her designee, as authorized by the Board. County will notify Contractor in writing sixty (60) days prior to expiration if it elects to exercise its right to extend this Contract.
- 4.3 Contractor shall notify ISD when this Contract is within six (6) months from the expiration of the term as provided for hereinabove. Upon occurrence of this event, Contractor shall send written notification to ISD at the address set forth in Exhibit E (County's Administration).

5.0 CONTRACT PRICING AND INVOICING

- 5.1 The Contract Rates shall not be charged before acceptance of the Services and shall not exceed the rates listed in Exhibits B-1, B-2 and B-3 of Exhibit B (Pricing Schedules). Contractor shall only invoice for Services identified in Exhibit B (Pricing Schedules). No discount, promotion, credit or waiver set forth in a Tariff, Guidebook, Catalog or Service Guide will apply to Services under this Contract unless specifically referenced in Exhibit B (Pricing Schedules). All tasks required to perform the Services and fulfill Contractor's obligations under Exhibits A-1, A-2 and A-3 of Exhibit A (Statements of Work) shall be supplied to County at the sole cost of Contractor. All tasks outside Contractor's obligations under Exhibit A (Statements of Work) shall be separately negotiated, pursuant to the terms of this Contract by the parties.

- 5.2 Contractor shall not be entitled to payment or reimbursement for any tasks or Services performed, nor for any incidental or administrative expenses whatsoever incurred in or incidental to performance hereunder, except as specified herein.
- 5.3 Except for Services provided by Contractor pursuant to Paragraph 8.47 (Contractor's Obligation upon Termination), unless County authorizes further Service and the parties agree upon the prices for such Service prior to expiration or termination of this Contract, Contractor shall have no claim against County for payment of any money or reimbursement of any kind whatsoever for any Service provided by Contractor after the expiration or other termination of this Contract. Should Contractor receive any such payment it shall immediately notify County and shall immediately repay all such funds to County. Payment by County for Services rendered after expiration/termination of this Contract shall not constitute a waiver of County's right to recover such payment from Contractor. This provision shall survive the expiration or other termination of this Contract. Consistent with this Paragraph 5.3, Contractor shall terminate all Services, tasks and work upon expiration or termination of this Contract or otherwise pursuant to Paragraph 8.47 (Contractor's Obligation upon Termination).
- 5.4 Contractor shall pay County an annual bonus amount of one million five-hundred thousand dollars (\$1,500,000) for each year of the initial term and for each year of any subsequent extended term(s) of this Contract exercised by County pursuant to Paragraph 4.2. The annual bonus shall be paid to County within fifteen (15) days after the anniversary of the execution of the Contract each year. All payments made under this Paragraph 5.4 shall be issued as credits on County's monthly invoice. In the event that this Contract is terminated prior to the anniversary date of the execution of the Contract, the annual bonus amount for that year will be pro-rated based on the date of termination. The annual bonus does not apply to any period of time that Contractor may be providing Service to County pursuant to Paragraph 8.47 (Contractor's Obligation upon Termination) or any amortization period that extends beyond the term of the Contract as provided in Subparagraph 8.1.2.

5.5 **Invoices and Payments**

- 5.5.1 Contractor shall invoice County only for providing the tasks, deliverables, goods, Services, and other work specified in Exhibit A (Statements of Work) and elsewhere hereunder. The Contractor shall prepare invoices which shall include only the charges owed to Contractor by County under the terms of this Contract. Payments to Contractor by County shall be as provided in Exhibit B (Pricing Schedules), and Contractor shall be paid only for the tasks, deliverables, goods, Services, and other work authorized by this Contract. If Contractor performs work outside the scope of Exhibit A (Statements of Work) without obtaining County's written approval to

perform such work and written agreement on the rates for such work, then no payment shall be due to Contractor for that work.

- 5.5.2 Contractor's invoices shall be priced in accordance with Exhibit B (Pricing Schedules).
- 5.5.3 Contractor's invoices shall contain the information set forth in Exhibit A (Statements of Work) describing the tasks, deliverables, goods, Services, work hours, and facility and/or other work for which payment is claimed.
- 5.5.4 Contractor shall provide flexible billing cycles and County will have the option of selecting the bill cycle statement date that is most compatible with the County's Billing Management System. Based upon the agreed upon bill cycle date, Contractor shall submit the monthly invoice and the electronic data (both summary data and detail data) within fifteen (15) days of the selected bill cycle statement date.
- 5.5.5 All invoices under this Contract shall be submitted in two (2) copies to the following address:

County of Los Angeles
Internal Services Department
Attn: Telephone Utilities Unit
9150 E. Imperial Hwy., MS-35
Downey, CA 90242

- 5.5.6 All invoices submitted by Contractor for payment shall have the approval of County's Project Manager prior to any payment thereof which approval shall not be unreasonably withheld. In no event shall County be liable or responsible for any payment prior to such approval; provided, however, that absent a bona fide dispute that County has identified to Contractor, the failure of the County's Project Manager to approve an invoice does not excuse County from complying with the payment time frames defined in Subparagraph 5.5.8 below.
- 5.5.7 Prices set forth in Exhibit B (Pricing Schedules) are exclusive of, and County will pay, all current and future taxes (excluding those on Contractor's net income), surcharges, recovery fees, custom clearances, duties, levies, shipping charges, and other similar charges (and any associated interest and penalties resulting from County's failure to timely pay such taxes or similar charges) relating to the sale, transfer of ownership, installation, license, use or provision of the Services, except to the extent County provides satisfactory proof of a valid tax exemption prior to the delivery of Services.
- 5.5.8 County is responsible for providing a clear path from the curb to the service hand-off point. In addition, for fiber services County will meet

Contractor's standard room-ready requirements for the hand-off location that includes power and grounding standards.

Special Construction charges are not included in Contractor's monthly recurring or nonrecurring charges. Such charges are determined by Contractor at the time of circuit installation consistent with Contractor's tariffs on file with the CPUC and such charges shall not be greater than those provided for under such tariffs.

County's obligation to pay for all Services will begin upon installation and availability, following agreed upon acceptance and testing of the Services by County. Contractor will invoice County for the Services on a monthly basis.

Payment is due within thirty (30) days after the billing date ("Billing Date"). If payment is not made within fifty (50) days after the Billing Date, Contractor may charge late payment fees, (a) for Services contained in a Tariff, Guidebook or Catalog, at the rate specified therein, or (b) for all other Services, at the lower of one and one-half percent (1.5%) per month (18% per annum) or the maximum rate allowed by law for overdue payments. Contractor shall send all invoices via either overnight private carrier (e.g., FedEx) or confirmed mail for receipt by County no later than seven (7) Business Days after the Billing Date. If Contractor fails to send an invoice within the seven (7) Business Day period described above, Contractor shall extend the payment period by a term equal to the time lost by reason of the mailing delay. Invoices will refer to the invoice number. Restrictive endorsements or other statements on checks are void.

Contractor and County shall use commercially reasonable efforts to resolve billing disputes within thirty (30) days. Payments on disputed charges may be withheld by County and no late payment charges will apply to the disputed amount pending resolution of the claim using the procedures set forth in Paragraph 8.30 (Dispute Resolution Procedure). Upon resolution of the dispute, Contractor shall issue to County any applicable credit or reinstitute the disputed amount as an amount due on the next periodic invoice.

5.6 Rate Benchmarking

- 5.6.1 If County is offered a service proposal for Qualifying Services from an alternative service provider that is priced at least ten percent (10%) less than the Services provided to County by Contractor, County shall provide Contractor written notice of the service proposal in reasonably sufficient detail (but without violating any confidential obligation with such other service provider in connection with providing the requested information) so that Contractor will have the option to respond to the rates and terms offered by such alternative service provider for the Services provided pursuant to this Contract. As used in this

Subparagraph, the term “Qualifying Services” shall mean any of the following five categories of goods and service under similar quantities, terms and conditions, and delivery conditions that Contractor offers such category of goods and services under this Contract; (i) the entire suite of Centrex services and features offered by Contractor under Exhibit A-1 (Statement of Work for Local Services); (ii) the entire suite of Messaging goods and services offered by Contractor under Exhibit A-1 (Statement of Work for Local Services); (iii) the entire suite of remaining goods and services (exclusive of Centrex and Messaging) offered by Contractor under Exhibit A-1 (Statement of Work for Local Services); (iv) the entire suite of goods and services offered by Contractor under Exhibit A-2 (Statement of Work for Long Distance Services); and (v) the entire suite of goods and services offered by Contractor under Exhibit A-3 (Statement of Work for Managed IP Services).

5.6.2 As part of the Services, County shall have the ongoing right to initiate the benchmarking process described below:

(a) Contractor and County will periodically review, and as required, Contractor will make adjustments to this Contract’s prices, rates and charges.

(b) On or after the thirteenth (13th) month after the Effective Date and once annually thereafter until any termination or expiration of this Contract, County may select and engage an independent third party (a “Benchmarker”), to benchmark Qualifying Service(s) in this Contract. In addition to the annual benchmarking activity, County shall have the right to engage, at County’s own expense, a Benchmarker to conduct additional benchmarking activities within twelve (12) months prior to any termination or expiration of the Contract, provided that each such additional benchmarking activity is conducted no sooner than six (6) months after the annual benchmarking activity. County and Contractor will discuss in advance the scope, methodology, relative comparisons and execution for each benchmarking process (the “Benchmarking Process”) and County will make the final determination of the Benchmarking Process. Each Benchmarking Process will be conducted, and the results documented, by the Benchmarker in a commercially reasonable manner and in accordance with the applicable Benchmarking Process. County and Contractor will review the results of each benchmark and determine if such benchmark results show that the charges under the Contract for the benchmarked Qualifying Service(s) are less favorable to County than the prices offered by any other service provider examined by the Benchmarker for Qualifying Services (the “Benchmarking Standard”). If the benchmark results show a variance between the prices, charges or fees for the benchmarked Qualifying Service(s) charged by Contractor hereunder and the Benchmarking Standard by greater than five percent (5%), then Contractor shall reduce its charges hereunder such that Contractor’s

total charges in the aggregate for the benchmarked Qualifying Service(s) are within five percent (5%) of the Benchmarking Standard. The parties agree that in no event shall the results of a benchmarking result in the increase of Contractor's prices, charges or fees. The effective date of such rate adjustment shall be the first day of the next billing cycle following the conclusion of the Benchmarking Process and the execution by the parties of an amendment pursuant to Subparagraph 8.1.2 below.

5.7 Revenue Achievement Bonus

Contractor shall provide County an annual bonus for revenue achievement ("Revenue Achievement Bonus") through the term of the Contract and any subsequent term extensions pursuant to Paragraph 4.2. All payments made under this Paragraph 5.7 shall be issued as credits on County's monthly bill.

5.7.1 For County Billed Revenue

For the first year of this Contract only, if the total billed revenue for all Services purchased under this Contract by County matches or exceeds \$45,000,000.00, a Revenue Achievement Bonus of \$112,500.00 shall be credited to County's monthly billing as set forth below.

For all subsequent years of this Contract, Contractor and County will benchmark the total amount billed to County for the first year of this Contract, beginning with the Effective Date of this Contract. When the total billed revenue for all Services purchased under this Contract by County in a subsequent annual period matches or exceeds the first year benchmark total, the following discounts will apply to the total billed revenue amount. The Revenue Achievement Bonus shall not exceed five hundred thousand dollars (\$500,000.00) annually.

<u>Total Revenue Amount</u>	<u>Credit</u>
Benchmark to (Benchmark + \$999,999.99)	.0025
(Benchmark + \$1,000,000) to (Benchmark + \$1,999,999.99)	.0050
(Benchmark + \$2,000,000) to (Benchmark + \$3,999,999.99)	.0075
Benchmark + \$4,000,000 or greater	.0100

Contractor shall provide County with a report of total billed revenue from County at the end of each annual period of the Contract. The Revenue Achievement Bonus shall be calculated and distributed as a credit to County's monthly billing within sixty (60) days of the Contract anniversary date, or within sixty (60) days of the expiration or termination of this Contract.

5.7.2 For Participating Entity Billed Revenue

Contractor will benchmark the total amount billed to Participating Entities for the first year of this Contract, beginning with the Effective Date of this Contract. When the total billed revenue for all Services

purchased under this Contract by all Participating Entities in a subsequent annual period matches or exceeds the first year benchmark total, the following discounts will apply to the total billed revenue amount. The Revenue Achievement Bonus shall not exceed five hundred thousand dollars (\$500,000.00) annually.

<u>Total Revenue Amount</u>	<u>Credit</u>
Benchmark to (Benchmark + \$999,999.99)	.0025
(Benchmark + \$1,000,000) to (Benchmark + \$1,999,999.99)	.0050
(Benchmark + \$2,000,000) to (Benchmark + \$3,999,999.99)	.0075
Benchmark + \$4,000,000 or greater	.0100

Contractor shall provide County with a report of total billed revenue from Participating Entities at the end of each annual period of the Contract. The Revenue Achievement Bonus shall be calculated and distributed as a credit to County’s monthly billing within sixty (60) days of the Contract anniversary date, or within sixty (60) days of the expiration or termination of this Contract.

6.0 ADMINISTRATION OF CONTRACT – COUNTY

A listing of all County administration personnel referenced in this Paragraph 6.0 is set forth in Exhibit E (County’s Administration). County shall notify Contractor in writing of any change in the names or addresses shown.

6.1 County’s Program Director

Responsibilities of County’s Program Director include:

- providing overall executive responsibility of this Contract; and
- delegating to his/her designee(s) the responsibilities included above.

County’s Program Director is not authorized to make any changes in any of the terms and conditions of this Contract and is not authorized to further obligate County in any respect whatsoever.

6.2 County’s Program Manager

Responsibilities of County’s Program Manager include:

- ensuring that the objectives of this Contract are met;
- monitoring Contractor’s performance in the daily operation of this Contract;
- providing direction to Contractor in the areas relating to County policy, information requirements, and procedural requirements; and

- delegating to his/her designee(s) the responsibilities set forth above.

County's Program Manager is not authorized to make any changes in any of the terms and conditions of this Contract and is not authorized to further obligate County in any respect whatsoever.

6.3 County's Project Manager

The responsibilities of County's Project Manager include:

- meeting with Contractor's Program Manager on a regular basis; and
- inspecting any and all tasks, deliverables, goods, Services, or other work provided by or on behalf of Contractor.

County's Project Manager is not authorized to make any changes in any of the terms and conditions of this Contract and is not authorized to further obligate County in any respect whatsoever.

6.4 County's Billing Manager

The responsibilities of County's Billing Manager include:

- ensuring that the billing and payment objectives of this Contract are met; and that invoices are reviewed and analyzed, with discrepancies and/or disputes reported to contractor for corrective action;
- providing direction to Contractor on billing and payment requirements, and procedural requirements for posting and processing vendor telecommunications charges; and
- coordinating the implementation of new billing formats, data elements, accounts, types of charges/services, etc.; and

County's Billing Manager is not authorized to make any changes in any of the terms and conditions of this Contract and is not authorized to further obligate County in any respect whatsoever.

7.0 ADMINISTRATION OF CONTRACT – CONTRACTOR

A listing of all Contractor's administration personnel referenced in this Paragraph 7.0 is set forth in Exhibit F (Contractor's Administration). Contractor shall notify County in writing of any change in the names or addresses shown.

7.1 Contractor's Program Director

Contractor's Program Director is designated in Exhibit F (Contractor's Administration). Contractor's Program Director shall be a full-time employee of Contractor. Contractor's Program Director shall be responsible for

Contractor's performance of all tasks and deliverables, and ensuring Contractor's compliance with this Contract. Contractor shall notify County in writing of any change in the name or address of Contractor's Program Director.

7.2 Contractor's Program Manager

Contractor's Program Manager shall be a full-time employee of Contractor. Contractor's Program Manager shall be responsible for Contractor's day-to-day activities as related to this Contract and shall coordinate with County's Program Manager and County's Project Manager on a regular basis.

Contractor's Program Manager shall be dedicated to this Contract as a central point of contact with County and shall represent Contractor in all day-to-day dealings with County. County shall have reasonable access to the Contractor's Program Manager or alternate during all hours, 365 days per year. Contractor shall provide a telephone number where the Contractor's Program Manager and alternate may be reached on a twenty-four (24) hour per day basis.

Contractor's Program Manager shall have direct responsibility for all Services performed by Contractor and its Subcontractors and shall have full authority to act for Contractor on all matters relating to the daily operation of this Contract. Contractor's Program Manager shall have authority to direct the work of all Contractor staff dedicated to and perform work on this Contract. Contractor's Program Manager must effectively communicate in English, both orally and in writing.

7.3 Contractor's Alternate Program Manager

Contractor's Alternate Program Manager shall assume all the duties of Contractor's Program Manager in the event Contractor's Program Manager is not available to County. Contractor's Alternate Program Manager must effectively communicate in English, both orally and in writing.

7.4 Contractor's Area Manager

Contractor's Area Manager is responsible for delivering high quality service assurance in support of this Contract, involving all of Contractor's products and services. Contractor's Area Manager shall have the authority to prioritize and redirect Contractor's installation and repair resources.

7.5 Contractor's Service Executive

Contractor's Service Executive shall have the primary responsibility to become County's advocate in all matters dealing with this Contract and to provide County with total service assurance. Contractor's Service Executive is required to adopt County's focus and is responsible to bring this focus throughout Contractor's organizations to resolve issues that have not been

resolved through normal, established processes. Contractor's Service Executive shall have the authority to escalate service issues raised by County.

7.6 Contractor's Transition Manager

Contractor's Transition Manager shall be a designated Project Manager to assure the transition of services in this Contract takes place with a minimal disruption of service. Contractor's Transition Manager shall be certified, with experience managing projects of a similar size and importance, and will have an office located in Los Angeles, or a neighboring county.

7.7 Contractor's Sales Vice President

Contractor's Sales Vice President shall be a full-time employee of Contractor. Contractor's Sales Vice President shall be responsible for Contractor's performance of all tasks and deliverables, and ensuring Contractor's compliance with this Contract. Contractor's Sales Vice President has been intentionally omitted from Exhibit F (Contractor's Administration).

7.8 Approval of Contractor's Staff

County has the absolute right to approve or disapprove Contractor's staff as set forth in Exhibit F (Contractor's Administration). Approval by County shall not be unreasonably withheld, and County shall take all necessary steps to ensure that approval is granted in a prompt manner. Contractor shall exercise reasonable efforts to minimize changes to Program Director and Program Manager during the term of this Contract. Contractor shall exercise all reasonable efforts to maintain continuity over time of Contractor's staff as identified in Exhibit F (Contractor's Administration). In the event the needs of Contractor's business support a change, or the individual is eligible for a promotion or other positive type of employment opportunity, or the individual's personal life requires a change, Contractor shall have the right to transfer an individual. Contractor shall exercise reasonable efforts to notify the County prior to transferring the employee and Contractor shall provide County with a resume of each proposed staff member and an opportunity to interview and provide written approval prior to that person being assigned to the position. Contractor shall promptly fill any such vacancy with personnel having comparable skills in terms of experience in the required work areas, as of those individuals set forth in Exhibit F (Contractor's Administration) at the time of Contract execution. Contractor shall assign a sufficient number of employees to perform the required work. At least one (1) employee on site shall be authorized to act for Contractor in every detail and must speak and understand English.

7.9 Contractor's Staff Identification

Contractor shall provide, at Contractor's expense, all staff providing Services under this Contract at County facilities with a photo identification badge, the form of which shall be subject to the reasonable approval of County's Program

Director. Contractor employees assigned to County facilities shall wear appropriate attire for the work being performed at all times consistent with Contractor's policies, union rules and California OSHA safety requirements. Contractor shall ensure their employees are appropriately identified as set forth in this Paragraph 7.9.

7.10 Contractor's Material and Equipment

Except as set forth otherwise in this Contract, the purchase of all materials/equipment to provide the needed Services is the sole responsibility of Contractor. Contractor shall use materials and equipment that are safe for the environment and safe for use by the Contractor's staff.

7.11 Contractor's Training

Contractor shall provide training programs for all new staff and continuing in-service training for all staff. All staff shall be trained in their assigned tasks and in the safe handling of equipment. All equipment shall be checked at reasonable intervals for safety, as on a daily basis for safety, if needed. All employees must wear safety and protective gear according to OSHA standards for the work being performed.

7.12 Contractor's Hours and Days of Work

Contractor shall provide Services twenty-four (24) hours daily for the term of this Contract, with the exception of scheduled outages or outages beyond the reasonable control of Contractor. Individual tasks shall be scheduled by County according to County needs and with the agreement of Contractor.

7.13 Contractor's Office

Contractor shall maintain an office with twenty-four (24) hour telephone service. The office shall be staffed during the hours of 8:00 a.m. to 5:00 p.m., Monday through Friday, by at least one (1) employee who can respond to inquires and complaints which may be received about Contractor's performance of the Contract. When the office is closed, an answering service shall be provided to receive calls. Contractor shall respond to calls received by the answering service within two (2) hours of receipt of the call.

7.14 Background and Security Investigations

7.14.1 At any time prior to or during term of this Contract, County may require that Contractor's Program Director, Contractor's Program Manager, and all staff identified in Exhibit F (Contractor's Administration) performing work under this Contract undergo and pass, to the satisfaction of County, a background investigation, as a condition of beginning and continuing to work under this Contract. County shall use its discretion in determining the method of background clearance to be used, up to and including a County performed fingerprint security clearance. The

fees associated with obtaining the background information shall be at the expense of Contractor, regardless if Contractor's staff passes or fails the background clearance investigation.

7.14.2 Based on reasonable cause, County may request that members of Contractor's staff be immediately removed from working on this Contract at any time during the term of this Contract. County will not provide to Contractor nor to Contractor's staff any information obtained through County conducted background clearance.

7.14.3 County may, at the sole discretion of County, immediately deny or terminate facility access to those of Contractor's staff who do not pass such investigation(s) to the satisfaction of County or whose background or conduct is incompatible with County facility access.

7.14.4 Disqualification, if any, of Contractor's staff pursuant to this Paragraph 7.14 shall not relieve the Contractor of its obligation to complete all work in accordance with the terms and conditions of this Contract. County shall make every reasonable effort to notify Contractor prior to disqualifying any of Contractor's staff.

7.15 Confidentiality

7.15.1 "Confidential Information" means ideas, know-how, trade secrets, computer programs, technical information, and other confidential information which is disclosed by a disclosing party to a receiving party under this Contract. Written or other tangible confidential information shall at the time of disclosure be identified and labeled as confidential information belonging to the disclosing party. When disclosed orally or visually, confidential information shall be identified as confidential at the time of the disclosure, with subsequent confirmation in writing within fifteen (15) days after disclosure. Each party shall maintain the confidentiality of all records obtained from the other party under this Contract in accordance with all applicable federal, State or local laws, ordinances, regulations and directives relating to confidentiality and shall protect the other party's Confidential Information with the same degree of care and in accordance with the security regulation by which it protects its own confidential business records. To the extent not prohibited by federal, State or local authority relating to confidentiality, neither party may during the Term and for three years thereafter disclose any of the other party's Confidential Information to any third party. Neither party may use the other party's Confidential Information except to perform its duties under this Contract. The Confidential Information restrictions will not apply to Confidential Information that is (i) already known to the receiving party, (ii) becomes publicly available through no wrongful act of the receiving party, (iii) independently developed by the receiving party without benefit of the disclosing party's Confidential Information, or (iv) disclosed by the disclosing party to a third party without an obligation of confidentiality. Until directed

otherwise by County in writing, Contractor's Program Director, Program Manager, and all staff supporting this Contract may discuss and disclose County's customer proprietary network information (CPNI) to any employee or agent of County without a need for further authentication or authorization.

7.15.2 Each party shall inform all of its officers, employees, agents and Subcontractors providing Services hereunder of the confidentiality provisions of this Contract.

7.15.3 As appropriate to the work done on this Contract by members of Contractor's staff, each such member of Contractor's staff shall sign and adhere to the provisions of Exhibit G (Contractor Employee Acknowledgement, Confidentiality Agreement and Assignment of Copyright). Where appropriate and reasonable, either party may require non-employees of the other party to execute a nondisclosure agreement in a form agreeable to both parties prior to such non-employees obtaining access to the other party's Confidential Information.

8.0 STANDARD TERMS AND CONDITIONS

8.1 Change Notices and Amendments

8.1.1 County reserves the right to initiate Change Notices that add services as they become available, or do not change the scope, term, Contract Sum or payments. All such agreed changes shall be accomplished with an executed Change Notice signed by the Contractor and by County's Program Director or designee.

8.1.2 Certain Change Notices may include, on an as-needed basis, requests for specific serving arrangements under the Contract with amortization periods that extend beyond the term of the Contract. This type of Change Notice shall be agreed upon by both parties and shall generally be in the form of Exhibit L (Sample Change Notice).

8.1.3 For any change which materially affects the scope of work, term, contract sum, payments, or any term or condition included under this Contract, a written amendment to this Contract shall be prepared, agreed upon and executed by the Contractor's authorized representative and by the Director or his/her designee, notwithstanding that County has the sole and unilateral option to extend the term of this Contract pursuant to Paragraph 4.2 and that Contractor is obligated to execute any such Amendment memorializing County's exercise of its rights under Paragraph 4.2.

8.1.4 The Board may require the addition and/or change of certain terms and conditions in this Contract during the term of this Contract resulting from policies, ordinances and/or directives adopted by the Board which are

generally applicable to all County contracts. County reserves the right to add and/or change such terms and conditions of this Contract as required by the Board. To implement any such additions and/or changes, a written amendment to this Contract shall be executed by Contractor's authorized representative and by the Director or his / her designee. If an addition and/or change to the terms and conditions of this Contract under this Subparagraph has, in the reasonable opinion of Contractor, a material adverse financial effect on Contractor then Contractor shall notify County of its concern. Such notice to County shall explain in detail the material adverse financial effect Contractor contends will occur, which explanation shall include Contractor's best estimate of the annual dollar amount of such adverse financial effect. Once notice is provided to County under this Subparagraph, County shall have the right to mitigate the material adverse financial effect identified by Contractor. If mitigated so the addition and/or change is no longer material, then this Contract may not be terminated by Contractor. Contractor and County shall act in good faith to mitigate the material adverse financial impact identified by Contractor and acknowledged by County. If County cannot mitigate the material adverse financial effect, Contractor may, as Contractor's sole remedy, elect to terminate this Contract within ninety (90) days of the effective date of such addition and/or change upon giving sixty (60) days written notice to County. Contractor and County shall act in good faith to modify the termination time periods or other terms of this Subparagraph to allow County to mitigate the material adverse financial impact identified by Contractor. In the event of a termination under this Subparagraph, Contractor shall continue to provide Services to County pursuant to Paragraph 8.47 (Contractor's Obligations Upon Termination) of this Contract, provided that County may extend the service duration under Paragraph 8.47 (Contractor's Obligations Upon Termination) from eighteen (18) months to thirty (30) months.

8.2 Assignment and Delegation

8.2.1 Contractor shall not assign its rights or delegate its duties under this Contract, or both, whether in whole or in part, without the prior consent of County, which will not be unreasonably withheld or delayed, and any attempted assignment or delegation without such consent shall be null and void. For purposes of this Paragraph 8.2, County consent shall require a written amendment to this Contract which is formally approved and executed by the parties. Any payments by County to any approved delegate or assignee on any claim under this Contract shall be deductible, at County's sole discretion, against the claims, which Contractor may have against County. Notwithstanding the foregoing, Contractor may assign all or any part of this Contract to an Affiliate and/or use Subcontractors, pursuant to Paragraph 8.39 (Subcontracting), to perform Services.

8.2.2 Shareholders, partners, members or other equity holders of Contractor may transfer, sell, exchange, assign or divest themselves of any interest they may have therein. However, in the event of any such sale, transfer, exchange, assignment or divestment is effected in such a way as to give majority control of Contractor to any person(s), corporation, partnership or legal entity other than the majority controlling interest therein at the time of the execution of this Contract, Contractor shall give notice thereof to County as soon as reasonably possible and County shall have the right, based solely on the change in majority control of Contractor, to terminate this Contract within ninety (90) days of receiving such notice with no associated costs or fees for such termination. Contractor shall continue to provide Services to County pursuant to Paragraph 8.47 (Contractor's Obligations Upon Termination) of this Contract.

8.2.3 If any assumption, assignment, delegation, or takeover of any of Contractor's duties, responsibilities, obligations, or performance of same by any entity other than Contractor, whether through assignment, Subcontract, delegation, merger, buyout, or any other mechanism, with or without consideration for any reason whatsoever without County's express prior approval, shall be a material breach of this Contract by Contractor which may result in the termination of this Contract, at the discretion of County. In the event of such termination, County shall be entitled to pursue the same remedies against Contractor as it could pursue in the event of any other breach or default by Contractor. Notwithstanding the foregoing, Contractor may assign all or any part of this Contract to an Affiliate and/or use Subcontractors, pursuant to Paragraph 8.39 (Subcontracting), to perform Services.

8.3 Authorization Warranty

Each party represents and warrants that the person executing this Contract for that party is an authorized agent who has actual authority to bind that party to each and every term, condition, and obligation of this Contract and that all requirements of that party have been fulfilled to provide such actual authority.

8.4 Budget Reductions

In the event that the Board adopts, in any fiscal year, a County budget which provides for reductions in the salaries and benefits paid to the majority of County employees and imposes similar reductions with respect to County contracts, County reserves the right to reduce its payment obligation under this Contract correspondingly for that fiscal year and any subsequent fiscal year during the term of this Contract (including any extensions), and the Services to be provided by Contractor under this Contract shall also be reduced correspondingly. County's notice to Contractor regarding said reduction in payment obligation shall be provided within thirty (30) days of the Board's approval of such actions. Except as set forth in the preceding sentence, Contractor shall continue to provide all of the Services set forth in this

Contract. Nothing in this Paragraph shall be interpreted to alleviate County's obligation under this Contract to pay Contractor for services performed by Contractor that are otherwise accepted by County under the terms of this Contract.

8.5 **Complaints**

Contractor shall develop, maintain and operate procedures for receiving, investigating and responding to complaints.

Within ten (10) Business Days after Contract effective date, Contractor shall provide County with Contractor's policy for receiving, investigating and responding to user complaints.

County will review Contractor's policy and provide Contractor with approval of said plan or with requested changes.

If County requests changes in Contractor's policy, Contractor shall, if agreeable, make such changes and resubmit the plan within five (5) Business Days for County approval.

If, at any time, Contractor wishes to materially change Contractor's policy as it pertains to County, Contractor shall submit proposed changes to County for approval before implementation.

Contractor shall preliminarily investigate all written complaints and notify County's Project Manager of the status of the investigation within five (5) Business Days of receiving the complaint.

When complaints cannot be resolved informally, a system of follow-through shall be instituted which adheres to formal plans for specific actions and strict time deadlines.

Copies of all written responses shall be sent to County's Project Manager within three (3) Business Days of mailing to the complainant.

8.6 **Compliance with Applicable Law**

Each party shall comply with all applicable Federal, State, and local laws, rules, regulations, ordinances, directives, policies and procedures, and all provisions required thereby to be included in this Contract are hereby incorporated herein by reference. Applicable Federal Communication ("FCC") Rules and Regulations regarding percent interstate and international usage shall apply to County traffic depending on whether the Service is intrastate or interstate jurisdictionally. County will be required to certify compliance with these rules. For jurisdictionally intrastate Services, County will be required to certify that that the total interstate traffic constitutes ten percent (10%) or less of the total traffic on the Service. For jurisdictionally interstate Services, County will be required to certify that that the total interstate traffic constitutes

more than ten percent (10%) of the total traffic on the Service. This Paragraph 8.6 shall only apply to Services provided for under Exhibit A-1 (Statement of Work for Local Services) and Exhibit A-2 (Statement of Work for Long Distance Services).

8.6.1 Contractor shall indemnify and hold harmless County from and against any and all liability, damages, costs, and expenses, including, but not limited to, defense costs and attorneys' fees, arising from or related to any violation on the part of Contractor or its employees, agents, or Subcontractors of any such laws, rules, regulations, ordinances, directives, policies or procedures.

8.7 Compliance with Civil Rights Laws

Contractor shall comply with Subchapter VI of the Civil Rights Act of 1964, 42 USC Sections 2000 (e) (1) through 2000 (e) (17), to the end that no person shall, on the grounds of race, creed, color, sex, religion, ancestry, age, condition of physical handicap, marital status, political affiliation, or national origin, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under this Contract or under any project, program, or activity supported by this Contract. Contractor shall comply with Exhibit D (Contractor's EEO Certification).

8.8 Compliance with County's Jury Service Program

This Contract is subject to the provisions of County's ordinance entitled Contractor Employee Jury Service ("Jury Service Program") as codified in Sections 2.203.010 through 2.203.090 of the Los Angeles County Code, a copy of which is attached hereto as Exhibit H (Jury Service Ordinance) and incorporated herein by this reference.

8.8.1 Written Employee Jury Service Policy

1. Unless Contractor has demonstrated to County's satisfaction either that Contractor is not a "Contractor" as defined under the Jury Service Program (Section 2.203.020 of the County Code) or that Contractor qualifies for an exception to the Jury Service Program (Section 2.203.070 of the County Code), Contractor shall have and adhere to a written policy that provides that its Employees shall receive from Contractor, on an annual basis, no less than five (5) Business Days of regular pay for actual jury service. The policy may provide that Employees deposit any fees received for such jury service with Contractor or that Contractor deduct from the Employee's regular pay the fees received for jury service.
2. For purposes of this Subparagraph, "Contractor" means a person, partnership, corporation or other entity which has a contract with County or a Subcontract with a County contractor

and has received or will receive an aggregate sum of \$50,000 or more in any twelve (12) month period under one or more County contracts or Subcontracts. "Employee" means any California resident who is a full-time employee of the Contractor. "Full-time" means forth (40) hours or more worked per week, or a lesser number of hours if: 1) the lesser number is a recognized industry standard as determined by County, or 2) Contractor has a long-standing practice that defines the lesser number of hours as full-time. Full-time employees providing short-term, temporary services of ninety (90) Business Days or less within a twelve (12) month period are not considered full-time for purposes of the Jury Service Program. If Contractor uses any Subcontractor to perform services for County under this Contract, the Subcontractor shall also be subject to the provisions of this Paragraph 8.8. The provisions of this Paragraph 8.8 shall be inserted into any such Subcontract agreement and a copy of the Jury Service Program shall be attached to the Subcontract agreement.

3. If Contractor is not required to comply with the Jury Service Program when this Contract commences, Contractor shall have a continuing obligation to review the applicability of its "exception status" from the Jury Service Program, and Contractor shall immediately notify County if Contractor at any time either comes within the Jury Service Program's definition of "Contractor" or if Contractor no longer qualifies for an exception to the Jury Service Program. In either event, Contractor shall immediately implement a written policy consistent with the Jury Service Program. County may also require, at any time during this Contract and at its sole discretion, that Contractor demonstrate to County's satisfaction that Contractor either continues to remain outside of the Jury Service Program's definition of "Contractor" and/or that Contractor continues to qualify for an exception to the Program.
4. Contractor's violation of this Paragraph 8.8 may constitute a material breach of this Contract. In the event of such material breach, County may, in its sole discretion, terminate this Contract and/or bar Contractor from the award of future County contracts for a period of time consistent with the seriousness of the breach.

8.9 Conflict of Interest

- 8.9.1 No County employee whose position with County enables such employee to influence the award of this Contract or any competing contract, and no spouse or economic dependent of such employee, shall be employed in any capacity by Contractor or have any other direct or indirect financial interest in this Contract. No officer or employee of Contractor who may financially benefit from the

performance of work hereunder shall in any way participate in County's approval, or ongoing evaluation, of such work, or in any way attempt to unlawfully influence County's approval or ongoing evaluation of such work.

8.9.2 Contractor shall comply with all conflict of interest laws, ordinances, and regulations now in effect or hereafter to be enacted during the term of this Contract. Contractor warrants that it is not now aware of any facts that create a conflict of interest. If Contractor hereafter becomes aware of any facts that might reasonably be expected to create a conflict of interest, it shall immediately make full written disclosure of such facts to County. Full written disclosure shall include, but is not limited to, identification of all persons implicated and a complete description of all relevant circumstances. Failure to comply with the provisions of this Paragraph 8.9 shall be a material breach of this Contract.

8.10 Consideration of Hiring County Employees Targeted for Layoff/or Re-Employment List

Should Contractor require additional or replacement personnel after the effective date of this Contract to perform the Services set forth herein, Contractor shall give consideration for such employment openings to qualified, permanent County employees who are targeted for layoff or qualified, former County employees who are on a re-employment list during the life of this Contract.

8.11 Consideration of Hiring Gain/Grow Program Participants

8.11.1 Should Contractor require additional or replacement personnel after the effective date of this Contract, Contractor shall give consideration for any such employment openings to participants in County's Department of Public Social Services Greater Avenues for Independence (GAIN) Program or General Relief Opportunity for Work (GROW) Program who meet Contractor's minimum qualifications for the open position. For this purpose, consideration shall mean that Contractor will interview qualified candidates. County will refer GAIN/GROW participants by job category to Contractor.

8.11.2 In the event that both laid-off County employees and GAIN/GROW participants are available for hiring, County employees shall be given first priority.

8.12 Contractor Responsibility and Debarment

8.12.1 Responsible Contractor

A responsible contractor is a contractor who has demonstrated the attribute of trustworthiness, as well as quality, fitness, capacity and

experience to satisfactorily perform the contract. It is County's policy to conduct business only with responsible contractors.

8.12.2 Chapter 2.202 of the County Code

Contractor is hereby notified that, in accordance with Chapter 2.202 of the County Code, if County acquires information concerning the performance of Contractor on this or other contracts which indicates that Contractor is not responsible, County may, in addition to other remedies provided in this Contract, debar Contractor from bidding or proposing on, or being awarded, and/or performing work on County contracts for a specified period of time, which generally will not exceed five years but may exceed five (5) years or be permanent if warranted by the circumstances, and terminate any or all existing contracts Contractor may have with County.

8.12.3 Non-responsible Contractor

County may debar a contractor if the Board finds, in its discretion, that the contractor has done any of the following: (1) violated a material term of a contract with County or a nonprofit corporation created by County which breach was uncured by contractor as allowed in the at-issue contract, (2) committed an act or omission which negatively reflects on the contractor's quality, fitness or capacity to perform a contract with County, any other public entity, or a nonprofit corporation created by County, or engaged in a pattern or practice which negatively reflects on same, (3) committed an act or offense which indicates a lack of business integrity or business honesty, or (4) made or submitted a false claim against County or any other public entity.

8.12.4 Contractor Hearing Board

1. If there is evidence that Contractor may be subject to debarment, ISD will notify Contractor in writing of the evidence which is the basis for the proposed debarment and will advise Contractor of the scheduled date for a debarment hearing before the Contractor Hearing Board.
2. The Contractor Hearing Board will conduct a hearing where evidence on the proposed debarment is presented. Contractor and/or Contractor's representative shall be given an opportunity to submit evidence at that hearing. After the hearing, the Contractor Hearing Board shall prepare a tentative proposed decision, which shall contain a recommendation regarding whether Contractor should be debarred, and, if so, the appropriate length of time of the debarment. Contractor and ISD shall be provided an opportunity to object to the tentative proposed decision prior to its presentation to the Board.

3. After consideration of any objections, or if no objections are submitted, a record of the hearing, the proposed decision, and any other recommendation of the Contractor Hearing Board shall be presented to the Board. The Board shall have the right to modify, deny, or adopt the proposed decision and recommendation of the Contractor Hearing Board.
4. If a contractor has been debarred for a period longer than five (5) years, that contractor may after the debarment has been in effect for at least five (5) years, submit a written request for review of the debarment determination to reduce the period of debarment or terminate the debarment. County may, in its discretion, reduce the period of debarment or terminate the debarment if it finds that the contractor has adequately demonstrated one or more of the following: (1) elimination of the grounds for which the debarment was imposed; (2) a bona fide change in ownership or management; (3) material evidence discovered after debarment was imposed; or (4) any other reason that is in the best interests of County.
5. The Contractor Hearing Board will consider a request for review of a debarment determination only where (1) the contractor has been debarred for a period longer than five (5) years; (2) the debarment has been in effect for at least five (5) years; and (3) the request is in writing, states one or more of the grounds for reduction of the debarment period or termination of the debarment, and includes supporting documentation. Upon receiving an appropriate request, the Contractor Hearing Board will provide notice of the hearing on the request. At the hearing, the Contractor Hearing Board shall conduct a hearing where evidence on the proposed reduction of debarment period or termination of debarment is presented. This hearing shall be conducted and the request for review decided by the Contractor Hearing Board pursuant to the same procedures as for a debarment hearing.
6. The Contractor Hearing Board's proposed decision shall contain a recommendation on the request to reduce the period of debarment or terminate the debarment. The Contractor Hearing Board shall present its proposed decision and recommendation to the Board. The Board shall have the right to modify, deny, or adopt the proposed decision and recommendation of the Contractor Hearing Board.

8.12.5 Subcontractors of Contractor

These terms shall also apply to Subcontractors of County contractors.

8.13 Contractor's Acknowledgement of County's Commitment to the Safely Surrendered Baby Law

Contractor acknowledges that County places a high priority on the implementation of the Safely Surrendered Baby Law. Contractor understands that it is County's policy to encourage all County contractors to voluntarily post the County's "Safely Surrendered Baby Law" poster in a prominent position at the contractor's place of business. Contractor will also encourage its Subcontractors, if any, to post this poster in a prominent position in the Subcontractor's place of business. County's Department of Children and Family Services will supply Contractor with the poster to be used. Information on how to receive the poster can be found on the Internet at www.babysafela.org.

8.14 Contractor's Warranty of Adherence to County's Child Support Compliance Program

8.14.1 Contractor acknowledges that County has established a goal of ensuring that all individuals who benefit financially from County through contract are in compliance with their court-ordered child, family and spousal support obligations in order to mitigate the economic burden otherwise imposed upon County and its taxpayers.

8.14.2 As required by County's Child Support Compliance Program (County Code Chapter 2.200) and without limiting Contractor's duty under this Contract to comply with all applicable provisions of law, Contractor warrants that it is now in compliance and shall during the term of this Contract maintain in compliance with employment and wage reporting requirements as required by the Federal Social Security Act (42 USC Section 653a) and California Unemployment Insurance Code Section 1088.5, and shall implement all lawfully served Wage and Earnings Withholding Orders or Child Support Services Department Notices of Wage and Earnings Assignment for Child, Family or Spousal Support, pursuant to Code of Civil Procedure Section 706.031 and Family Code Section 5246(b).

8.15 County's Quality Assurance Plan

County or its agent may elect to evaluate Contractor's performance under this Contract on not less than an annual basis. Such evaluation will include assessing Contractor's compliance with all Contract terms and conditions and performance standards. Contractor deficiencies which County determines are severe or continuing and that may place performance of this Contract in jeopardy if not corrected will be reported to the Board. The report will include improvement/corrective action measures taken by County and Contractor. If improvement does not occur consistent with the corrective action measures, County may pursue available remedies for default under Paragraph 8.42 (Termination for Default) below or impose other applicable penalties as specified in this Contract.

8.16 Damage to County Facilities, Buildings or Grounds

- 8.16.1 Contractor shall repair, or cause to be repaired, at its own cost, any and all damage to County facilities, buildings, or grounds directly caused by Contractor or employees or agents of Contractor. Such repairs shall be made immediately after Contractor has become aware of such damage, but in no event later than thirty (30) days after the occurrence.
- 8.16.2 If Contractor fails to make timely repairs, County may make any necessary repairs. All reasonable costs incurred by County, based on a) internal cost should County perform repairs internally or b) actual external cost should County perform repairs through a third party, provided for that County follow its procurement process for such repairs, shall be submitted to Contractor for repayment with supporting documentation, for such costs. County shall be repaid by Contractor by cash payment upon demand or, at County's option, deducted from any outstanding payments for Service owed by County to Contractor. Notwithstanding the preceding sentence, Contractor shall have five (5) Business Days to review such costs. If Contractor disputes the amount of any such costs, Contractor shall pay or County shall deduct from outstanding payments due Contractor all amounts. Contractor may then make claim to recover such amounts through procedures set forth in Paragraph 8.30 (Dispute Resolution Procedure).
- 8.16.3 County will make reasonable efforts to ensure that the location within a County facility at which Contractor installs, maintains or provides Services is a safe working environment, free of Hazardous Materials. To the extent that County becomes aware that a location within a County facility is not a safe working environment, free of Hazardous Materials, County will provide timely notification of such conditions to Contractor prior to Contractor's commencement of Services at that location. "Hazardous Materials" means any substance or material capable of posing an unreasonable risk to health, safety or property or whose use, transport, storage, handling, disposal, or release is regulated by any law related to pollution, protection of air, water, or soil, or health and safety. Contractor does not handle, remove or dispose of Hazardous Materials, and Contractor has no obligation to perform work at a location that is not a suitable and safe working environment. Contractor will not be liable for any Hazardous Materials or any removal or remediation costs.

8.17 Employment Eligibility Verification

- 8.17.1 Contractor warrants that it fully complies with all Federal and State statutes and regulations regarding the employment of aliens and others and that all its employees performing work under this Contract meet the citizenship or alien status requirements set forth in Federal and State statutes and regulations. Contractor shall obtain, from all employees

performing work hereunder, all verification and other documentation of employment eligibility status required by Federal and State statutes and regulations including, but not limited to, the Immigration Reform and Control Act of 1986, (P.L. 99-603), or as they currently exist and as they may be hereafter amended. Contractor shall retain all such documentation for all covered employees for the period prescribed by law.

8.17.2 Contractor shall indemnify, defend, and hold harmless, County, its agents, officers, and employees from employer sanctions and any other liability which may be assessed against Contractor or County or both in connection with any alleged violation of any Federal or State statutes or regulations pertaining to the eligibility for employment of any persons performing work under this Contract who are employed by Contractor.

8.18 Facsimile Representations

County and Contractor hereby agree to regard facsimile representations of original signatures of authorized officers or managers of each party, when appearing in appropriate places on the Amendments to this Contract prepared pursuant to Paragraph 8.1 (Change Notices and Amendments), and received via communications facilities, as legally sufficient evidence that such original signatures have been affixed to Amendments to this Contract, such that the parties need not follow up facsimile transmissions of such documents with subsequent (non-facsimile) transmission of "original" versions of such documents.

8.19 Fair Labor Standards

Contractor shall comply with all applicable provisions of the Federal Fair Labor Standards Act and shall indemnify, defend, and hold harmless County and its agents, officers, and employees from any and all liability, including, but not limited to, wages, overtime pay, liquidated damages, penalties, court costs, and attorneys' fees arising under any wage and hour law, including, but not limited to, the Federal Fair Labor Standards Act, for work performed by Contractor's employees for which County may be found jointly or solely liable.

8.20 Governing Law, Jurisdiction, and Venue

This Contract shall be governed by, and construed in accordance with, the laws of the State of California. Contractor agrees and consents to the exclusive jurisdiction of the courts of the State of California for all purposes regarding this Contract and further agrees and consents that venue of any action brought hereunder shall be exclusively in the County of Los Angeles. Nothing in this Contract is intended, or should be construed, to limit a party's right to seek preliminary or permanent injunctive relief from a court of competent jurisdiction for a breach of any provision of this Contract.

8.21 **Independent Contractor Status**

8.21.1 This Contract is by and between County and Contractor and is not intended, and shall not be construed, to create the relationship of agent, servant, employee, partnership, joint venture, or association, as between County and Contractor. The employees and agents of one party shall not be, or be construed to be, the employees or agents of the other party for any purpose whatsoever.

8.21.2 Contractor shall be solely liable and responsible for providing to, or on behalf of, all persons performing work pursuant to this Contract all compensation and benefits. County shall have no liability or responsibility for the payment of any salaries, wages, unemployment benefits, disability benefits, Federal, State, or local taxes, or other compensation, benefits, or taxes for any personnel provided by or on behalf of Contractor.

8.21.3 Contractor understands and agrees that all persons supplied by Contractor who are performing work pursuant to this Contract are, for purposes of Workers' Compensation liability, solely employees of Contractor and not employees of County. Contractor shall be solely liable and responsible for furnishing any and all Workers' Compensation benefits to any person as a result of any injuries arising from or connected with any work performed by or on behalf of Contractor pursuant to this Contract.

8.21.4 Each party shall adhere to the provisions stated in Paragraph 7.15 (Confidentiality).

8.22 **Indemnification**

Each party shall indemnify, defend and hold harmless the other party, its Special Districts, elected and appointed officers, directors, employees, and/or agents from and against any and all third party claims and related liability, including but not limited to demands, claims, actions, fees, costs, and expenses (including attorney and expert witness fees), for bodily injury, death, personal injury, or damage to tangible real or tangible personal property directly arising from or connected with the indemnifying party's negligent acts or omissions and/or willful misconduct arising from and/or relating to this Contract. Any obligation to indemnify and/or any liability of the indemnifying party for damages under this Paragraph 8.22 shall correspond to the relative and proportionate responsibility of the indemnifying party for such damages. The indemnifying party's obligation to defend and indemnify the other party is contingent upon (i) the other party providing the indemnifying party prompt written notice of any claim; and (ii) the other party providing the indemnifying party all reasonable information and assistance requested by the indemnifying party to settle, defend, or bring a countersuit in conjunction with any claim.

8.23 General Insurance Requirements

Without limiting Contractor's indemnification of County and during the term of this Contract, Contractor shall provide and maintain, and shall require all of its Subcontractors to maintain, the following programs of insurance specified in this Contract. Such insurance shall be primary to and not contributing with any other insurance or self-insurance programs maintained by County. Such coverage shall be provided and maintained at Contractor's own expense. Alternatively, Contractor may satisfy these requirements through self-insurance.

8.23.1 Evidence of Insurance: Certificate(s) or other evidence of coverage satisfactory to County shall be delivered to:

Division Manager
Internal Services Contracting Division
1100 N. Eastern Avenue
Los Angeles, CA 90063

prior to commencing Services under this Contract. Such certificates or other evidence shall:

- Specifically identify this Contract;
- Clearly evidence all coverages required in this Contract;
- Contain the express condition that County is to be given written notice by mail at least thirty (30) days in advance of cancellation for all policies evidenced on the certificate of insurance;
- Include copies of the additional insured endorsement to the commercial general liability policy, including the County of Los Angeles, its Special Districts, its officials, officers and employees as insureds for all activities arising from this Contract; and
- County retains the right to require Contractor to provide a bond guaranteeing payment of all such retained losses and related costs, including, but not limited to, expenses or fees, or both, related to investigations, claims administrations, and legal defense. Such bond shall be executed by a corporate surety licensed to transact business in the State of California.

8.23.2 Insurer Financial Ratings: Insurance is to be provided by an insurance company acceptable to County with an A.M. Best rating of not less than A:VII unless otherwise approved by County.

8.23.3 Failure to Maintain Coverage: Failure by Contractor to maintain the required insurance, or to provide evidence of insurance coverage acceptable to County, shall constitute a material breach of this Contract

upon which County may immediately terminate or suspend this Contract. County, at its sole option, may obtain damages from Contractor resulting from said breach. Alternatively, County may purchase such required insurance coverage, and without further notice to the Contractor, County may deduct from sums due to Contractor any premium costs advanced by County for such insurance.

8.23.4 Notification of Incidents, Claims or Suits: Contractor shall report to County:

- Any accident or incident relating to Services performed under this Contract which involves injury or property damage which may result in the filing of a claim or lawsuit against Contractor and/or County. Such report shall be made in writing within twenty-four (24) hours of occurrence.
- Any third party claim or lawsuit filed against Contractor arising from or related to Services performed by Contractor under this Contract.
- Any injury to a Contractor employee that occurs on County property. This report shall be submitted on a County “Non-employee Injury Report” to County’s Project Manager.
- Any loss, disappearance, destruction, misuse, or theft of any kind whatsoever of County property, monies or securities entrusted to Contractor under the terms of this Contract.

8.23.5 Compensation for County Costs: In the event that Contractor fails to comply with any of the insurance requirements of this Contract, and such failure to comply results in any costs to County, Contractor shall pay full compensation for all costs incurred by County.

8.23.6 Insurance Coverage Requirements for Subcontractors: Contractor shall ensure any and all Subcontractors performing Services under this Contract meet the insurance requirements of this Contract by either:

- Contractor providing evidence of insurance covering the activities of Subcontractors, or
- Contractor providing evidence submitted by Subcontractors evidencing that Subcontractors maintain the required insurance coverage. County retains the right to obtain copies of evidence of Subcontractor insurance coverage at any time upon reasonable notice.

8.24 Insurance Coverage Requirements

8.24.1 **General Liability Insurance** written on ISO policy form CG 00 01 or its equivalent with limits of not less than the following:

General Aggregate:	\$4 million
Products/Completed Operations Aggregate:	\$2 million
Personal and Advertising Injury:	\$2 million
Each Occurrence:	\$2 million

8.24.2 **Automobile Liability Insurance** written on ISO policy form CA 00 01 or its equivalent with a limit of liability of not less than \$1 million for each accident. Such insurance shall include coverage for all “owned”, “hired” and “non-owned” vehicles, or coverage for “any auto”.

8.24.3 **Workers’ Compensation and Employers’ Liability Insurance** providing workers’ compensation benefits, as required by the Labor Code of the State of California or by any other state, and for which Contractor is responsible. This insurance also shall include Employers’ Liability coverage with limits of not less than the following:

Each Accident:	\$1 million
Disease - policy limit:	\$1 million
Disease - each employee:	\$1 million

8.24.4 **Errors and Omissions Liability Insurance** with limits of not less than \$5 million per claim and \$5 million aggregate. Such insurance also shall provide contractual liability, personal injury and intellectual property (copyright infringement) liability coverage.

8.25 Assessed Fees

8.25.1 Billing Inaccuracies and Disputes

If, in the judgment of the Program Director or his/her designee, Contractor’s invoice is deemed inaccurate, County will notify Contractor and Contractor and County shall exercise commercially reasonable efforts to resolve such billing dispute within thirty (30) days. In addition to, or in lieu of, other remedies provided herein, payments on disputed charges may be withheld by County and no late payment charges will apply to the disputed amount pending resolution of the claim. If not resolved to County’s satisfaction within thirty (30) days, County and Contractor shall resolve the claim through the procedures set forth in Section 8.30 (Dispute Resolution Procedure) below. Upon resolution of the dispute, Contractor shall issue to County any applicable credit or reinstitute the disputed amount as an amount due on the next periodic invoice.

8.25.2 Contractor's Non-Compliance with Material Terms or Obligations.

If, in the judgment of the Program Director or his/her designee, Contractor is deemed to be non-compliant with material terms and obligations assumed hereby or a repeat failure (defined as more than one failure of the same kind on the same line/circuit/telephone number within a rolling thirty (30) day period) concerning a non-insignificant service issue occurs, the Program Director or his/her designee, shall notify Contractor of, and meet with Contractor to confer regarding the underlying failures or deficiencies in Contractor's performance. Contractor shall be provided a reasonable cure period (not to exceed sixty (60) calendar days). If a cure to County's satisfaction is not achieved by Contractor during the permitted cure period, an automatic escalation shall occur to Contractor's Regional Sales Vice President. Within fifteen (15) days of the automatic escalation, Contractor shall describe to County the underlying issue(s) and the corrective action(s) that have been implemented. If the corrective action(s) do not resolve the specific non-compliance or failure to County's satisfaction, Contractor and County shall resolve the matter through the procedures set for in Paragraph 8.30 (Dispute Resolution Procedure) below.

If, in the judgment of the Program Director or his/her designee, the specific non-compliance or failure reoccurs within twelve (12) months of its last occurrence, County may do any or all of the following:

- (a) Escalate the issue to Contractor's Sales Vice President.
- (b) Deduct assessed fees as specified in the Performance Requirements Summary (PRS) Chart. Contractor shall be liable to County for Assessed Fees in the specified amount. The amount specified in the PRS shall be deducted from County's payment to Contractor.
- (c) Upon giving five (5) Business Days notice to Contractor, County may correct the identified deficiencies. All reasonable costs incurred by County, based on actual cost of goods and services for such repairs performed internally by County, shall be submitted, with supporting documentation of the costs, to Contractor for repayment. County shall be repaid by Contractor by cash payment upon demand or, at County's option, such costs shall be deducted from any outstanding payments owed by County to Contractor for Services under this Contract. Notwithstanding the preceding sentence, Contractor shall have five (5) Business Days to review such costs. If Contractor disputes the amount of any such costs, Contractor shall pay or the County shall deduct from outstanding payments due Contractor all amounts not in good faith dispute. Disputed amounts may be withheld by Contractor and County shall not deduct such amounts pending resolution of the dispute

pursuant to the procedure set forth in Paragraph 8.30 (Dispute Resolution Procedure).

- (d) Notwithstanding the anything in this Subparagraph 8.25.2, Contractor may in good faith dispute (i) that it failed to perform its obligations under this Contract, or (ii) the amount of assessed fees retained by County, by providing written notice of such dispute to County within sixty (60) days of the County's withholding assessed fees. Contractor may then seek recovery of any such disputed amounts pursuant to Paragraph 8.30 (Dispute Resolution Procedure).

8.25.3 The action noted in this Paragraph 8.25 shall not be construed as a penalty, but as adjustment of payment to Contractor to recover County cost due to the failure of Contractor to complete or comply with the provisions of this Contract.

8.25.4 This Subparagraph shall not, in any manner, restrict or limit either party's rights under this Contract, including but not limited to County's right to damages for any breach of this Contract provided by law or as specified in the PRS or this Paragraph 8.25, and shall not, in any manner, restrict or limit County's right to terminate this Contract as agreed to herein.

8.26 Most Favored Public Entity

If Contractor's prices decline, or should Contractor at any time during the term of this Contract provide the same suite of goods within each individual Statement of Work under similar quantity, similar terms and conditions, and similar delivery conditions to the State of California or any county, municipality, or district of the State at prices below those set forth in this Contract, then such lower prices shall be immediately extended to County. The suite of goods and services to which this Paragraph 8.26 applies are; (i) the entire suite of goods and services offered by Contractor under Exhibit A-1 (Statement of Work for Local Services); (ii) the entire suite of goods and services offered by Contractor under Exhibit A-2 (Statement of Work for Long Distance Services); and (iii) the entire suite of goods and services offered by Contractor under Exhibit A-3 (Statement of Work for Managed IP Services).

8.27 Nondiscrimination and Affirmative Action

8.27.1 Contractor certifies and agrees that all persons employed by it, its affiliates, subsidiaries, or holding companies are and shall be treated equally without regard to or because of race, color, religion, ancestry, national origin, sex, age, physical or mental disability, marital status, or political affiliation, in compliance with all applicable Federal and State anti-discrimination laws and regulations.

- 8.27.2 Contractor shall certify to, and comply with, the provisions of Exhibit D (Contractor's EEO Certification).
- 8.27.3 Contractor shall take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to race, color, religion, ancestry, national origin, sex, age, physical or mental disability, marital status, or political affiliation, in compliance with all applicable Federal and State anti-discrimination laws and regulations. Such action shall include, but is not limited to: employment, upgrading, demotion, transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship.
- 8.27.4 Contractor certifies and agrees that it will deal with its Subcontractors, bidders, or vendors without regard to or because of race, color, religion, ancestry, national origin, sex, age, or physical or mental disability, marital status, or political affiliation.
- 8.27.5 Contractor certifies and agrees that it, its affiliates, subsidiaries, or holding companies shall comply with all applicable Federal and State laws and regulations to the end that no person shall, on the grounds of race, color, religion, ancestry, national origin, sex, age, physical or mental disability, marital status, or political affiliation, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under this Contract or under any project, program, or activity supported by this Contract.
- 8.27.6 Contractor shall allow County representatives access to Contractor's employment records during regular business hours to verify compliance with the provisions of this Paragraph 8.27 when so requested by County subject to reasonable prior written notice and appropriate limitations.
- 8.27.7 If County finds that any provisions of this Paragraph 8.27 have been violated, such violation shall constitute a material breach of this Contract upon which County may terminate or suspend this Contract. While County reserves the right to determine independently that the anti-discrimination provisions of this Contract have been violated, in addition, a determination by the California Fair Employment Practices Commission or the Federal Equal Employment Opportunity Commission that Contractor has violated Federal or State anti-discrimination laws or regulations shall constitute a finding by County that Contractor has violated the anti-discrimination provisions of this Contract.
- 8.27.8 Contractor agrees that in the event Contractor violates any of the anti-discrimination provisions of this Contract, County shall, at its sole discretion and option, be entitled to the sum of Five Hundred Dollars (\$500) for each such violation pursuant to California Civil Code

Section 1671 as liquidated damages, and not as a penalty, in lieu of terminating or suspending this Contract.

8.28 Non Exclusivity

Nothing herein is intended nor shall be construed as creating any exclusive arrangement by County with Contractor. This Contract shall not restrict County from acquiring similar, equal or like goods and/or services from other entities or sources.

8.29 Notice of Delays

Except as otherwise provided under this Contract, when either party has knowledge that any actual or potential situation is delaying or threatens to delay the timely performance of this Contract, that party shall, within one (1) business day, give notice thereof, including all relevant information with respect thereto, to the other party.

8.30 Dispute Resolution Procedure

8.30.1 Contractor and County agree to act promptly and diligently to mutually resolve any disputes which may arise with respect to this Contract. All such disputes shall be subject to the provisions of this Paragraph 8.30.

8.30.2 Contractor and County agree that, the existence and details of a dispute notwithstanding, both parties shall continue without delay their performance hereunder, County shall continue to pay sums not in dispute during any such period of continued performance. If Contractor fails to continue without delay its performance hereunder which County, in its reasonable discretion, determines should not be delayed as a result of such dispute, then any additional costs which may be incurred by Contractor or County as a result of Contractor's failure to continue to so perform shall be borne by Contractor as such are mutually agreed by County and Contractor, and Contractor shall make no claim whatsoever against County for such costs. The cost incurred by County shall not exceed the fair market cost of performing the required action and County shall provide Contractor with supporting documentation, of such costs under this Subparagraph at the time it submits such costs for payment by Contractor. However, County shall be entitled to the actual costs of goods, Services, and/or other work provided under this Subparagraph in an emergency situation(s). Contractor shall promptly reimburse County for such County costs, as determined by County, or County may deduct all such additional costs from any amounts due to Contractor from County, whether under this Contract or otherwise.

8.30.3 In the event of any dispute between the parties with respect to this Contract, Contractor and County shall submit the matter to their

respective Program Managers for the purpose of endeavoring to resolve such dispute.

8.30.4 In the event that the Program Managers are unable to resolve the dispute within a reasonable time not to exceed five (5) Business Days from the date of submission of the dispute to them, then the matter shall immediately be submitted to the parties' respective Program Directors for further consideration and discussion to attempt to resolve the dispute.

8.30.5 In the event that the Program Directors are unable to resolve the dispute within a reasonable time not to exceed five (5) Business Days from the date of submission of the dispute to them, then the matter shall immediately be submitted to Contractor's Sales Vice President and to County's Director for further consideration and discussion to attempt to resolve the dispute.

8.30.6 In the event that Contractor's Sales Vice President and County's Director are unable to resolve the dispute within a reasonable time not to exceed ten (10) Business Days from the date of submission of the dispute to them, then each party may assert its other rights and remedies provided under this Contract and/or its rights and remedies as provided by law.

8.30.7 All disputes utilizing this dispute resolution procedure shall be documented in writing by each party and shall state the specifics of each alleged dispute and all actions taken. The parties shall act in good faith to resolve all disputes. At all levels described in this Paragraph 8.30, the efforts to resolve a dispute shall be undertaken by conference between the parties' respective representatives, either orally, by face-to-face meeting or by telephone, or in writing by exchange of correspondence.

8.30.8 Notwithstanding any other provision of this Contract, County's right to terminate this Contract pursuant to Paragraph 8.44 (Termination for Insolvency), Paragraph 8.42 (Termination for Default), or any other termination provision hereunder, and either party's right to seek injunctive relief to enforce the provisions of Paragraph 7.15 (Confidentiality), and Contractor's right to terminate this Contract pursuant to Subparagraph 8.42.6 of Paragraph 8.42 (Termination for Default), shall not be subject to this dispute resolution procedure.

8.31 Notice to Employees Regarding the Federal Earned Income Credit

Contractor shall notify its employees, and shall require each Subcontractor to notify its employees, that they may be eligible for the Federal Earned Income Credit under the federal income tax laws. Such notice shall be provided in accordance with the requirements set forth in Internal Revenue Service Notice No. 1015.

8.32 Notice to Employees Regarding the Safely Surrendered Baby Law

Contractor shall notify and provide to its employees, and shall require each Subcontractor to notify and provide to its employees, a fact sheet regarding the Safely Surrendered Baby Law, its implementation in Los Angeles County, and where and how to safely surrender a baby. The fact sheet is set forth in Exhibit I (Safely Surrendered Baby Law) of this Contract and is also available on the Internet at www.babysafela.org for printing purposes.

8.33 Notices

All notices or demands required or permitted to be given or made under this Contract shall be in writing and shall be hand delivered to the other Party, (i) in person, (ii) by certified mail, return receipt requested, postage prepaid (iii) by traceable overnight delivery, or (iv) by facsimile, electronically confirmed and followed immediately by U.S. Mail. Notice will be effective upon delivery and addressed to the parties as identified in Exhibit E (County's Administration) and Exhibit F (Contractor's Administration). Addresses may be changed by either party giving ten (10) Business Days prior written notice thereof to the other party. The Director or his/her designee shall have the authority to issue all notices or demands required or permitted by County under this Contract.

8.34 Prohibition Against Inducement or Persuasion

Notwithstanding any provision hereof to the contrary, Contractor and County agree that, during the term of this Contract and for a period of one year thereafter, neither party shall in any way intentionally induce or persuade any employee of one party to become an employee or agent of the other party. No bar exists against any hiring action initiated through a public announcement.

8.35 Public Records Act

8.35.1 Any documents submitted by Contractor become a matter of public record and shall be regarded as public records. All information obtained in connection with County's right to audit and inspect Contractor's documents, books, and accounting records pursuant to Paragraph 8.37 (Record Retention and Inspection/Audit Settlement) of this Contract; as well as those documents which were required to be submitted in response to the Request for Proposals (RFP) used in the solicitation process for this Contract, become the exclusive property of County and become a matter of public record and shall be regarded as public records. Exceptions will be those elements in the California Government Code Section 6250 et seq. (Public Records Act) and which are marked "trade secret", "confidential", or "proprietary". County shall not in any way be liable or responsible for the disclosure of any such records including, without limitation, those so marked, if disclosure is required by law, or by an order issued by a court of competent jurisdiction.

8.35.2 In the event County is required by request of Contractor to defend an action on a Public Records Act request for any of the aforementioned documents, information, books, records, and/or contents of a proposal marked “trade secret”, “confidential”, or “proprietary”, Contractor agrees to defend and indemnify County from all costs and expenses, including reasonable attorney’s fees, in action or liability arising under the Public Records Act.

8.36 Publicity

8.36.1 Contractor shall not disclose any details in connection with this Contract to any person or entity except as may be otherwise provided hereunder or required by law. However, in recognizing Contractor’s need to identify its services and related clients to sustain itself, County shall not inhibit Contractor from publishing its role under this Contract within the following conditions:

- Contractor shall develop all publicity material in a professional manner; and
- During the term of this Contract, Contractor shall not, and shall not authorize another to, publish or disseminate any commercial advertisements, press releases, feature articles, or other materials using the name of County without the prior written consent of County’s Project Director.

8.36.2 Contractor may, without the prior written consent of County, indicate in its proposals and sales materials that it has been awarded this Contract with the County of Los Angeles, provided that the requirements of this Paragraph 8.36 shall apply.

8.36.3 Each party agrees not to display or use, in advertising or otherwise, any of the other party’s trade names, logos, trademarks, service marks or other indicia of origin without the other party’s prior written consent, which consent may be revoked at any time by notice.

8.37 Record Retention and Inspection/Audit Settlement

Contractor shall maintain accurate and complete financial records of its activities and operations relating to this Contract in accordance with generally accepted accounting principles. Contractor shall also maintain accurate and complete employment and other records relating to its performance of this Contract. The Contractor agrees that upon reasonable prior notice to Contractor, County, or its authorized representatives, shall have access to and the right to examine, audit, excerpt, copy, or transcribe any pertinent transaction, activity, or record reasonably relating to this Contract provided such access rights do not constitute an unlawful invasion of privacy rights of any Contractor employee and would not in the reasonable opinion of

Contractor subject Contractor to legal liability. Such requests for audit shall be reasonable in number. Should the audit be performed by a non-County entity or should a non-County entity be requested by County to review information received pursuant to an audit under this Paragraph, Contractor may require the non-County examiner/auditor to execute a Nondisclosure Agreement prior to any disclosure. The Nondisclosure Agreement shall limit the non-County entity's use of information received or reviewed in connection with the audit to work performed specifically for County. All such material, including, but not limited to, all financial records, timecards and other time and employment records, and proprietary data and information, shall be kept and maintained by Contractor and shall be made available to County in the form and format maintained by Contractor during the term of this Contract and for a period of five (5) years thereafter unless County's written permission is given to dispose of any such material prior to such time. All such material shall be maintained by Contractor at a location in Los Angeles County, provided that if any such material is located outside Los Angeles County, then, at Contractor's option, Contractor shall provide the materials in Los Angeles County or pay County for travel, per diem, and other costs incurred by County to examine, audit, excerpt, copy, or transcribe such material at such other location.

8.37.1 In the event that an audit of Contractor is conducted specifically regarding this Contract by any Federal or State auditor, or by any auditor or accountant employed by Contractor or otherwise, then Contractor shall file a copy of such audit report with County's Auditor-Controller within thirty (30) days of Contractor's receipt thereof, unless otherwise provided by applicable Federal or State law or under this Contract. Subject to applicable law, County shall maintain the confidentiality of such audit report(s) consistent with Paragraph 7.15 (Confidentiality) above.

8.37.2 A material failure on the part of Contractor to comply with any of the provisions of this Paragraph 8.37 shall constitute a material breach of this Contract upon which, if not cured by Contractor as allowed in Paragraph 8.42 (Termination for Default) below, County may terminate or suspend this Contract, in its sole discretion.

8.37.3 If, at any time during the term of this Contract or within five (5) years after the expiration or termination of this Contract, representatives of County conduct an audit of Contractor limited to work performed under this Contract, and if such audit finds that County's dollar liability for any such work is less than payments made by County to Contractor, then the difference shall be either: a) repaid by Contractor to County by cash payment upon demand or b) at the sole option of County's Auditor-Controller, deducted from any amounts due to Contractor from County, whether under this Contract or otherwise. Notwithstanding the foregoing, in the event Contractor disagrees with the audit findings, Contractor may commence the dispute resolution process under Paragraph 8.30 (Dispute Resolution Procedure). Contractor may commence the dispute resolution after payment or deduction is made

for recovery of such payment or deduction. If such audit finds that County's dollar liability for such work is more than the payments made by County to Contractor, then the difference shall be paid to Contractor by County by cash payment. Such payment will include a one-half percent (.5% per month) (6% per annum) interest rate beginning from the date Contractor initiates the dispute resolution process. In no event shall County's maximum obligation for this Contract exceed the funds appropriated by County for the purpose of this Contract.

8.38 Recycled Bond Paper

Consistent with the Board's policy to reduce the amount of solid waste deposited at County landfills, Contractor agrees to use recycled-content paper to the maximum extent possible on this Contract.

8.39 Subcontracting

8.39.1 The requirements of this Contract may not be Subcontracted by Contractor without the advance approval of County. Any attempt by Contractor to Subcontract without the prior consent of County may be deemed a material breach of this Contract. Notwithstanding the foregoing, the requirements under this Paragraph 8.39 apply only to Subcontracted work that is specifically targeted and limited to functions under this Contract. County acknowledges and agrees that this Paragraph 8.39 does not apply to Contractor's Affiliates, or any other Subcontract that is entered into by Contractor for a purpose that is not specifically aimed at supporting this Contract.

8.39.2 If Contractor desires to Subcontract, Contractor shall provide the following information promptly at County's request:

- A description of the work to be performed by the Subcontractor;
- A draft copy of the proposed Subcontract; and
- Other pertinent information and/or certifications requested by County.

8.39.3 Contractor shall indemnify and hold County harmless with respect to the activities of each and every Subcontractor in the same manner and to the same degree as if such Subcontractor(s) were Contractor employees.

8.39.4 Contractor shall remain fully responsible for all performances required of it under this Contract, including those that Contractor has determined to Subcontract, notwithstanding County's approval of Contractor's proposed Subcontract.

- 8.39.5 County's consent to Subcontract shall not waive County's right as defined in this Contract relating to prior and continuing approval of personnel, including Subcontractor employees, providing Services under this Contract. Contractor is responsible to notify its Subcontractors of this County right. County's consent to Subcontract will not be unreasonably withheld or delayed.
- 8.39.6 County's Program Director is authorized to act for and on behalf of County with respect to approval of any Subcontract and Subcontractor employees.
- 8.39.7 Contractor shall be solely liable and responsible for all payments or other compensation to all Subcontractors and their officers, employees, agents, and successors in interest arising through Services performed hereunder, notwithstanding County's consent to Subcontract.
- 8.39.8 Contractor shall obtain certificates of insurance, which establish that the Subcontractor maintains all the programs of insurance required by County from each approved Subcontractor. Contractor shall ensure delivery of all such documents to:

Division Manager
Internal Services Contracting Division
1100 N. Eastern Avenue
Los Angeles, CA 90063

before any Subcontractor employee may perform any work hereunder.

8.40 Termination for Breach of Warranty to Maintain Compliance with County's Child Support Compliance Program

Failure of Contractor to maintain compliance with the requirements set forth in Paragraph 8.14 (Contractor's Warranty of Adherence to County's Child Support Compliance Program) shall constitute default under this Contract. Without limiting the rights and remedies available to County under any other provision of this Contract, failure of Contractor to cure such default within ninety (90) days of written notice shall be grounds upon which County may terminate this Contract pursuant to Paragraph 8.42 (Termination for Default) and pursue debarment of the Contractor, pursuant to County Code Chapter 2.202.

8.41 Termination for Convenience

8.41.1 This Contract may be terminated, in whole or in part, from time to time, when such action is deemed by County, in its sole discretion, to be in its best interest. Termination of work hereunder shall be effected by notice of termination to Contractor specifying the extent to which performance of work is terminated and the date upon which such termination becomes effective. The date upon which such termination becomes

effective shall be no less than thirty (30) days after the notice is sent, unless otherwise determined by County.

8.41.2 After receipt of a notice of termination and except as otherwise directed by County, Contractor shall:

- Stop work under this Contract on the date and to the extent specified in such notice, and
- Complete performance of such part of the work as shall not have been terminated by such notice.

8.41.3 All material including books, records, documents, or other evidence bearing on the costs and expenses of Contractor under this Contract shall be maintained by Contractor in accordance with Paragraph 8.37 (Record Retention and Inspection/Audit Settlement).

8.41.4 Should County terminate this Contract pursuant to this Paragraph 8.41, Contractor will compute termination charges according to the following provisions and render a bill to County, upon County's approval of such bill, County agrees to pay within sixty (60) days:

- (a) a pro rata reimbursement of any waived or amortized non-recurring charges for equipment and/or services to the extent identified in the relevant pricing document or Statement of Work;
- (b) a pro rata reimbursement of all sign-on bonuses;
- (c) Any charges incurred by Contractor from a third party (e.g., not a Contractor Affiliate) due to the termination, including but not limited to any termination charges assessed by the Local Access Provider, if County cancels, in whole or in part, any Local Access Service procured by Contractor on its behalf;

Without terminating this Contract, should County disconnect over fifty percent (50%) of total Service volumes of Exhibit A-1 (Statement of Work for Local Services), or of Exhibit A-2 (Statement of Work for Long Distance Services), Contractor shall have the right to raise rates for the impacted Statement of Work to levels consistent with and in no event higher than Contractor's current rates for similarly situated customers with similar volumes. The preceding sentence does not apply to the extent County migrates the disconnected Services to Services provided under Exhibit A-3 (Statement of Work for Managed IP Services).

8.42 Termination for Default

8.42.1 County may, by written notice to Contractor, terminate the whole or any part of this Contract if Contractor fails to perform or provide any material Service including any task, deliverable or other work required,

(i) within the times specified in this Contract including the applicable notice and/or cure periods, if any, (if no cure period is specified elsewhere in this Contract for a particular Service, Contractor shall have thirty (30) days to cure) prior to termination under this Subparagraph 8.42.1, or (ii) any authorized extensions thereof (provided that nothing in this Subparagraph 8.42.1 shall in any way limit or modify any rights of County or obligations of Contractor relating to timely performance by Contractor as otherwise set forth in this Contract).

8.42.2 In the event that County terminates this Contract in whole or in part as provided in Subparagraph 8.42.1, County may procure, upon such terms and in such manner as County may deem appropriate, goods and Services similar to those so terminated. Contractor shall be liable to County for any and all excess costs incurred by County, as determined by County, for such similar goods and Services. The cost incurred by County shall not exceed fair market cost of goods, Services, and/or other work being terminated. County shall provide Contractor with supporting documentation, limited to invoices, of such costs under this Subparagraph at the time it submits such costs for payment by Contractor. County shall be entitled to excess cost incurred by County based on the actual cost of goods, Services, and/or other work provided under this Paragraph 8.42 in an emergency situation(s), or if suitable goods, Services, and/or other work are not otherwise reasonably available, as determined by County. Contractor shall continue the performance of this Contract to the extent not terminated under the provisions of this Paragraph 8.42.

8.42.3 Except with respect to defaults of any Subcontractor, Contractor shall not be liable for any such excess costs of the type identified in Subparagraph 8.42.2 if its failure to perform this Contract arises out of causes beyond the control and without the fault or negligence of Contractor. Such causes may include, but are not limited to: acts of God or of the public enemy, acts of County in either its sovereign or contractual capacity, acts of Federal or State governments in their sovereign capacities, war, terrorism, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and unusually severe weather; but in every case, the failure to perform must be beyond the control and without the fault or negligence of Contractor. If the failure to perform is caused by the default of a Subcontractor, and if such default arises out of causes beyond the control of both Contractor and Subcontractor, and without the fault or negligence of either of them, Contractor shall not be liable for any such excess costs for failure to perform, unless the goods or Services to be furnished by the Subcontractor were obtainable from other sources in sufficient time to permit Contractor to meet the required performance schedule. As used in this Subparagraph 8.42.3, the terms "Subcontractor" and "Subcontractors" mean Subcontractor(s) at any tier. Any delay resulting from a force majeure event shall extend

Contractor's performance period by a term equal to the time lost by reason of the force majeure.

8.42.4 If, after County has given notice of termination under the provisions of this Paragraph 8.42, it is determined by County that Contractor was not in default under the provisions of this Paragraph 8.42, or that the default was excusable under the provisions of Subparagraph 8.42.3, the rights and obligations of the parties shall be the same as if the notice of termination had been issued pursuant to Paragraph 8.41 (Termination for Convenience).

8.42.5 The rights and remedies of County provided in this Paragraph 8.42 shall not be exclusive and are in addition to any other rights and remedies of County provided by law or under this Contract.

8.42.6 The Contractor may terminate the whole or any part of this Contract in the event of the occurrence of any of the following:

- Upon thirty (30) days written notice if County fails to perform or observe any material term or condition of the Contract, including but not limited to the payment of undisputed amounts due for Services provided by Contractor hereunder, and such failure is not remedied within ninety (90) days (three (3) billing cycles) of County's receipt of Contractor's written notice.
- Contractor may terminate or suspend an affected Service, and not the entire suite of Services, twelve (12) hours following written notice to County and confirmed acknowledgement of such notice by an authorized representative of the County if (i) the affected Service is used for an unlawful purpose based upon a judicial determination, or (ii) County's use of the affected Service causes immediate, serious, and substantial harm or damage to Contractor's network or affected Service. At the request of County, Contractor will meet with County during the twelve (12) hour period to discuss the affected Service prior to termination or suspension of Service.
- The rights and remedies of Contractor provided in this Paragraph 8.42 shall not be exclusive and are in addition to any other rights and remedies of Contractor provided by law or under this Contract.

8.43 Termination for Improper Consideration

8.43.1 County may, by written notice to Contractor, immediately terminate the right of Contractor to proceed under this Contract if it is found that consideration, in any form, was offered or given by Contractor, either directly or through an intermediary, to any County officer, employee, or agent with the intent of securing this Contract or securing favorable treatment with respect to the award, amendment, or extension of this Contract or the making of any determinations with respect to

Contractor's performance pursuant to this Contract. In the event of such termination, County shall be entitled to pursue the same remedies against Contractor as it could pursue in the event of default by Contractor.

8.43.2 Contractor shall immediately report any attempt by a County officer or employee to solicit such improper consideration. The report shall be made either to the County manager charged with the supervision of the employee or to the County Auditor-Controller's Employee Fraud Hotline at (800) 544-6861.

8.43.3 Among other items, such improper consideration may take the form of cash, discounts, Service, the provision of travel or entertainment, or tangible gifts.

8.43.4 If, after County has given notice of termination under the provisions of this Paragraph 8.43, it is determined by County or a court of competent jurisdiction that the Contractor was not in default under the provisions of this Paragraph 8.43, the rights and obligations of the parties shall be the same as if the notice of termination had been issued pursuant to Paragraph 8.41 (Termination for Convenience).

8.44 Termination for Insolvency

8.44.1 County may terminate this Contract forthwith in the event of the occurrence of any of the following:

- Insolvency of Contractor. Contractor shall be deemed to be insolvent if it has ceased to pay its debts for at least sixty (60) days in the ordinary course of business or cannot pay its debts as they become due, whether or not a petition has been filed under the Federal Bankruptcy Code and whether or not the Contractor is insolvent within the meaning of the Federal Bankruptcy Code;
- The filing of a voluntary or involuntary petition regarding Contractor under the Federal Bankruptcy Code;
- The appointment of a receiver or trustee for Contractor; or
- The execution by Contractor of a general assignment for the benefit of creditors.

8.44.2 The rights and remedies of County provided in this Paragraph 8.44 shall not be exclusive and are in addition to any other rights and remedies of County provided by law or under this Contract.

8.45 Termination for Non-Adherence of County Lobbyist Ordinance

Contractor, and each County Lobbyist or County Lobbying firm as defined in County Code Section 2.160.010 retained by Contractor, shall fully comply with County's Lobbyist Ordinance (County Code Chapter 2.160). Failure on the part of Contractor or any County Lobbyist or County Lobbying firm retained by Contractor to fully comply with County's Lobbyist Ordinance shall constitute a material breach of this Contract, upon which County may in its sole discretion, immediately terminate or suspend this Contract.

8.46 Termination for Non-Appropriation of Funds

Notwithstanding any other provision of this Contract, County shall not be obligated for Contractor's performance hereunder or by any provision of this Contract during any of County's future fiscal years unless and until the Board appropriates funds for this Contract in County's Budget for each such future fiscal year. In the event that funds are not appropriated for this Contract, then this Contract shall terminate as of June 30 of the last fiscal year for which funds were appropriated. County shall notify Contractor in writing of any such non-allocation of funds at the earliest possible date, but in no event less than ten (10) Business Days prior to the termination date. County will remain responsible for all Services provided up to the termination date and shall be responsible for a pro rata reimbursement to Contractor of any waived or amortized non-recurring charges for equipment and/or services to the extent identified in the relevant pricing document or Statement of Work and charges incurred by Contractor from a third party, not a Contractor Affiliate, due to the termination, including but not limited to any termination charges assessed by the Local Access Provider for any Local Access Service procured by Contractor on County's behalf.

8.47 Contractor's Obligations Upon Termination

In the event of termination of this Contract, Contractor shall, except as set forth below, continue to be obligated to provide Services to County and support any hardware and software in accordance with the terms of this Contract until County transitions such services to an alternate service provider, within a reasonable transition period not to exceed eighteen (18) months. Notwithstanding the preceding sentence, in the event County terminates this Contract pursuant to Paragraph 8.41 (Termination for Convenience); the transition period under this Paragraph shall not exceed nine (9) months. During the transition period, County shall exercise best efforts to transition Service to the alternate carrier and/or alternate serving arrangement as quickly as is reasonably feasible and shall limit new orders for Service to adds, moves or changes at existing County locations.

Contractor's obligation to provide Service during the transition period is conditioned on the County's payment of all amounts due under this Contract. Contractor retains the right to withhold or limit Service to County if County fails to pay undisputed amounts due in ninety (90) days after termination for

Service provided prior to the termination or fails to pay in ninety (90) days the undisputed amounts due for Services rendered during the transition period.

During the transition period, Contractor shall continue providing Service at the Service Levels and rates in effect at the termination of the Contract, provided, however, that once fifty percent (50%) of the volume of Service in place at the termination of the Contract has been transitioned off the Contract, Contractor shall, in its sole discretion, determine the most reasonable means in which to support the Services remaining on the Contract. The required employee and administrative support set forth in Paragraph 7.0 (Administration of Contract - Contractor) of the Contract may be modified by Contractor as the volume of Service remaining on the Contract reduces during the Transition Term.

At a point in which the volume of Service provided under this Contract is less than fifty percent (50%) of the volume in place at the commencement of transition period, the Parties shall meet in good faith to modify the Service Levels for the remaining Services to ensure reasonable service standards for County and reasonable measurement metrics for Contractor.

Upon the conclusion of the transition period, all Service under this Contract shall either be disconnected or shall be provided by Contractor to County at Contractor's then-current tariff or generally available rates. No additional transition support will be required of Contractor.

8.48 Validity

If any provision of this Contract or the application thereof to any person or circumstance is held invalid, the remainder of this Contract and the application of such provision to other persons or circumstances shall not be affected thereby.

8.49 Waiver

No waiver by either party of any breach of any provision of this Contract shall constitute a waiver of any other breach or of such provision. Failure of either party to enforce at any time, or from time to time, any provision of this Contract shall not be construed as a waiver thereof. The rights and remedies set forth in this Paragraph 8.48 shall not be exclusive and are in addition to any other rights and remedies provided by law or under this Contract.

8.50 Warranty Against Contingent Fees

8.50.1 Contractor warrants that no person or selling agency has been employed or retained to solicit or secure this Contract upon any Contract or understanding for a commission, percentage, brokerage, or contingent fee, excepting bona fide employees or bona fide established commercial or selling agencies maintained by the Contractor for the purpose of securing business.

8.50.2 For breach of this warranty, County shall have the right to terminate this Contract and, at its sole discretion, deduct from the Contract Price or consideration, or otherwise recover, the full amount of such commission, percentage, brokerage, or contingent fee.

8.51 **Performance Bond**

Contractor shall furnish to County, at Contractor's sole expense, within ten (10) Business Days of the Effective Date of this Contract, a performance bond in the amount of One Million Dollars (\$1,000,000). Such performance bond shall be in form and substance satisfactory to County. Such bond, may be in the form of an annually renewable bond, and shall be maintained by Contractor in full force and effect until released by County's Risk Manager upon County's Program Director's determination that Contractor shall have fully performed all of its obligations under this Contract. Any modification, extension, or termination of this Contract shall in no way release Contractor or any of its sureties from any of their obligations under such performance bond. Such bond shall contain a waiver of notice of any Change Notices and Amendments to this Contract.

Without excusing any default under Paragraph 8.42 (Termination for Default), no payments shall be due Contractor until the applicable performance bond is in place and approved in writing by County's Risk Manager. Such bond shall be made payable to County of Los Angeles, and shall be issued by a corporate surety licensed to do business in the State of California and satisfactory to County. The Contract number and dates of performance shall be specified in each performance bond.

Such performance bond shall secure Contractor's performance, including, without limitation, performing Services in accordance with the SOW and providing all of the deliverables, and shall secure any damages, costs or expenses resulting from Contractor's default in performance hereunder.

In the event of termination under Paragraph 8.42 (Termination for Default), such performance bond shall become payable to County for any outstanding damage assessments made by County against Contractor. An amount up to the full amount of such bond may also be applied to Contractor's liability for any administrative costs and/or excess costs incurred by County in obtaining similar Services, hardware and software to replace those terminated as a result of Contractor's default. In addition, upon such a termination, County may seek any other remedies permitted under this Contract or under applicable law.

At its sole option, County may accept certificates of deposit, cash deposits, United States government securities, or irrevocable letters of credit in lieu of commercial bonds to meet this provision. Such alternate forms of surety shall be made payable to County of Los Angeles and shall be deposited with:

Division Manager
Internal Services Contracting Division
1100 N. Eastern Avenue
Los Angeles, CA 90063

County shall have no responsibility to Contractor to pay interest on any such deposit, and any loss by reason of the failure of any institution issuing such collateral shall be solely the responsibility of Contractor.

Prior to acceptance of Contractor's performance bond, Contractor shall submit to County the form of such proposed performance bond or alternative security for approval by County's Risk Manager or Treasurer and Tax Collector, as applicable, as determined by County. Both the initial expense and the renewal premiums on the bond shall be at the expense of and shall be timely paid by Contractor.

Failure on the part of Contractor to procure and maintain all of the required insurance and the performance bond shall constitute a material breach of this Contract upon which County may terminate this Contract pursuant to Paragraph 8.42 (Termination for Default).

8.52 Transition Services

Prior to the expiration or termination of this Contract, Contractor shall work with County to transition the Services of the Contract to County or to County's successor contractor. The transition of the Services shall include, at a minimum, the procedures, schedules, and deliverables required for transition of each Service, the responsibilities of the parties, and provision of and payment for Services which may be necessary but which are outside the scope of this Contract.

9.0 ADDITIONAL TERMS AND CONDITIONS

9.1 Contractor's Obligations as a "Contractor" Under Health Insurance Portability & Accountability Act of 1996 (HIPAA)

County is subject to the Administrative Simplification requirements of the Health Insurance Portability and Accountability Act of 1996 (HIPAA). Under this Contract, Contractor provides Services to County and may receive, have access to, and/or create Protected Health Information as defined in Exhibit J (Contractor's Obligations Under Health Insurance Portability & Accountability Act of 1996 (HIPAA)) in order to provide a portion those Services. County and the Contractor therefore agree to be bound by the terms of Exhibit J (Contractor's Obligations Under Health Insurance Portability & Accountability Act of 1996 (HIPAA)) only for those portions, if any, of the Services provided hereunder that actually causes Contractor to receive, have access to and/or create Protected Health Information, and by executing this Contract, Contractor shall be deemed to have executed Exhibit J (Contractor's

Obligations Under Health Insurance Portability & Accountability Act of 1996 (HIPAA)).

9.2 Ownership of Materials, Software and Copyright

9.2.1 Contractor Provided, Non-Customized Materials and Software

Contractor shall be the sole owner of all right, title and interest, including copyright, in and to all software, plans, diagrams, facilities, and tools (hereafter "Materials") that are provided by Contractor and used to provide Services to County under this Contract. For any software, Contractor grants County, for no additional consideration, a personal, non-transferable and non-exclusive license (without the right to sublicense) to use software, in object code form, solely in connection with the Service(s) for which the software is provided and solely in accordance with applicable written and electronic documentation. Any software used with the Service(s) will be governed by the written terms and conditions applicable to such software. Title to software remains with Contractor or its supplier. County shall comply with all such terms and conditions and they take precedence over this Contract.

9.2.2 Contractor Developed Materials and Software Created for County's Unique and/or Customized Applications

County shall be the sole and exclusive owner of all right, title and interest, including copyright, in and to all unique and/or customized Materials that are expressly developed by Contractor under this Contract for the exclusive benefit of County. Contractor, for valuable consideration herein provided, shall execute all documents necessary to assign and transfer to, and vest in County all of Contractor's right, title and interest in and to such original materials, including any copyright, patent and trade secret rights which arise pursuant to Contractor's work under this Contract.

Contractor developed Materials to which the County shall be the sole and exclusive owner of all right, title and interest, including copyright, include, but are not limited to, the following, except for Contractor's pre-existing intellectual property included in such Materials:

For the County's network: all Contractor developed network drawings, procedures, router configurations, and reports for County owned routers and switches.

For the County's planned VoIP environment: all Contractor developed drawings, procedures, server scripts, reports, and router, switch, and gateway configurations.

For the County's IPCC: any Contractor developed call flow programming, IVR scripts and recordings, and special custom reporting.

9.2.3 County Provided Materials and Software

County shall be the sole owner of all right, title and interest, including copyright, in and to all Materials that County provides to Contractor to enable Contractor to perform its Services. For any software, County grants Contractor, for no additional consideration, a personal, non-transferable and non-exclusive license (without the right to sublicense) to use all software, in object code form, solely in connection with the Service(s) for which the software is provided and solely in accordance with applicable written and electronic documentation. Any software used with the Service(s) will be governed by the written terms and conditions applicable to such software. Title to software remains with County. Contractor shall comply with all such terms and conditions and they take precedence over this Contract.

County owned software includes, but is not limited to the following pre-existing items: the VoIP operating system software, call center software, and recording software.

9.2.4 During the term of this Contract and for five (5) years thereafter, Contractor shall maintain and provide security for all of Contractor's working papers prepared under this Contract related to developed materials and software created for County's unique and/or customized applications. County shall have the right to inspect, copy and use upon reasonable advance notice during and for a five year period subsequent to the term of this Contract. Contractor shall assist County in accessing and understanding all data provided by Contractor.

9.2.5 Any and all materials, software and tools which are developed or were originally acquired by Contractor or County outside the scope of this Contract, which Contractor or County desires to use hereunder, and which Contractor or County considers to be proprietary or confidential, shall be specifically identified by Contractor or County to the other party as proprietary or confidential, and shall be plainly and prominently marked by Contractor as "Propriety" or "Confidential" on each appropriate page of any document containing such material.

9.2.6 Both parties will use reasonable means consistent with Paragraph 7.15 (Confidentiality) above to ensure that proprietary and/or confidential items of the other party are safeguarded and held in confidence. Both parties agree not to reproduce, distribute or disclose to third party entities any such proprietary and/or confidential items without the prior written consent of the other party.

- 9.2.7 Notwithstanding any other provision of this Contract, the receiving party will not be obligated to disclosing party in any way under Subparagraph 9.2.6 for any of the disclosing party's proprietary and/or confidential items which are not plainly and prominently marked with restrictive legends as required by Subparagraph 9.2.5 or for any disclosure which either party is required to make under any state or federal law or order of court.
- 9.2.8 All the rights and obligations of this Paragraph 9.2 shall survive the expiration or termination of this Contract.
- 9.2.9 Services may include use of certain equipment owned by Contractor that is located at a County location (hereinafter "Contractor Equipment"), but title to the Contractor Equipment will remain with Contractor. County will bear the risk of loss or damage to Contractor Equipment only to the extent caused by County's negligence or willful misconduct.
- 9.2.10 County has absolute ownership of any and all data associated with Contractor's services provided to County that is expressly developed under the Contract for the sole and exclusive use of County, excluding Contractor's pre-existing intellectual property included in such data and data determined to be Contractor's proprietary data. County will use its access to data under Subparagraph 9.2.4 for the purpose of overseeing the administration and operation of Contractor's services and will take all reasonable measures to ensure protection of Contractor's proprietary rights. This County-owned data includes, but is not intended to be limited to, the following, excluding Contractor's pre-existing intellectual property included in such data and data determined to be Contractor's proprietary data:
- All circuit and services inventory data
 - Status and performance data concerning any system resources used in the provision of services
 - Status and performance data concerning the timely delivery of services to County locations
 - Billing data concerning the delivery of Contractor services

Training materials and job aids developed specifically for County and their services.

All data shall be provided to County upon request by County's Program Manager. Contractor shall provide the most current data available, and agree to work with, any subsequent Contractor to provide the same, or similar, services to County at the conclusion/termination of the Contract.

9.3 Patent, Copyright and Trade Secret Indemnification

- 9.3.1 Contractor shall indemnify, hold harmless and defend County from and against any and all third party claims and related liability, damages, costs, and expenses, including, but not limited to, defense costs and attorneys' fees, for or by reason of any actual or alleged infringement of any third party's patent or copyright, or any actual or alleged unauthorized trade secret disclosure, arising from the operation and utilization of Contractor's work under this Contract. Contractor's obligation to defend and indemnify County is contingent upon (i) County providing Contractor prompt written notice of any claim; and (ii) County providing Contractor all reasonable information and assistance requested by the Contractor to settle, defend, or bring a countersuit in conjunction with any claim.
- 9.3.2 In the event any equipment, part thereof, or software product becomes the subject of any complaint, claim, or proceeding alleging infringement or unauthorized disclosure, such that County's continued use of such item is formally restrained or enjoined, or subjected to a claim for damages, Contractor, at its sole expense, and providing that County's continued use of the system is not materially impeded, shall either:
- Procure for County all rights to continued use of the questioned equipment, part, or software product; or
 - Replace the questioned equipment, part, or software product with a non-questioned item; or
 - Modify the questioned equipment, part, or software so that it is free of claims.
 - Terminate the infringing equipment, part or software product, and refund to County all amounts paid for such infringing item.
- 9.3.3 Contractor shall have no liability to indemnify, hold harmless and defend County under this Paragraph 9.3 if the alleged infringement or unauthorized disclosure is based upon (i) a use of the questioned product, either alone or in combination with other items not supplied by Contractor, in a manner for which the questioned product was not designed nor intended, (ii) County's content, (iii) Contractor's adherence to County's written requirements, or (iv) use of the Service by County in violation of this Contract.
- 9.3.4 County will indemnify and defend Contractor its directors, officers, employees, agents, and their successors from and against any and all third party claims and related liability, including but not limited to demands, claims, actions, fees, costs, and expenses (including attorney and expert witness fees), arising from improper use of Services or information or any content or data transmitted over any

Contractor network or facilities. County's obligation to defend and indemnify Contractor is contingent upon (i) Contractor providing County prompt written notice of any claim; and (ii) Contractor providing County all reasonable information and assistance requested by County to settle, defend, or bring a countersuit in conjunction with any claim.

9.4 Limitation of Liability

9.4.1 Neither party shall be liable to the other for any indirect, incidental, punitive, exemplary, special, or consequential damages (including without limitation, damages related to lost profits, revenue or increased cost of operations) arising under this Contract, regardless of the form of action, whether in contract, tort (including negligence), strict liability or otherwise and regardless of whether or not such damages are foreseen or unforeseen. The total aggregate liability of the Contractor, its suppliers, licensors, affiliates, directors, officers, and/or employees under or in connection with this Contract to County not to exceed per claim (or in the aggregate during any twelve (12) month period) an amount equal to the total charges paid by County for all Services during the twelve months preceding the month in which the event giving rise to the claim occurred. In the event there is less than a twelve (12) month period, then the period will be annualized for the full twelve (12) months.

9.4.2 The per claim or aggregate twelve (12) month limitations described in the preceding paragraph will not apply to:

- (i) bodily injury, death or damage to real or tangible property directly caused by a party's negligent or wrongful acts and/or omissions arising from and/or relating to this Contract;
- (ii) breach of Paragraph 7.15 (Confidentiality) and Paragraph 8.36 (Publicity);
- (iii) settlement, defense or payment obligations under Paragraph 8.22 (Indemnification) and Paragraph 9.3 (Patent, Copyright and Trade Secret Indemnification);
- (iv) damages arising from a party's willful misconduct.
- (v) alteration, loss or destruction of County's applications, content or data arising from Contractor's gross negligence or willful misconduct.

9.5 Access Rights

County will in a timely manner allow Contractor to access County-owned and controlled property and equipment as required to provide the Services. Access Rights include the right to construct, install, repair, maintain, replace and remove access lines and network facilities, as well as to use ancillary equipment space within a building, as necessary for County's connection to Contractor's network. County must provide Contractor timely information and access to County's facilities and equipment as Contractor reasonably

requires to provide the Services, subject to County's reasonable security policies. Unless otherwise set forth in this Contract, County will furnish any conduit, holes, wireways, wiring, plans, equipment, space, power/utilities, and other items reasonably required to perform installation of the Services, and obtain any necessary licenses, permits and consents (including easements and rights-of-way), consistent with California Public Utility Commission decisions defining the point at which the wiring under the control of the vendor ends, and the wiring under the control of the property owner begins (i.e., Minimum Point of Entry (MPOE) and Local Loop Demarcation Point (LLDP) rules). County will make the site ready for Contractor to perform its work according to a mutually agreed schedule.

In non-County controlled facilities (i.e., leased buildings), County is responsible for obtaining access and secure necessary space, power, alterations and wiring paths that are needed for the Contractor to provide the requested goods and services. Contractor will work cooperatively with County in support of County's efforts with the property owner.

9.6 Participating Entities

Contractor agrees to extend access to the Services provided under this Contract to "Participating Entities" (as defined below) as follows: (i) all Participating Entities ordering Services to be provisioned within the geographic boundaries of Los Angeles County will be offered all Services under the same basic terms as being offered to County, except those Services with unique distance sensitivities (e.g., Centrex) and/or non-standard customer installation/entrance facility requirements not covered by Contractor's established non-recurring charges which will be separately negotiated; (ii) all Participating Entities ordering Services within the State of California but outside the geographic boundaries of Los Angeles County will be offered Services at terms and conditions that will be separately negotiated; (iii) all Participating Entities shall agree to an acceptable length of term and commitment level for all Services requested; and (iv) all Services are subject to the availability of equipment and facilities (including outside plant, cable, capacity and memory). As used in this Paragraph, "Participating Entities" means any "local public entity" as that term is defined in California Government Code Section 900.4.

9.7 Resale of Services

County may not resell the Services to third parties without Contractor's written consent.

9.8 Internet Services

If a Service is provided over or accesses the Internet, County and all users of any such Services shall comply, in all material respects, with the AUP.

9.9 **Warranty**

Contractor hereby warrants to County that all Services provided by Contractor to County under this Contract shall conform to the Statements of Work and this Contract.

With regard to each and every piece of personal property purchased by County under this Contract, including any software or other intellectual property (the "Assets"), AT&T shall pass through to County, to the fullest extent permitted by law or agreement, any applicable hardware and/or software warranties offered by the manufacturer for such Assets.

Contractor further represents, warrants, covenants and agrees that:

- Contractor shall comply with the descriptions and representations set forth in Exhibit A (Statements of Work).
- All tasks, subtasks, Deliverables, Assets, goods, Services, and other work shall be performed in a timely and professional manner by qualified personnel.
- All tasks, subtasks, Deliverables, Assets, goods, Services, and other work shall be completed in accordance with this Contract and industry standards.
- All Services shall perform in accordance with this Contract and shall meet or exceed the functional and performance requirements set forth in this Contract.
- The Services shall be capable of interconnecting and/or interfacing with each other and County's Existing System and that the Services and Existing System, when taken together, shall be capable of delivering all Services as set forth in this Contract.

Contractor agrees, at no cost to County, to correct any and all Deficiencies in its Services. In the event that County determines that the Deficiency was caused by the County, County shall reimburse Contractor for its reasonable internal costs (excluding costs related to problem identification) to correct the Deficiencies. Except as specifically set forth in this Contract to the contrary, the Parties agree to resolve any disputes regarding provisioning of Services in accordance with Paragraph 8.30 (Dispute Resolution Procedure).

The process for monitoring compliance with the Statement of Work and credits for non-compliance are set forth in the PRS. Contractor acknowledges and agrees that the remedy and credits to be assessed pursuant to the PRS shall be payable to County upon demand and may, at County's sole option, be set off against any monies due to Contractor under

this Contract and are reasonable under the circumstances existing as of the date this Contract is entered into.

EXCEPT FOR THE EXPRESS WARRANTIES SPECIFIED IN THIS CONTRACT, CONTRACTOR MAKES NO WARRANTIES EITHER EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

9.10 Withdrawal of Service

Notwithstanding that this Contract may commit Contractor to provide a Service to County for a specific term, unless applicable law or regulation mandates otherwise, Contractor may discontinue providing a Service upon twelve (12) months' notice, or a Service Component upon one hundred twenty (120) days' notice, but only where Contractor generally discontinues providing the Service or Service Component to similarly-situated customers and Contractor offers County an alternative solution that reasonably meets the service needs of County.

Notwithstanding the preceding, with regard to voice mail service, Contractor reserves the right to change the technology that provides voice mail services to County. Voice mail services to County shall not materially change based on any change in technology. Contractor shall notify County of any new proposed technology change one hundred twenty (120) days in advance, explain any such technology and identify the changes, if any, to County's voice mail services. The parties agree to negotiate in good faith in order to address the impact of the technology change, including migration scheduling and training for County employees.

9.11 No Third Party Beneficiaries

This Contract is for the benefit of County and Contractor, and does not provide any third party (including any third party users of Services provided hereunder) the right to enforce or bring an action for any remedy, claim, liability, reimbursement, cause of action or other right or privilege, other than as set forth in Paragraph 9.6 (Participating Entities).

9.12 Survival

The respective obligations of County and Contractor that by their nature would continue beyond the termination or expiration of this Contract, including without limitation, the obligations set forth in Paragraph 7.15 (Confidentiality), Paragraph 8.22 (Indemnification), Paragraph 8.37 (Record Retention and Inspection/Audit Settlement), Paragraph 9.1 (Contractor's Obligations Under Health Insurance Portability & Accountability Act of 1996 (HIPAA)), Paragraph 9.3 (Patent, Copyright and Trade Secret Indemnification), Paragraph 9.4 (Limitation of Liability), and this Paragraph 9.12, will survive termination or expiration.

9.13 Improper Use of Voice Mail

The name and reputation of Contractor are important corporate assets. Therefore, to the extent permitted by law Contractor will not allow on its voice mail service applications recorded content provided by customers which: violates laws, statutes or tariffs (including statements that are defamatory, fraudulent, or deceptive); are pornographic; or are harmful matter as defined in California Penal Code Section 313: "Matter, taken as a whole, which the average person, applying contemporary statewide standards, appeals to the prurient interest, and is matter which, taken as a whole, depicts or describes in a patently offensive way sexual conduct and which, taken as a whole, lacks serious literary, artistic, political or scientific value for minors". Contractor acknowledges that this Paragraph 9.13 places no obligation on County to monitor, check or otherwise supervise the use of voice mail service under this Contract, including but not limited to content provided by County employees or other authorized users of the service.

IN WITNESS WHEREOF, Contractor has executed this Contract, or caused it to be duly executed on its behalf by its authorized representative, and the County of Los Angeles, by order of its Board of Supervisors has caused this Contract to be executed on its behalf by the Chair of said Board and attested by the Executive Officer-Clerk of the Board of Supervisors thereof, the day and year first above written.

CONTRACTOR: [Signature]

By Robin MacGillivray
Name

Vice President, SBC Global Services, Inc.
dba AT&T Global Services
Title

COUNTY OF LOS ANGELES

By [Signature]
CHAIR, PRO TEM, BOARD OF SUPERVISORS

ATTEST:

SACHI HAMAI
Executive Officer-Clerk
of the Board of Supervisors

By [Signature]



ADOPTED
BOARD OF SUPERVISORS
COUNTY OF LOS ANGELES

18 MAR 18 2008

[Signature]
SACHI A. HAMAI
EXECUTIVE OFFICER

APPROVED AS TO FORM:

RAYMOND G. FORTNER, JR.
County Counsel

By [Signature]
Jose Silva
Principal Deputy County Counsel

**TELECOMMUNICATION SERVICES CONTRACT
EXHIBIT A-1**

STATEMENT OF WORK

FOR

LOCAL SERVICES

**EXHIBIT A-1
STATEMENT OF WORK FOR
LOCAL SERVICES**

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**EXHIBIT A-1
STATEMENT OF WORK FOR
LOCAL SERVICES**

1.0 SCOPE

This Statement of Work (SOW) provides the specifications for all the local telecommunications services (local services) required by County. The services include business lines, centrex-type services, private lines, enterprise voice mail services, local calling, intra-LATA calling, Frame Relay, Asynchronous Transfer Mode, etc.

Contractor hosts 39,000 voice mail boxes connecting to about fifty (50) PBXs and some twenty (20) Centrex/Centranet nodes integrated over a private network and provided as part of the monthly service price without regard for number of mailboxes or location. The integration is accomplished using Simplified Message Desk Interface (SMDI). For NEAX PBX's, a protocol converter transforms the serial interface message to SMDI form.

The dedicated network consists of T-1 circuits connecting the PBX or central office switch to the voice mail system. Facilities are configured for County's voice mail in an approximate ratio of one (1) trunk channel per twenty-five (25) mailboxes.

About 100 other PBXs either have stand-alone voicemail or no voicemail at all. The original 45 PBXs converted to the Unisys voicemail system, most remain in operation, will have to be integrated to the Contractor's enterprise voicemail system. The Cisco voicemail will remain as is, eventually growing to provide 100 percent (100%) of County's enterprise voicemail. It could take ten (10) to fifteen (15) years to effect all the replacements. At the present time, about twenty (20) lines on County's Call Manager are integrated to the AT&T voicemail system.

2.0 QUALITY CONTROL

Contractor shall establish and utilize a comprehensive Quality Control Plan (QC Plan) to assure County a consistently high level of service throughout the term of the Contract. The QC Plan shall be submitted seventy-five (75) days after the effective date of the Contract to County's Program Manager for review and approval. The QC Plan shall minimally include the following:

- A method of monitoring to ensure that Contract requirements are being met;
- A record of all inspections conducted by Contractor, any corrective action taken, the time a problem was first identified, a clear description of the problem, and the time elapsed between identification and completed corrective action, shall be provided to County upon request.

3.0 QUALITY ASSURANCE PLAN

County will evaluate Contractor's performance under the Contract using the quality assurance procedures as defined in Paragraph 8.15 (County's Quality Assurance Plan) of the base document of the Contract.

Contractor shall provide notification of a Contract discrepancy to County's Program Manager as soon as possible whenever a Contract discrepancy is identified. A plan for correction of all deficiencies identified shall be submitted to County's Program Manager within ten (10) Business Days. The problem shall be resolved within a time period mutually agreed upon by County and Contractor. If a discrepancy is identified by the County's Program Manager, Contractor is required to acknowledge the reported discrepancy or present contrary evidence.

In addition to departmental contracting staff, other County personnel may observe performance, activities, and review documents relevant to the Contract at any time during normal business hours. However, these personnel may not unreasonably interfere with Contractor's performance.

4.0 DEFINITIONS

- 4.1 **800 Number:** The term "800 Number" shall mean toll-free inbound calls to numbers with area codes 800, 888, 877, and 866, or any other area codes established to provide toll-free incoming calls to County.
- 4.2 **ATM:** The term "ATM" shall mean asynchronous transfer mode which is a communications protocol to send data across a network as a series of small, fixed-length cells.
- 4.3 **Centrex-type:** The term "centrex-type" shall mean central-office-based business telephone services, commercially often called Centrex or Centranet. Telephone services are provided using switching equipment owned by and located at Contractor's premises.
- 4.4 **CPE:** The term "CPE" shall mean County provided equipment which is equipment provided by County to Contractor in accordance with this SOW.
- 4.5 **Diversity:** The term "Diversity" shall mean multiple independent lines established for a County private line service installed at a critical County facility.
- 4.6 **Implementation:** The term "Implementation" shall mean the process of planning for, installing, testing, and accepting equivalent replacement services and/or equipment, upgraded services and/or equipment, and/or adding new services and/or equipment to County user locations supported by the Contract.
- 4.7 **LATA:** The term "LATA" shall mean Local Access Transport Area as defined by the FCC. LATA calls are roughly defined as any call outside the twelve (12) mile radius from the point of origination to the end of the LATA boundary.

- 4.8 **Migration:** The term “Migration” shall mean the process of planning for and transferring from existing legacy services and networks to new replacement services and networks.
- 4.9 **MPOE:** The term “MPOE” shall mean minimum point of entry which is the location on the customer’s property that is the physical and logical terminating point for provisioned services.
- 4.10 **PBX:** The term “PBX” shall mean private branch exchange which refers to any telephone switch not owned by a telephone company.
- 4.11 **PIC:** The term “PIC” shall mean primary interexchange carrier which identifies the local and long distance carrier assigned to a telephone line.
- 4.12 **POTS:** The term “POTS” shall mean plain old telephone service which is traditional analog voice telephony service.
- 4.13 **Transition:** The term “Transition” shall mean the process of planning for and transferring County services from existing service providers to a new Contractor’s services.
- 4.14 **NPA-NXX-XXXX:** The term “NPA-NXX-XXXX” shall mean the standard format for telephone numbers within the North American Numbering Plan. It comprises a three digit area code followed by a three digit exchange and four digit station number.
- 4.15 **Unassociated Billing:** The term “Unassociated Billing” shall mean Contractor invoices for single use or single account bills that are not on the master account; and where Contractor is directly or through third party billing presenting for payment to County these invoices for services identified in the Contract and are not rated at the Contract price. Also referred to as Casual or Thrifty bills.
- 4.16 **AVPN:** The term “AVPN” shall mean AT&T Virtual Private Network service, which is a network-based IP VPN solution utilizing MPLS to provide a converged network, connecting customer locations while supporting applications such as voice, video and data over a single connection.

5.0 CONTRACTOR ADMINISTRATION

Contractor shall administer the Contract according to Paragraph 7.0 (Administration of Contract – Contractor) of the base document of the Contract.

6.0 WORK REQUIREMENTS

The following services are required, and shall be provided by Contractor to County.

6.1 Local Services

Contractor shall provide Local Services that include analog and digital services that provide dial tone and various business related switch features at facilities conducting County business, and permit dialing across the Public Switched Telephone Network (PSTN). The total availability of all voice services shall be 99.99 percent (99.99%) each month. All existing County telephone numbers are to be Transitioned to Contractor's services without change or interruption.

Contractor may, at its own option, provision Local Services to the service location in the traditional manner such as copper pairs to the MPOE, or choose to provision services in another manner provided that the physical, logical and electrical interface is the same and does not require County to make changes to its equipment.

County may request Contractor to extend the service demarc beyond the MPOE; deregulated charges may apply.

County will not accept a hosted IP centrex-type telephony proposal for Local Services. Only Managed IP Services will have hosted IP telephony services.

6.1.1 Analog (Measured) Business Line

Contractor shall provide the NPA-NXX-XXXX telephone number and provision the circuit to the County facility where it shall be terminated on a demarcation block at the MPOE to the County facility. Contractor shall provide Contractor's approved call control services specified by County in Technical Exhibit 3 (Line Blocking Matrix). Additionally, the following optional features shall be available for measured business lines:

- Call Forwarding
- Busy Call Forwarding
- Delayed Call Forwarding
- Call Waiting
- Caller ID
- Call Waiting ID
- Selective Call Forwarding
- Hunting
- Speed Calling
- Three-way Calling
- Call Return
- Call Screen
- Priority Ringing
- Repeat Dialing
- Call Trace
- Remote Access to Call Forwarding

6.1.2 PBX Trunks

Contractor shall provide trunking to County PBX systems. Trunking shall be loop or ground start signaling as requested by County. Contractor shall provide line rotary hunt for trunk groups and shall provide individual NPA-NXX-XXXX numbers for each trunk, except DID trunks.

A. Basic Trunks

Contractor shall provide Basic trunks that can be used to carry one-way outbound traffic, one-way inbound traffic, or two-way traffic. Transmission loss for these trunks will not exceed more than 8.0 dB.

B. Assured Trunks

Contractor shall provide Assured PBX trunks that can be used to carry one-way outbound traffic, one-way inbound traffic, direct Inward dialing, or a combination thereof. Transmission loss for these trunks will not exceed 5.5 dB.

C. Direct Inward Dial (DID)

Contractor shall provide DID trunking for County PBXs. DID trunking shall out dial the station number of each PBX extension to allow a caller to directly ring a PBX extension without the assistance of an attendant. Contractor shall provide DID number groups (NPA-NXX-AAAA to NPA-NXX-BBBB). Contractor shall provide DID groups as small as twenty (20) numbers. Number groups shall be consecutive for each PBX trunk group. DID service shall be provided over analog and digital trunks.

6.1.3 Off-Premises Extension

Off-Premises extension service shall be provided to enable the use of telephone instruments from a PBX or centrex-type to be directly connected to the serving switch regardless of the location of the instrument. Contractor shall provide the local loop and any inter/intra-exchange facilities to provide the end-to-end voice band service. Service is only available within Contractor's franchise territory.

6.1.4 Foreign Exchange Service

Foreign exchange service provides for the extension of dial tone from one telephone exchange area to a County facility in another telephone exchange area. Contractor shall provide the local loop, inter/intra exchange facilities, and exchange switching services to provide foreign exchange service. Service is only available within Contractor's franchise territory.

6.1.5 Remote Call Forwarding

Remote call forwarding shall allow a call to be automatically forwarded from the dialed number to another, pre-programmed number anywhere. Contractor shall provide this feature in its central office switches. Remote call forwarding shall be established only in writing by County's Program Manager. Contractor shall maintain an inventory of remote call forwarded lines, and the forward destination

6.1.6 Centrex-type Service

Contractor shall provide centrex-type business telephone services. Each centrex-type line shall have a unique NPA-NXX-XXXX telephone number. Centrex-type service shall be provisioned as analog or ISDN service at County facilities, or any facility where County business is conducted. These hosted services are in switching equipment at Contractor's premises, and shall be provided to County facilities via analog or digital local loops to the MPOE demarcation point of the County facility. County will extend the centrex-type service from the demarcation point to the station equipment within the facilities.

From time to time County may request Contractor to extend the circuit/service beyond the MPOE to a termination point at an equipment room or desktop. Some private line circuits and ISDN services may require this end-to-end wiring. This additional work shall be performed concurrently with the Service Request requesting the circuit installation, as may be agreed by the parties. MPOE extension service and BRI ISDN are only available within Contractor's franchise territory. Call Center Manager is only available on Contractor's DMS CO switches within Contractor's franchise territory.

The minimum number of lines necessary to establish a centrex-type group in a central office switch shall be at least two (2) but not more than three (3).

County may request the Migration of existing Measured Business Lines to centrex-type service at no cost to County.

A. Basic Station Line Features

Each centrex-type line shall include the following Basic Station Line features. The Basic Station Line features shall be included in the basic line price along with all associated recurring fees specifically mandated by the FCC.

1. Station-to-Station Calling

Any centrex-type line shall be able to call any other centrex-type line in the system, unless specifically restricted, without incurring any usage charges.

2. Call Transfer/Three (3)-Way Consultation

The station user shall be able to transfer an existing call to another centrex-type line. The station user shall also be able to enable a three (3)-way conference by adding the existing call to the newly placed call. The station user shall then be able to disconnect from the call that remains in progress.

3. Call Hold

Call Hold shall enable a station user to place an existing call on hold while placing another call or answering an incoming call. The user shall be able to alternate between the two calls.

4. Call Forward - Fixed
Call Forward-Fixed shall automatically re-route incoming calls to a pre-selected centrex-type line whenever the called line is busy or does not answer within a pre-defined number of rings.
5. Call Forward Busy
Call Forward Busy shall automatically re-route calls to another station or voice mailbox when the line is busy.
6. Call Forward - Variable
Call Forward - Variable shall enable the station user to re-route any incoming call to another number. The station user dialing a predefined code plus the forwarded station number shall accomplish this.
7. Call Forward Variable - Unlimited
Call Forward Variable-Unlimited shall allow a station user to control forwarding of incoming calls to a remote number within the same centrex-type system, or outside of the centrex-type system via the PSTN.
8. Call Restriction Levels
Each centrex-type line shall have a restriction level associated with it that allows or denies access to other lines and features inside and outside the system. Call restriction levels are defined in Technical Exhibit 3 (Line Blocking Matrix).

Restriction levels will include but not be limited to the following:
 - receipt of incoming calls only
 - calls within the local centrex-type system
 - restricted access to the local LATA
 - unrestricted call access to the PSTN
9. Call Pickup
Call Pickup shall allow a centrex-type line to answer a call ringing at any other station line in a defined group.
10. Last Number Re-dial
Last Number Re-dial shall automatically re-dial the last number called from the centrex-type line by dialing a simple code, or by programming a button on a centrex-type compatible electronic telephone set.
11. Message Waiting Indicator
Message Waiting Indicator shall provide audible or visual notification to alert station user.

B. Other Station Line Features

The following features and services shall be made available to County by Contractor for each centrex-type line. Each feature shall be implemented and billed on an individual basis:

1. Line/Station Hunting
Line/station hunting shall route incoming calls to a pre-defined group of available station lines when the centrex-type line called is busy.
2. Automatic Call Back
Automatic Call Back shall allow a centrex-type station to automatically be called back by a busy centrex-type station as soon both lines are idle.
3. Assume Dial 9 Service
Assume Dial 9 Service shall enable a centrex-type station to access an outside line whenever the centrex-type line goes off-hook without dialing a designated access number (usually 9). These lines shall emulate standard business lines and/or PBX trunks.
4. Automatic Re-Dial
Automatic Re-Dial shall automatically re-dial the last number called from the centrex-type line by dialing a simple code.
5. Caller ID
Contractor shall provide the ability to receive, if available, caller identification (the calling party's 10-digit telephone number) with every incoming call including business lines, centrex-type lines, ISDN, PBX trunks and cellular calls. Caller ID service shall be available to any County facility on any line. Caller ID display equipment will be provided by County.
6. Caller ID Blocking
Contractor shall provide the means to block the Caller ID information of an outgoing County telephone call on a permanent and/or per call basis. Any line shall be permanently blocked in providing Caller ID information when so ordered by County. All other lines may block Caller ID information on a per call basis by invoking a feature code in the dialing sequence.
7. Call Waiting
Call Waiting shall alert a busy station line with a tone that indicates that another call is waiting. The station user may place the original call on hold and answer the new call. Call Waiting may be temporarily canceled by dialing a code.

8. Limited Call Acceptance
Limited Call Acceptance permits a centrex-type line to accept incoming calls only from a pre-defined list of telephone numbers. The accept list must be at least thirty (30) numbers.
9. Ring Down Line
When a Ring Down centrex-type station goes off-hook, it shall automatically dial a pre-defined telephone number.
10. Speed Dialing – Individual
A centrex-type station shall be able to program at least ten (10) telephone numbers that can be out-dialed (often called “speed dialed”) by use of simplified access codes and numbers. Network speed calling enables recording of up to one-thousand (1000) telephone numbers per system.
11. Speed Dialing - System/Group
Additional speed dial tables of at least thirty (30) telephone numbers each shall be able to be programmed for use by a defined group of centrex-type lines.
12. Call Trace
Call Trace shall allow user to track calls on an on-going basis to identify annoying or harassing callers.
13. Remote Access to Call Forwarding
Remote Access to Call Forwarding shall allow a user to change a "forward to" number, activate, or deactivate Call Forwarding from a remote location
14. Call Screen
Call Screen shall allow a user to block unwanted callers. Up to ten (10) numbers shall be listed on a block list, and the capability to modify the list at any time shall be provided.
15. Call Park
Call Park shall enable a station user to place a call on hold then retrieve the call from any other centrex-type line in the system.
16. Station Controlled (Large) - Conferencing
Conferencing that is station controlled shall allow a station to establish a conference call of up to thirty (30) users, and this shall include the originator of the conference.
17. Station Controlled (Small) - Conferencing
Conferencing that is station controlled shall allow a station to establish a conference call of up to six (6) users, and this shall include the originator of the conference.

18. Dialing Plan Integration

County requires Contractor to provide the ability to Transition between existing centrex-type services and new VoIP services in a phased manner. Specifically, Contractor shall provide the ability for a centrex user to reach existing centrex-type numbers that have been 'ported' to a VoIP system via dialing 4 or 5 digit station numbers between systems, centrex-type to VoIP system. The VoIP user shall likewise be able to dial 4 or 5 digits to reach existing centrex-type lines. The use of dialed access codes is not acceptable.

19. Centrex-type Reserve Numbers

Contractor shall provide centrex-type non-working telephone numbers to provide continuity to centrex-type switch numbering plans.

20. Station Call Detail

Station Call Detail shall provide a detailed record of every call made by each centrex-type line, except internal system calls, including date, starting time, duration, and number dialed. The Station Call Detail shall be available to County. Rates for station call detail, including any data links, premises equipment, buffers, etc., shall be explained by Contractor.

C. Call Center Services

1. Automated Attendant

Contractor shall provide Automated Attendant Service that will answer incoming calls and allow the callers to route themselves to an extension. Contractor shall also provide an option for the caller to be directed to a live attendant when assistance is required.

2. Automatic/Uniform Call Distribution (ACD/UCD)

Automatic/Uniform Call Distribution shall route incoming calls evenly to a group of pre-defined centrex-type lines, in the order received. The system will answer the incoming call with a recorded greeting, and route caller to a live attendant or a voice response unit (VRU). Management information shall be provided to determine trunking and staffing requirements.

3. Interactive Voice Response (IVR)

Contractor shall provide IVR Service that allows caller to hear prerecorded information played to them after making menu selections from their touchtone telephone. Caller may respond to system commands using the key pad, or, respond verbally to system request. IVR may be programmed to transfer calls automatically based on time of day, day of week, geographic origin and other parameters at a top level of the IVR.

4. Voice Library
County may create a voice library for such things as frequently asked questions. Information shall be able to be stored as text to allow the system to “read” to the caller.

D. Call Center Functions

In conjunction with the automatic/uniform call distribution services, Contractor shall provide call center services for multiple County agent positions to answer incoming calls including groups that may have up to 255 supervisor groups, 256 agents, 511 queue slots and up to 4,000 agents. The following functions are required for all County call centers.

1. Incoming Call Queue
The call center system shall provide waiting slots for callers, when all agents are busy.
2. Call Priority
The call center system shall allow County to designate which calls should be connected first to the available agents.
3. Call Delay Announcement
The call center system shall provide customized recorded announcements to callers who are in queue.
4. Music in Queue
The call center system shall allow callers to hear music (supplied by County) while they wait in queue or on hold.
5. Log On/Log Off
The call center system shall allow an agent to enter and exit the system by entering a password.
6. Reports
Each call center system shall provide reports including daily call volumes by hour, monthly history with total daily calls, average holding time, number of calls in queue, number of call abandons, etc. Reports shall be available via e-mail or Internet.
7. Abandoned Call Clearing
8. Automatic Overflow
9. Call Present
10. Manual Answering
11. Night Service

12. Overflow Scan

13. Ring Threshold

6.2 **Calling Services**

Calling Services is defined as the ability to dial and connect to any other telephone number within the Public Switched Telephone Network (PSTN). Each type of call shall be charged on a timed incremental rate for any time, any day for each product as set forth in the chart below.

Type of Call	Initial Increment	Subsequent Increment
Local	1 Minute	1 Minute
Zone	18 Seconds	1 Second
Local Toll	18 Seconds	1 Second
Toll Free	30 seconds	1 Second

6.2.1 Local Calls

Unless specifically restricted by the local telephone system, every station line shall be able to place calls in the local calling area of the originating line. The local calls are roughly defined up to a radius of eight (8) miles from the point of origination. Contractor shall route for completion all calls attempted regardless of the terminating location or terminating carrier.

6.2.2 Zone Calls

Unless specifically restricted by the local telephone system, every station line shall be able to place calls in the zone unit calling area of the originating line. The zone unit calls are roughly defined by a radius of from eight (8) miles to twelve (12) miles from the point of origination. Contractor shall route for completion all calls attempted regardless of the terminating location or terminating carrier.

6.2.3 Intra-LATA Calls

Unless specifically restricted by the local telephone system, every station line shall be able to place calls throughout the LATA of the originating line. Contractor shall route for completion all calls attempted regardless of the terminating location or terminating carrier.

6.2.4 Inbound Toll-free Calls

Inbound Toll-free Calling Services shall allow callers to contact County offices on a 'free call' basis. All charges for 800 Number calls shall be billed to County. Contractor shall provision new 800 Numbers as required by County. Contractor shall work with County to obtain unique 'vanity' numbers for special County programs. 800 Number services may be provisioned as dedicated lines and/or provisioned on existing business, centrex-type services, DID, and/or PBX trunk lines. Contractor shall implement any additional toll-free area codes as they are opened with all the service and features available with the current 800 area codes.

A. Alternative Destinations

Alternative Destination shall allow County to route incoming 800 Number calls to alternative answering location(s) based on the 1) originating area code and/or prefix of the call, 2) the time of day and/or day of the week, and/or 3) upon an emergency request to re-designate new answering points at existing business, centrex-type services, DID, or PBX trunk lines within one (1) hour's notice or less.

B. Call Data

In order for County to maximize the usefulness of the 800 Number toll free services, Contractor shall record and make available to County complete detailed call data. Data for each call to a 800 Number shall include the location of the caller by NPA and NXX, the date of the call, the time of the start of the call, duration of the call, the carrier used to route the call, and the number of calls blocked in the network during busy periods. This call data shall be provided to the County facility requesting such data and reports.

C. Call Status Reports

1. Call Status Reports shall provide County with information about the status of calls placed to each 800 Number. Contractor shall provide Call Status Reports on a daily, weekly, monthly and quarterly basis. Daily reports shall contain information summarized in sixty (60) minute increments. Weekly, monthly and quarterly reports shall contain information summarized in one (1) hour increments. Multiple report formats shall be available which further summarizes the information by time zone or geographic region.

2. Unless affected by a holiday observed by County, reports shall be available within fifty-four (54) hours after the end of any given day. For example, the report for a Monday shall be available by 6:00 a.m. on Thursday. Reports shall be delivered at County's discretion via electronic mail over the Internet or hardcopy via express mail. Each report shall contain standard information including:

- The title of the report
- The date of the report
- The period covered by the report
- Name of County Department and the organizational unit's identification number
- The 800 Number

For any given 800 Number, Contractor will, at a minimum, provide the following information within the reports:

- The number of calls from each area code who have dialed the 800 Number (i.e., call attempts)

- The number of calls that encounter a busy signal (i.e., blocked)
- The number of calls offered to the number (i.e., egress trunk group)
- The number of calls answered at each telephone line
- The average duration of calls answered at each telephone line
- The average duration of all calls answered for a given 800 Number at all telephone lines

6.2.5 900 Service

Contractor shall provide 900 Calling services. The 900 service shall allow the public to be connected from off-net locations to predetermined County users and information providing systems, located at County locations. Callers will receive information via prerecorded messages used in combination with voice response systems. The information provided by 900 service call-handling equipment could be passive, interactive, with selections made by pressing designated numbers on a touch-tone telephone, opinion polls (i.e., call or peg counters for a basic yes or no, for or against, or choice A or B response to a question); and, computer database access from callers using modems. Contractor shall bill callers directly for charges for the regular phone call and for County information retrieval, and settle revenue with County for their share of charges for providing County information to the callers. Contractor shall accommodate any currently assigned County 900 numbers.

The 900 service shall provide a preamble message stating the 900 call charges to the callers and providing the caller the opportunity to hang up without being charged.

6.3 **Call Control Services**

Contractor shall be able to provide the following controls to minimize abuse and fraudulent use of County's telephone services. These controls shall be implemented automatically by Contractor whenever any new line is installed, moved or re-arranged in any way. County shall identify in writing all County staff authorized to direct Contractor under this Paragraph 6.3.

6.3.1 Call Blocking

Contractor shall provide universal blocking of specific telephone numbers such as off-shore 800 Numbers or area codes and/or prefixes as directed by County that shall apply to all lines unless individually and specifically exempted in writing by authorized staff of County as set forth in Technical Exhibit 3 (Line Blocking Matrix).

6.3.2 900/976 Calls

Unless a line is individually and specifically unrestricted in writing by County's Program Manager, all lines shall be blocked from accessing any 900 area code and 976 prefix 'information services' telephone numbers. County will not be responsible for charges absent a written exemption.

6.3.3 Dial 0, 00, 0+ Access

Any County line (unless restricted by the local telephone system) shall be able to access Contractor's Operator services. Access to any other carrier via dialing 0 or 00 shall be blocked on all lines unless individually and specifically unrestricted in writing by authorized County staff. Access to 0+ for dialing calling card calls shall be available from any County line (unless restricted by the local telephone system) unless individually and specifically restricted in writing by authorized County staff. Contractor's Operators shall not complete any call for any County user unless the user produces a valid calling card number or authorization code. Contractor's Operators shall not pass the call to another carrier.

6.3.4 Dial 1010XXX

Unless individually and specifically unrestricted in writing by authorized County staff, all calling to any carrier other than Contractor by use of a 1010XXX code shall be blocked. Contractor shall be responsible for insuring that no calls are placed using any other carrier either by 1010XXX access or by changing of the PIC code for the individual line. County will not be responsible for any charges by any unauthorized carrier on lines not specifically exempted.

6.3.5 International Calls

Unless individually and specifically unrestricted in writing by authorized County staff, all international calls (except countries that are included in the North American Dialing Plan) shall be blocked. County will not be responsible for any charges by any unauthorized carrier on lines not specifically exempted.

6.3.6 Incoming Call Blocking

Contractor shall block incoming calls, either direct calls or 800 calls, from specific numbers or areas as directed by authorized County staff. Blocking shall be based on area code and prefix, as set forth in Technical Exhibit 3 (Line Blocking Matrix). Blocking shall be based on the calling ANI number. This blocking shall be used to thwart attempted hacking from suspected or known locations of fraudulent activities.

6.3.7 Call Return or Extension Services

Unless individually and specifically unrestricted in writing by authorized County staff, all 'call return' or automatic completion or extending of a call through 411 services, or any other special calling feature not called out in these specifications that incurs a fee for use shall be blocked only on Centrex services within Contractor's franchise territory.

6.4 **Operator Services**

Contractor's operators shall provide the following special functions. Any rates for these services shall be itemized on the pricing worksheet.

6.4.1 Directory Assistance

Contractor's directory assistance operators shall be available twenty-four (24) hours a day, seven (7) days a week. They shall be accessed by dialing 411 (after obtaining carrier dial tone). Contractor's operators shall have access to all published directory listings in the USA. Contractor's operator staffing shall be at a level so that all County calls shall be answered within ten (10) seconds ninety percent (90%) of the time.

County lines shall by default be blocked from dialing 411 unless specifically exempted from 411 blocking in writing by authorized County staff.

County shall not be liable for 411 service charges placed on lines not specifically exempted from 411 service blocking.

6.4.2 Operator Assistance

Contractor shall provide operator service twenty-four (24) hours daily, seven (7) days a week. Contractor's operators shall be accessed by dialing '0' from any business lines, centrex-type service, or PBX line after dialing the outside access digit (if the line is so un-restricted). Contractor's operator staffing shall be at a level such that all County calls shall be answered within fifteen (15) seconds ninety-five percent (95%) of the time. County users shall not receive a busy tone when calling Contractor's operators. Contractor's operators shall have the capability to verify busy signals and barge in for emergencies.

County shall not be liable for operator service charges placed on lines not specifically exempted from 411 service blocking.

6.4.3 Dialing Assistance

Contractor's operators shall assist County users in dialing calls that they are having problems in completing. However, Contractor's operators shall verify the restriction levels placed on the originating line and/or user. Contractor's operators shall not place calls for County users that violate the restriction levels placed on the originating line or user's authorization code range, and charges incurred upon operator failure to enforce line restrictions will not be the responsibility of County

6.4.4 Collect Calls

Contractor's operator shall place outgoing collect calls for County users. However, unless individually and specifically authorized in writing by authorized County staff, no County lines shall accept, nor pay for, any incoming collect calls, regardless of whether the called party accepts the call and charges. Contractor shall be responsible to prevent collect calls from being accepted and billed to non-authorized County lines.

6.4.5 Third-Party Calls

Contractor's operator shall place outgoing third-party calls for County users. However, County will not accept or pay charges for any third-party calls charged to County lines. Contractor shall be responsible for preventing any such billings from taking place.

6.5 Voice Mail

Contractor shall provide Voice Mail service that allows an end user to receive messages when unavailable. The service shall include the ability for the user to compose messages, and edit or forward messages to other users and shall provide a message waiting indicator to the switch or CPE controlling the line.

County requires a uniform fixed price per voice mailbox per month that includes the network, regardless of location or number of lines to be integrated. Not every County telephone line will have voicemail. Voicemail is the option of each County department. As VoIP is implemented, both at new locations and as PBXs are replaced, County may request that some or all of the lines be integrated into the legacy voicemail realm instead of the voicemail provided on the Cisco Call Manager.

6.5.1 Enterprise Voice Mail Services

Contractor shall provide voice mail services, which shall be integrated with County's PBX systems which are certified for use with AT&T Messaging EM.

Certified TDM PBXs:

- Avaya Definity, minimum Release 6 software, with Special Application #8052 (SA8052)
- Nortel Meridian PBX, minimum Release 25.40B software

Certified IP PBX:

- Cisco CallManager IP PBX, minimum Release 3.0 software

and Contractor's centrex-type services. The voice mail system shall be networked throughout County's systems to enable County department-wide voice mail distribution, forwarding, and reply. The voice mail system shall be able to integrate with numeric paging systems.

6.5.2 Voice Mail Integration – Centrex-type

Contractor shall provide integration between Contractor's centrex-type lines, whether directly owned or re-sale, and the Enterprise Voice Mail system. The SMDI link to the system shall provide call information giving the call state (direct, forwarded, busy, ring no answer), number called, calling extensions and message waiting indication.

6.5.3 Voice Mail Integration – PBX or IP Telephony

Contractor shall provide voice mail integration for County PBX and IP Telephony systems which are certified for use with AT&T Messaging EM.

Certified TDM PBXs:

- Avaya Definity, minimum Release 6 software, with Special Application #8052 (SA8052)
- Nortel Meridian PBX, minimum Release 25.40B software

Certified IP PBX:

- Cisco CallManager IP PBX, minimum Release 3.0 software.

County has approximately fifty (50) existing PBXs and VoIP systems that are integrated into the Enterprise Voice Mail system, in addition to the connected voice mail. Most of County's 150 PBX are NEC NEAX 2400 and about thirty (30) are Nortel Meridian.

6.5.4 Legacy Voice Mail Services

Contractor shall provide voice mail services to replace an existing countywide voice mail system comprising over 38,000 mail boxes. It shall be integrated with existing PBX systems and centrex-type services. The voice mail system shall be networked throughout County to enable County-wide voice mail distribution, forwarding and reply. The voice mail system shall be able to be integrated with existing radio paging systems and ideally with email.

A. Network and Integration

Contractor will integrate legacy voicemail onto its own equipment, which are certified for use with AT&T Messaging EM.

Certified TDM PBXs:

- Avaya Definity, minimum Release 6 software, with Special Application #8052 (SA8052)
- Nortel Meridian PBX, minimum Release 25.40B software
- Contractor shall certify and support NEC NEAX 2400 by the end of March 2008.

Certified IP PBX:

- Cisco CallManager IP PBX, minimum Release 3.0 software.

The replacement voice mail system must integrate all existing voice mail nodes. It can be – initially – a separate system from a VoIP-based voice mail system if proposed in Managed IP Services. Contractor shall take whatever measures are necessary and consistent with this Contract to convert all current PBX and Centrex/Centranet voicemail boxes at no cost to County. Successful integration is entirely the responsibility of Contractor working with the necessary cooperation with County. Consistent with this Contract, any and all equipment up to and including PBX upgrades become Contractor's responsibility. Proposers are cautioned that just because the integration is working now with a large Unisys OEM voice mail platform does not indicate that it will integrate

with any other voice mail system. This warning is primarily due to old PBXs and software.

B. Caller Forwarding

Callers shall be connected to a user's voice mail box if the user's telephone line is in use or if there is no answer after a set number of rings as determined by the user.

C. Greetings

County users shall be able to create both primary and alternative greeting messages. It shall be easy to switch back and forth from the primary and alternative messages. Messages shall be easily changed from both the user's telephone line or remotely from any line.

D. User Notification

The voice mail system shall notify County user that voice mail has been received. A 'stutter' dial tone on telephone lines and/or message waiting lamps on telephone instruments shall be activated when there are messages by the voice mail system. Both centrex-type and PBX systems, which are certified for use with AT&T Messaging EM.

Certified TDM PBXs:

- Avaya Definity, minimum Release 6 software, with Special Application #8052 (SA8052)
- Nortel Meridian PBX, minimum Release 25.40B software

Certified IP PBX:

- Cisco CallManager IP PBX, minimum Release 3.0 software.

shall be integrated with the voice mail system so that users are so notified.

Integration with the user's e-mail system would be desirable. This integration would permit the listing of received voice mail messages, along with the date and time received and sending party's name and telephone number (via ANI).

E. User Access

County staff shall be able to access, review and manipulate their voice mail both from their primary telephone line and remotely from any line. A toll-free access number is desirable to permit County staff to access the voice mail system, enter their unique password code and telephone number to access the voice mail box.

F. Passwords

County staff shall be able to create their own unique password codes for accessing their voice mail box. These passwords shall be able to be

changed at any time by the user. Password lengths shall be selectable by County to correspond to existing password structures. Passwords of at least six (6) digits shall be available at each County's location. Contractor shall provide a mechanism for resetting County user passwords within two (2) hours of request.

G. Message Review

Upon accessing a voice mail box, County users shall be able to review all their messages. Each message shall be announced with the date and time the message was received. Users shall be able to pause, fast-forward, back up, go to the beginning or the end of all the messages at any time by using the telephone dial pad push buttons.

H. Message Handling

Users shall be able to save, replay or erase any message. Users shall be able to forward any message or reply to any message by entering the recipient voice mail (telephone) number. Messages may be replied to or forwarded to anywhere in County to any other voice mail box in the same system.

I. Message Distribution

Users shall be able to establish unique distribution lists of up to fifty (50) recipients per list. Messages entered by the users for a particular distribution list shall be immediately delivered to everyone on that distribution list anywhere in that government agency. Authorized County staff shall be able to send system-wide messages to all users of their systems.

J. Message Class Marks

Messages shall be able to be marked as 'urgent' messages that shall be then placed ahead of all other messages in the recipient's voice mail box. Messages shall be able to be marked as 'private' messages that shall then not allow them to be forwarded to any other voice mail box. Messages shall be able to be marked for 'notification of receipt' which shall notify the user that the recipient has listened to the sent message.

K. Extension Mail Boxes

County staff that shares a telephone line shall be able to have their own unique voice mail boxes through the use of 'extension' codes to the telephone line number.

L. Pager Access

The voice mail system shall be interfaced with any County's radio paging service. Users shall be able to instruct (or program) the voice mail system to page them whenever a new message arrives in their voice mail box and/or whenever an 'urgent' message is received.

M. Outcall Notification

The voice mail system shall be able to automatically call an outside number to notify the answerer that a message has been received. The answerer may then retrieve the message. The mail box user shall be able to program the outcall number at any time, either locally or remotely.

N. Transfer to Receptionist

County users shall be able to program their voice mail box to allow callers to transfer to a receptionist rather than to leave a message. The receptionist may be any telephone number within County's telephone systems.

O. Integration with E-Mail

It would be advantageous for the voice mail system to integrate with the e-mail systems. This integration would permit listing of all pending voice mail messages, would permit e-mail messages to be accessed remotely from the voice mail system and provide a text to voice translation for the user and would allow voice mail messages to be recorded and stored as digital files for future reference or for annotation to documents. It would also be advantageous to be able to save voice mail messages as audio data files in the recipient's local computer for later use.

P. Reports

The voice mail system shall provide reports that shall indicate network trunk utilization and overall availability. An on-line inventory of mail boxes by County departments shall be provided.

Q. Automated Attendant Services

The voice mail service shall include automated attendant services. The automated attendant service shall allow callers to route themselves via voice menus to the service, employee or information they are seeking via entries from their telephone keypad. The automated attendant shall be a Contractor-provided service requiring no equipment on County premises. Automated attendant services shall be available anywhere in Southern California on any County telephone line.

1. Operation

The automated attendant shall answer an incoming call from any type of voice line (POTS, centrex-type, toll-free "800"), give a voice greeting and menu of choices, receive the callers keypad entry, route the call to the telephone line, voice mail box, or pre-recorded announcement associated with the received entry, or route the caller to a receptionist or information recording if no entry is received or the caller enters '0'. Up to four layers of menu choices shall be available with nine (9) choices per menu. The system capacity shall be easily expandable to handle additional traffic loads.

2. Messages

Menu and end messages shall be able to be changed at any time via password protected remote access. Pre-recorded 'after hours',

'holiday' and 'emergency' messages shall be programmable so that they may be automatically played based on day and time and/or upon password protected remote access activation.

3. Reports

Each automated attendant voice mail system shall provide reports including daily call volumes by hour, monthly history with total daily calls, usage time, and average holding time, monthly utilization with mapping of all existing messages and prompts, the number of transfers at which prompt locations, and number of calls abandoned at which prompt locations. Report shall be transmitted at the end of each reporting cycle to the department representative for each system.

R. Call Processing/Interactive Voice Response Services

Contractor shall provide call processing/interactive voice response services for specialized County functions. These services include database look up and text to voice translation from a numeric entry made by a caller after a prompt from an automated attendant, voice recognition to validate access and routing of calls to special functions or persons, load leveling by system callback from ANI and/or later time commitment, fax back capability, etc.

S. Call Center Tree

Contractor shall provide County a call center tree that shall be a network-based call router that allows customers to answer incoming calls and route them to different departments, employees or to a recorded announcement. Features shall include multiple languages, names directory / dial by extension, holidays, after-hours schedules, and secondary telephone numbers.

T. Performance Levels

Contractor shall provide the following performance levels for the voice mail and automated attendant systems:

1. System availability shall be 99.95 percent (99.95%) each month.
2. Passwords shall be reset within two (2) hours of request.

6.5.5 Direct Dial Mailbox

Contractor shall provide message-only mailboxes. This service will support one or more lines with one mailbox. Users will have the capability to retrieve messages by dialing a specified access number.

6.5.6 Storage

Mail boxes shall retain up to fifty (50) messages for a minimum of thirty (30) Days. The storage shall accommodate messages of at least three (3) minutes in length. Message storage of five (5) minutes or up to sixty (60) Days will be an option.

6.5.7 Bulletin Boards

Contractor shall provide Bulletin Board mail boxes to allow users to record messages that can be accessed by callers. Bulletin Board messages shall be up to five (5) minutes in length. Messages shall be changed using local access and not require system administration intervention.

6.6 **Switched Data Services**

6.6.1 Integrated Services Digital Network (ISDN)

Integrated Services Digital Network (ISDN) services shall be provided by Contractor anywhere within County. ISDN services shall adhere to National ISDN-1 (NI-1) Standards for BRI and National ISDN 2 (NI-2) Standards for PRI. Each 'bearer' channel shall be assigned a telephone number. ISDN may be ordered as a stand-alone service or as a centrex-type service.

The ISDN access service shall follow the North American adaptations of the ANSI T1 standards and ITU-TSS G, H, I, Q, X, and V series recommendations for the provision of ISDN, including common channel Signaling System Number 7 (SS7) for inter-exchange signaling. In particular, the ISDN access service shall conform to ANSI T1.620/607/606/614/608/602/609/612/626.

A. Basic Rate Interface (BRI)

Basic Rate Interface ISDN services shall provide two circuit-switched, digital "clear channel" 64 Kbps "B" channels and a 16 Kbps packet data "D" channel over a single cable pair. The BRI circuit, commonly referred to as "2B+D", shall terminate as a 'U' interface at the demarcation point at the County facility. The BRI shall be provisioned as two voice channels, a voice and data channel, or two data channels. Contractor shall work with County to simplify and standardize BRI configurations to ease ordering and installation procedures. ISDN BRI is only available within Contractor's franchise territory and under Contractor's resale agreement out of territory.

B. Primary Rate Interface (PRI)

Primary Rate Interface ISDN services shall provide twenty-three (23) circuit-switched, digital, clear channel, 64 Kbps "B" channels and a 64 Kbps packet data "D" channel provisioned over a T-1 at 1.544 Mbps. It is commonly referred to as "23B+D". Contractor shall terminate the PRI circuit at the demarcation point in the County facility. County will install the DSU/CSU and any multiplexing equipment.

6.6.2 Switched 56 Services

Switched 56 services shall provide dial up, full duplex, synchronous, digital service at 56 Kbps. Switched 56 services shall be available anywhere in County. Each line shall be assigned a NPA-NXX-XXXX telephone number. The service shall be provisioned as a four-wire circuit, and terminated at the demarcation point in the County facility. County will provide the Digital Service Unit (DSU). Switched 56 services shall be compatible and

interoperate with ISDN services. Service is only available within Contractor's franchise territory.

6.7 Private Line Services

It is the intent of County to migrate from point-to-point and multi-point private line data circuits to a switched cell/packet environment. However, current Implementations must be preserved as this Migration is occurring. Contractor shall provide private line services to maintain the installed base of networks in reliable working order.

6.7.1 Analog Private Lines

Contractor shall provide voice-grade analog transmission within the 300 to 3000 Hz frequency band. The service shall be provided as point-to-point and multi-point circuits. Contractor shall provide various types of line conditioning as required by County, including adjustments and controls on envelope delay, attenuation, harmonic distortion, and signal to noise ratio. Both two-wire and four-wire terminations shall be available. These services shall be available anywhere in the County of Los Angeles. County will supply modems and other equipment.

6.7.2 Digital Private Lines

Contractor shall provide full duplex, synchronous, point-to-point or multi-point, dedicated private line digital circuits. This service shall be available anywhere in the County of Los Angeles. Contractor shall terminate the service at the demarcation point at County facility. Contractor shall work with County staff for any space and power requirements for terminating equipment. Contractor's premises equipment will be solely for the termination and provisioning of the specific services ordered by County. County will provide the CSU/DSU equipment, multiplexing equipment, and/or other access equipment. Digital private lines shall meet the following performance criteria:

A. Low Speed Digital Private Lines

Contractor shall provide digital private lines with transmission speeds available of 2.4, 4.8, 9.6, 19.2, 56, and 64 kilo-bits per second (Kbps). A secondary channel for system monitoring that operates in conjunction with the primary channel shall be available with each primary channel. Contractor shall provide sub-rate multiplexing that shall enable the aggregation of low speed channels (1.2, 2.4, 9.6, etc.) onto a higher speed 64 Kbps channel in the central office.

B. T1 Services

Contractor shall provide dedicated, four-wire, synchronous, point-to-point, full duplex digital private line services at 1.544 Mbps (DS1). This service shall be available both as a basic 1.544 Mbps channel and as a channelized, 24 - 64 Kbps channels, service.

C. Fractional T1 Services

Contractor shall provide point-to-point, dedicated, full duplex, digital private line service in increments of 256, 384, 512, 768 and 1,544 Kbps. This service shall provide for the contiguous routing of multiple DS0s (64 Kbps channels) within the same T1 circuit.

D. DS3 Services

Contractor shall provide dedicated, full duplex, point-to-point transmission services at 44.736 Mbps. This service shall be available as a single data stream or channelized into DS1 and DS0 formats.

6.7.3 Synchronous Optical Network (SONET)

Contractor shall provide SONET services to County facilities as requested. Contractor shall terminate their fiber optic facilities at County premises in space provided by County. County will provide the required AC power but Contractor shall provide all battery backup or auxiliary power units as necessary. County will provide the SONET access and multiplexing equipment unless specified otherwise. The following SONET service shall be provided:

A. SONET-OC3

This category of service shall support three SONET OC1 channels where each OC1 channel is equivalent to information payload (i.e., clear channel) data rate of 49.536 Mbps over an interface with a line rate of 155.520 Mbps. These three OC1 channels shall be able to be grouped as follows:

- Channelized OC3
In this mode, three (3) separate OC1 channels, each with an information payload data rate of 49.536 Mbps, shall be supported and requires an interface card.
- Unchannelized OC3
In this mode, a single channel equivalent to information payload data rate of 148.608 Mbps (i.e., equivalent of three (3) OC1 channels) shall be supported.

B. SONET-OC12

This category of service shall support four (4) SONET OC3 channels where each OC3 channel is equivalent to information payload (i.e., clear channel) data rate of 148.608 Mega-bits per second (Mbps) over an interface with a line rate of 622.080 Mbps. These four (4) OC3 channels shall be able to be grouped as follows:

1. Channelized OC12

In this mode, four (4) separate OC3 channels, each with an information payload data rate of 148.608 Mbps, shall be supported.

2. Unchannelized OC12

In this mode, a single channel equivalent to information payload data rate of 594.432 Mbps (i.e., equivalent of 12 OC1 channels) shall be supported.

C. SONET-OC48

This category of service shall support single SONET OC48 channel with the information payload data rate of 2.378 Giga-bits per second (Gbps) over an interface with a line rate of 2.488 Gbps.

D. SONET-OC192

This category of service shall support single SONET OC192 channel with the information payload data rate of 9.621 Giga-bits per second (Gbps) over an interface with a line rate of 9.953 Gbps.

6.7.4 Multi-drop Connection

Contractor shall allow connection of three (3) or more County facilities. For each intermediate point (i.e. drop location), the following capabilities shall be supported:

A. Branch-off

In this mode, all points shall be treated as if in one shared medium with the ability of autonomous sending and receiving of data by each point. However, CPE application will ensure controller/subordinate mode of operation (e.g., polling scheme used in IBM 3270 mode of data communication).

B. Drop-and-insert

In this mode, previously specified channels of a channelized T1, channelized T3 or SONET OC3 service category shall be able to be dropped off to a site, and simultaneously new channels from the site shall be able to be picked up or inserted.

6.7.5 Special Routing

Contractor shall provide multiple routes (Diversity) for special private line circuits that support critical public safety or administrative applications when requested by County based on the below arrangements.

A. End-to-End Diversity

Between terminating County facilities, Contractor shall supply at least two (2) physically separated routes for private line circuits. These diverse routes shall not share common telecommunications facilities or offices. Contractor shall maintain a minimum separation of twenty-five (25) feet throughout all diverse routes.

B. Access Diversity

Between the County facility and Contractor's serving central office and/or wire center Contractor shall supply at least two (2) physically separated routes for the private line circuits. These diverse routes shall

not share common telecommunications facilities or offices. Contractor shall maintain a minimum separation of twenty-five (25) feet throughout all diverse routes.

C. Diversity Implementation

Within thirty (30) Days of the Implementation of Diversity and again thereafter upon County request, Contractor shall provide a graphical representation (e.g., diagrams/maps) of private line circuit routes to show where Diversity has been implemented. Contractor shall provide County thirty (30) Days prior written notification of any proposed reconfigurations.

6.7.6 End-to-End Performance

The transmission performance parameters for any County facility to County facility connection shall meet the following:

A. For analog private line service, all analog transmission parameters shall satisfy at least the values and ranges set forth in the Notes on the BOC Intra-LATA Network [TR-NPL-000275].

B. For digital private line service, all digital transmission parameters shall satisfy at least the values and ranges set forth in the AT&T PUB 62411 for T1, Bellcore PUB TR-499 for T3, and ANSI T1.105 & 106 for SONET.

C. Availability

The total availability of each private line circuit shall be 99.99 percent (99.99%) each month.

6.8 **Frame Relay Service**

Contractor shall provide Frame Relay service. The Frame Relay service shall be accessible from any County facility. There are existing Frame Relay services used by County networks which shall be migrated to Contractor's Frame Relay service without service disruption, or any changes to the existing access equipment or administrative procedures.

6.8.1 Standards

The Frame Relay service shall conform to the ANSI T1 standards, in particular T1.606/614/617/618, and ITU-TSS I, Q, and X series recommendations for the provision of the Frame Relay service and the North American adaptations of these recommendations as defined by the Alliance for Technology Information Standards (ATIS) (formerly the Exchange Contractor Standards Association [ECSA]) T1 Committee. The Frame Relay service shall also conform to the industry contracts of the Frame Relay Forum, the Internet Engineering Task Force (IETF), and the North American ISDN Users Forum (NIUF). The Frame Relay service shall support packet sizes up to 8192 bytes, including sizes of 64, 128, 256, 512, 1024, 2048 and 4096 bytes. The Frame Relay service shall offer Committed Information Rates (CIRs) of at least 1024 Kbps.

6.8.2 Multi-Point Service

The Frame Relay service shall support multi-point connection of three (3) or more County facilities.

6.8.3 Priority Levels

The Frame Relay service shall support priority levels (4 levels) for Virtual Circuits. Higher priority traffic shall be delivered ahead of lower priority traffic and shall be discarded only after all lower priority traffic has been discarded.

6.8.4 Access

Contractor shall provide various types of access bandwidth services to their Frame Relay service from County facilities. The following access types shall be provided for Frame Relay service from any County facility:

Dedicated access types:	Circuit switched dial-up access types:
Digital 64 Kbps Circuit T1 Circuit T3 Circuit	Switched 56 within Contractor service territory ISDN BRI (2B+D) within Contractor service territory and under resale agreement out of territory ISDN PRI Circuit (23B+D)

6.8.5 End-to-End Performance

The transmission performance parameters for County facility to County facility connection shall satisfy at least the values and ranges set forth in ANSI T1.606/614/617/618 standards. Frame Relay services shall be provided by a single Contractor's network. There shall be no NNI interfaces to provide any end-to-end services to County.

6.8.6 Availability

The availability of the Frame Relay service shall be at least 99.99 percent (99.99%) each month.

6.8.7 Equipment

County will provide to Contractor a list of the interface equipment to the Frame Relay service such as DSU/CSU, routers as part of the Transition process. Contractor shall ensure that all the existing CPE currently accessing Frame Relay services shall work properly with Contractor's Frame Relay service.

6.9 **DSL Services**

Contractor shall provide the following Digital Subscriber Line (DSL) service options at County facilities. CPE and/or routers may be provided by either County or Contractor at County's option.

6.9.1 Asymmetrical DSL

- DSL – 384 kbps down / 128 kbps up
- DSL – 768 kbps down / 128 kbps up

- DSL – 1.5 mbps down / 384 kbps up
- DSL – 1.5 mbps down / 768 kbps up
- DSL – 3 mbps down / 512 kbps up
- DSL – 6 mbps down / 768 kbps up

6.9.2 Symmetrical DSL

- DSL – 1.5 mbps down / 1.5 mbps up

6.9.3 Remote Local Area Network DSL

ANIRA exceeds the performance of the existing RLAN service by allowing connectivity to all DSL sites, not just where Contractor is the local service provider. If Contractor's DSL is not available at a location, ANIRA can support other broadband technologies such as cable or DSL from other providers. The ANIRA service also offers single user connectivity as well as small office - home office. With Contractor's Client software, ANIRA can provide connectivity over dial up, dedicated Internet, or WiFi. Connections can be use either L2TP (dial up), IPSec (for Internet Access).

6.10 ATM Service

Contractor shall provide ATM service to County. The ATM service shall be accessible from any County facility.

ATM service shall support the transmission and aggregation of a broad range of County information, including voice, data, and video via circuit-mode and packet-mode transmission. ATM shall use cell-switching and multiplexing technology that conforms to ITU-TSS and ANSI standards. The ATM service shall support bandwidth-on-demand capability, by allocating incremental bandwidths in response to a user's demand for additional bandwidth.

6.10.1 Adaptation Layer Capabilities

The following ATM Adaptation Layer (AAL) capabilities shall be supported and comply with ITU-TSS Recommendations I.361, I.362, I.363, and ITU-TSS Q.SAAL for signaling:

AAL TYPE 3 Connection-oriented Variable Bit Rate (VBR).

ATM service shall support packet-mode connection-oriented VBR data transfer.

6.10.2 Connection Types

ATM service shall support the following connection types for PVCs (Permanent Virtual Circuits) and SVCs:

- A. Point-to-Point Connection. This feature shall allow dedicated connection between two (2) County facilities.
- B. Point-to-Multipoint Connection. This feature shall allow connection of three (3) or more County facilities.

6.10.3 Data Rates

The ATM Service shall support the following data rates:

- A. DS1 at line-rate of 1.544 Mbps and information-payload data-rate of 1.536 Mbps
- B. DS3 at line-rate of 44.736 Mbps and information-payload data-rate 43.008 Mbps
- C. SONET OC3 at line-rate of 155.520 Mbps and information-payload data-rate of 148.608 Mbps
- D. SONET OC12 at line-rate of 622.080 Mbps and information-payload data-rate of 594.432 Mbps

The ATM Service shall support the following fractional data rates:

- E. Fractional DS3 at sustained-cell-rate (SCR) of 3Mbps and peak-cell-rate (PCR) of 12Mbps
- F. Fractional DS3 at sustained-cell-rate (SCR) of 5Mbps and peak-cell-rate (PCR) of 25Mbps
- G. Fractional DS3 at sustained-cell-rate (SCR) of 10Mbps and peak-cell-rate (PCR) of 40Mbps
- H. Fractional DS3 at sustained-cell-rate (SCR) of 15Mbps and peak-cell-rate (PCR) of 40Mbps
- I. Fractional DS3 at sustained-cell-rate (SCR) of 20Mbps and peak-cell-rate (PCR) of 40Mbps
- J. Fractional DS3 at sustained-cell-rate (SCR) of 30Mbps and peak-cell-rate (PCR) of 40Mbps
- K. Fractional OC3 at sustained-cell-rate (SCR) of 40Mbps and peak-cell-rate (PCR) of 140Mbps

6.10.4 Inverse Multiplexing over ATM

Inverse Multiplexing over ATM provides a means for users to access ATM networks at rates between the traditional DS1 (1.544Mbps) and DS3 (45Mbps) levels by aggregating multiple T1/E1 links.

IMA allows multiple T1/E1s to act as a single, logical ATM connection that can be managed as an IMA "link group." The aggregate bandwidth of the IMA link group determined the rate of the ATM connection, (e.g., a link groups of four (4) DS1s provides an ATM bandwidth of 6 Mbps)

Vendor shall provide ATM IMA at the following data rate:

- A. ATM Bundled Port & Access IMA – 3.072Mbps
- B. ATM Bundled Port & Access IMA – 4.608Mbps
- C. ATM Bundled Port & Access IMA – 6.144Mbps
- D. ATM Bundled Port & Access IMA – 7.680Mbps
- E. ATM Bundled Port & Access IMA – 9.216Mbps
- F. ATM Bundled Port & Access IMA – 10.752Mbps
- G. ATM Bundled Port & Access IMA – 12.288Mbps

6.10.5 Priority Levels

ATM service shall support multiple priority levels (minimum of four (4)) for packet VCs. A higher priority VC shall receive preferential treatment over a lower priority VC in terms of delay and guarantee of delivery (if there is possibility of discard) during network congestion.

6.10.6 Standards

The ATM service shall comply with all applicable current and future ITU-TSS Recommendations including I.113, I.121, I.150, I.211, I.311, I.321, I.327, I.361, I.362, I.363, I.413, I.432, I.610, and Q.SAAL, ATM Forum Version V.3, and ANSI T1.105 and T1.106.

6.10.7 Additional Features

The ATM service shall support all commercially available services and future B-ISDN services when commercially available. County shall be provided the following services when they are available and offered to any other entity in the Los Angeles service area.

- A. AAL TYPE 1 Constant Bit Rate (CBR). ATM service shall support circuit-mode services at DS1 and DS3 levels on an end-to-end basis.
- B. AAL TYPE 2 Variable Bit Rate (VBR). The ATM service shall support packet-mode when the specification is defined in the future.
- C. AAL TYPE 3/4 Variable Bit Rate (VBR). The ATM service shall support data traffic, connection-oriented, asynchronous traffic (e.g. X 25 data) or connectionless packet data.
- D. AAL TYPE 5 Variable Bit Rate (VBR). The ATM service shall support IP over ATM, Ethernet over ATM, and LAN Emulation (LANE).

6.10.8 End-to-End Performance

The performance parameters for County facility to County facility connections shall meet the following.

Packet Mode Services

The performance parameters for County facility to County Facility connection shall satisfy at least the values and ranges set forth in the Bellcore TR-TSV-772 and TR-TSV-773 standards.

6.10.9 Availability

The availability of ATM Service shall be at least 99.99 percent (99.99%) monthly.

6.11 **Metro Ethernet**

6.11.1 Contractor shall provide a high-speed, fiber based, physical layer transport service designed to offer connection of Customer's LAN/WAN at the native speed of the LAN backbone within the same LATA. Point-to-point configurations support Ethernet-to-Ethernet (IEEE 802.3z) LAN connections at 1.25 Gigabits per second (Gbps). The service shall consist

of dedicated fiber(s) connecting specialized fiber repeaters that are placed at County premises demarcation points as Network Terminating Equipment (NTE). The Vendor shall hand off the high-speed fiber connections to County as Gigabit Ethernet interfaces.

6.11.2 Contractor shall provide an advanced service offering networking capabilities utilizing Optical Ethernet. Optical Ethernet is the use of Ethernet LAN packets running over optical fiber within or as access to a service provider's network where facilities exist. This shall provide an integrated service consisting of fiber transport connected to an Ethernet device capable of switching and routing with bandwidth ranging from 10 Mbps to 1 Gbps. The service shall connect to the Customer's network using a router, bridge or switch. The service shall support a logical point-to-point or point-to-multi-point configuration and shall enable County to connect locations within a Metropolitan Area Network (MAN) as if they were segments on the same LAN. The service shall include the transport from County premises to the Ethernet network, a port on the Ethernet network, and an assigned bandwidth usage which is inclusive of the Committed Information Rate (CIR) and one Ethernet Virtual Connection (EVC).

6.11.3 OPT-E-MAN service shall use Contractor's network strength and Cisco equipment to create a scalable optical service within County's metropolitan area.

6.12 **Dense-Wave Division Multiplexing DWDM Optical Network**

Contractor shall provide a flexible, high volume optical transport utilizing multiplexing technology in a fully redundant, protected dedicate ring configuration. Optional non-redundant, non-protected ring configuration should also be available. Multiple data signals are transmitted over fiber-optic cable using different wavelengths of light that are protocol independent of every other channel in the system. The service shall allow County to combine its multiple data signals so they can be amplified and transported over one network. The service shall provide dedicated capacity over a single pair of fiber in two directions that increases capacity without limiting customer-required data interfaces.

A MON Ring shall provide high-volume optical transport using DWDM technology in a dedicated ring configuration. With DWDM, fiber-optic cable transmits multiple data signals using different wavelengths of light. Each wavelength represents a transmission channel in the MON Ring system and is protocol-independent of every other channel. MON Ring shall use diverse fiber routes whenever possible. County shall be able to expand County's fiber routing from property line to County's wire center to help ensure that loop fibers follow separate paths.

6.13 **Multi Protocol Label Switching (MPLS) Services**

County seeks end-to-end integrated support of existing legacy technologies such as Frame Relay and ATM with new Ethernet services. MPLS integrates Ethernet and Frame Relay/ATM traffic over a single shared infrastructure to allow service

providers to offer new Ethernet services and support Frame Relay/ATM services at the same time. Contractor will provide County with Contractor's private MPLS transport. Contractor's MPLS transport shall provide the widest variety of legacy and next generation access types.

Contractor shall describe its MPLS offering, including:

- Geographic and Implementation limitations
- Pricing combines Port and Access charges
- All associated pricing for components
- Service installation intervals

The MPLS service shall comply with industry definitions and/or Standards as set by the IETF to include the following features:

- Remote VPN tunneling
- Access to Internet providers
- VPN management
- Non IP traffic (e.g., SNA, Appletalk, IPX)
- Encryption
- Authentication
- Firewall features

At a minimum, the following data rates will be provided:

- MPLS Service at DS1
- MPLS Service at DS3
- MPLS Service at OC3
- MPLS Service at Gigabit Ethernet

7.0 INVENTORY AND ORDER MANAGEMENT

Paragraph 7.1 (County's Telemanagement Order System) contains all information relating to the ordering of services from initiation to finalization. Contractor shall interface with County's Telemanagement Order System for the administration and processing of Service Requests and for directing and accomplishing provisioning of the requested services, including identifying configuration changes needed on end-user equipment to make it compatible with Contractor's communications systems. A confirmation of all Service Requests placed in the system shall be generated to the ordering entity. The confirmation shall include the due date, cost of service requested, and tracking number. County's billing system shall compare the final bill with the cost estimate. If the charges are in excess of quoted charges, Contractor shall provide an explanation. When no explanation is provided, or the excess charges cannot be justified to County's satisfaction, the original quoted costs shall apply. County shall pay the original quoted costs; provided, however, that Contractor may pursue dispute resolution as set forth in Paragraph 8.30 (Dispute Resolution Procedures) of the base document of the Contract.

7.1 County's Telemangement Order System

County's Telemangement Order System is an off-the-shelf product from Symphony Services that has several custom programs designed specifically for County. The system is a web-based application that resides behind County firewall. Contractor shall comply with current County data security procedures as follows to gain access to the Telemangement Order System.

- Complete County's Security Data Request form;
- Request an RSA SecurID Card to log on Network (Current cost \$75.00 each)
- Down load the Cisco VPN Client 5.
- URL for EMS11

7.2 Service Request Process

The normal Service Request process shall follow the sequence outlined below:

- Service Price Quote (optional step)
- Service Requests
- Service Request Authorization
- Service Request Acknowledgment
- Service Request Proposal Issuance
- Service Request Proposal Acceptance
- Service Request Implementation
- Service Request Completion Notification
- Service Acceptance

The detailed requirements for Service Request processing are described in the following paragraphs.

7.3 Service Price Quote

Contractor shall utilize County's Telemangement Order System to electronically provide a Service Price Quote that is not binding to County and at no cost to County. Contractor's quotes shall identify all nonrecurring and recurring costs along with the Service Request Interval expected in Paragraph 7.11 (Service Request Interval (Response Time)). The Service Price Quote shall be based upon the following information provided by County:

- Type of service and features
- Locations for service delivery
- Service due date
- Agency department requesting the service
- Any additional information required to complete the Service Price Quote

Authorized County representative may at County's option request a Service Price Quote prior to placing a Service Request. The Service Request shall be used for price quote requests. All relevant fields of information in the Service Request shall be transmitted via the Telemangement Order System to Contractor. Contractor shall provide a price quotation within two (2) Business Days which includes all recurring charges, all non recurring costs and the time frame for performing the work.

7.4 **Service Requests**

Each authorized County representative will submit to Contractor a request for initiating, adding, changing or terminating service. Contractor shall be responsible for directing and accomplishing all tasks associated with processing the Service Request.

The Service Request is the official communication to Contractor from County that additions, changes or deletions of services are desired. This request shall contain a complete description of the work to be done, related inventory and billing information, time frames and site information. The Service Request shall include the following fields of information:

- Service Request Number – A unique number assigned to Service Requests by County's Telemangement Order System. Contractor shall enter this number as part of the Service Request ordering process and shall ensure that this number is passed through on all billing processes and is shown on the detailed billing data for verification and tracking purposes. Contractor shall accommodate various formats of characters and numbers.
- Order Analyst – The name of the authorized individual placing the Service Request
- Order Date and Time – Date and time the Service Request was placed
- Due Date – Requested or officially scheduled completion date
- Priority – A classification that determines the urgency of the Service
- Inventory Number – For existing services this is the NPA-NXX-XXXX that uniquely identifies a specific line or number
- User Name – The employee or function associated with the service
- Site Info – Address and building specific location
- Contact Name – For access, coordination and installation
- Telephone Number – Of the access person
- Org code – The number associated with the cost center to which the service is to be billed
- Project Name or Application – Describes an application, function or project associated with this service
- Status – Upon Service Request placement this is an initial Service Request. This field may be used to reflect Service Request acknowledgment, any delays or postponements, work in process, completion, acceptance, etc.

The Service Request may also contain narrative or attachments which completely describes the work to be done.

7.5 Verify Authorization of Service Request

Upon receipt of a Service Request, Contractor shall verify that the individual requesting the service is authorized to submit the Service Request. County's Program Manager will provide to Contractor a current list of County staff authorized to initiate Service Requests. Contractor shall not process any Service Request without verification of County staff authorization or an explicit exception authorization from County's Program Manager.

7.6 Service Request Acknowledgment

The Service Request Acknowledgment is a response transmitted by Contractor via the Telemangement Order System which updates the Service Request status as having been received by Contractor. This acknowledgment shall be received within four (4) hours following the issuance of the Service Request by County. Service Requests issued after 3:00 p.m. must be acknowledged the next business morning.

7.7 Service Request Proposal Issuance and Acceptance

Following acknowledgment of the Service Request by Contractor, Contractor shall provide County with Service Request response via the Telemangement Order System. The response shall include the cost, completion date, binding post, Contractor's contact name and phone number, and any other information relevant to the completion of the Service Request. This response shall be submitted to County no later than three (3) Business Days following Service Request acknowledgment by Contractor.

7.8 Implementation

Contractor shall perform the actions and tasks required to complete the Service Request. Contractor shall coordinate with County or the CPE service providers regarding any agreed upon County or CPE service provider's actions that are required to fulfill the Service Request. Any changes or additional information by County or Contractor shall be communicated both electronically via the Telemangement Order System as well as by direct telephone contact.

7.9 Service Request Notification of Completion

Contractor shall notify County contact person specified in the Service Request by telephone when the Service Request has been completed. The official notification must be made via the Telemangement Order System within twenty-four (24) hours after Service Request completion. Verbal notification shall not substitute for official notification.

7.10 Changes During Service Request Process

7.10.1 Cancellation of Service Request

Except for Service Requests requiring Project Coordination, Contractor shall accept from County a notice of Service Request cancellation that it receives more than five (5) Business Days before the service due date without County incurring any charge. Cancellation by County of Service Requests with Project Coordination or any other Service Request within the last five (5) Business Days prior to the service due date shall qualify Contractor for cost reimbursement of costs reasonably incurred as a result of the cancellation, provided Contractor has made appropriate notification to County of the additional costs that may be applicable. Contractor shall provide County's Program Manager with a description of its procedures for Service Request cancellation.

7.10.2 Change of Service Request Completion Date

County's requests for a delay of Service Request completion date more than three (3) Business Days prior to the service due date shall be accepted by Contractor at no cost to County. County's requests for a delay within three (3) Business Days before the service due date may incur a delay charge. A Service Request delayed by County longer than thirty (30) Days from the original promised due date cannot be presumed canceled unless County requestor is notified and cancels it. Contractor shall not delay a Service Request completion date unless agreed to by the authorized County staff requesting the service. County is responsible for all additional costs reasonably incurred by Contractor as a result of a County requested delay under this Subparagraph 7.10.2 that extends beyond thirty (30) Days, provided Contractor has made appropriate notification to County of additional costs that may be applicable.

7.11 Service Request Interval (Response Time)

A Service Request Interval is the interval of time between issuance of a Service Request acceptance by Contractor and the issuance of a Service Request completion notice by Contractor. Contractor shall make Service Request Interval information available to County staff for each type of service. Service Request Intervals defined herein are not applicable to the initial Transition from existing service providers to Contractor's services. Service Request Intervals are:

- Standard Service Request Intervals
- Emergency Service Request Intervals
- Expedited Service Request Intervals
- Negotiated Service Request Intervals

Contractor shall accept Service Requests in bulk or singly using Standard and Expedited Service Request Intervals. Service Requests for new or enhanced service trials or demonstrations also may be ordered using Standard and Expedited Service Intervals. The costs for Standard and Expedited Service Request Intervals shall be in accordance with the costs provided in the Contract.

7.11.1 Standard Service Request Interval

Contractor shall provide County with a set of Standard Service Request Intervals for each type of service provided.

7.11.2 Emergency Service Request Interval

In the event of life or property threatening emergencies, County Program Manager or other specifically identified County staff, may require Contractor to complete a Service Request in the shortest possible time. County Program Manager may waive planned completion of other Service Requests during an emergency.

7.11.3 Expedited Service Request Interval

This situation is not an emergency but is one in which the Standard Service Request Interval would bring hardship to the user. The expedite condition may be requested any time during the Service Request process. When County formally requests an Expedited Service Request Interval, related expedite charges are committed even though County might subsequently cancel the Service Request. If Contractor does not meet the expedite date, related expedite charges do not apply.

7.11.4 Negotiated Service Request Interval

This situation involves an expedited Service Request date that is determined by negotiations between County and Contractor. This procedure will be utilized when County desires a shorter than Standard Service Request Interval and Contractor agrees to attempt to meet the compressed date with a Standard Service Request Interval price. In this case, no expedite charges shall be applied.

7.11.5 Bulk Service Request Processing

Contractor shall provide the ability for County to submit requests for multiple services or features via a single Service Request, e.g., multiple service locations, multiple services at single location and multiple quantities of a single service or feature. Contractor shall be responsible for obtaining the unique order identifier for each of the components of the bulk Service Request.

7.11.6 Service Request Performance

Contractor shall adhere to the performance levels for all Implementation activities as submitted in their proposal for standard service intervals, or as negotiated between County and Contractor for specific Service Requests during the term of the Contract. Failure to meet standard or negotiated due dates shall incur performance remedies as specified in Technical Exhibit 2 (Performance Requirements Summary (PRS)).

7.12 **Service Requests for New or Enhanced Service Trials or Demonstrations**

Contractor shall identify and notify County's Program Manager of any Service Requests it receives for services not included in the Pricing Schedule of the

Contract. Contractor shall obtain written permission from County's Program Manager prior to conducting service trials.

7.12.1 Procedure for Trials

Contractor shall provide County's Program Manager a description of their procedures for ordering trials or new or expanded services following Contract(s) award. A trial is defined as the use of proposed future enhancements by a County department that takes place for a period of time and at locations as agreed to by County and Contractor.

7.12.2 Trial Initiation

Contractor shall provide written notification to County's Program Manager prior to initiation of any trial program with any department. This notification shall include:

- the start date and duration of the trial;
- a copy of the cost estimate that Contractor gave to the County department;
- the section of the Contract service the trial proposes to enhance;
- an acceptance test plan.

County's Program Manager will respond with approval or rejection within fifteen (15) Days after receipt of the notification. If the trial is approved by County's Program Manager, Contractor shall not charge more than the cost estimate. Contractor shall report the status of all trials to County's Program Manager.

7.13 Acceptance of Services

After Contractor Transitions or installs service, County may, at its sole option, begin testing of the Service in accordance with the applicable acceptance test plan(s) developed pursuant to Subparagraph 7.12.2 (Trial Initiation) or, in the absence of such plan, in a manner consistent with technology industry testing practices, to determine that the service is performing in accordance with all applicable requirements of this SOW and Contract.

7.13.1 Acceptance Testing

The service shall be accepted by County when the applicable acceptance test plan has been successfully completed or, in the absence of such test plan, when County's Program Director determines, consistent with technology industry standards that the service is operating properly. County will give Contractor notice of acceptance as provided in the applicable acceptance test plan or, in the absence of such test plan, within thirty (30) Days of the successful completion of testing. Should County not provide notice within (30) Days, it shall be deemed as accepted. Testing to ensure services continue to operate without deficiencies as additional sites are added shall be provided pursuant to this SOW. Contractor will not turn over service to County for purposes other than for testing prior to acceptance

unless partial acceptance is defined and agreed upon by both County and Contractor in the applicable test plan, should a test plan exist.

7.13.2 Failed Acceptance Testing

If a service has not successfully passed the applicable acceptance test, County's Program Manager will promptly notify Contractor in writing of such failure, specifying the manner in which the services failed. Contractor shall immediately commence such necessary corrections, repairs and modifications to the service as will permit the service to be ready for retesting. Contractor shall notify County's Program Manager when such corrections, repairs and modifications have been completed, and the acceptance test shall begin again. If, after the acceptance test has been completed for a second time, and the service again fails to pass the acceptance test, County's Program manager shall promptly notify Contractor in writing, specifying the manner in which the service failed. Contractor shall immediately commence such necessary correction, repairs and modification to the service as will permit the service to be ready for retesting. Such procedure shall continue until such time as County notifies Contractor in writing either (1) of the successful completion of testing, or (2) that County has made a determination that satisfactory progress toward successful completion is not being made, in which latter event County shall have the right to terminate the at-issue service.

7.14 Remedies for Failed Terminated Service

In the event of a failed service termination under Paragraph 7.0 (Inventory and Order Management), Contractor shall reimburse or credit County for any costs paid to Contractor for the trial services by County or at County's sole option any reimbursement due to it may be credited against other sums due and payable by County to Contractor.

8.0 BILLING

This Paragraph 8.0 (Billing) addresses the delivery of invoices and detailed billing data to County's Billing Manager and County departments. County's intention is for Contractor to provide a single invoice to County for all services centrally. County reserves the right to require Contractor to provide invoices directly to County departments. This Paragraph 8.0 (Billing) also addresses Contractor resolving billing disputes, providing periodic traffic and budget forecasts, and maintaining detailed billing data for access by County. Contractor shall interface with County's web-based Telecommunications Expense Management System to provide the billing requirements.

8.1 Invoicing

Contractor shall provide a single invoice containing the actual charges for all services provided by Contractor in accordance with the Contract pricing for services. The invoice shall consolidate all services for those users Contractor serves. Detailed billing data shall be accessible to County's Program Manager at

the same time as the Invoice is presented. Complete invoice and detailed billing data shall be presented no later than the 15th day following the end of the billing period, which shall be a calendar month (1st day of the month through the last day of the month) unless agreed to otherwise by County's Billing Manager.

8.1.1 Any missing charges/accounts shall deem the Invoice and detailed billing data as incomplete. The incomplete portion of the invoices will not be approved by County for payment. The complete portion of invoices shall be paid pursuant to the time frames as defined in Paragraph 5.0 (Contract Pricing and Invoicing) of the base document of the Contract. Contractor shall present corrected invoice and billing data within two (2) billing cycles after County notifies Contractor of the incomplete billing data.

8.1.2 Contractor shall invoice for all services within ninety (90) days after the services are rendered or 150 Days for any calling card usage. All charges not billed within ninety (90) days shall be borne by Contractor without recourse to County unless a request for an extension is approved in writing by County's Billing Manager within this ninety (90) Day period.

8.2 **Balancing of Invoice and Detailed Billing Data**

Contractor's detailed bill data records shall balance to the corresponding monthly invoice. If a discrepancy is found, County will consider both formats incomplete. The incomplete portion of the invoices will not be approved by County for payment. The complete portion of invoices shall be paid pursuant to the time frames as defined in Paragraph 5.0 (Contract Pricing and Invoicing) of the base document of the Contract. Contractor shall present corrected invoice and billing data within two (2) billing cycles after County notifies Contractor of the incomplete billing data. All charges not billed within two (2) billing cycles after County notifies Contractor of the balancing discrepancy shall be borne by Contractor without recourse to County unless a request for an extension is approved in writing by County's Billing Manager within this two (2) billing cycle period.

8.3 **Effective Billing Date (EBD)**

Contractor shall start billing for services on the EBD. The EBD shall be the date when the service is accepted (based on the successful completion of acceptance testing) but no earlier than the date requested in Paragraph 7.0 (Inventory and Order Management).

8.3.1 Initiation/Installation Charges

For service additions at a County facility where service is already being provided, the initiation/installation charge for the addition will be charged in its entirety in the first month following initiation/installation.

8.3.2 Service Termination

Contractor shall terminate billing effective upon County's requested date for service disconnection.

8.4 Rates

The rates for Services which are to appear on County's invoice and detailed billing data are set forth in Exhibit B-1 (Pricing Schedule for Local Services).

8.5 Invoice Content

The invoice shall consist of a Summary Section and a Detailed Section.

8.5.1 Summary Section

Contractor shall ensure that the Summary Section of the invoice contains, at a minimum, the following information:

- Period of time covered by the invoice
- Total current charges by charge category, e.g., monthly, usage, taxes
- Previous statement balance
- Current month payments
- Current month adjustments
- Balance due

8.5.2 Detailed Section

The Detailed Section of the invoice shall contain the call detail and recurring, nonrecurring and service initiation charges at the Working Telephone Number level. As currently envisioned, the required data elements in the Detailed Section of the report shall include, but are not limited to:

Adjustments	Administrative Charges
Bill Start Date	Bill Stop Date
Call Connect Date & Time	Call Cost Amount
Call Disconnect Date & Time	Call Minutes
Call Volume Kilo-segments	Called City
Called Number	Called State
Caller Identification	Calling City
Calling Number	Calling State
Charge Type	Circuit Number
Circuit Type	Conference End Date & Time
Conference Start Date & Time	Conference Type
Conference User	Connect Time
Credits	Customer Acceptance Date
Debits	Disconnect Time
Dispute Number	Features
Service Request Code	Charge Description
Mailbox User Name	Mailbox – Number of Messages
Monthly Recurring Charge	Service Initiation Charge
Service Request Number	Service Type
Special Charges	Surcharges
Tax Amount	Usage Rate
Charge Date	Contractor Name
Purchase Order Number	Call Quantity

8.5.3 Detailed Billing Data

Contractor shall provide County access to detailed billing data which will be processed by County's Telecommunications Expense Management System. The required data elements for the detailed billing data shall include, but are not limited to:

Adjustments	Administrative Charges
Bill Start Date	Bill Stop Date
Call Connect Date & Time	Call Cost Amount
Call Disconnect Date & Time	Call Minutes
Call Volume Kilo-segments	Called City
Called Number	Called State
Caller Identification	Calling City
Calling Number	Calling State
Charge Type	Circuit Number
Circuit Type	Conference End Date & Time
Conference Start Date & Time	Conference Type
Conference User	Connect Time
Credits	Customer Acceptance Date
Debits	Disconnect Time
Dispute Number	Features
Service Request Code	Charge Description
Mailbox User Name	Mailbox – Number of Messages
Monthly Recurring Charge	Service Initiation Charge
Service Request Number	Service Type
Special Charges	Surcharges
Tax Amount	Usage Rate
Charge Date	Contractor Name
Purchase Order Number	Call Quantity

8.5.4 Invoice and Detailed Billing Data Changes

Contractor shall provide a sample of the changed invoice/detailed billing data to County's Billing Manager, to facilitate the reconfiguration of their systems, as soon as possible, in advance of any change. Invoice or detailed billing data format/content changes initiated at the direction of Contractor shall be at no cost to County.

8.5.5 Special Billing Arrangements

Any temporary or intermittent deviation or modification of the billing procedures set forth in this Paragraph 8.0 (Billing) shall be considered a special billing arrangement. In the event Contractor believes a special billing arrangement is necessary, Contractor shall submit requests for special billing arrangements to County's Billing Manager for approval. Contractor shall not implement the requested special billing arrangement prior to receipt of written approval from County's Billing Manager.

8.5.6 Billing for Added Service Offerings

In the event additional service offerings are added to the Contract, Contractor shall coordinate the billing arrangements with County's Billing Manager for each added service in advance of providing that service.

8.5.7 Data Exchange

Contractor will provide electronic access to all detailed billing data in a mutually acceptable format. Contractor will store/house the detailed billing data in a data warehouse for receipt by County. County may obtain the detailed billing data by accessing the data warehouse. Appropriate security features shall be provided that will ensure only authorized County staff and managers can access the detailed billing data.

8.5.8 Data Retention

All detailed billing data, hard copy letters, memorandum, credits and adjustment data pertaining to the billing of Contractor services shall be retained by Contractor and made accessible to County as directed in Paragraph 8.37 (Record Retention and Inspection Audit/Settlement) of the base document of the Contract. Contractor shall assist County in being able to access and process all data provided by Contractor under this Subparagraph 8.5.8.

8.5.9 Tax Exempt Status

Contractor shall ensure that County's accounts are appropriately identified with Tax Exempt status.

8.5.10 Charges from other Vendors

Any charges, not requested by authorized County personnel, appearing on the invoice or the detailed billing data from Vendors other than Contractor will be considered abuse and County is not responsible for those charges. (For example: the PIC is changed by non-authorized County personnel; non-contracted charge amounts incurred on that line will not be the responsibility of County.)

8.5.11 Unassociated Billing Management

Should instances arise where Unassociated Billing is generated by Contractor, Contractor shall be responsible for all investigation and resolution to get the bill(s) included on the summary account. Contractor shall not be responsible for any Unassociated Billing incurred on a specific line prior to the Transition PIC conversion of that line. Contractor shall not control or be responsible for County end user 1010XXX dialing or dial around.

Contractor shall proactively search all lines and identify, resolve and re-rate any incorrectly PIC'd lines.

Contractor shall provide all resources required to manage the billing accounts and any billing anomalies therein. Unassociated Billing or any other billing charges will be carried over to the summary bill at the level of billing telephone number (BTN) or station number, where possible, and/or

calling card number, once resolved, and will not be paid by County separately.

Detailed billing information shall be available to County upon request for Unassociated Billing charges.

Contractor shall resolve all Unassociated Billing issues within two (2) billing cycles from the time of notification by County and will reflect the change no later than the third billing cycle invoice. Bills added to the summary account must be re-rated to the Contracted rate by Contractor.

Contractor shall meet with County to report on performance of billing, including metrics of bill management and verification of corrected rates on a quarterly basis.

8.5.12 Third Party Calls

Contractor shall be responsible for preventing any third party calls charged to County by Contractor. County will not accept, nor pay charges for these calls.

8.5.13 Collections

Contractor shall ensure that no past-due County accounts are sent to outside collection agencies for collection. All Contractor collection efforts will be conducted directly with County by Contractor.

8.5.14 Rate Validation/Invoice Accuracy

Within sixty (60) days of Contract effective date, Contractor shall submit a Rate Validation reporting design to County's Program Manager for approval. Using the approved report, Contractor shall conduct quarterly reviews as of March 31, June 30, September 30, December 31, of all invoices sent to County to ensure rates are accurate. A written Rate Validation Report of the review shall be provided to County's Billing Manager within fifteen (15) days of completion of the quarterly verification. Any inaccuracies found during the review shall be corrected and adjustments made on the following bill cycle.

8.5.15 Billing Adjustments

County shall be reimbursed for errors in billing that are the responsibility of Contractor. County shall be reimbursed for all corrections back to the initial point in time of error, but not prior to the point in time Contractor becomes responsible for the service.

Contractor shall ensure that all billing debits and credits, including associated taxes, are detailed on the invoice and the detailed billing data at the BTN level and, if possible, the station level. If an adjustment is found to exceed \$20,000, Contractor shall notify County's Billing Manager before processing the adjustment to the invoice. No separate rebates are allowed.

Contractor shall provide to County's Billing Manager a monthly summary report of credit and debit billing adjustments. The summary shall include, but not be limited to, the number and types of adjustments identified, the

number of adjustments resolved, and the number and types of adjustments that are outstanding.

8.5.16 System Verification Testing

Contractor shall provide a Test and Acceptance Plan that shall specify the test procedures for verifying all County billing requirements, as specified in this Paragraph 8.0 (Billing). The test and acceptance plan shall be submitted to County's Program Manager for approval. The plan shall be submitted no later than ninety (90) days prior to the scheduled start of billing Transition. The Test and Acceptance Plan shall include, but not be limited to, the following:

- Assuring that Service Request data is transmitted through County's Telemanagement Order System to Contractor's billing system and then to the invoice. The detailed billing data must be accessed by County and transmitted to County's Telecommunications Expense Management System. The data must be successfully processed by the billing module of County's Telecommunications Expense Management System.
- Initiating pricing tests for all services according to sample data furnished by County's Program Manager.

Following approval of the test and acceptance auditing plan by County's Program Manager, Contractor shall participate in an acceptance test within ninety (90) Days. No County initiated Service Requests shall be processed for billing until County's Program Manager certifies that Contractor's billing deliverables meet the approved criteria agreed upon in the test and acceptance auditing plan. County's Program Manager reserves the right to require the development of additional test plans and/or to conduct joint testing with Contractor's billing system during the life of the Contract.

9.0 TRANSITION

Implementation of Contractor's services while maintaining existing operations will require concerted effort of both County and Contractor. It shall be the responsibility of Contractor, however, to ensure that Transition to Contractor's services is as transparent and problem-free as possible to the users.

9.1 Transition Goals

County's goals and objectives for the Transition activities are to:

- Optimize the rate at which existing users' services are Transitioned to Contractor's services
- Minimize disruptions and maintain the continuity of services to the users
- Ensure cost effective Transition of services to Contractor's services
- Adopt best business and industry practices.

9.2 Transition Time

Contractor shall complete the Transition of the existing services to Contractor's services not later than seven (7) months after receiving notification to commence work, unless County Program Manager reschedules Transition of some services. Any delay by County shall extend Contractor's performance period by a period equal to the time lost by reason of County's delay

9.3 Transition Planning

Contractor shall provide the following plans for Transitioning service:

9.3.1 Transition Plan

Contractor shall develop its own comprehensive Transition strategy and document this strategy in its own Transition Plan. Contractor shall deliver a draft of its Transition Plan to County ninety (90) days after effective date of the Contract. Contractor shall fully coordinate its Transition Plan with the existing service providers as appropriate. County will review Contractor's Transition Plan for integrity, completeness and responsiveness to the objectives and requirements of County. County will review and coordinate recommended changes to the Transition Plan with the plan's Contractor. County intends to approve the draft Transition Plan within fifteen (15) Days after its submission.

9.3.2 Transition Strategy

The Transition strategy shall address the mission criticality of the services being Transitioned and describe the cutover strategy and options that Contractor adopts for Transitioning existing services to Contractor's services and networks.

County will work with Contractor to determine the sequence in which departments and facilities will Transition their services based on the departments' missions and the criticality of the services to be Transitioned. This sequence will then be coordinated with Contractor. Contractor shall incorporate this sequence into its own comprehensive Transition strategy.

9.3.3 Transition Scheduling and Plan

All Transition schedules shall be phased and consider the resources available to County and Contractor to accomplish the Transition activities. The successful accomplishment of activities described in the Transition Plan shall become the sole responsibility of Contractor, and all dates and other requirements contained in the Transition Plan shall constitute a firm commitment by Contractor. Any change from the schedule in an approved Transition Plan shall be in the best interests of County and shall require approval by County's Program Manager.

Contractor's Transition strategy shall address the possibility of operating services in parallel, i.e., full service operation on departments' existing network(s) with associated operation of test traffic on Contractor's new

network(s). The Transition strategy shall document the procedures, if needed, for services to be temporarily returned to their original networks and configurations prior to the services being accepted on Contractor's networks.

Contractor's Transition strategy shall address the impact, if any, on users regarding operations of their services or networks during the cutover activities. The strategy shall describe the approach to minimize any impact and to make the Transition as transparent as possible to the users. If any disruption to users' services or networks is envisioned, the strategy shall describe the degree of these disruptions so users may plan how to effectively deal with them. The Transition strategy shall describe various cutover options and address the relative difficulty in carrying them out.

Contractor's Transition strategy shall address any dependencies on the sequence with which services are cut over to Contractor's networks and services. If the establishment of a service on Contractor's network is required before any other services are cut over to the same network, the strategy shall indicate this situation and be reflected in the cutover scheduling contained within the Transition Plan.

In addition to the Transition strategy, the Transition Plan shall include, as a minimum, details of:

- Cutover schedules
- Phasing and sequencing of service types being cut over
- Identifying service locations for the cutovers
- Identifying the lead-times required for cutovers
- Identifying the month in which services at each location will be cut over
- Identifying the steps required to prepare the locations for the cutovers
- Identifying the steps required to complete the cutovers
- Identifying how each type of existing service may be affected during the cutover activities
- Type of CPE involved at each location in which services will be cut over
- Originating traffic at each location
- Logistics
- Emergency procedures and fallback to restore normal operations in the event of difficulty
- Service order systems development, test, and acceptance
- Training, in particular, train-the-trainer and user training associated with Legacy voicemail transition.
- New construction.

The Transition Plan shall include a general description of the tests required to prepare the locations for the cutovers and to verify that services will perform satisfactorily after the cutovers are completed.

Contractor's Transition Plan shall include an analysis of the key areas of risk entailed in the Transition activities and a schedule of Transition activities.

9.3.4 Transition Management Plan

Contractor shall develop a Transition Management Plan consistent with Contractor's County approved Transition Plan. The Transition Management Plan shall serve as a progress report and master log as well as serve as a working blueprint for day-to-day activities by Contractor during the Transition of services at individual users' locations. The initial version of the Transition Management Plan shall be submitted to County by Contractor at least thirty (30) Days prior to the first scheduled Transition activity for Contractor. Contractor shall be responsible for reviewing and updating the Transition Management Plan, as necessary during the Transition period.

The Transition Management Plan shall contain all schedules, exceptions and deviations from the generic procedures in the Service and Location Cutover Plan from Contractor's proposal specific to the Transition of services at applicable County facilities. The Transition Management Plan shall contain cutover contingency plans for each facility and/or service at which services are Transitioned to Contractor's networks and services. The Transition Management Plan shall be available to County's Program Manager and authorized staff via electronic on-line read-only access, organized by months, and updated daily. Contractor's initial version of its Transition Management Plan shall begin with the month in which the first Transition activities are scheduled to occur.

9.3.5 Reporting of Status and Progress

Contractor shall provide weekly summaries of cutover activities (via on-line read-only access) to County regarding the progress of pending and concluded Transition activities and the status of activities delineated in the Transition Management Plan.

Contractor shall meet with appropriate County department representatives as requested by County to appraise it of progress in completing the Transition schedules and to obtain approval for any type of Transition changes as they occur. Contractor shall be responsible for coordinating all meetings and establishing a meeting's agenda.

9.3.6 Cutover Test Plan

Ninety (90) days after effective date of the Contract, Contractor shall provide County with an initial Cutover Test Plan. The Cutover Test Plan shall describe the testing related to Transitioning of services onto Contractor's services and networks from the existing service providers.

County intends to approve Contractor's initial Cutover Test Plan within fifteen (15) Days after its submission. Contractor shall be responsible for updating the Cutover Test Plan during the Transition period.

9.4 Responsibilities of Contractor During Transition

9.4.1 Transition Project Manager

Contractor shall establish a Transition Project Manager within fifteen (15) Days following effective date of the Contract. The Transition Project Manager shall be charged with overseeing all aspects of the activities related to the Transition of services from the existing service providers to Contractor's services and networks. During the Transition period, the Transition Project Manager shall provide a single point of contact for these activities with County and with users at locations where Transition activities will occur. The Transition Project Manager shall administer all Contractor plans, policies, and specific Transition schedules regarding Contractor's services.

9.4.2 Transition Coordination

The Transition Project Manager's responsibility for coordinating all activities extends to any activity conducted by any subcontractor or provider on behalf of Contractor. All requests for information or assistance directed to individual user locations for purposes of site access or preparation shall come from the Transition Project Manager and shall be directed to County's Program Manager.

9.4.3 Transition Information

The Transition Project Manager or a designated representative shall be available for each location where Transition activities are to occur. This representative shall be available to communicate with the site prior to, during and immediately following cutover activities. This representative shall be available to answer any questions related to Transition.

9.4.4 Transition Service Request Status

The Transition Project Manager shall make available in read-only on-line access to County information related to the content and status of Service Requests associated with the Transition of services onto Contractor's services and networks and the removal of services from the current service providers.

9.5 Network and Facility Inventories

No later than sixty (60) days after effective date of the Contract, Contractor shall begin to conduct its own network and County facility inventories. These inventories may be initially based upon information provided by County.

9.5.1 Network Inventory

Contractor shall obtain from County sources, where available, and/or by means of a physical check all information that is needed to accomplish the Transition of all services for which Contractor is responsible. The information obtained by Contractor shall be provided in a read-only database electronically accessible on-line to County no later than thirty (30) Days after submittal of Contractor's Transition Plan to County.

9.5.2 Facility Inventory

Contractor shall obtain information regarding County facility customer premises equipment which has an impact on the delivery of service(s) to that location. The acquisition of this information shall be the sole responsibility of Contractor. Contractor shall complete a facility inventory for each location with which it is associated. Discrepancies between County's database information and a current provider's or other source of information as to equipment or services at a location shall be Contractor's responsibility to validate. Contractor's Transition Project Manager shall provide this information in a read-only database electronically accessible on-line to County no later than ninety (90) Days after submittal of Contractor's Transition Plan to County.

9.5.3 Traffic Statistics

From County sources, where available, or by means of Contractor's physical checks, Contractor shall obtain an update of all existing traffic information necessary for the design of Contractor's proposed Transition Plan. County will support Contractor in the development of this information. The Transition Project Manager shall verify, to the extent possible, all traffic information for a given location in advance of all specific Transition activities at that location. The information obtained by Contractor shall be provided in a read-only database electronically accessible on-line to County no later than sixty (60) Days after submittal of Contractor's Transition Plan to County. It is not intended that Contractor replace all present services on a one-for-one basis. Rather Contractor shall utilize the traffic statistics obtained to optimize the trunking at PBX locations, identify unused lines and trunks for possible disconnection and recommend re-design of networks where advantageous to County.

9.5.4 Database

Contractor shall develop, provide and maintain its own database containing its current Transition schedule along with a summary of all information contained in the Transition Management Plan for County facilities. This electronic on-line read-only access to the database shall be provided to County by Contractor's Transition Project Manager no later than sixty (60) Days after effective date of the Contract. The database shall be updated on a daily basis. The database records shall contain the following information, as a minimum, in addition to the information mentioned in Paragraphs above.

- County facility
- County departments at the facility
- Facility physical address
- Local contact name and telephone number
- Date and time facility scheduled for Transition
- Summary of all preparatory steps prior to action at each facility with scheduled dates for the initiation and completion by Contractor of each step of the action

- Summary of all services currently employed at the user facility, including:
 - Number of access lines for all services
 - Current service provider(s) providing facilities
 - Summary of all planned services
 - Schedule for ordering planned services
 - Status information regarding the Transition or initial Implementation activities (highlighted in the database record if the cutover or initial Implementation is in jeopardy or delayed)
 - Critical circuits identified
 - Service order numbers

9.6 Transition Notification and Scheduling

During the Transition of services, Contractor shall notify County about cutover activity at County locations at least sixty (60) Days prior to the actual commencement of activities for that location unless County alters the original cutover schedule. The Transition Project Manager shall follow the procedures listed below when notifying all involved parties concerning Transitioning activities:

The Transition Project Manager shall initially notify County's Program Manager (via facsimile, E-mail, or in hardcopy printed form) of the approved scheduled Transition date and time for the particular user location.

Within ten (10) Business Days after this notification regarding the approved scheduled Transition date and time, Contractor shall contact the location's local contact to verify that the date can be accommodated by the users at the location and that the time does not disrupt operations.

The Transition Project Manager shall provide detailed documentation to notify County Program Manager at least thirty (30) Days prior to Transition activities beginning at a location (unless County alters the original cutover schedule), including the following information:

- Agreed-upon date and time for the activities
- The quantity and type of new or modified circuits and facilities required at the location
- The circuit numbers of the new or modified circuits and access facilities
- The name and telephone number of Contractor's local Transition Project Manager representative
- Requests for assistance required by Contractor from the individual user location in order to complete Transition activities, including actions such as unlocking telephone rooms and providing special security passes for personnel
- A Transition activities list informing each user location of all peripheral activity that will take place prior to the actual physical Transition of service(s). As an example, this list shall include installation of equipment at various times prior to Transition activities or on-site visits by Contractor' staff. Representatives of Contractor's Transition Project Manager shall be solely

responsible for coordinating all such activity and visits with County's Program Manager. This coordination effort includes scheduling visits, making any requests for assistance from the user location, and verifying with the user location that schedules have been adhered to

- Procedures to be followed for trouble reporting during the Transitioning activities
- Fallback procedure to be followed to restore interrupted service back to original. Contractor shall initiate and complete all Transition activities outside of normal office/business hours unless otherwise arranged with, or requested by County's Program Manager or other authorized representative. All Transition activities shall be completed within 24 hours after being initiated unless special approval is obtained in advance from County's Program Manager.

9.7 Verification of Information

Contractor shall negotiate a freeze date with County's Program Manager after which no changes that would affect Transition will be made at a location. After this freeze date, Contractor shall verify, with County's Program Manager for that location, all information Contractor requires for the proper and efficient Transition of services at that location.

9.8 Notification of Completion of Transition Activity

The Transition Project Manager shall inform County's Program Manager when Transition activities, including all required Contractor-performed testing, are completed at the location(s).

9.9 Technical Transition Requirements

County requires compliance with a number of technical requirements to ensure user transparency, quality of service, and continuity of service for all users as their services are Transitioned to Contractor's services. Contractor shall be responsible for adhering to the requirements set forth below.

9.9.1 Connectivity

During the period in which services are being Transitioned from current service providers to Contractor's services, Contractor shall maintain continuity of those services already Transitioned to Contractor's network. The only exception to this requirement is the time when the services are being physically transferred to accomplish the Transition.

9.9.2 Cutover Contingency

As part of Contractor's Transition Management Plan, Contractor shall submit contingency plans for County approval for all locations at which services are Transitioned from the current service providers to Contractor's services. These plans shall describe how Contractor will provide for 100 percent (100%) restoration of existing services in the event that Contractor's services do not pass acceptance testing. The activation of contingency plans shall

take no longer than two (2) hours. Contractor shall maintain the capability to activate contingency plans until a location's Contractor's services have been accepted by County. Contingency plans shall be activated immediately for any of the following reasons:

- Failure of twenty-five percent (25%) or more of the access facilities for Contractor's services at a location
- Failure of cutover or acceptance testing at a location
- Need determined by County's Program Manager

9.10 County Responsibilities During the Transition Period

9.10.1 Registrar /Recorder

County agrees to transition all telecommunications services offered by AT&T, currently provided by other vendors at the Registrar / Recorder, over to AT&T provisioned fiber within twelve (12) months of the Contract effective date.

9.10.2 Letter of Agency

Upon award of the Contract(s), County will issue Contractor a letter of agency.

9.10.3 Role of County's Program Manager

The functions to be performed by County's Program Manager and representatives, assisted by the telecommunication staff and agency departmental coordinators as necessary, will include the following activities:

- Reviewing and recommending approval or rejection of all plans requiring County approval and related to Transition activities
- Approving the services and locations to be cut over for each phase of the Transition activities
- Ensuring that Contractor provides user training, if required, at locations gaining new or different services
- Reviewing samples of cutover results as required
- Assisting in resolving any conflict with existing service providers during the Transition of services to Contractor's services

9.10.4 Role of County's Telecommunication Staff

At Contract award and for each location, County will identify the responsible telecommunication staff. The staff will be responsible for coordinating all Transition planning and other activities through, at least, the acceptance of all Transitioned services at the location(s) for which they are responsible. The responsibilities of the staff are as follows:

- Serve as the central point of contact for that location(s) for both Contractor's Transition Project Manager and County for all local Transition planning and coordination activities

- Assist the Transition Project Manager during the user location inventory by providing any available telecommunications information about that location(s) and providing other assistance required, such as building access
- Assist the Transition Project Manager to ascertain from the existing service providers the type of equipment that is required to support the type and quantity of Contractor service(s) to be installed
- Upon receipt of information from the Transition Project Manager regarding the cutover date and location requirements, coordinate with the appropriate department coordinators and CPE providers providing that location(s) with premises equipment (PBX, routers, key systems, etc.) and other telecommunications facilities
- Disseminate all training materials that have been obtained from Contractor to location users and coordinate the internal scheduling of personnel for training sessions at locations where it has been agreed County will perform those functions
- If desired by the staff and/or departmental coordinator, monitor cutover and testing on site as performed by the Transition Project Manager. Accept or reject service in accordance with the Contract. Notify County's Program Manager if service is unacceptable following acceptance testing

10.0 MANAGEMENT AND OPERATIONS

This Paragraph 10.0 identifies Contractor's requirements to provide data, reports, personnel, equipment, systems access and other information to County's Program Manager in order for County to manage and operate Contractor's services. Management and operations activities include County's monitoring of Contractor's compliance with Contractor's service level requirements and County's enforcement of contractual obligations.

The County's Program Manager identified in Contract Paragraph 6.0 (Administration of Contract – County (of the base contract)) will be the primary point of contact with the Contractor for management and operations activities.

10.1 Management Objectives

The Management Objectives of County are:

- To ensure customer satisfaction
- To achieve effective planning, control, security, and administration of those services that Contractor provides for the duration of the Contract
- To be in compliance with prompt resolution of issues or disputes arising within the Contract
- To ensure the information needed to manage the program is available to County

10.2 Operational Objectives

The Operational Objectives are:

- To ensure that Contractor's services are delivered in accordance with the technical requirements and performance parameters specified in the Contract
- To ensure continuity of operations during periods of emergency
- To obtain systems engineering
- To achieve an efficient, economical and orderly Transition from existing service providers to Contractor's services
- To implement new services

10.3 General Activities

10.3.1 Program Administration

Program Administration includes all of the activities that will be performed by County's Program Manager, County department staff, County departmental telephone and information systems staff, and Contractor to accomplish all administrative activities associated with Contractor's services. Contractor shall assist County's Program Manager to perform the following Program Administration activities:

- Establishing and maintaining cooperative working relationships among Contractor, and County agency departments
- Establishing Contractor reporting requirements
- Supporting user forums, conferences, and shows
- Receiving and processing various Contractor-provided data that is needed by County's Program Manager to conduct the oversight of the Contracts
- Ensuring County's databases are maintained with current information by Contractor
- Providing any additional administrative support that County's Program Manager may reasonably require in order to carry out the functions of administering the Contract. County may require on-site assistance in supporting the ordering activities. Contractor shall state their rate for this additional activity and provide references.
- Measuring Contractor performance against performance standards established under the Contract.

10.3.2 Network Management

Contractor shall be responsible for overseeing the performance of its network and services provided to County in accordance with the Performance Requirements Summary and the Contract. Contractor shall be responsible for providing reports of network management activity for its Frame Relay, ATM and AVPN network plus providing on-line network management access to County's network control centers and, as required, to County departments that request it.

10.3.3 Planning and Engineering

County will be responsible for determining its service requirements. Contractor shall be responsible for managing its network and services with the appropriate level of engineering required to:

- Support County's Program Manager's program administration
- Develop and maintain disaster recovery plans
- Assure operational interface of existing installed base of equipment
- Provide services in accordance with existing County technical standards and in concert with other CPE providers and
- Provide technical expertise to County as required

Contractor shall be responsible for the detailed engineering of its services and assuring interoperability with equivalent services obtained from other County contracts.

10.4 **Program Administration**

Contractor shall support the program administration activities. Contractor's Program Manager and customer service staff shall interface with County's Program Manager and authorized County staff to support program administrative activities.

10.4.1 Contact Points

County's Program Manager will identify Department Program Managers, telecommunication specialists, and other staff who are authorized by their respective departments to initiate and track Service Requests. County's Program Manager will identify to Contractor the authorized County staff by name, department represented, address, and telephone number as well as the services that staff member is authorized to order.

Typical subjects shall relate to, but not be limited to:

- Customer service
- Technical support
- Billing
- Contract administration
- Network management
- Level of service

10.4.2 Contractor Contact Points

Contractor shall provide County's Program Manager and other authorized staff with names and telephone numbers for Contractor points of contact and Contractor customer service staff.

Contractor shall provide sufficient staffing with the required skills to implement and support the Contracts with County. In some instances staff shall be completely and totally dedicated to County's services, while in other functional areas the staff may be assigned other customer responsibilities along with responsibility for County's services.

10.4.3 Contractor's Program Manager

Contractor's Program Manager shall be dedicated to County Contract(s) and shall represent Contractor in all day-to-day dealings with County. Contractor's Program Manager shall have direct responsibility for all services performed by Contractor and its sub-contractors and shall have authority to direct the work of all Contractor staff dedicated to County Contract(s).

10.4.4 Contractor's Service Manager

Contractor shall identify the Service Manager who will be responsible for ensuring that the installation, maintenance and repair of Contractor services meet the level of service requirements. The Service Manager need not be dedicated to County Contract(s) but shall have sufficient time and resources to apply to County services. The Service Manager shall have authority to prioritize and re-direct Contractor installation and repair resources to meet the level of service requirements.

10.4.5 Support User Forums

Contractor shall make its representatives available as needed to attend County user forums. User forums are held at least quarterly or as requested by County's Program Manager. Contractor representatives shall answer questions raised by department staff, report on the status of service enhancements, and resolution of outstanding actions from previous user forums. Contractor shall provide demonstrations of new technologies it proposes to incorporate into its services at the user forums as requested by County's Program Manager.

10.4.6 Data Access Requirements

Contractor shall provide connections, procedures, and documentation necessary to permit County's Program Manager to have on-line read-only access to Contractor's Frame Relay, ATM, and AVPN network management, administrative, and operational data associated with the services Contractor provides. Contractor shall provide County's Program Manager and authorized staff such as County's Help Desk, Network Control Center, and other staff, with access to the same data and information as Contractor uses in its own Network Management Center to monitor and manage its services. In addition to providing on-line access to Contractor systems data, Contractor shall offer data to County's Program Manager on a variety of media types including magnetic tape, Compact Disc-Read Only Memory [CD-ROM], Write Once Read Many [WORM], DVD-ROM or paper.

The operational data category shall include, but not be limited to, the following types of data:

- Customer Service Requests, disputes, troubles, and complaints
- Technical performance measurements
- Transition, Migration, and Implementation progress
- Traffic reports

- Network fault, configuration, administrative, performance, and security.

The administrative data category shall consist of, but not be limited to, the following types of data:

- Service and feature Contract prices
- Circuit and services inventory
- Customer service procedures, user manuals, and service descriptions
- Billing information
- Program management reports

A. County Data Access Requirements

Contractor shall provide County with reasonable access to Contractor's data system(s). This data access capability shall permit the authorized departmental representative(s) to access only the data associated with the services ordered by their member agency from Contractor and shall inhibit a member agency from accessing any data associated with another member agency.

B. County / Contractor Data Sharing

County's Program Manager intends to minimize unnecessary duplication of operational and administrative data and to share common administrative and operational processes with Contractor to the maximum extent practical. Where County determines that it is most efficient for Contractor to maintain a database of interest to County, Contractor shall do so, and County shall have the capability to access Contractor's database on an ongoing basis as mutually agreed by the parties in writing. Where County determines that it is in the best interest of County to develop and maintain a database of mutual interest, it will do so and enable Contractor to access it. Common data would include but not be limited to:

- County's organizational structures (for billing purposes)
- Names, addresses, phone numbers, and level of authority for County staff authorized to initiate Service Requests

10.5 Call and Fraud Control Services

Contractor shall have an active fraud control service. The service shall be in operation twenty-four (24) hours a day, seven (7) days a week. The service shall automatically and continuously monitor County's usage patterns to detect and alert for possible fraudulent use of County telecommunication services. Contractor shall notify County staff immediately upon detection of any possible misuse, abuse or fraud.

Contractor shall operate real time automated tools for the monitoring of all traffic activity on all County lines for possible fraudulent use. Contractor shall monitor traffic detail for all outgoing local, LATA toll, and 800 Number incoming calls.

10.5.1 Detection

Contractor shall establish thresholds in their monitoring systems to detect activities such as major increases in traffic after hours or weekends from any line, any abnormal increases or peaks in traffic from any line during the Business Day, increase or abnormally high calling to particular numbers or areas, new or abnormally long holding times for calls from any line or to any number or area, increases in the number of calls or the holding time for incoming calls to any County line or group of lines, the simultaneous use of the same authorization code number or calling card number, increase or abnormally high number of calls from an authorization code number or calling card number, activity in unassigned voice mailboxes, etc.

10.5.2 Notification

Contractor shall establish with County a notification policy and procedure to alert County when possible fraudulent activities are detected. The policy and procedure shall include:

- Thresholds where Contractor is authorized to immediately disconnect service and/or block calling privileges and then notify the authorized County staff of the action,
- Thresholds where Contractor immediately notifies County staff of a possible problem for the user to investigate and determine appropriate action, and
- Thresholds where County and Contractor will continue to monitor and investigate.

10.5.3 Prosecution

Contractor shall assist law enforcement authorities in investigation and prosecution of any and all individuals responsible for fraudulent activities using County telecommunications services.

10.5.4 Education

Contractor shall provide on-going education to County telecommunication staff on the methods of fraud and misuse detection, prevention and identification of areas of vulnerability, and recommended alternatives and solutions. Contractor shall also provide on going educational presentations and material to educate County employees on how to avoid becoming the victim of fraudulent telecommunication activities.

10.5.5 External Information Sources

Contractor shall subscribe to and monitor fraud information bulletins, which identify current telephone numbers that should be blocked and area codes/prefixes/office numbers that originate high volumes of fraudulent traffic. This information shall be shared with County and shall be implemented in the call blocking controls.

10.5.6 Call Control Services

Contractor shall provide controls to minimize abuse and fraudulent use of County's telephone services. Contractor shall automatically implement controls whenever a new line is installed, moved, or re-arranged. Contractor system shall validate authorization codes to allow or reject the dialed call.

10.5.7 Fraud Reports

Contractor shall develop, within three months of Contract award, and prepare on an individual case basis monthly recurring reports to detect fraudulent activities. Reports shall include most frequently called numbers (with filters to eliminate legitimate usage) and longest holding times to and from lines. Contractor shall also provide complete call detail reports within five (5) Business Days of request for any lines or services having been identified as having possible fraudulent activity.

10.5.8 Abuse, Misuse and Fraud Plan

Contractor shall submit an Abuse, Misuse and Fraud Plan to County specifying the monitoring and threshold notification alarms for approval by County thirty (30) Days after Contract effective date. Once accepted, this document may be changed at any time by mutual agreement of both parties to reflect new threats, techniques and responses needed to keep the monitoring effective and current.

10.5.9 Fraudulent Call Liability

County shall not be financially liable for any calls that have been identified as being fraudulent in origin by County and Contractor, provided, however, that County will be liable if fraud occurs and County is at fault, including any misuse or abuse by its employees and contractors.

10.5.10 Call Trace Service

Contractor shall provide an immediate call trace service upon request of the authorized County staff.

10.6 **Disaster Preparedness and Response**

County government agencies are responsible for the health, welfare and safety of its citizens. During emergency and disaster situations, County provides the initial, as well as long term, assistance to those affected. Telecommunications services are vital to County in performing these life and property saving roles.

10.6.1 Priority Lines

Certain business lines, centrex-type services lines, and other services will be designated by County as 'essential service' lines. These lines shall be class marked by Contractor in its systems at no cost to County as having priority for dial tone during call blocking situations in central offices. The number of essential service lines will not exceed ten percent (10%) of the total lines provided to County by Contractor.

10.6.2 Restoration Priority

Contractor shall provide priority restoration services for routine operations as well as for emergencies to be restored immediately or as soon as possible. Contractor shall restore service consistent with the essential services identified by County as well as statutory and regulatory requirements, and Contractor's policies. This may, where feasible, require the installation of temporary or work around facilities and equipment. County shall provide the priority list to Contractor. Contractor's disaster routing service shall allow County to choose and change, at no cost, the three (3) destination options County elects to receive top activation priority at any given time. In addition, County can change the designation at anytime via telephone call to the disaster routing service access number.

10.6.3 Telecommunications Service Priority (TSP)

The TSP Program provides national security and emergency preparedness (NS/EP) user priority authorization of telecommunications services that are vital to coordinating and responding to crises. As a result of hurricanes, floods, earthquakes, and other natural or man-made disasters, telecommunications service contractors may become overwhelmed with requests for new telecommunications services and requirements to restore existing telecommunications services. The TSP Program provides service contractors with a Federal Communications Commission (FCC) mandate for prioritizing Service Requests by identifying those services critical to NS/EP. A telecommunications service with a TSP assignment is assured of receiving full attention by the service contractor before a non-TSP service.

10.6.4 Command Post Services

During emergency and disaster situations various County agencies, especially the Sheriff, Police and Fire departments, establish field command posts. These command posts will require the installation of various Contractor provided services including business lines, centrex-like services lines, data circuits and services, etc. Contractor shall exercise every reasonable effort to implement such services as quickly as possible upon notice at agreed upon locations in Southern California. County staff will exercise every reasonable effort to work with Contractor to facilitate placement of command posts where telecommunication facilities are available although this is not always possible.

10.6.5 County Emergency Operations Center (EOC)

Contractor shall provide assistance to County EOC and may staff a position when requested by County. Contractor's representative shall have the authority to direct the deployment of Contractor resources during emergency situations as requested by County.

10.7 **Customer Service**

Contractor shall administer and support customer service functions. These functions include, but are not limited to, the following:

- Accepting and implementing Service Requests
- Accepting, acting upon, and providing status on user trouble reports
- Accepting and acting upon user complaints and inquiries
- Providing training
- Providing training manuals and other documentation
- Providing technical support in response to user inquiries

10.7.1 Hours of Operation

The Customer Service Office shall conduct business eight (8) hours per Day, five (5) Days per week. However, due to the nature of County business Contractor shall provide twenty-four (24) hours a day, seven (7) days a week contacts for emergency requests and shall be fulfilled with the same procedures and service intervals as performed by the Customer Service Office. Contractor shall establish the Customer Service Office within thirty (30) Days after Contract effective date. The Customer Service Office shall be appropriately staffed as each required function becomes operational.

10.7.2 Telephone Numbers for Problem Reporting and Tracking

Contractor's Customer Service Office shall assign different toll-free telephone numbers for customer service activities. Contractor Customer Service staff shall return calls received from County users within one (1) Business Day or less. County's Program Manager will track complaints against any of Contractor's Customer Service staff and will inform Contractor's Program Manager of the complaints. Contractor shall evaluate replacing their Customer Service staff at the request of County's Program Manager.

10.7.3 Trouble Reports

Contractor shall establish a trouble reporting center. Contractor shall develop and implement systems, interfaces, and procedures, with approval by County's Program Manager, for receiving and handling user trouble reports that are received via telephone or electronically from County problem management systems. Contractor shall submit the draft procedure within sixty (60) Days after Contract effective date for approval by County's Program Manager. No services may be Transitioned to Contractor until an approved trouble reporting process and on-line connection are functional.

10.7.4 Provide Technical Support

Within the Customer Service Office, Contractor shall provide a technical group to support County agency departments, the County's Program Manager and telecommunications staff regarding the services Contractor delivers to County. Such support shall include, but not be limited to:

- Answering questions related to how users can obtain the basic functions designed into the services Contractor delivers
- Advising users on the capabilities incorporated into certain service features

- Providing tier 2 level technical support to assist either County's technicians or CPE contractors in the timely resolution of troubles
- Notifying users of new services and features that are planned or that have recently been added to the Contract.

10.7.5 Provide Customer Assistance

Within the Customer Service Office, Contractor shall make available administrative assistance to County's Program Manager and telecommunication staff. This assistance shall address subjects regarding billing and service delivery issues.

10.7.6 Trouble Reporting

Contractor shall establish and implement, following County's Program Manager's approval, procedures for trouble collection, entry, tracking, analysis, priority classifications, and escalation for all services to ensure that problems are resolved within the specified time frames. These procedures shall include, but not be limited to:

- Centralized trouble reporting
- Identifying and clearing troubles including support of County-identified mission-critical services
- Customer notification of opening and closing a trouble report
- Working cooperatively with other County technicians and contractors to resolve problems
- Maintaining audit trails of trouble resolution activities
- Responding to inquiries on trouble resolution status
- Providing trend analysis and sorting of trouble reports and administrative reporting
- Providing trouble escalation for normal and emergency events
- Providing direct access to Contractor's technical staff by County technical staff for joint trouble shooting activities.

10.7.7 Entering and Handling Trouble Reports

In order to maintain an audit trail to monitor and evaluate Contractor's performance, all cases of trouble must be reported by County users first to their respective agency's Help Desk to be entered into their own agency's problem management systems. Contractor shall electronically interface with and receive transmitted data from these problem management systems or receive problems via telephone for agencies without automated systems. Contractor shall be responsible for developing and implementing the correct interface. County's Help Desks shall also be able to reach Contractor's trouble reporting center by calling a single toll-free telephone number to which all Contractor trouble reports shall be directed. Contractor shall provide personnel twenty-four (24) hours a day, seven (7) days a week to accept trouble calls electronically and orally. Calls placed to the trouble reporting center shall be answered by Contractor's personnel within fifteen (15) seconds for ninety-five percent (95%) of the troubles reported.

Contractor shall, at a minimum, perform the following activities regarding the handling of trouble reports:

- Identify each reported trouble via a unique trouble report number assigned by County's Help Desks.
- Maintain an audit trail of trouble resolution
- Perform analysis of trouble data and provide results to County's Program Manager
- Categorization of trouble data by failure type
- Outage reports, percent availability
- Mean time to restore
- Perform analysis of repeat failures on the same line or circuit
- Perform special analysis of trouble data for an individual agency department or network by service, symptom and circuit, as requested
- Maintain on-line (available via the Internet) trouble report and resolution data for all trouble reports for the previous 180 Days
- Maintain an archive of trouble reports and their resolutions for the duration of the Contract

Contractor shall use the same trouble reporting system for initiating its own trouble reports if detected by Contractor before being reported by County. Contractor shall notify the affected County Help Desk of a trouble report being generated by Contractor.

10.7.8 Feedback

Contractor shall advise County's Help Desks of the status of clearing the trouble report and the resolution of the trouble report when cleared. Contractor shall verbally report the status of trouble resolution efforts every two (2) hours unless County's Help Desk authorizes either a longer duration or agrees to obtain updates via the electronic interface between County's problem management system and Contractor's trouble reporting status system. Contractor shall report status resolution efforts at least hourly for all services classified as mission critical by County's Help Desk.

10.7.9 User Trouble Report Data Access

Contractor shall provide access to trouble reporting information via web-based read-only access. Contractor shall make status updates accessible to County by trouble report number, line or circuit identification. Contractor shall document procedures regarding the means to electronically access the status of trouble reports.

- A. Contractor shall document information on all reported service interruptions or outages that qualify for County credit adjustments monthly. These interruptions or outages may include, but are not limited to:

- Call interrupts
- Unsatisfactory transmission performance
- Dialing or call set-up errors
- Busy or out-of-service circuits

B. Contractor's data access capability shall allow County's Program Manager and agency departments to obtain user-specified trouble reports containing information on trouble reports opened by or for the user. Contractor shall provide these reports periodically as scheduled with County's Program Manager or on an ad hoc basis.

10.7.10 Trouble Reporting Performance Measurements

Contractor shall provide the performance measurements of all trouble reports for County by type of service, by network, and by department in a monthly summary and in a rolling twelve (12) month comparison.

- A. Contractor shall maintain Mean Time to Repair of four (4) hours for service outage to one or more lines or circuits.
- B. Contractor shall maintain Mean Time to Repair of four (4) hours for loss of all voice or data services to a building or campus.

10.8 Training

Contractor shall develop and implement a training program for the following segments of County employee population:

- General user trainers
- County's Program Manager and staff

Contractor shall provide County's Program Manager with examples of class descriptions offered and samples of training manuals prior to these materials being used for training. Whenever possible, Contractor shall provide training at user sites or within commuting distance of user sites. Contractor shall provide County the ability to request additional training through the standard Service Request process.

At the inception of service under the Contract, Contractor shall provide initial training for provisioned services at no cost to County. Within the first six (6) months after a new service type is ordered at a location, Contractor shall provide initial training at no cost to County.

10.8.1 General User Trainer Training

Contractor shall train County trainers, who in turn will train other County personnel. Following this training, Contractor shall provide the trainers with supplementary materials for them to use in training others. This supplemental material shall include brochures, audio/visual aids, desk top guides, or other materials as deemed appropriate. These supplemental materials shall contain descriptions of services and features with

explanations of how to use Contractor's services and how to report user troubles and complaints.

Contractor shall also develop and distribute supplemental documentation about handling credit adjustments, service assistance, conference calls and other appropriate subjects suitable for inclusion in agency-published directories. Contractor shall distribute the training and supplemental materials to County telecommunications staff and agency departmental coordinators in sufficient quantities to supply all trainees.

During the Transition, Migration or Implementation of new services at locations, Contractor shall complete general user training prior to cutover.

10.8.2 County's Program Manager and Staff

Contractor shall provide training to County's Program Manager and staff on all administrative and operational support systems including all features and functions of an on-line system. This training shall provide initial instructions for the operation of these systems and additional training on the systems shall occur whenever any of the systems change or on an annual basis, whichever comes first. County's Program Manager will designate the number and names of the individuals who will receive this training.

10.8.3 User Training

Contractor shall provide various types of telecommunications training available, upon request, to any and all of County's users. All training for Contractor supplied services and equipment will be billable. Types of training should include:

- Voice Mail services
- Telephone etiquette
- CPE equipment (PBX, call processing, EKTS, etc.)
- All Contractor supplied services
- Telecommunications Technical Training (data communications, network design and protocols, etc.)

11.0 FACILITIES/PRODUCT FORECASTING

Contractor shall monitor the exhaustion of cable pairs to County facilities listed in Technical Exhibit 4 (Facilities Monitoring) and advise County's Program Manager when building pair capacity reaches ninety percent (90%) of maximum.

12.0 NETWORK MANAGEMENT

Contractor shall provide County the capability to monitor the status and performance of Contractor's services and to provide directions to Contractor with regard to service restoration priorities, planned and unplanned reconfigurations, and other changes as required by contingencies, natural disasters or emergencies. Real time (less than five (5) seconds delay from event) network statistics for Frame Relay and ATM services shall be provided for all County sites being served.

Contractor shall provide standard network management status feeds for each service for display at County's network control centers. Contractor's network management shall enable County to manage its own frame relay network.

In addition, Contractor shall provide the ability for County to request the capability to perform loop-back tests on private line circuits.

12.1 Network Fault Management

Contractor's NM system shall enable County to monitor service-affecting events, when they occur, from County's network control centers.

Examples of service-affecting events are as follows:

- Outages of network switches or facilities, including planned outages
- Outages causing site impairments and/or isolations from any Contractor service
- Outages/failures of peripheral network elements, such as dedicated access facilities and interfaces to the various types of County equipment for all services, and external interfaces and facilities to other networks supporting designated services
- Any hazardous condition that may cause or has caused loss of service
- Any network controls initiated by Contractor.

12.2 Data Reported

Contractor shall provide an interface to County's network control center's network management system for Frame Relay, ATM, and AVPN. Events shall be reported to the network control centers on a real time basis. A textual message shall be associated with an audible and/or visual alarm to provide information about the reported event. The message shall include, at minimum, the following:

- Event description (e.g., loss of signal, link failure, circuit outage)
- Event date and detected time
- Service affected by the event
- Information about detection of alarms of peripheral network resources indicating whether internal or external

12.3 Department Advisement

Contractor shall also establish an e-mail distribution arrangement with confirmations to inform agency departments and County's Program Manager of major outages or potential hazards to service on a real-time basis via the Internet. This arrangement shall also be utilized by Contractor to present clearance of these same situations. Contractor shall use verbal notification to advise County's Program Manager on major outages and to indicate when service has been restored or hazardous conditions cleared.

12.4 Reporting

Contractor's NM system shall process and format the collected fault management data into reports. The types of reports shall include scheduled and ad hoc reports. County personnel will determine whether a scheduled and/or ad hoc report shall be made. For scheduled reports, County's Program Manager and agency departments will specify:

- The starting date/time and/or the event that triggers the start of automatic reporting
- The ending date/time and/or the event that triggers the cessation of automatic reporting
- The time interval between reports
- The cause of the event that triggered start of automatic reporting
- Information categories provided

The following types of fault management reports are examples of the types that may be specified by County:

- Summary reports of specified service-affecting events of individual services/resources
- Summary reports of daily/weekly service-affecting events, sorted by criteria that are specifiable and selectable by County
- Reports of results of all County-directed diagnostic tests.

12.5 Network Configuration Management

Contractor shall coordinate and receive approval for all changes in network and related support systems (hardware and software) that could negatively affect users. Contractor shall exercise every reasonable effort to provide notification to County's Program Manager at least ten (10) Business Days in advance of any Contractor network and related support systems' configuration changes affecting or likely to affect users' services and resources.

12.6 Network Accounting Management

Contractor's network accounting management system shall provide for the generation and distribution of usage data to support County monitoring for detection of waste, fraud and abuse; Contract compliance; and telecommunications planning. Contractor shall establish and implement procedures for detecting apparent fraudulent occurrences and to promptly report these cases to County's Program Manager.

12.7 Network Performance Management

Contractor's NM system shall include a performance management function to monitor and control Contractor's network performance and the quality of Contractor's services and features provided. The performance management capabilities for Frame Relay, ATM and AVPN shall include access to:

- A database of information regarding network operations, both current and historical. For example, this database shall include traffic pattern characterization data (e.g., busy day and busy hour), performance data and information on usage of network and other resources and services.
- A set of performance measurements that are derived from the network operations data, for use in evaluation of network performance levels of County services and features, thereby ensuring that the performance-related variables meet contractual levels.
- Report(s) defining the performance of the network services for the previous month and a rolling 12-month average comparison.

Contractor's NM system shall also provide to County's Program Manager monitoring of County's traffic flow across the network for Frame Relay, ATM and AVPN, and receipt of notifications about selected events, data exceptions, or measures related to performance degradation.

12.8 Planning and Engineering

Contractor shall provide a planning and engineering function to ensure that telecommunications resources are available and tailored to meet emerging County requirements. The principal functions associated with such planning and engineering shall include the following activities:

- Ensure network and service interoperability with CPE
- Develop and maintain contingency and restoration plans that prevent deterioration of network services. Contractor shall provide County with an updated description of its network contingency and restoration plans applicable to network services sixty (60) Days after notice to commence work. This plan shall be updated and provided for County review and approval annually.
- Develop and maintain capacity plans to support potential changes over the term of the Contract.
- Develop and maintain system operations plans that meet the service requirements for performance, availability, security and capacity while minimizing costs.
- Continuously assess current and anticipated communications technology to meet County goals and plan network services that meet the near- and long-term requirements.

12.9 Technical Advisory Staff

Within Contractor's engineering organization, Contractor shall maintain technical advisory staff to provide technical expertise to County for resolution of service problems of a complex technical nature that cannot be, or have not been, resolved through normal procedures.

12.10 Network and Service Cost Optimization

Contractor shall be responsible for determining where opportunities arise to optimize service costs to County for service between two or more of their locations, or service to a County location, through the use of newer technology or the combining of service connections between or to a County location. Contractor shall identify such optimization opportunities to County's Program Manager and to agency departments that may benefit from the optimization. If the proposed optimization opportunity is chosen for Implementation by County, the normal Service Request process will be utilized to initiate the change.

12.11 Service Planning

Contractor shall provide County's Program Manager with reports about the future services available to users and assessments of future network directions.

12.12 Contractor Planned Network Changes

Contractor shall notify County's Program Manager as soon as possible, with the goal being at least sixty (60) Days in advance of all planned changes to the County network required to maintain state-of-the-art technologies and methodologies. Contractor shall obtain the input of County's Program Manager before instituting any planned changes. Contractor shall provide County with a description of the procedures it will use to provide such network upgrades. Any expense to County that might result from upgrades must be approved by that County's Program Manager prior to work being done.

Any changes in the network or support systems made by Contractor that result in material or ongoing service degradation, erroneous billing, or other service deficiencies shall be returned to their original condition at no additional cost to County. Any charges paid by County in error because of such degradation, errors, or deficiencies shall be credited to County by Contractor retroactively to the point of error but not earlier than the effective date of the Contract.

13.0 MEETINGS

Continual exchange of information is necessary to avoid misunderstandings and conflicts. Therefore, monthly meetings shall be held to review the status of all services being provided and to resolve any issues that have arisen.

13.1 Management Meetings

Contractor management and County management shall meet together on a monthly basis to review level of service reports, resolve any issues pertaining to Contractor performance, and exchange information on any new projects, programs or services. County will arrange for the meeting location, prepare an agenda for each meeting, and record and publish minutes and assignments to all the participants.

13.2 Staff Meetings

Contractor operational staff that work on County services shall meet with County's telecommunication staff on a monthly basis to review procedural issues, review status of current project, programs, and orders, review level of service reports, resolve any service, cost allocation, or billing problems, introduce new projects, programs, or services, and discuss any other issues. County will provide the meeting location, prepare the agenda, and record and publish minutes of the meeting for all participants.

13.3 Service Management Meetings

County will chair a monthly meeting to review all the problem management reports and level of service reports. County and Contractor's staff will review any outstanding service or outage problems to determine the proper assignment of responsibility prior to the final level of service report being issued by Contractor for the month.

14.0 PERFORMANCE REQUIREMENTS SUMMARY

Technical Exhibit 2 (Performance Requirements Summary (PRS)) lists required services that will be monitored by County during the term of the Contract. All listings of services used in the PRS are intended to be completely consistent with the Contract and the SOW, and are not meant in any case to create, extend, revise, or expand any obligation of Contractor beyond that defined in the Contract and the SOW. In any case of apparent inconsistency between services as stated in the Contract and the SOW and the PRS, the meaning apparent in the Contract and the SOW will prevail. If any service seems to be created in this PRS which is not clearly and forthrightly set forth in the Contract and the SOW, that apparent service will be null and void and place no requirement on Contractor. All requirements in the PRS will be measured and reported on by Contractor on a monthly basis unless otherwise identified. The assessments will be paid by Contractor quarterly as billing adjustments (i.e., credits). Financial penalties will be applied once per failure. In the event a failure involves more than one PRS, Contractor will only pay the PRS with the highest financial remedy; provided that, at no time will the total cash refund due County for any given month for a single circuit, service or facility exceed 100% of the monthly recurring charge for that circuit, service or facility. Should Contract standard not be met for any service requirement for a quarter, Contractor's Program Manager shall manage the process until such time the service level meets Contract requirements for no less than a quarter period of time. PRS requirements do not apply to out of territory services unless the service is a facilities-based service provided by Contractor. Additionally, when Contractor's performance does not conform to the requirements of the PRS and/or the Contract, County will have the option to apply the following non-performance remedies:

- 15.1 Require Contractor to implement a formal corrective action plan, subject to approval by County. In the plan, Contractor must include reasons for the unacceptable performance, specific steps to return performance to an acceptable level, and monitoring methods to prevent recurrence.

--- End Local Services Statement of Work---

EXHIBIT A-1: STATEMENT OF WORK FOR LOCAL SERVICES
TECHNICAL EXHIBIT 1
LIST OF DELIVERABLES

DELIVERABLE	STATEMENT OF WORK REFERENCE	DUE or START DATE	DEDUCTIONS/FEEES TO BE ASSESSED
Quality Control Plan	SOW Paragraph 2.0	Contract Effective Date + 45 days	\$100 per day late
Fraud, Abuse, Misuse Plan	SOW 10.5.8	Contract Effective Date + 30 days	\$100 per day late up to 10 days late; \$1000 per day 11- 30 days; \$2500 per day more than 30 days late
Customer Service Office Established	SOW 10.7.1	Contract Effective Date + 30 days	\$100 per day up to 10 days late; \$500 per day more than 10 days
Rate Validation Report Format	SOW 8.5.14	Contract Effective Date + 60 days	\$10 per day late
Trouble Reports	SOW 10.7.3	Contract Effective Date + 60 days	\$100 per day late up to 10 days late; \$500 per day more than 10 days
Billing Requirements Test & Acceptance Plan	SOW 8.5.16	90 days prior to start of Billing Transition	Not applicable
Transition Plan	SOW 9.3.1	Contract Effective Date + 90 days	\$100 per day late up to 10 days late; \$1000 per day 11-30 days; \$2500 per day more than 30 days late
Transition Management Plan	SOW 9.3.4	Agreed upon date	Not applicable

**EXHIBIT A-1: STATEMENT OF WORK FOR LOCAL SERVICES
TECHNICAL EXHIBIT 2
PERFORMANCE REQUIREMENT SUMMARY (PRS)**

STOP CLOCK CONDITIONS

Stop clock conditions include, but are not limited to:

- Waiting for after-hours test or customer release.
- Time after a circuit has been restored, but end user requests ticket remains open for observation.

Inside Wire problems:

- Inside wire installer other than AT&T contracted to a building or campus.
- Conduit congestion.
- No riser cable.
- Additional time is required to approve inside wire installation.
- Trouble caused by power fluctuation or failure on the customer premises.
- Any site that requires additional AT&T facilities.

Contact/access problems:

- Access not arranged by site contact or entity representative.
- Site contact refuses access to technician.
- Insufficient or incorrect site contact information which prevents access.
- Any problem or delay caused by County or Participating Entity staff.
- Any problem or delay caused by end user applications.
- Repair/replacement of CPE not provided by AT&T.
- Failure of the trouble ticket originator to return a call or respond to a message from AT&T's technician for on-line close-out of trouble tickets.
- Any scheduled preventative maintenance.

Stop clock does not apply to:

- The time it takes for a outside technician to arrive at an unmanned test point.
- Testing initiated by AT&T.
- Power fluctuation at AT&T's or subcontractor's central office.

**EXHIBIT A-1: STATEMENT OF WORK FOR LOCAL SERVICES
 TECHNICAL EXHIBIT 2
 PERFORMANCE REQUIREMENT SUMMARY (PRS)**

SPECIFIC PERFORMANCE REFERENCE	SERVICE	MONITORING METHOD & SCHEDULE	DEDUCTIONS/FEEES TO BE ASSESSED
SOW Subparagraph 6.1 Analog Voice Services <ul style="list-style-type: none"> •Centrex •Business Lines •Trunks 	Contractor shall maintain 99.995% availability for all Services	Contractor reporting monthly; applied monthly, based on County trouble tickets issued to Contractor.	10% of monthly cost for affected services
SOW Service Availability <ul style="list-style-type: none"> • MPLS • AVPN • Frame Relay • ATM 	Availability of each Service shall be 99.99% each month	Contractor reporting monthly; applied quarterly, based on County trouble tickets issued to Contractor.	10% of monthly cost for affected service(s)
DSL Services	Latency (IP backbone): less than 40 milliseconds Data Delivery (packet loss): less than 0.01%	Contractor reporting monthly; applied quarterly, based on Contractor IP backbone performance.	5% credit on monthly service fee
SOW 6.5.4. Legacy Voice Mail System and Auto Attendant Availability	Contractor shall maintain 99.95% monthly availability level for Legacy Voice Mail System	Contractor reporting monthly; applied monthly	\$500 per month or \$2,500 if below 99.5%
SOW 6.7 Private Line Services	Aggregate transport private line circuit availability to be 99.99% monthly	Contractor reporting monthly; applied quarterly. Hours all lines available/hours all lines installed based on County trouble tickets issued to Contractor	10% of monthly cost for affected services

**EXHIBIT A-1: STATEMENT OF WORK FOR LOCAL SERVICES
TECHNICAL EXHIBIT 2
PERFORMANCE REQUIREMENT SUMMARY (PRS)**

SOW 6.12 DWDM Optical Network – OPT-E-MAN	Contractor shall maintain 99.95% availability per month. County shall be credited for an interruption of ten (10) seconds or more.	County shall notify Contractor of interruption within forty-five (45) days after the end of the month and Contractor shall verify interruption.	Credit shall be at the rate of 10/8640 of the monthly charges for the service for each period of 5 minutes or major fraction thereof that the interruption continues.
SOW 6.12 DWDM Optical Network – GigaMAN	Contractor shall maintain 99.999% availability for fully-path protected circuits and 99,98% availability for unprotected circuits. Interruptions will be measured in hours and increments thereof, accumulated on a monthly basis.	Measurement of unavailable time will commence with a trouble report from County and end when the circuit is returned to service, as confirmed by Contractor.	For fully-path protected, credit shall equal to 100% of the monthly recurring charge for the entire circuit. For unprotected circuits, credit shall be 10 times the billing rate for the equivalent period of service, up to 100% of the monthly recurring charge.
SOW 6.12 DWDM Optical Network - MON	Contractor shall maintain 99.999% availability for protected channels, and 99.995% availability for unprotected channels. The service is considered to be interrupted and unavailable at the onset of ten consecutive out-of-service seconds for the service as a whole, or by any individual protected MON channel.	The time shall be measured from the moment County report the outage, until the Service is available. Contractor shall have an objective to restore the service within an average of four (4) hours.	A service unavailability (“interruption”) will result in a credit equal to one month’s bill for the individual port-to-port connection involved. An interruption of service will start when an inoperative services is reported to Contractor and end when the service is operative.
SOW 7.7 Service Request Proposal Issuance and Acceptance	3 Business Days of Requested Order for 95% of orders	Vendor and Service Center Reporting System	\$500 per month if not met
SOW 7.11 Service Request Performance	Contractor completes 90% of Service Requests on or before established due date	County reports	50% of non-recurring service charge if due date not met

**EXHIBIT A-1: STATEMENT OF WORK FOR LOCAL SERVICES
 TECHNICAL EXHIBIT 2
 PERFORMANCE REQUIREMENT SUMMARY (PRS)**

SOW 8.1 Invoicing – Complete Data	Contractor shall make accessible to the County complete invoice and detailed billing data by agreed upon billing delivery date	Inspection	If the billing performance is not met, an automatic escalation process to the billing supervisor, the 2 nd failure escalated to the Customer Service Center Manager, the 3 rd failure escalated to the Program Manager and the 4 th failure escalated to the Program Director.
SOW 8.5.14 Rate Validation	Contractor shall submit written Rate Validation Report quarterly to the Billing Manager within 45 Business Days of Contractor’s completion of the quarterly verification at the end of each quarter.	Observation	Reported Quarterly - Assessed Quarterly - If the standard for delivery of the Rate Validation Report is not met, an automatic escalation process to the billing supervisor, the 2 nd failure escalated to the Customer Service Center Manager, the 3 rd failure escalated to the Program Manager and the 4 th failure escalated to the Program Director.

**EXHIBIT A-1: STATEMENT OF WORK FOR LOCAL SERVICES
 TECHNICAL EXHIBIT 2
 PERFORMANCE REQUIREMENT SUMMARY (PRS)**

SOW 10.7.10.A Voice & Data Services Repair	Mean Time to Repair (MTTR) - 4 hours for service outage to one or more lines or circuits	Hours all lines available/hours all lines installed based on County trouble tickets issued to Contractor	Quarterly - If the performance standard is not met, 75% of the monthly service charge will be credited for each individual line/circuit that was out of service for longer than the performance standard. An additional 25% cumulative credit will be added for each consecutive quarter that the standard is not met, up to a maximum credit of 150% per quarter.
SOW 10.7.10.B Voice & Data Services Repair	Mean Time to Repair (MTTR) - 4 hours for loss of all Voice or Data Services to a building or campus	Hours all lines available/hours all lines installed based on County trouble tickets issued to Contractor	Quarterly - If the performance standard is not met, 75% of the monthly service charge will be credited for each individual line/circuit that was out of service for longer than the performance standard. An additional 25% cumulative credit will be added for each consecutive quarter that the standard is not met, up to a maximum credit of 150% per quarter.
SOW 10.7.10 Excessive Voice & Data Services Repair	Mean Time to Repair (MTTR) Excessive Repair Outage - 12 hours per incident outside MTTR standard	Hours all lines available/hours all lines installed based on County trouble tickets issued to Contractor	Reported and Assessed Monthly - 100% of the monthly service charge will be credited for the affected service

**EXHIBIT A-1: STATEMENT OF WORK FOR LOCAL SERVICES
 TECHNICAL EXHIBIT 2
 PERFORMANCE REQUIREMENT SUMMARY (PRS)**

SOW 10.7.10 Repeat Failures	Defined as more than one failure of the same kind on the same line/circuit within a 30 day period of time (based on a rolling thirty (30) day period, looking back basis)	Hours all lines available/hours all lines installed based on County trouble tickets issued to Contractor	Monthly - An automatic escalation process upon the 3rd failure to contract repair service management
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**EXHIBIT A-1: STATEMENT OF WORK FOR LOCAL SERVICES
 TECHNICAL EXHIBIT 3
 LINE BLOCKING MATRIX**

Blocking Matrix

- UL 411
- UL Access to "0" Operator
- UL Caller ID
- UL Collect calls
- UL Long Distance, International
- UL Operator assisted calls billed to County
- US *69 Call Return
- US 1010 codes
- US 3rd party calls
- US 800 forwards to 900
- US 900/976
- US Cramming
- US IntraLATA carrier cannot be changed
- US LD carrier cannot be changed
- US Nationwide 411
- US Operator transfer to non-agreement carrier
- US Unauthorized credit cards

Centrex	1MB	Trunks	ISDN
Y	N	N	N
Y	N	N	N
Y	Y	Y	Y
Y	Y	Y	Y
Y	Y	Y	Y
Y	N	N	Y
Y	Y	Y	Y
Y	N	N	N
Y	Y	Y	Y
N	N	N	N
Y	Y	Y	Y
Y	Y	Y	Y
Y	N	N	N
Y	Y	Y	Y
N	N	N	N

US=Unauthorized Service, not allowed on any County line
 UL=Unauthorized Line, allowed or not allowed on a line by line basis
 Y=Blocked by default
 N=Cannot be blocked

**EXHIBIT A-1: STATEMENT OF WORK FOR LOCAL SERVICES
TECHNICAL EXHIBIT 4
FACILITIES MONITORING**

ALHAMBRA	1000 S FREMONT AVE 900 S FREMONT AVE
DOWNEY	9150 E IMPERIAL HWY
LOS ANGELES	1100 N EASTERN AVE 111 N HILL ST 1200 N STATE ST 12021 S WILMINGTON AVE 210 W TEMPLE ST 2707 S GRAND AVE 3075 WILSHIRE BLVD 3175 W 6TH ST 320 W TEMPLE ST 500 W TEMPLE ST 600 S COMMONWEALTH AVE 4700 W RAMONA BLVD
NORWALK	12400 IMPERIAL HWY 12440 IMPERIAL HWY
TORRANCE	1000 W CARSON ST

**TELECOMMUNICATION SERVICES CONTRACT
EXHIBIT A-2**

**STATEMENT OF WORK
FOR
LONG DISTANCE SERVICES**

**EXHIBIT A-2
STATEMENT OF WORK FOR
LONG DISTANCE SERVICES**

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**EXHIBIT A-2
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LIST OF TECHNICAL EXHIBITS

Technical Exhibit 1	List of Deliverables
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**EXHIBIT A-2
STATEMENT OF WORK FOR
LONG DISTANCE SERVICES**

1.0 SCOPE OF WORK

Contractor shall provide Long Distance Voice and Data Telecommunications Services for County. Contractor's capabilities must be interoperable with the Public Switched Telephone Network (PSTN) or IP Network (IPN), Inter Exchange Carriers (IXC), Local Exchange Carriers (LEC), Competitive Access Providers (CAP), internationally defined Post, Telephone and Telegraph (PTT) service providers, or alternative telecommunications service providers in any given country and any other network that is interoperable with the PSTN or IP Network, for the services for which the provider has contracted with County.

Contractor shall be responsible for all aspects of service quality, interconnectivity and interoperability of services. Other than all County Provided Equipment (CPE), the purchase of all materials/equipment necessary to provide the required services in this Statement of Work (SOW) is the responsibility of Contractor.

2.0 QUALITY CONTROL

Contractor shall establish and utilize a comprehensive Quality Control Plan (QC Plan) to assure County a consistently high level of service throughout the term of the Contract. The QC Plan shall be submitted to County's Program Manager for review. The QC Plan shall minimally include the following:

- 2.1 Method of monitoring to ensure that Contract requirements are being met;
- 2.2 A record of all inspections conducted by Contractor, any corrective action taken, the time a problem was first identified, a clear description of the problem, and the time elapsed between identification and completed corrective action, shall be provided to County upon request.

3.0 QUALITY ASSURANCE PLAN

County will evaluate Contractor's performance under this Contract using the quality assurance procedures as defined in Paragraph 8.15 (County's Quality Assurance Plan) of the base document of the Contract.

3.1 Contract Discrepancy

County will evaluate Contractor's performance under the Contract using the quality assurance procedures as defined in Paragraph 8.15 (County's Quality Assurance Plan) of the base document of the Contract.

Contractor shall provide notification of a Contract discrepancy to County's Program Manager as soon as possible whenever a Contract discrepancy is identified. A plan for correction of all deficiencies identified shall be submitted to County's Program Manager

within ten (10) Business Days. The problem shall be resolved within a time period mutually agreed upon by County and Contractor. If a discrepancy is identified by the County's Program Manager, Contractor is required to acknowledge the reported discrepancy or present contrary evidence.

3.2 County Observations

In addition to departmental contracting staff, other County personnel may observe performance, activities, and review documents relevant to this Contract at any time during normal business hours. However, these personnel may not unreasonably interfere with Contractor's performance.

4.0 DEFINITIONS

- 4.1 **ANI:** The term "ANI" shall mean automatic number identification which delivers the number of the calling party to the receiving end.
- 4.2 **ATM:** The term "ATM" shall mean asynchronous transfer mode which is High-speed data transmission containing high bandwidth, low delay, connection oriented technology. ATM supports the transmission and aggregation of a broad range of user information, including voice, data, and video via circuit-mode and packet-mode transmission. ATM uses cell-switching and multiplexing technology that conforms to ATMF, ANSI and ITU-TSS standards.
- 4.3 **CAC:** The term "CAC" shall mean the Customer Assistance Center which is the County help desk that receives calls from County department users, creates trouble tickets and routes issues to Contractor for resolution.
- 4.4 **CPE:** The term "CPE" shall mean County provided equipment which is equipment provided by County to Contractor in accordance with this SOW.
- 4.5 **InterLATA:** The term "InterLATA" shall mean Any service, call traffic, or facility that originates in one Local Access and Transport Area (LATA) and terminates in another. InterLATA calls are any call outside the local LATA to any other LATA in the United States.
- 4.6 **International Call:** The term "International Call" shall mean any call placed from the United States to any other country.
- 4.7 **Interoperability:** The term "Interoperability" shall mean the ability to operate software and exchange information in a network with multiple applications.
- 4.8 **Migration:** The term "Migration" shall mean the process of planning for and transferring services from existing departmental legacy networks to new Contractor services.

- 4.9 **NMS:** The term “NMS” shall mean the network management system which are procedure software, equipment and operation techniques that keep the network operating efficiently.
- 4.10 **PBX:** The term “PBX” shall mean private branch exchange which refers to any telephone switch not owned by a telephone company.
- 4.11 **RESPORG:** The term “RESPORG” shall mean responsible organization; generally identifying County, Contractor, or third party entity as the organization responsible for completion of a task.
- 4.12 **Service Request Interval:** The term “Service Request Interval” shall mean the interval between receipt of a Service Request proposal acceptance by Contractor and the issuance of a Service Request completion notice by Contractor.
- 4.13 **SONET:** The term “SONET” shall mean the Synchronous Optical Network which is the optical interface standard allowing flexibility for various digital signals with transmission rates.
- 4.14 **Toll Free:** The term “Toll Free” shall mean calls paid for by the called party, including 800, 888, 877, 866, etc.
- 4.15 **Transition:** The term “Transition” shall mean the process of planning for and transferring services from the incumbent service provider(s) to Contractor’s services and networks.
- 4.16 **Unassociated Billing:** The term “Unassociated Billing” shall mean Contractor invoices for single use or single account bills that are not on the master account; and where Contractor is directly or through third party billing presenting for payment to County these invoices for services identified in the contract and are not rated at the contract price. Can also be known or referred to as Casual or Thrifty bills.
- 4.17 **Vanity Number:** The term “Vanity Number” shall mean a Toll Free number that identifies a special alpha naming sequence, i.e., 1-800-LIBRARY.
- 4.18 **VPN:** The term “VPN” shall mean virtual private network, which allows County to dial a Toll Free number to remotely access their VPN service, then follow the prompts to enter a valid authentication number, callers personal identification number (PIN), and the number the caller is calling. If a valid authentication number and PIN have been entered, then the call will be completed.
- 4.19 **VRA:** The term “VRA” shall mean virtual remote access which allows County to place out of LATA calls from a County facility or a remote location.

5.0 CONTRACTOR ADMINISTRATION

Contractor shall administer the Contract according to Paragraph 7.0 (Administration of Contract – Contractor) of the base document of the Contract.

5.1 Program Manager

Contractor's Program Manager shall be responsible for the duties set forth in Paragraph 7.2 (Contractor's Program Manager) of the base document of the Contract and shall execute Contractor's obligations under this Contract through completion and County acceptance of Transition into services. Following County's acceptance of Transition, Contractor's Program Manager and designated alternate need not be assigned full-time, however County must have reasonable access to the Contractor's Program Manager or designated alternate during all hours, 365 days per year.

6.0 PRODUCTS AND SERVICES

6.1 Voice

County's calls are separated into the following usage types: long distance, international, calling card NRA II, calling card AWCC, and toll free. Each type of call shall be charged on a postalized (distance insensitive), per billing rate increment as set forth in the chart below.

Type of Call	Initial Increment	Subsequent Increment
Long Distance	18 Seconds	1 Second
International	18 Seconds	1 Second
Calling Card NRA II	18 Seconds	6 Seconds
Calling Card AWCC	60 Seconds	60 Seconds
Toll Free	30 seconds	1 Second

6.1.1 InterLATA Call

Contractor shall provide InterLATA calls from any County business line, centrex-type line or PBX trunk. Contractor shall block InterLATA traffic unless the user enters a valid authorization code.

6.1.2 Intrastate/Interstate Call

Contractor shall provide intrastate (intraLATA) and interstate (interLATA) calls from any County business line, centrex-type line, or PBX trunk as designated by County. Contractor shall block intrastate and interstate traffic unless the user enters a valid authorization code, unless otherwise notified by County.

6.1.3 Incoming Call Blocking

Contractor shall block incoming calls whenever possible, from specific numbers or areas as directed by County. Blocking shall be based on the calling ANI number.

6.1.4 International Calling

Contractor shall provide International Calls to agreed destinations outside of the United States. Countries are blocked on Contractor's Long Distance network using the Inter-voice platform with 00-, 01+ access methods. Calls made via Contractor's standard long distance calling card platform have additional blocked

countries. County may elect to block all International Calling and may elect to block calls to specific countries.

6.2 Operator Services

6.2.1 Directory Assistance

Contractor's directory assistance operators shall be available twenty-four (24) hours a day, seven (7) days a week. They shall be accessed by dialing 1+0+NPA-555-1212 to reach a national Directory Assistance (DA) operator. Callers shall receive basic business, residence, and government listing searches as well as domestic area code information. Callers shall be allowed to request two (2) listings per call for domestic directory assistance and one (1) listing per call for International Directory Assistance. Contractor's operators shall have access to all published directory listings in the United States. Contractor's operator staffing shall be at a level so that all County calls shall be answered within ten (10) seconds ninety percent (90%) of the time. Contractor shall offer English and Spanish Directory Assistance to callers who are located in the U.S. international directory assistance shall be reached through the Operator Assistance (OA) operator who shall place a call to the DA operator in the requested foreign country. The foreign DA operator will provide the domestic OA operator with the telephone number. Contractor's domestic operator shall provide the number to the caller.

Contractor shall disable the Directory Assistance Call Completion (DACC) feature for all County lines. Contractor shall credit County for any DACC and toll charges billed County.

6.2.2 Operator Assistance

Contractor shall have operator services twenty-four (24) hours a day, seven (7) days a week. Contractor's operators shall be accessed by dialing 0+, 00, 01+ Numbering Plan Area (NPA) 555-1212 from any business lines or any centrex-type or PBX line. Contractor's operator staffing shall be at a level so that all County calls shall be answered within ten (10) seconds ninety percent (90%) of the time. Contractor shall make every reasonable effort to ensure that County users never receive a busy tone when calling Contractor's operators and operators shall have the capability to verify busy signals and interrupt/barge in for emergencies.

Call completion services are for Person-to-Person and problem assistance calls and will be handled by the operator. Other operator requests include: international directory assistance, Credit, Rate Quotes, Foreign Language Assistance, Dialing Instructions, Time of Day, trouble reporting, Business Office connections, and Emergency Agency requests. Credit for when service difficulty is encountered (wrong number, cut off or poor transmission, etc.) will be applied immediately by the operator. The operator will also connect callers to Customer Care if they need further assistance.

6.2.3 Dialing Assistance

Contractor's operator shall assist County users in dialing calls when required. When possible, Contractor's operators are to verify the restriction levels place on the originating line and/or user. Contractor's operators shall not place calls for County users that violate the restriction levels placed on the originating line.

6.2.4 Collect Calls

Contractor shall have operator assistance services twenty-four (24) hours a day, seven (7) days a week to place outgoing collect calls for County users.

6.3 **Toll Free Calls**

Throughout this solicitation, toll-free inbound calls to numbers with area codes 800, 888, 877 and 866 will be referred to as "800 number(s)".

Toll Free services with 800, 888, 877, 866 and any area code added during the term of the subsequent contract shall allow callers to contact County offices on a 'free call' basis. All charges for 800 calls will be billed to County. Contractor shall provision new 800 numbers as required by County, and Transition eligible 800 numbers as directed by County. Contractor shall work with County to obtain unique Vanity Numbers for special County programs as needed. 800 services may be provisioned as dedicated lines and/or on existing business, centrex-type, Direct Inward Dial (DID), and/or PBX trunk lines. Contractor shall implement any additional toll-free codes on an as needed basis at the sole discretion of County, with all the services and features currently available on 800 codes.

6.3.1 Alternate Routing

Alternate Routing shall allow County to route incoming Toll Free calls to alternative answering location(s) based on the 1) originating area code and/or prefix of the call, 2) the time of day and/or day of the week, and/or 3) upon an emergency request. Contractor shall complete alternate routing to County pre-defined destination (County must set alternate call routing profiles in advance of activation) within five (5) minutes of County request and to non-predefined destinations within thirty (30) minutes of County request, this service shall be available twenty-four (24) hours a day, seven (7) days a week.

6.4 **Data**

6.4.1 Private Line Services

Contractor shall provide interLATA private line services as required by County and at County's sole discretion may be required to migrate any existing services. The total availability of each private line circuit shall be 99.99 percent (99.99%) each month. Contractor shall provide Domestic Private Line Service (PLS) via dedicated circuit of pre-subscribed bandwidth between any two points across a state line or LATA. PLS provides County connectivity from one location (Location A) to another location (Location Z) with an InterLATA or Interstate mid-link between the two locations. PLS is offered in DS1 (1.544 Mbps) and DS3 (44.736 Mbps) bandwidths and OC3 (155.52 Mbps), OC12 (622.08 Mbps), OC48 (2.488 Gbps) (nonconcatenated and concatenated), and OC192 (9.953 Gbps)

(nonconcatenated and concatenated) bandwidths. This service shall be available anywhere in the Continental United States. Contractor shall terminate the service at the demarcation point at County facility. Contractor shall work with County for any space and power requirements for terminating equipment.

6.4.2 Synchronous Optical Network

Contractor shall provide SONET services to County facilities as requested by County. Contractor shall terminate their fiber optics at County premise in space provided by County. County will provide the required AC power and Contractor shall provide all battery backup or auxiliary power units as necessary. Contractor shall provide the SONET access and multiplexing equipment unless specified otherwise. The following SONET service shall be required:

A. SONET-OC3

This category of service shall support three (3) SONET OC1 channels where each OC1 channel is equivalent to information payload (i.e., clear channel) data rate of 49.536 Mbps over an interface with a line rate of 155.520 Mbps. These three (3) OC1 channels shall be able to be grouped as follows:

- Channelized OC3
In this mode, three (3) separate OC1 channels, each with an information payload data rate of 49.536 Mbps, shall be supported and requires an interface card.
- Unchannelized OC3
In this mode, a single channel equivalent to information payload data rate of 148.608 Mbps (i.e., equivalent of 3 OC1 channels) shall be supported.

B. SONET-OC12

This category of service shall support four (4) SONET OC3 channels where each OC3 channel is equivalent to information payload (i.e., clear channel) data rate of 148.608 Mega-bits per second (Mbps) over an interface with a line rate of 622.080 Mbps. These four (4) OC3 channels shall be able to be grouped as follows:

- Channelized OC12
In this mode, four (4) separate OC3 channels, each with an information payload data rate of 148.608 Mbps, shall be supported.
- Unchannelized OC12
In this mode, a single channel equivalent to information payload data rate of 594.432 Mbps (i.e., equivalent of twelve (12) OC1 channels) shall be supported.

- C. SONET-OC48
This category of service shall support single SONET OC48 channel with the information payload data rate of 2.378 Giga-bits per second (Gbps) over an interface with a line rate of 2.488 Gbps.
- D. SONET-OC192
This category of service shall support single SONET OC192 channel with the information payload data rate of 9.621 Giga-bits per second (Gbps) over an interface with a line rate of 9.953 Gbps.

6.4.3 Special Routing

Contractor shall be able to provide different routes for special private line/circuits that support critical public safety or administrative applications when requested by County based on the below arrangements. Should facilities not be available at time of request, special construction may be required at additional cost to County.

- A. End-to-End Diversity
Between terminating County facilities, Contractor shall supply at least two (2) physically separated routes for private line circuits. These diverse routes shall not share common telecommunications facilities or offices. Contractor shall maintain a minimum separation of twenty-five (25) feet throughout all diverse routes.
- B. Access Diversity
Between County facility and Contractor's serving central office and/or wire center Contractor shall supply at least two (2) physically separated routes for the private line circuits. These diverse routes shall not share common telecommunications facilities or offices. Contractor shall maintain a minimum separation of twenty-five (25) feet throughout all diverse routes.
- C. Diversity Implementation
Within thirty (30) Days of the implementation of diversity and again thereafter upon County request, Contractor shall provide a graphical representation (e.g., diagrams/maps) of private line circuit routes to show where diversity has been implemented. Contractor shall provide County thirty (30) Days prior written notification of any proposed reconfigurations.

6.4.4 End-to-End Performance

Transmission performance parameters for Digital private line service shall satisfy at least the values and ranges set forth in the AT&T PUB 62411 for T1, Bellcore PUB TR-499 for T3 and ANSI T1.105 & 106 for SONET.

6.4.5 Frame Relay Service

Contractor shall provide Frame Relay service options which shall be accessible from any County facility. Should there be existing Frame Relay services used by County networks, at County's request, said services shall be migrated to

Contractor's Frame Relay service with minimal service disruption or any changes to the existing access equipment or administrative procedures.

A. Standards

Frame Relay service supports Permanent Virtual Connections (PVC), and the addressing is done through Data Link Connection Identifiers (DLCIs). The Frame Relay service shall support packet sizes up to 1500 bytes. The Frame Relay service shall offer T1 and DS3 at port speeds of 1.544Mbps and 44.736Mbps, respectively. Offerings to deliver Committed Information Rates (CIR) up to the respective port speeds. All Frame Relay services shall support burst modes over and above the CIR up to the port speeds and shall be available not less than 99.99 percent (99.99%).

B. Addressing

The Frame Relay service shall support a numbering plan for Permanent Virtual Connections (PVC) that shall use Data Link Control Identifiers as the numbering scheme.

C. Access

Contractor shall provide various types of access bandwidth services to their Frame Relay service from County facilities, including T1 and T3 Circuit.

D. End-to-End Performance

The transmission performance parameters shall satisfy at least the values and ranges set forth in ANSI T1.606/614/617/618 standards.

E. Equipment

Contractor shall ensure that all the existing County equipment currently accessing Frame Relay services shall work properly with Contractor's Frame Relay service. Contractor may recommend and provide additional or other equipment for future use by County.

6.4.6 Asynchronous Transfer Mode Service

Contractor shall provide three (3) ATM service options as depicted in Attachment 6, Frame Relay & ATM Service Matrix, and ensure it's compliance with ATMF and all applicable ITU-TSS recommendations including I.113, I.121, I.150, I.211, I.311, I.321, I.327, I.361, I.362, I.363, I.413, I.432, I.610, signaling adaptation layer (i.e., ITU-TSS Q.2100 Series), ATMF and ANSI T1.105. The ATM shall offer Sustained Cell Rates (SCR) of 4, 8, 16, and 32 Mbps for Variable Bit Rate (VBR) traffic including cell overhead. For point-to-point connections, the SCR shall fallback to the smaller subscribed SCR value of the connected points for the duration of the call/connection. Availability shall be not less than 99.99 percent (99.99%).

Contractor shall provide dedicated and optionally inter-networked originating and terminating access arrangements for ATM. Originating access arrangements

shall connect ATM on network originating locations with the associated Point of Presence (POP). Terminating access arrangements shall connect the terminating POP with ATM on-net terminating locations.

- A. The ATM Service shall support the following data rates:
- DS1 at line-rate of 1.544 Mbps and information-payload data-rate of 1.536 Mbps
 - DS3 at line-rate of 44.736 Mbps and information-payload data-rate 43.008 Mbps
 - This category of service shall support a single SONET OC1 channel on an OC3 circuit and requires an interface card.
 - SONET OC3 at line-rate of 155.520 Mbps and information-payload data-rate of 148.608 Mbps
 - SONET OC12 at line-rate of 622.080 Mbps and information-payload data-rate of 594.432 Mbps
- B. The ATM Service shall support the following fractional data rates:
- Fractional DS3 at sustained-cell-rate (SCR) of 3Mbps and peak-cell-rate (PCR) of 12Mbps
 - Fractional DS3 at sustained-cell-rate (SCR) of 5Mbps and peak-cell-rate (PCR) of 25Mbps
 - Fractional DS3 at sustained-cell-rate (SCR) of 10Mbps and peak-cell-rate (PCR) of 40Mbps
 - Fractional DS3 at sustained-cell-rate (SCR) of 15Mbps and peak-cell-rate (PCR) of 40Mbps
 - Fractional DS3 at sustained-cell-rate (SCR) of 20Mbps and peak-cell-rate (PCR) of 40Mbps
 - Fractional DS3 at sustained-cell-rate (SCR) of 30Mbps and peak-cell-rate (PCR) of 40Mbps
 - Fractional OC3 at sustained-cell-rate (SCR) of 40Mbps and peak-cell-rate (PCR) of 140Mbps

6.4.7 Inverse Multiplexing over ATM

Inverse Multiplexing over ATM provides a means for users to access ATM networks at rates between the traditional DS1 (1.544Mbps) and DS3 (45Mbps) levels by aggregating multiple T1/E1 links.

IMA allows multiple T1/E1s to act as a single, logical ATM connection that can be managed as an IMA "link group." The aggregate bandwidth of the IMA link group determined the rate of the ATM connection, (e.g., a link groups of four (4) DS1s provides an ATM bandwidth of 6 Mbps)

Vendor shall provide ATM IMA at the following data rate:

- ATM Bundled Port & Access IMA – 3.072Mbps
- ATM Bundled Port & Access IMA – 4.608Mbps
- ATM Bundled Port & Access IMA – 6.144Mbps
- ATM Bundled Port & Access IMA – 7.680Mbps
- ATM Bundled Port & Access IMA – 9.216Mbps

- ATM Bundled Port & Access IMA – 10.752Mbps
- ATM Bundled Port & Access IMA – 12.288Mbps

6.4.8 Integrated Services Digital Network

Integrated Services Digital Network (ISDN) services shall be provided by Contractor. ISDN services shall adhere to National ISDN – 1 standards.

- A. Basic Rate Interface (BRI)
- B. Primary Rate Interface (PRI)

6.5 **Calling/Authorization Card Network**

Contractor's network shall allow County to route outbound long distance calls according to County specific requirements and provide control over call routing through call completion. Contractor shall provide associated features to the service including:

6.5.1 Remote Access (Off-Net calls from non-County offices)

Contractor shall provide remote access (Off-Net calls from non-County offices) calling from U.S. locations at the same rates as calls made from County locations. Contractor shall provide, at their expense, a toll-free number for County users to access remotely. County user will use a single ten-digit authorization code and random, non sequential personal Identification number (PIN) to complete the call. Calls can be made from anywhere in the U.S. or international locations, and can terminate in the U.S. or international locations, based on call screen routing restriction levels. Remote access calls originating from areas where Contractor's long distance is not authorized to provide long distance service will be carried by and billed on behalf of a Contractor affiliate.

6.5.2 On-Network calls (placed from County facilities).

Contractor shall provide the capability to place calls from County facilities using the same ten-digit authorization code as remote access to complete the call. County user will not be required to enter the four-digit PIN when dialing from inside the County network. The user's ten digit authorization code shall be included with the account code for billing purposes. Calls can be made from anywhere in the U.S. and can terminate in the U.S. or international locations, based on call screen routing restriction levels.

6.5.3 Call Screen Routing

Contractor shall provide the ability to control calling/authorization card calls by restricting calls to defined time intervals, days of the week, days of the year, or to defined destinations. Rules for call termination can be based on where the call originates, where the call terminates, and on time elements (e.g., day of week, time of day).

6.5.4 Authentication/Authorization/Account Code Prompt

Any Inter-LATA call placed from any County line, unless the line is individually and specifically exempted by authorized County staff, shall be prompted by a

tone for the entering of the 10 digit authorization code. County shall identify in writing all County staff authorized to direct Contractor under this Subparagraph 7.5.4. If the line restriction level allows the call to be placed, the entered code shall be analyzed by Contractor's system to validate whether that code will allow the call to be placed. Only calls that meet the authorization code's restriction levels and the line restriction levels shall be allowed to go through. Contractor's authorization cards shall maintain restriction levels at the card level and shall be associated to an individual user.

6.5.5 Issuance of VRA Authorization Cards

Contractor shall ensure all current County calling/authorization cards remain functional and in operation. Contractor shall issue, at Contractor's sole expense, new or replacement calling/authorization cards to more than 30,000 County staff, upon County's sole request. Contractor shall issue new or replacement calling/authorization cards with a County specified department code. Authorization codes shall be random, non-sequential ten (10) digit numbers. Each calling/authorization card shall allow an optional spending cap to be established by County, at no additional cost, that, when exceeded, will cause the card to be disabled. Contractor shall notify County's Program Manager immediately upon disabling a calling/authorization card. If Contractor fails to disable a card reaching cap, County will not be liable for excess charges.

Contractor shall ensure existing calling/authorization cards maintain the same Account/Authorization/Pin Codes. The PIN Number shall not be printed on the card. County shall approve, in writing, the card design for all new calling/authorization cards. Contractor shall include, at the time of any new card distribution, an electronic file containing the original file of existing authorization codes, as provided to Contractor by County. Contractor shall provide an on-line or other approved method, for activation and deactivation of authorization codes by County. Authorization codes may be deactivated on an emergency basis within fifteen (15) minutes, and within one (1) Business Day for normal business. For normal business, authorization codes shall be activated and delivered to County within five (5) Business Days.

6.6 **Audio Conference Calling**

Contractor shall provide multi-party audio conference services. The audio conference services shall provide the following features and any associated fees or surcharges. Contractor shall also provide a description of any optional services associated with their conference service.

6.6.1 Operator Conference Service

Contractor's operator shall be able to establish an audio conference of up to fifty (50) users. The Contractor shall establish appropriate active bridge connections to ensure that the audio level of each participant is not degraded. Contractor's operator shall establish connections with each participant at a pre-arranged time. County may establish regularly scheduled conferences and/or as-need conferences. Conferences may be set up as interactive or broadcast mode only. A

“roll call” service shall be available as well as an audio cassette recording service. This service shall be available twenty-four (24) hours a day, seven (7) days a week. The conference call shall be billed to the originating party as provided in Paragraph 9.0 (Billing).

6.6.2 Dial-in Conference Service

Contractor shall provide Toll Free, dial-in conference service. All users shall be able to dial a set telephone number at a pre-arranged date and time and automatically be part of an interactive conference. The service shall accommodate at least fifty (50) users and be available twenty-four (24) hours a day, seven (7) days a week.

6.6.3 Reservationless

Contractor shall provide Reservationless Audio Conference service accessible by dialing a Toll Free number, and be host controlled. The ability to establish a conference account in advance shall be available by calling a Toll Free number or on the internet.

6.6.4 Conference Services Training

Contractor shall provide ongoing conferencing services training for County end users. This training shall be available via the internet and include demos, recordings, and webinars. Training services shall be at no cost to County.

6.6.5 Special Conferencing Features

Contractor shall provide special features that would enhance the security and usage of the conferencing capability. The pre-arrangement of conferences should be established through an on-line service on the Internet. The telephone numbers of all participants should be listed, and for security purposes, when the conference is established each caller shall be checked with a pre-arranged list to verify authorization. The ability to provide a large, dial-in, broadcast service for up to 1,000 users is desirable to allow County staff to listen to the governing board meetings, special training or informational sessions.

6.7 Video Conferencing Services

The Contractor shall provide video conferencing services. The service shall provide for two-way point-to-point and multi-point video conferencing of room type and desktop video systems. The service shall also provide for multi-casting video programs that shall be available to all County facilities for training, viewing of internal meetings, and viewing of standard external broadcast services. The Video networking service should utilize the Contractor’s ATM/Frame Relay services in conjunction with the County Internet service. Video conferencing services shall provide the following features at a minimum.

6.7.1 Two-way Video Services

The County has existing two-way video conferencing systems used for administrative and criminal justice applications. Some of the systems are non-compressed video systems with analog connections. Others are H.261 or H.320 compliant compressed digital systems using ISDN or Switched 56 transmission

services. The existing video systems include room type systems, PC desktop systems, and customized systems. Contractor shall integrate the County's existing and future standards-compliant video systems with Contractor's video conferencing services.

6.7.2 Multi-Point Services

The Contractor shall provide, as integral to its video conferencing service, the ability to establish multi-point two-way video conferences. This feature shall be available by "dialing" into a multi-point bridge and/or pre-arranged schedule made by a conference coordinator. Up to twenty (20) participants shall be able to be bridged into a single conference. Contractor's multi-point service shall permit up to five (5) simultaneous conferences. During a conference, the participant 'on screen' shall be determined as follows:

- Voice Activation
The video from a receiving location shall be selected after audio from that receiving location exceeds a preset level for 1 second. After the selection of a video source from a receiving location, the previous speaker shall be viewed by the new speaker.
- Chairperson Control
The video from a receiving location shall be selected by the voice activation of the current speaker (presenter), who is in control of the transmitted video channel. AVCS can set up a conference in voice activated mode thereby allowing automatic switching of speakers when necessary. AVCS can dedicate a conference producer to a conference where switching of presenters is necessary. In practice all audio to the video bridge will be muted with the exception of the speaker. At the appointed time or on cue from the presenter the lecturer will switch to the next presenter, unmuting his or her line and mute the previous speakers line.
- Lecture Control
The video from a receiving location shall always be selected by the lecturer. AVCS can set up a conference in voice activated mode thereby allowing automatic switching of speakers when necessary. AVCS can dedicate a conference producer to a conference where switching of presenters is necessary. In practice all audio to the video bridge will be muted with the exception of the speaker. At the appointed time or on cue from the presenter the lecturer will switch to the next presenter, unmuting his or her line and mute the previous speakers line.
- Continuous Presence
The video from between three and nine participating locations may be viewed simultaneously at each participating location. If the number of locations participating in the video teleconference exceeds nine, AVCS can work out a rolling site insertion into the conference. At predetermined intervals the conference producer will add a previously unseen site into the call. It will be necessary to work out the details of this feature prior to the videoconference.

6.8 Web Conferencing

Contractor shall provide Web Conference service. The host and participants shall be able to collaborate on documents and make real time revisions. Web Conferencing shall include the following:

- File transfer capability
- Record and playback
- Chat
- Polling for online survey and results
- Web meeting without audio conference
- Whiteboard
- Website sharing

7.0 INVENTORY AND ORDER MANAGEMENT

Paragraph 7.1 (County's Telemangement Order System) contains all information relating to the ordering of services from initiation to finalization. Contractor shall interface with County's Telemangement Order System for the administration and processing of service requests and for directing and accomplishing provisioning of the requested services, including identifying configuration changes needed on end-user equipment to make it compatible with Contractor's communications systems. A confirmation of all Service Requests placed in the system shall be generated to the ordering entity. The confirmation shall include the due date, cost of service requested, and tracking number. County's billing system shall compare the final bill with the cost estimate. If the charges are in excess of quoted charges, Contractor shall provide an explanation. When no explanation is provided, or the excess charges cannot be justified to County's satisfaction, the original quoted costs will apply. County shall pay the original quoted costs; provided, however, that Contractor may pursue dispute resolution as set forth in Paragraph 8.30 (Dispute Resolution Procedures) of the base document of the Contract.

7.1 County's Telemangement Order System

County's Telemangement Order System is an off-the-shelf product from Symphony Services that has several custom programs designed specifically for County. The system is a web-based application that resides behind the County firewall. Contractor shall comply with current County data security procedures as follows to gain access to the Telemangement Order System.

- Complete County's Security Data Request form;
- Request an RSA SecurID Card to log on Network (Current cost \$75.00 each);
- Down load the Cisco VPN Client ;
- Contractor will be provided with County URL for EMS11

7.2 Service Request Process

The normal Service Request process shall follow the sequence outlined below:

- Service Price Quote (optional step)
- Service Requests
- Service Request Authorization
- Service Request Acknowledgment
- Service Request Proposal Issuance
- Service Request Proposal Acceptance
- Service Request Implementation
- Service Request Completion Notification
- Service Acceptance

The detailed requirements for Service Requests are described in the following Paragraphs.

7.3 **Service Price Quote**

Contractor shall utilize County's Telemangement order System to electronically provide a service price quote that is not binding to County and at no cost to County. Contractor's quotes shall identify all nonrecurring and recurring costs along with the service availability interval expected. The price quote shall be based upon the following information provided by County:

- Type of service and features
- Locations for service delivery
- Service due date
- Agency department requesting the service
- Any additional information required to complete the price quote

Authorized County representative may at County's option request a price quote prior to placing a Service Request. The Service Request shall be used for price quote requests. All relevant fields of information in the Service Request shall be transmitted via the Telemangement Order System to Contractor. Contractor shall provide a price quotation within two (2) Business Days which includes all recurring charges, all non recurring costs and the time frame for performing the work.

7.4 **Service Requests**

Each authorized County representative will submit to Contractor a request for initiating, adding, changing or terminating service. Contractor shall be responsible for directing and accomplishing all tasks associated with processing the service request.

The Service Request is the official communication to Contractor from County that additions, changes or deletions of services are desired. This request shall contain a complete description of the work to be done, related inventory and billing information, time frames and site information. The Service Request shall include the following fields of information:

- Service Request Number – A unique number assigned to Service Requests by County’s Telemanagement Order System. Contractor shall enter this number as part of the Service Request process and shall ensure that this number is passed through on all billing processes and is shown on the detailed billing data for verification and tracking purposes. Contractor shall be able to accommodate various formats of characters and numbers.
- Order Analyst – The name of the authorized individual placing the order
- Order Date and Time – Date and time the order was placed
- Due Date – Requested or officially scheduled completion date
- Priority – A classification that determines the urgency of the Service
- Inventory Number – For existing services this is the NPA-NXX-XXXX that uniquely identifies a specific line or number
- User Name – The employee or function associated with the service
- Site Info – Address and building specific location
- Contact Name – For access, coordination and installation
- Telephone Number – Of the access person
- Org code – The five-digit number associated with County cost center to which the service is (will be) billed
- Project Name or Application – Describes an application, function or project associated with this service
- Status – Upon order placement this is an initial order. This field may be used to reflect order acknowledgment, any delays or postponements, work in process, completion, acceptance, etc.

The Service Request may also contain narrative or attachments which completely describes the work to be done.

7.5 Verify Authorization of Service Request

Upon receipt of a Service Request, Contractor shall verify that the individual requesting the service is authorized to submit the Service Request. County’s Program Manager will provide to Contractor a current list of County staff that are authorized to initiate Service Requests. Contractor shall not process any service request without verification of County staff authorization or an explicit exception authorization from County’s Program Manager.

7.6 Service Request Acknowledgment

The Service Request Acknowledgment is a response transmitted by Contractor via the Telemanagement Order System which updates the Service Request status as having been received by Contractor. This acknowledgment shall be received by close of next Business Day following the issuance of the service request by County.

7.7 Service Request Proposal Issuance and Acceptance

Following acknowledgment of the Service Request by Contractor, Contractor shall provide County with Service Request response via the Telemanagement Order System. The response shall include the scheduled completion date, binding post, Contractor’s contact

name and phone number, and any other information relevant to the completion of the Service Request. This response shall be submitted to County no later than three (3) Business Days following Service Request acknowledgment by Contractor.

7.8 Implementation

Contractor shall perform the actions and tasks required to complete the Service Request. Contractor shall coordinate with County or the CPE service providers regarding any agreed upon County or CPE service provider's actions that are required to fulfill the order. Any changes or additional information by County or Contractor shall be communicated both electronically via the Telemanagement Order System as well as by direct telephone contact.

7.9 Service Request Notification of Completion

Contractor shall notify County contact person specified in the Service Request by telephone when the Service Request has been completed. The official notification must be made via the Telemanagement Order System within twenty-four (24) hours after Service Request completion. Verbal notification shall not substitute for official notification.

7.10 Changes during Service Request Process

7.10.1 Cancellation of Service Request

Except for Service Requests requiring Project Coordination, Contractor shall accept from County a notice of Service Request cancellation that it receives more than five (5) Business Days before the service due date without County incurring any charge. Cancellation by County of Service Requests with Project Coordination or any other Service Request within the last five (5) Business Days prior to the service due date shall qualify Contractor for cost reimbursement of costs reasonably incurred as a result of the cancellation, provided Contractor has made appropriate notification to County of additional costs that may be applicable. Contractor shall provide County's Program Manager with a description of its procedures for Service Request cancellation.

7.10.2 Change of Service Request Completion Date

County's requests for a delay of Service Request completion date more than three (3) Business Days prior to the service due date shall be accepted by Contractor at no cost to County. County's requests for a delay within three (3) Business Days before the service due date may incur a delay charge. A Service Request delayed by County longer than thirty (30) Days from the original promised due date cannot be presumed canceled unless County requestor is notified and cancels it. Contractor shall not delay a Service Request completion date unless agreed to by the authorized County staff requesting the service. County is responsible for all additional costs reasonably incurred by Contractor as a result of a County requested delay under this Subparagraph 7.10.2 that extends beyond thirty (30) Days, provided Contractor has made appropriate notification to County of additional costs that may be applicable.

7.11 Service Request Interval (Response Time)

A Service Request Interval is the interval of time between receipt of a Service Request acceptance by Contractor and the issuance of a Service Request completion notice by Contractor. Contractor shall make Service Request Interval information available to County staff for each type of service. Service Request Intervals defined herein are not applicable to the initial Transition from existing service providers to Contractor's services. Service Request Intervals are:

- Standard Service Request Intervals
- Emergency Service Request Intervals
- Expedited Service Request Intervals
- Negotiated Service Request Intervals

Contractor shall accept Service Requests in bulk or singly using Standard and Expedited Service Request Intervals. Service Requests for new or enhanced service trials or demonstrations also may be ordered using Standard and Expedited Service Intervals. The costs for Standard and Expedited Service Request Intervals shall be in accordance with the costs provided in the contract.

7.11.1 Standard Service Request Interval

Contractor shall provide County with a set of Standard Service Request Intervals for each type of service provided. Each Service Request that indicates the Standard Service Request Interval shall be completed within Contractor's agreed Standard Service Request Interval.

7.11.2 Emergency Service Request Interval

In the event of life or property threatening emergencies, County Program Manager or other specifically identified County staff, may require Contractor to complete a Service Request in the shortest possible time. County Program Manager may waive planned completion of other Service Requests during an emergency.

7.11.3 Expedited Service Request Interval

This situation is not an emergency but is one in which the Standard Service Request Interval would bring hardship to the user. The expedite condition may be requested any time during the Service Request process. When County formally requests an Expedited Service Request Interval, related expedite charges are committed even though County might subsequently cancel the order. Secondly, if Contractor does not meet the expedite date, related expedite charges do not apply.

7.11.4 Negotiated Service Request Interval

This situation involves an expedited service request date that is determined by negotiations between County and Contractor. This procedure will be utilized when County desires a shorter than Standard Service Request Interval and Contractor agrees to attempt to meet the compressed date with a Standard

Service Request Interval price. In this case, no expedite charges shall be applied.

7.11.5 Bulk Service Request Processing

Contractor shall provide the ability for County to submit requests for multiple services or features via a single Service Request, e.g., multiple service locations, multiple services at single location and multiple quantities of a single service or feature. Contractor shall be responsible for obtaining the unique order identifier for each of the components of the bulk Service Request.

7.11.6 Service Request Performance

Contractor shall adhere to the performance levels for all implementation activities as submitted in their proposal for standard service intervals, or as negotiated between County and Contractor for specific Service Requests during the term of the Contract. Service Requests for New or Enhanced Service Trials or Demonstrations

7.12 **Service Requests for New or Enhanced Service Trials or Demonstrations**

Contractor shall identify and notify County's Program Manager of any Service Requests it receives for services not included in the Pricing Schedule of the Contract. Contractor shall obtain written permission from County's Program Manager prior to conducting service trials.

7.12.1 Procedure for Trials

Contractor shall provide County's Program Manager a description of their procedures for ordering trials or new or expanded services following contract(s) award. A trial is defined as the use of proposed future enhancements by a County department that takes place for an agreed upon period of time, at agreed upon locations.

7.12.2 Trial Initiation

Contractor shall provide written notification to County's Program Manager prior to initiation of any trial program with any department. This notification shall include:

- the start date and duration of the trial;
- a copy of the cost estimate that Contractor gave to County department;
- the Paragraph of the contract service the trial proposes to enhance;
- an acceptance test plan.

County's Program Manager will respond with approval or rejection within fifteen (15) Business Days after receipt of the notification. If the trial is approved by County's Program Manager, Contractor shall not charge more than the cost estimate. Contractor shall report the status of all trials to County's Program Manager.

7.13 Acceptance of Services

After Contractor Transitions or installs service, County may, at its sole option, begin testing of the Service in accordance with the applicable acceptance test plan(s) developed pursuant to Subparagraph 7.12.2 (Trial Initiation) or, in the absence of such plan, in a manner consistent with technology industry testing practices, to determine that the service is performing in accordance with all applicable requirements of this SOW and Contract.

7.13.1 Acceptance Testing

The service shall be accepted by County when the applicable acceptance test plan has been successfully completed or, in the absence of such test plan, when County's Program Director determines, consistent with technology industry standards, that the service is operating properly. County will give Contractor notice of acceptance as provided in the applicable acceptance test plan or, in the absence of such test plan, within thirty (30) Days of the successful completion of testing. Should County not provide notice within (30) Days, it shall be deemed as accepted. Testing to ensure services continue to operate without deficiencies as additional sites are added shall be provided pursuant to this SOW. Contractor will not turn over service to County for purposes other than for testing prior to acceptance unless partial acceptance is defined and agreed upon by both County and Contractor in the applicable test plan, should a test plan exist.

7.13.2 Failed Acceptance Testing

Is a service has not successfully passed the applicable acceptance test, County's Program Manager will promptly notify Contractor in writing of such failure, specifying the manner in which the services failed. Contractor shall immediately commence such necessary corrections, repairs and modifications to the service as will permit the service to be ready for retesting. Contractor shall notify County's Program Manager when such corrections, repairs and modifications have been completed, and the acceptance test shall begin again. If, after the acceptance test has been completed for a second time, and the service again fails to pass the acceptance test, County's Program manager shall promptly notify Contractor in writing, specifying the manner in which the service failed. Contractor shall immediately commence such necessary correction, repairs and modification to the service as will permit the service to be ready for retesting. Such procedure shall continue until such time as County notifies Contractor in writing either (1) of the successful completion of testing, or (2) that County has made a determination that satisfactory progress toward successful completion is not being made, in which latter event County shall have the right to terminate the at-issue service.

7.13.3 Remedies for Failed Service

In the event of a failed service termination under Paragraph 12.0 (Performance Requirements Summary), Contractor shall reimburse County for any costs paid to Contractor for the trial services by County or at County's sole option any reimbursement due to it may be credited against other sums due and payable by County to Contractor.

8.0 BILLING

This Paragraph 8.0 (Billing) addresses the delivery of invoices and detailed billing data to County's Billing Manager and County departments. County's intention is for Contractor to provide a single invoice to County for all services centrally. County reserves the right to require Contractor to provide invoices directly to County departments. This Paragraph 8.0 also addresses Contractor resolving billing disputes, providing periodic traffic and budget forecasts, and maintaining detailed billing data for access by County. Contractor shall interface with County's web-based Telecommunications Expense Management System to provide the billing requirements.

8.1 Invoicing

Contractor shall provide a single invoice containing the actual charges for all services provided by Contractor in accordance with the contract pricing for services. The invoice shall consolidate all services for those users Contractor serves. Detailed billing data shall be accessible to County's Billing Manager at the same time as the Invoice is presented. Complete invoice and detailed billing data shall be presented no later than the 15th day following the end of the billing period, which should be a calendar month (1st day of the month through the last day of the month) unless agreed to otherwise by County's Billing Manager.

9.1.1 Any missing charges/accounts shall deem the Invoice and detailed billing data as incomplete. The incomplete portion of the invoices will not be approved by County for payment. The complete portion of invoices shall be paid pursuant to the time frames as defined in Paragraph 5.0 (Contract Pricing and Invoicing) of the base document of the Contract. Contractor shall present corrected invoice and billing data within two (2) billing cycles after County notifies Contractor of the incomplete billing data.

9.1.2 Contractor shall invoice for all services within ninety (90) Days after the services are rendered or 150 Days for any calling card usage. All charges not processed within ninety (90) Days shall be borne by Contractor without recourse to County unless a request for an extension is approved in writing by County's Billing Manager within this ninety (90) Day period.

8.2 Balancing of Invoice and Detailed Billing Data

Contractor's detailed bill data records shall balance to the corresponding monthly invoice. If a discrepancy is found, County will consider both formats incomplete. The incomplete portion of the invoices will not be approved by County for payment. The complete portion of invoices shall be paid pursuant to the time frames as defined in Paragraph 5.0 (Contract Pricing and Invoicing) of the base document of the Contract. Contractor shall present corrected invoice and billing data within two (2) billing cycles after County notifies Contractor of the incomplete billing data. All charges not billed within two (2) billing cycles after County notifies Contractor of the balancing discrepancy shall be borne by Contractor without recourse to County unless a request for an

extension is approved in writing by County's Billing Manager within this two (2) billing cycle period.

8.3 **Effective Billing Date (EBD)**

Contractor shall start billing for services on the starting EBD. The starting EBD shall be the date when the service is accepted (based on the successful completion of acceptance testing) but no earlier than the date requested in Paragraph 7.0 (Inventory and Order Management).

8.3.1 Initiation/Installation Charges

For service additions at a County facility where service is already being provided, the initiation/installation charge for the addition will be charged in its entirety in the first month following initiation/installation.

8.3.2 Service Termination

Contractor shall terminate billing effective upon County's requested date for service disconnection.

8.4 **Rates**

The rates for County services which are to appear on County's invoice and detailed billing data are set forth in Exhibit B-2 (Pricing Schedule for Long Distance Services).

8.5 **Invoice Content**

The invoice shall consist of a summary section and a detailed section.

8.5.1 Summary Section

Contractor shall ensure that the summary section of the invoice contains, at a minimum, the following information:

- Period of time covered by the invoice
- Total current charges by charge category, e.g., monthly, usage, taxes
- Previous statement balance
- Current month payments
- Current month adjustments
- Balance due

8.5.2 Detailed Section

The detailed section of the invoice shall contain the call detail and recurring, nonrecurring and service initiation charges at the Working Telephone Number level. As currently envisioned, the required data elements in the detailed section of the report shall include, but are not limited to:

Adjustments	Administrative Charges
Bill Start Date	Bill Stop Date
Call Connect Date & Time	Call Cost Amount
Call Disconnect Date & Time	Call Minutes
Call Volume Kilo-segments	Called City
Called Number	Called State
Caller Identification	Calling City
Calling Number	Calling State
Charge Type	Circuit Number
Circuit Type	Connect Time
Credits	Customer Acceptance Date
Debits	Disconnect Time
Dispute Number	Features
Service Request Code	Charge Description
Mailbox User Name	Mailbox – Number of Messages
Monthly Recurring Charge	Service Initiation Charge
Service Request Number	Service Type
Special Charges	Surcharges
Tax Amount	Usage Rate
Charge Date	Contractor Name
Purchase Order Number	Call Quantity

8.5.3 Detailed Billing Data

Contractor shall provide County access to detailed billing data which will be processed by County's Telecommunications Expense Management System. As currently envisioned, the required data elements for the detailed billing data shall include, but are not limited to:

Adjustments	Administrative Charges
Bill Start Date	Bill Stop Date
Call Connect Date & Time	Call Cost Amount
Call Disconnect Date & Time	Call Minutes
Call Volume Kilo-segments	Called City
Called Number	Called State
Caller Identification	Calling City
Calling Number	Calling State
Charge Type	Circuit Number
Circuit Type	Connect Time
Credits	Customer Acceptance Date
Debits	Disconnect Time
Dispute Number	Features
Service Request Code	Charge Description
Mailbox User Name	Mailbox – Number of Messages
Monthly Recurring Charge	Service Initiation Charge
Service Request Number	Service Type
Special Charges	Surcharges
Tax Amount	Usage Rate
Charge Date	Contractor Name
Purchase Order Number	Call Quantity

8.5.4 Invoice and Detailed Billing Data Changes

Contractor shall provide a sample of the changed invoice/detailed billing data to County's Billing Manager, to facilitate the reconfiguration of their systems, as soon as possible, in advance of any change. Invoice or detailed billing data format/content changes initiated at the direction of Contractor shall be at no cost to County.

8.5.5 Special Billing Arrangements

Any temporary or intermittent deviation or modification of the billing procedures set forth in Paragraph 8.0 (Billing) shall be considered a special billing arrangement. In the event Contractor believes a special billing arrangement is necessary, Contractor shall submit requests for special billing arrangements to County's Billing Manager for approval. Contractor shall not implement the requested special billing arrangement prior to receipt of written approval from County's Billing Manager.

8.5.6 Billing for Added Service Offerings

In the event additional service offerings are added to the Contract, Contractor shall coordinate the billing arrangements with County's Billing Manager for each added service in advance of providing that service.

8.5.7 Data Exchange

Contractor shall provide County with electronic access to all detailed billing data in a mutually acceptable format. Contractor will store/house the detailed billing data in a data warehouse for receipt by County. County may obtain the detailed billing data by accessing the data warehouse. Appropriate security features shall be provided to ensure only authorized County staff and managers can access the detailed billing data.

8.5.8 Data Retention

All detailed billing data, hard copy letters, memorandum, credits and adjustment data pertaining to the billing of Contractor services shall be retained by Contractor and made accessible to County as directed in Paragraph 8.37 (Record Retention and Inspection/Audit Settlement) of the base document of the Contract.

8.5.9 Tax Exempt Status

Contractor shall ensure that County's accounts are appropriately identified with Tax Exempt status.

8.5.10 Charges from other Vendors

Any charges, not requested by authorized County personnel, appearing on the invoice or the detailed billing data from Vendors other than Contractor will be considered abuse and County is not responsible for those charges. (For example: the PIC is changed by non-authorized County personnel; non-contracted charge amounts incurred on that line will not be the responsibility of County)

8.5.11 Unassociated Billing Management

Should instances arise where unassociated bills are generated by Contractor, Contractor shall be responsible for all investigation and resolution to get the bill(s) included on the summary account. Contractor shall not be responsible for any Unassociated Billing incurred on a specific line prior to the Transition PIC conversion of that line. Contractor shall not control or be responsible for County end user 1010XXX dialing or dial around.

Detailed billing information shall be available to County upon request for Unassociated Billing charges.

Contractor shall proactively search all lines and identify, resolve and re-rate any incorrectly PIC'd lines.

Contractor shall provide all resources required to manage the billing accounts and any billing anomalies therein. Unassociated billing or any other billing charges will be carried over to the summary bill, once resolved, and will not be paid by County separately.

Contractor shall resolve all Unassociated Billing issues within two (2) billing cycles from the time of notification by County and will reflect the change no later than the third billing cycle invoice. Bills added to the summary account must be re-rated to the Contracted rate by Contractor.

Contractor shall meet with County to report on performance of billing, including metrics of bill management and verification of corrected rates on a quarterly basis.

8.5.12 Collections

Contractor shall ensure that no past-due County accounts are sent to outside collection agencies for collection. All Contractor collection efforts will be conducted directly with County by Contractor.

8.5.13 Rate Validation/Invoice Accuracy

Contractor shall submit a Rate Validation reporting design to County's Billing Manager for approval within sixty (60) Days after Contract effective date. Using the approved report, Contractor shall conduct quarterly reviews as of March 31, June 30, September 30, December 31, of all invoices sent to County to ensure rates are accurate. A written report of the review shall be provided to County's Billing Manager within fifteen (15) Days of completion of the quarterly verification. Any inaccuracies found during the review shall be corrected and adjustments made on the following bill cycle.

8.5.14 Billing Adjustments

County shall be reimbursed for errors in billing that are the responsibility of Contractor. County shall be reimbursed for all corrections back to the initial point

in time of error, but not prior to the point in time Contractor becomes responsible for the service.

Contractor shall ensure that all billing debits and credits, including associated taxes, are detailed on the invoice and the detailed billing data at the billing telephone number (BTN) level and, if possible, the station level. If an adjustment is found to exceed \$20,000, Contractor shall notify County's Billing Manager before processing the adjustment to the invoice. No separate rebates are allowed.

Contractor shall provide to County's Billing Manager a monthly summary report of credit and debit billing adjustments. The summary shall include, but not be limited to, the number and types of adjustments identified, the number of adjustments resolved, and the number and types of adjustments that are outstanding.

8.5.15 System Verification Testing

Contractor shall provide a Test and Acceptance Plan that shall specify the test procedures for verifying all County billing requirements, as specified in this Paragraph 8.0 (Billing). The test and acceptance plan shall be submitted to County's Program Manager for approval. The plan shall be submitted no later than sixty (60) Days prior to the scheduled start of billing transition. The Test and Acceptance Plan shall include, but not be limited to, the following:

- Assuring that Service Request data is transmitted through County's Telemanagement Order System to Contractor's billing system and then to the invoice. The detailed billing data must be accessed by County and transmitted to County's Telecommunications Expense Management System. The data must be successfully processed by the billing module of County's telecommunications expense management system.
- Initiating pricing tests for all services according to sample data furnished by County's Program Manager.

Following approval of the test and acceptance auditing plan by County's Program Manager, Contractor shall participate in an acceptance test within ninety (90) Days. No County initiated Service Requests will be processed for billing until County's Program Manager certifies that Contractor's billing deliverables meet the approved criteria agreed upon in the test and acceptance auditing plan. County's Program Manager reserves the right to require the development of additional test plans and/or to conduct joint testing with Contractor's billing system during the life of the contract.

9.0 TRANSITION

Contractor is required and solely responsible for managing the complete Transition process of existing County services from present provider to Contractor facilities and billing with minimal disruption of service, unplanned changes of features, telephone number changes, billing

accuracy or financial impact of any kind. Contractor has the responsibility to complete the Transition within a prescribed transition schedule.

Contractor shall provide Interoperability with the Public Switched Telephone Network (PSTN) and IP Networks. Contractor is obliged to work cooperatively with County's Local Exchange Contractor (LEC) to ensure uninterrupted service and has sole responsibility to avoid any Unassociated Billing that may result from any Transition shortfalls. Any Interoperability problems resulting from the Transition shall be resolved by Contractor, who shall provide the necessary technical support, development, operations, procedures, software, and equipment to resolve the problems at no cost to County.

Contractor shall bear all costs associated to the Primary Interexchange Carrier (PIC) for all County telephone lines during the transition period and throughout the term of the Contract.

9.1 Transition Schedule

Contractor shall complete the Transition of all tasks and existing services to Contractor's services within seven (7) months from agreed upon start of Transition. County shall reasonably cooperate in all ways necessary to accomplish this time frame. Any delay by County shall extend Contractor's performance period by a period equal to the time lost by reason of County's delay.

9.2 Transition Plan Strategy

Contractor shall develop and provide to County a final updated and comprehensive Transition Plan no later than sixty (60) Days after Contract effective date.

9.2.1 Implementation of Service

Contractor shall define the Transition of all services and support functions being Transitioned and describe the cutover strategy and options that Contractor adopts for Transitioning existing services to Contractor's services and networks. The following services and support functions are to be addressed:

- Services and Product Implementation:
 - On-Net/Off-Net Long Distance
 - Operator Services
 - Toll Free Calling
 - Data Services
- Network Configuration/Class of services/Inventory Review procedures.
- Inventory Conversion. Methods for assignment of PIC code for long distance and the generation of an authorization code file.
- Service Request processing support as required in Paragraph 7.0 (Inventory and Order Management).
- Billing Support as required in Paragraph 8.0 (Billing)
- Help Desk Requirements as required in Subparagraph 10.1.10 (Trouble Reporting)
- Training Requirements as required in Paragraph 9.6 (Training)

- Account management support
- The possibility of operating services in parallel, i.e., full service operation on departments' existing network(s) with associated operation of test traffic on Contractor's new network(s).
- Procedures, if needed, for services to be temporarily returned to their original networks and configurations prior to the services being accepted on Contractor's networks.
- Impact, if any, on users regarding operations of their services or networks during the cutover activities.
- Approach to minimize any impact and to make the Transition as transparent as possible to the users. If any disruption to users' services or networks is envisioned, the strategy shall describe the degree of these disruptions, and suggested options to effectively deal with them.
- Dependencies on the sequence with which services are cut over to Contractor's networks and services. If the establishment of a service on Contractor's network is required before any other services are cut over to the same network, the strategy shall indicate this situation and be reflected in the cutover scheduling contained within the Transition Plan.

The successful accomplishment of activities described in the Transition Plan shall be the mutual responsibility of both parties and all dates and other requirements contained in the Transition Plan shall constitute a firm commitment by County and Contractor. Contractor shall initiate and complete all Transition activities outside of normal office/business hours unless otherwise arranged with, or requested by, County Program Manager or other authorized representative. All Transition activities shall be completed within twenty-four (24) hours after being initiated unless special approval is obtained in advance from County Program Manager. Any change from the schedule in an approved Transition Plan must be approved in writing by County's Program Manager.

9.2.2 Transition Management

Contractor shall provide an initial Transition Management Plan, sixty (60) Days after contract effective date, which shall serve as a progress report and master log as well as serve as a working blueprint for day to day activities by Contractor during the Transition of services at individual users' locations. Contractor shall be responsible for reviewing and updating the Transition Management Plan, and make plan available electronically and update weekly, organized by month.

The Transition Management Plan shall detail all schedules, exceptions, and deviations from the generic procedures in the Transition Plan. The Transition Management Plan shall contain cutover contingency plans for each facility and/or service at which services are Transitioned to Contractor's networks and services.

Contractor shall meet with appropriate County department representatives as requested by County to present progress and issues in completing the Transition schedules and to obtain approval for any type of Transition changes as they occur. Contractor shall be responsible for coordinating all meetings including

establishing a meeting's agenda and supplying notes as necessary to document actions, assignments and due dates

9.3 **Test Acceptance Plan**

Contractor shall provide County with a Test Acceptance Plan within ninety (90) Days after contract effective date. Contractor's Test Acceptance Plan shall describe the testing related to Transitioning of services onto Contractor's services and networks from the existing service providers. Contractor's Test Acceptance Plan shall detail specific plans for testing and accepting functions including but not limited to the following:

- Toll Free conversion/RESPORG
- PIC Transition assurance
- Authorization/Calling Card activation assurance
- Order Processing between County and Contractor
- Billing Support functions
- Help Desk Support functions

Contractor Program Manager shall provide detailed documentation to notify County Program Manager at least five (5) Business Days prior to Transition activities beginning at a location (unless County alters the original cutover schedule), including the following information:

- Agreed-upon date and time for the activities.
- The quantity and type of new or modified circuits and facilities required at the location.
- The circuit numbers of the new or modified circuits and access facilities.
- Requests for assistance required by Contractor from the individual user location in order to complete Transition activities, including actions such as unlocking telephone rooms and providing special security passes for personnel.
- Procedures to be followed for trouble reporting during the Transitioning activities.

Contractor's Program Manager shall notify County's Program Manager in writing of the approved test schedule, Transition date and time for each location. This coordination effort includes scheduling visits, making any requests for assistance from the user location, and verifying with the user location that schedules have been adhered to.

9.4 **Connectivity**

During the period in which services are being Transitioned from current service providers to Contractor's services, Contractor shall maintain continuity of those services already Transitioned to Contractor's network. The exception is when the services are physically being transferred.

9.5 Pre-Transition

All Pre-Transition tasks shall be as set forth in a Pre-Transition Tasks Schedule. Proposer shall submit a Pre-Transition Tasks Schedule to County for approval. The Pre-Transition Task Schedule shall include but not be limited to:

9.5.1 Network and Facility Inventories

Conduct an inventory of lines and services related to the assignment of long distance services. Contractor shall obtain information regarding County inventories, which has an impact on the delivery of service(s) to that location (i.e. data services). Contractor's Program Manager shall provide this information in a database electronically transmitted to County.

9.5.2 Verification of Information

Contractor shall work with County Program Manager to establish a freeze date after which no changes that would affect Transition will be made at a location. After this freeze date, Contractor shall verify, with County Program Manager, all information Contractor requires for the proper and efficient Transition of services at that location.

9.5.3 Notification of Completion of Transition Activity

Contractor Program Manager shall inform County Program Manager when Transition activities, including all required Contractor performed testing, are completed.

9.6 Training

Contractor shall develop and implement a training program for County telecommunications staff that will thoroughly address the features and operation of Contractor's products and services provided herein.

Contractor shall conduct specific training classes at both Contractor's and County's facilities. All training classes will address ordering, trouble reporting, as well as the course of action the entity will take in order to handle credit adjustments. Contractor shall provide a Training Plan covering at least the following:

- How to use long distance services and related features
- How to use calling VRA/authorization cards
- Toll Free Services
- Fraud detection and prevention methods

Contractor shall provide County's Program Manager training materials offered prior to these materials being used for training. Whenever possible, Contractor shall provide training at user sites or within commuting distance of user sites. Contractor shall provide County the ability to request additional training through the standard Service Request process.

Contractor shall support user forums, conferences, and product shows as requested by County's Program Manager in an effort to support County departments in their request of demos, presentations, etc.

9.6.1 County's Program Manager and Staff

Contractor shall provide training to County's Program Manager and staff on all administrative and operational support systems including all features and functions of an on-line system. This training shall provide initial instructions for the operation of these systems and additional training on the systems shall occur whenever any of the systems change or on an annual basis, whichever comes first. County's Program Manager will designate the number and names of the individuals who will receive this training.

9.6.2 Additional User Training

Contractor shall provide various types of telecommunications training to County users, at County's request. Various training includes:

- All Contractor supplied services
- Telecommunications Technical Training

Contractor shall update training documentation as required and provide additional training/retraining upon request by County. A Training Plan for new staff and continuing in-service training will be developed in cooperation with County's Program Manager and staff and submitted by a mutually agreed upon date.

10.0 ON-GOING SUPPORT SERVICES

10.1 Network Fault Management/Help Desk

Contractor's NMS shall inform County of service affecting events, and contact County's Network Control Center. Contractor shall notify County minimally within five (5) business day's of any planned maintenance for service affecting events such as:

- Outages of network switches or facilities, including network controls initiated by Contractor for DS3 circuits or above (planned outages)
- Outages causing site impairments and/or isolations from any Contractor service
- Outages/failures of peripheral network elements, such as dedicated access facilities (facilities that provide a direct link from the enterprise CPE to the nearest Long Distance Contractors switch) and interfaces to the various types of County equipment for all services, and external interfaces and facilities to other networks supporting designated services
- Any hazardous condition that may cause or has caused loss of service or any network controls initiated by Contractor

10.1.1 Data Reported

Contractor shall provide an informational interface to County's network control center's NMS. Events shall be reported to the network control centers on a real time basis. The message shall include, at minimum, the following:

- A. Event description (e.g., loss of signal, link failure, circuit outage)
- B. Event date and detected time
- C. Service affected by the event
- D. Information about detection of alarms of peripheral network resources indicating whether internal or external will be submitted within sixty (60) Days after the Contract effective date.

10.1.2 Department Advisement

Contractor shall establish an e-mail confirmation distribution to inform County's CAC and County's Program Manager of major outages or potential hazards to service on a real-time basis via the Internet. This distribution shall also be utilized by Contractor to present clearance of these same situations. Contractor shall also leave verbal notifications with the Program Manager on outages and restores. Contractor's Program Manager will work with County's Program Manager to develop reports for collected fault management data.

10.1.3 Reporting

Contractor's NMS shall process and format collected fault management data into scheduled and ad hoc reports at the request and/or direction of County Program Manager. Contractor's Program Manager shall work with County's Program Manager to develop said scheduled reports.

10.1.4 Network Configuration Management

Contractor shall obtain written approval from County's Program Manager for all changes in network and related support systems (hardware and software) that could affect users. Contractor shall make best efforts to provide notification to County's Program Manager ten (10) Business Days in advance, however, in no event should such notification be given in less than five (5) Business Days of any Contractor network and related support systems' configuration changes or servicing affecting or likely to affect users' services and resources. If it is an emergency notification, Contractor shall inform County as far in advance as possible.

10.1.5 Network Account Management

Contractor's network account management system shall provide for the generation and distribution of usage data to support County monitoring for detection of fraud, misuse and abuse; Contract compliance; and telecommunications planning. Contractor shall establish and implement procedures for detecting apparent fraudulent occurrences and to promptly report these cases to County's Program Manager.

10.1.6 Network Performance Management

Contractor's NMS shall monitor and control Contractor's network performance and the quality of Contractor's services and features provided.

10.1.7 Disaster Preparedness and Response

Contractor shall maintain and provide capabilities, resources, and skills to support their role in emergency and disaster responses, as reasonably requested by County Program Manager. Emergency services shall be uninterrupted and available twenty-four (24) hours a day, seven (7) days a week during the established emergency period.

A. Restoration/Routing Priority

Contractor shall provide priority restoration services for routine operations as well as for emergencies to be restored immediately or as soon as possible. Contractor shall restore service consistent with the essential services identified by County as well as statutory and regulatory requirements, and Contractor's policies and contractual obligations to other similarly situated customers. This may, where feasible, require the installation of temporary or work around facilities and equipment. County shall provide the priority list to Contractor. Contractor's Disaster Routing Service shall allow County to choose and change, at no cost, the three (3) destination options County elects to receive top activation priority at any given time. In addition, County can change the designation at anytime via telephone call to the Disaster Routing Service access number.

B. Telecommunications Service Priority (TSP)

The Telecommunications Service Priority (TSP) Program provides national security and emergency preparedness (NS/EP) user priority authorization of telecommunications services that are vital to coordinating and responding to crises. As a result of hurricanes, floods, earthquakes, and other natural or man-made disasters, telecommunications service contractors may become overwhelmed with requests for new telecommunications services and requirements to restore existing telecommunications services. The TSP Program provides service contractors with a Federal Communications Commission (FCC) mandate for prioritizing service requests by identifying those services critical to NS/EP. A telecommunications service with a TSP assignment is assured of receiving full attention by the service contractor before a non-TSP service.

C. Command Post Services

Contractor shall exercise every reasonable effort to implement InterLATA services within one (1) hour notice anywhere in the Southern California in cases deemed by County as emergency. This will require Contractor to work with various LECs to coordinate services including business or centrex-type lines to maximize interLATA access for Sheriff and Fire field command posts.

D. Emergency Operations Center

Contractor's Program Manager will work with County's Program Manager to develop a notification plan within sixty (60) Days of Contract award for County in case of a disaster. Contractor's staff, as identified in Exhibit F, Contractors Administration, may be requested to report to County Emergency Operations Center (County EOC, currently located at 1275 N. Eastern Avenue, Los Angeles) in case of a widespread disaster or participate in an on-going preparedness exercise. Contractors designated Service Managers will be available twenty-four (24) hours a day, seven (7) days a week to support County for any emergency or service need. Contractor's designated staff shall have the authority to direct the deployment of Contractor resources during emergency situations as requested by County.

10.1.8 Trouble Reporting

Contractor shall establish and implement procedures for trouble collection, entry, tracking, analysis, priority classifications, and escalation for all services to ensure that problems are resolved within the specified time frames. These procedures shall be approved in writing by County and at minimum shall address:

- Centralized trouble reporting.
- Identifying and clearing troubles including support of County identified mission-critical services.
- Working with County technicians and Contractor's technicians to resolve problems.
- Maintaining audit trails of trouble resolution activities.
- Responding to inquiries on trouble resolution status.
- Providing trend analysis and sorting of trouble reports and administrative reporting.
- Providing trouble escalation for normal and emergency events.
- Providing County technical personnel direct access to Contractor's technical personnel for joint trouble shooting activities.

A. Entering and Handling Trouble Reports

Contractor must report all performance problems to County's Help Desk. Help Desk calls to Contractor's trouble reporting center shall be answered by Contractor's personnel within fifteen (15) seconds for ninety-five percent (95%) of the troubles reported.

Contractor shall perform the following activities regarding the handling of trouble reports:

1. Identify each reported trouble via a unique trouble report number assigned by County's Help Desk.
2. Maintain an audit trail of trouble resolution.
3. Perform analysis of trouble data, and provide to County's Program Manager
4. Categorization of trouble data by failure type

5. Outage reports, percent availability
6. Mean time to restore
7. Perform special analysis of trouble data for an individual agency department or network by service, symptom, and circuit, as requested.
8. Maintain an archive of trouble reports and their resolutions for the duration of the Contract.
9. Use the same trouble reporting system for initiating its own trouble reports if detected by Contractor before being reported by County.
10. Allow twenty-four (24) hours a day, seven (7) days a week access to County Help Desk for trouble reporting via Contractor established Toll Free number or email system.

B. Feedback

Contractor shall provide status reporting to County Help Desk of all trouble and abuse incidents, location, and resolution. Contractor shall verbally report the status of trouble resolution efforts every two (2) hours unless otherwise authorized in writing by County's Program Manager. Contractor shall report status resolution efforts at least hourly for all services classified as mission critical by County's Help Desk.

C. User Trouble Report Data Access

Contractor shall document information on all reported service interruptions or outages that qualify for County monthly credit adjustments. These interruptions or outages shall include:

1. Call interrupts
2. Unsatisfactory transmission performance
3. Dialing or call set-up errors.
4. Busy or out of service circuits

Contractor's data access capability shall allow County to obtain user specified trouble reports, and provide these reports as scheduled or requested by County's Program Manager.

D. Trouble Reporting Performance Measurements

Contractor shall provide a performance measurement summary of all trouble reports for County by type of service, network, and department on a monthly basis, and in a rolling 12-month comparison if requested by County.

10.2 Meetings

10.2.1 Monthly Management Meetings

County and Contractor shall meet on a monthly basis to review service levels, resolve any issues pertaining to Contractor performance and exchange information on any new projects, programs, or services. County will arrange for a meeting location acceptable to County and Contractor, prepare an agenda for

each meeting, and record and publish minutes and assignments to all the participants.

10.2.2 Monthly Operational Staff Meeting

Contractor staff working on County services shall meet with County's telecommunications staff on a monthly basis to review procedural issues, status of current project, programs, orders, and level of service reports. The meeting shall cover cost allocation or billing problems, introduce new projects and programs or services. County will arrange for a meeting location acceptable to County and Contractor, prepare an agenda for each meeting, and record and publish minutes and assignments to all the participants. County reserves the option to combine the Monthly Operational Staff Meeting with the Monthly Management Meeting.

10.3 **Security**

Contractor shall provide basic security related service within the infrastructure of Contractor's network. Within ninety (90) Days of the Contract effective date, Contractor shall submit to County's Program Manager a plan that addresses its solutions for providing the security requirements below. Contractor shall submit, as part of its security plan, a procedure for incorporating new standards into Contractor's operations as they become accepted. Contractor shall make copies of its current plan available to County Program Manager upon request.

10.3.1 Identification and Authentication

Contractor shall provide mechanisms to identify and authenticate County and Contractor personnel authorized to access network management information. Contractor shall provide access controls to ensure that only authorized personnel have access to network management information.

Contractor shall provide access controls to protect the NMSs and switching systems from attacks via publicly accessible ports on "end" devices such as PBXs, routers, packet switches or from ports on end devices that may be accessed via the PSTN (e.g., maintenance ports).

10.3.2 Alarms and Audit Trails

Contractor shall be responsible for identifying, reporting, and resolving all security violations and breaches. Contractor shall report all security breaches to County's Program Manager.

Contractor shall provide audit and alarm mechanisms that log all security related events and report critical events to County immediately, in no case longer than one (1) hour. Contractor shall maintain audit trails on all security related events for a minimum of one year or longer if such records become evidence in a legal proceeding.

Contractor shall provide County with procedures and tools to detect suspected abuse or intrusions to the network and set off alarms for those events that require immediate attention.

10.3.3 Ongoing Security Improvements

Contractor shall incorporate new security related standards for telecommunications transmission and switching technologies.

Contractor shall work with County on an ongoing basis to certify and enhance security. Contractor shall describe planned enhancements to security of the network and shall be updated and provided annually after contract award.

10.3.4 Timely County Notification

Contractor shall notify County as directed within fifteen (15) minutes of becoming aware of a security alarm or incident that represents 1) actual or potential unauthorized intrusion, 2) a "hacker" who may have gained access to sensitive County or network management information, or 3) the actual or potential disclosure of sensitive or confidential information. This notification requirement applies regardless of the origin of the incident, fault of any party, or exploits of weaknesses in coding. County is to be held harmless if damages result from Contractor's failure to provide secure services pursuant to the Statement of Work. Contractor is not responsible for security breaches resulting from any compromise of County controlled equipment, systems, locations or networks. County shall notify Contractor immediately of any such breach if the breach has the reasonable potential of impacting Contractor's provision of service under this Contract.

10.4 **Customer Service**

Contractor shall establish a Toll Free number, at Contract award, to act as a single point of contact for all County required customer service requirements. The single point of contact shall administer and support customer service functions, including:

- Providing price quotes.
- Accepting and implementing Service Requests.
- Accepting, acting, and providing status on user trouble reports.
- Accepting and acting on user complaints and inquiries.
- Providing training, manuals, and other documentation.
- Providing technical support in response to user inquiries.
- Providing authorization and calling card codes.

10.4.1 Establishment of Customer Service Office

Contractor shall establish, operate and appropriately staff a Customer Service Office within ten (10) Business Days after Contract effective date to provide Service Request and complaint services to County.

The Customer Service Office shall conduct business Monday through Friday 8:00 a.m.-5:00 p.m. PST. Contractor shall provide twenty-four (24) hours a day,

seven (7) days a week contact for emergency requests. Contractor's customer service staff shall be proficient in all Contractor's services and features and have the authority to resolve service and billing issues.

Contractor customer service office may assign different Toll Free telephone numbers for customer service activities. Contractor Service staff shall return calls received from County users within one Business Day or less. Contractor shall provide voice mail access for off-hours communication.

10.5 Reports

10.5.1 Fraud Reports

Contractor shall develop, within three months of Contract award, and prepare on an individual case basis monthly recurring reports to detect fraudulent activities. Reports shall include most frequently called numbers (with filters to eliminate legitimate usage) and longest holding times to and from lines. Contractor shall also provide complete call detail reports within five (5) Business Days of request for any lines or services having been identified as having possible fraudulent activity.

10.5.2 Standard Reports

Reports shall be generated on a monthly basis and contain information chronologically sequenced in specific format suitable for electronic transfer, and shall be submitted to County Program Manager by end of same day. Reports shall be delivered at County's discretion via electronic mail or web based retrieval. Contractor reports include: Toll Free Busy Hour Reports, Daily Trunk Group Report, Hourly Trunk Group Report, Traffic Reports, Procedural Reports and Recent Call History Reports.

Contractor shall provide caller information reports, upon request, containing the ANI of all callers to a given 800 number. In those instances where ANI is not available, the area code of the caller shall be provided. When requested, Contractor shall provide real-time ANI information to County for 800 calls.

10.5.3 Authorization Code Management Reports

Contractor shall provide monthly reports upon County's request of calls made using authorization codes for one (1) or more months. This call detail information shall be supplied via CD ROM, or on-line in Excel and/or text format. The data shall include authorization codes, usage, department, on net/off net usage, and unused authorization codes. County will provide employee names and their assigned authorization codes to Contractor on a monthly basis. Contractor shall include the provided information to produce the required reports.

10.5.4 Service Metrics Reporting

Contractor shall provide monthly performance metrics reports to County for the items set forth in Technical Exhibit 2 (Performance Requirement Summary (PRS)). These reports shall be produced by and discussed in the monthly account management meeting.

10.5.5 Individual Case Basis Reports

Contractor shall provide reports as required by County on an individual case basis as mutually agreed. County can specify the frequency and delivery dates for these reports as well as the delivery method.

11.0 FRAUD

11.1 Fraud Control Services

Contractor shall have an active fraud control service. Service shall be in operation twenty-four (24) hours a day, seven (7) days a week, and shall automatically monitor County's usage patterns and detect possible fraudulent use of County telecommunication Services. Contractor shall notify County Program Manager or designee immediately upon detection of any possible misuse, abuse, or fraud.

11.2 Traffic Monitoring

Contractor shall operate real time automated tools for the monitoring of all traffic activity on all County lines for possible fraudulent use. Contractor shall monitor traffic detail for all outgoing LATA toll, InterLATA toll, International Calls, all calling card calls, and 800/888 incoming calls.

11.3 Toll Free Detection

Contractor shall establish thresholds in their monitoring systems to detect activities such as major increases in traffic after hours or weekends from any line, any abnormal increases or peaks in traffic from any line during the Business Day, increase or abnormally high calling to particular numbers or areas, new or abnormally long holding times for calls from any line or to any number or area, increases in the number of calls or the holding time for incoming calls to any County line or group of lines, the simultaneous use of the same authorization code number or calling card number, increase or abnormally high number of calls from an authorization code number or calling card number.

11.4 Spending Cap

County reserves the right to establish an optional monthly spending limit for charges to individual calling cards. County shall provide Contractor with reasonable advance notice of the spending limits and the requested start or change date. Any card that reaches the established limit shall be disabled by Contractor immediately. Contractor shall notify the Program Manager whenever a calling card is disabled for over limit charges.

11.5 Notification

Contractor shall establish with County a notification policy and procedure to alert County when possible fraudulent activities are detected. The policy and procedure shall include:

- Thresholds where Contractor is authorized to immediately disconnect service and/or block calling privileges and then notify the authorized County staff of the action,
- Thresholds where Contractor immediately notifies County staff of a possible problem for the user to investigate and determine appropriate action, and
- Thresholds where County and Contractor will continue to monitor and investigate.

11.6 Prosecution

Contractor shall assist law enforcement authorities in investigation and prosecution of any and all individuals responsible for fraudulent activities using County telecommunications services.

11.7 Education

Contractor shall provide on-going education to County telecommunication staff on the methods of fraud and misuse detection, prevention and identification of areas of vulnerability, and recommended alternatives and solutions. Contractor shall also provide on going educational presentations and material to educate County employees on how to avoid becoming the victim of fraudulent telecommunication activities.

11.8 External Information Sources

Contractor shall subscribe to and monitor fraud information bulletins, which identify current telephone numbers that should be blocked and area codes/prefixes/office numbers that originate high volumes of fraudulent traffic. This information shall be shared with County and shall be implemented in the call blocking controls.

11.9 Call Control Services

Contractor shall provide controls to minimize abuse and fraudulent use of County's telephone services. Contractor shall automatically implement controls whenever a new line is installed, moved, or re-arranged. Contractor system shall validate authorization codes to allow or reject the dialed call.

11.10 Fraud Reports

Contractor shall develop, within three months of Contract award, and prepare on an individual case basis monthly recurring reports to detect fraudulent activities. Reports shall include most frequently called numbers (with filters to eliminate legitimate usage) and longest holding times to and from lines. Contractor shall also provide complete call detail reports within five (5) Business Days of request for any lines or services having been identified as having possible fraudulent activity.

11.11 Abuse, Misuse and Fraud Plan

Contractor shall submit an Abuse, Misuse and Fraud Plan to County specifying the monitoring and threshold notification alarms for approval by County thirty (30) Days after

transition to Contractor's new long distance platform. Once accepted, this document may be changed at any time by mutual agreement of both parties to reflect new threats, techniques and responses needed to keep the monitoring effective and current.

11.12 Fraudulent Call Liability

County shall not be financially liable for any calls that have been identified as being fraudulent in origin by County and Contractor; provided, however, that County will be liable if fraud occurs and County is at fault, including any misuse or abuse by its employees and contractors.

11.13 Call Trace Service

Contractor shall provide an immediate call trace service upon request of the authorized County staff.

12.0 PERFORMANCE REQUIREMENTS SUMMARY

Technical Exhibit 2 (Performance Requirements Summary (PRS)) lists required services that will be monitored by County during the term of this Contract. All listings of services used in the PRS are intended to be completely consistent with the Contract and the SOW, and are not meant in any case to create, extend, revise, or expand any obligation of Contractor beyond that defined in the Contract and the SOW. In any case of apparent inconsistency between services as stated in the Contract and the SOW and the PRS, the meaning apparent in the Contract and the SOW will prevail. If any service seems to be created in this PRS which is not clearly and forthrightly set forth in the Contract and the SOW, that apparent service will be null and void and place no requirement on Contractor. All requirements in the PRS will be measured and reported on a monthly basis unless otherwise identified. The assessments will be paid by Contractor quarterly. Financial penalties will be applied once per failure. In the event a failure involves more than one PRS, Contractor will only pay the PRS with the highest financial remedy; provided that, at no time will the total cash refund due County for any given month for a single circuit, service or facility exceed 100% of the monthly recurring charge for that circuit, service or facility. Should contract standard not be met for any service requirement for an entire quarter, Contractor's Program Manager shall manage the process until such time the service level meets contract requirements for no less than a quarter period of time. Additionally, when Contractor's performance does not conform to the requirements of the PRS and/or the Contract, County will have the option to apply the following non-performance remedies:

- 12.1. Require Contractor to implement a formal corrective action plan, subject to approval by County. In the plan, Contractor must include reasons for the unacceptable performance, specific steps to return performance to an acceptable level, and monitoring methods to prevent recurrence.

--- End Long Distance Services Statement of Work---

EXHIBIT A-2: STATEMENT OF WORK FOR LONG DISTANCE SERVICES
TECHNICAL EXHIBIT 1
LIST OF DELIVERABLES

DELIVERABLE	STATEMENT OF WORK REFERENCE	DUE or START DATE	DEDUCTIONS/FEEES TO BE ASSESSED
Quality Control Plan	SOW Paragraph 2.0	Date to be agreed	\$100 per day late
Training Plan	SOW 9.6.2	Date to be agreed	\$25 per day late
Standard Service Request Intervals	SOW 7.11.1	Date to be agreed	\$25 per day late
Billing System Verification Testing	SOW 8.5.15	60 days prior to start of billing transition	Not Applicable
Transition Plan	SOW 9.2	Contract Effective Date + 60 days	\$250 per day late
Transition Management Plan (initial)	SOW 9.2.2	Contract Effective Date + 60 days	\$100 per day late
Test Acceptance Plan	SOW 9.3	Contract Effective Date + 90 days	\$100 per day late
Pre-Transition Task Schedule	SOW 9.5	Date to be agreed	Not applicable
Disaster Preparedness Response Notification Plan	SOW 10.1.7	Contract Effective Date + 60 days	\$25 per day late
Security Requirements Plan	SOW 10.3	Contract Effective Date + 90 days	\$250 per day late
Customer Service Office	SOW 10.4.1	Contract Effective Date + 10 days	\$25 per day late

EXHIBIT A-2: STATEMENT OF WORK FOR LONG DISTANCE SERVICES
TECHNICAL EXHIBIT 2
PERFORMANCE REQUIREMENT SUMMARY (PRS)

STOP CLOCK CONDITIONS

Stop clock conditions include, but are not limited to:

- Waiting for after-hours test or customer release.
- Time after a circuit has been restored, but end user requests ticket remain open for observation.

Inside Wire problems:

- Inside wire installer other than AT&T contracted to a building or campus.
- Conduit congestion.
- No riser cable.
- Additional time is required to approve inside wire installation.
- Trouble caused by power fluctuation or failure on the customer premises.
- Any site that requires additional AT&T facilities.

Contact/access problems:

- Access not arranged by site contact or entity representative.
- Site contact refuses access to technician.
- Insufficient or incorrect site contact information which prevents access.
- Any problem or delay caused by County or Participating Entity staff.
- Any problem or delay caused by end user applications.
- Repair/replacement of CPE not provided by AT&T.
- Failure of the trouble ticket originator to return a call or respond to a message from AT&T's technician for on-line close-out of trouble tickets.
- Any scheduled preventative maintenance.

Stop clock does not apply to:

- The time it takes for a outside technician to arrive at an unmanned test point.
- Testing initiated by AT&T.
- Power fluctuation at AT&T's or Subcontractor's central office.

SPECIFIC PERFORMANCE REFERENCE	SERVICE	MONITORING METHOD & SCHEDULE	DEDUCTIONS/FEEES TO BE ASSESSED																																	
SOW: Subparagraph 6.4.1 Private Line Services	Private line circuit availability to be 99.99% monthly for each circuit	Contractor reporting and monitoring monthly based on County trouble tickets	<p>10% of line monthly cost if objective not met for 2 consecutive months; 25% for 3 consecutive months.</p> <p>Total credits are determined by the number of times service is interrupted and the length of outage for each circuit during a month. Each interruption is calculated independently for each circuit and could be as much as 100 percent of the monthly circuit bill, if more than one interruption occurs.</p> <table border="1" data-bbox="1430 789 1877 1243"> <thead> <tr> <th><i>If Outage is From:</i></th> <th><i>If Outage Is Up To:</i></th> <th><i>Credit Applied Is:</i></th> </tr> </thead> <tbody> <tr><td>1 min</td><td>59 min</td><td>5%</td></tr> <tr><td>1 hr</td><td>1 hr 59 min</td><td>10%</td></tr> <tr><td>2 hr</td><td>2 hr 59 min</td><td>15%</td></tr> <tr><td>3 hr</td><td>3 hr 59 min</td><td>20%</td></tr> <tr><td>4 hr</td><td>4 hr 59 min</td><td>25%</td></tr> <tr><td>5 hr</td><td>5 hr 59 min</td><td>30%</td></tr> <tr><td>6 hr</td><td>6 hr 59 min</td><td>35%</td></tr> <tr><td>7 hr</td><td>7 hr 59 min</td><td>40%</td></tr> <tr><td>8 hr</td><td>8 hr 59 min</td><td>45%</td></tr> <tr><td>9 hr</td><td>> 9 hr</td><td>50%</td></tr> </tbody> </table>	<i>If Outage is From:</i>	<i>If Outage Is Up To:</i>	<i>Credit Applied Is:</i>	1 min	59 min	5%	1 hr	1 hr 59 min	10%	2 hr	2 hr 59 min	15%	3 hr	3 hr 59 min	20%	4 hr	4 hr 59 min	25%	5 hr	5 hr 59 min	30%	6 hr	6 hr 59 min	35%	7 hr	7 hr 59 min	40%	8 hr	8 hr 59 min	45%	9 hr	> 9 hr	50%
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SPECIFIC PERFORMANCE REFERENCE	SERVICE	MONITORING METHOD & SCHEDULE	DEDUCTIONS/FEEES TO BE ASSESSED										
SOW 6.4.5 Frame Relay Service Availability	Availability of Frame Relay Services shall be 99.99% for the County Frame Relay Network.	Monthly reports based on County trouble tickets issued.	<p>The performance objective for the US Packet Network Availability SLA is a US Packet Network Availability percentage of 99.99%. If AT&T does not meet this performance objective, Customer will be entitled to a US Packet Network credit.</p> <p>The US Packet Network Availability SLA credit, if applicable, is equal to the total discounted monthly recurring charges for covered PVCs for the month in which the US Packet Network Availability percentage is not met (net of any other applicable US Packet SLA credits), times a US Packet Network Availability SLA Factor determined based on the average number of PVCs in service during the month, as set forth in the following table:</p> <table border="1" data-bbox="1325 943 1965 1219"> <thead> <tr> <th colspan="2" data-bbox="1325 943 1965 992">US Packet Network Availability SLA Factor</th> </tr> <tr> <th data-bbox="1325 992 1835 1073">Average Number of PVCs in Service During the Month</th> <th data-bbox="1835 992 1965 1073">SLA Factor</th> </tr> </thead> <tbody> <tr> <td data-bbox="1325 1073 1835 1122">At least 1, up to and including 49</td> <td data-bbox="1835 1073 1965 1122">0.05</td> </tr> <tr> <td data-bbox="1325 1122 1835 1170">More than 49, up to and including 99</td> <td data-bbox="1835 1122 1965 1170">0.10</td> </tr> <tr> <td data-bbox="1325 1170 1835 1219">More than 99</td> <td data-bbox="1835 1170 1965 1219">0.20</td> </tr> </tbody> </table>	US Packet Network Availability SLA Factor		Average Number of PVCs in Service During the Month	SLA Factor	At least 1, up to and including 49	0.05	More than 49, up to and including 99	0.10	More than 99	0.20
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SPECIFIC PERFORMANCE REFERENCE	SERVICE	MONITORING METHOD & SCHEDULE	DEDUCTIONS/FEEES TO BE ASSESSED										
SOW: 6.4.6 ATM Service Availability	Availability of ATM Services shall be 99.99% each month for the County ATM network.	Monthly reports based on County trouble tickets issued.	<p>The performance objective for the US Packet Network Availability SLA is a US Packet Network Availability percentage of 99.99%. If AT&T does not meet this performance objective, Customer will be entitled to a US Packet Network credit.</p> <p>The US Packet Network Availability SLA credit, if applicable, is equal to the total discounted monthly recurring charges for covered PVCs for the month in which the US Packet Network Availability percentage is not met (net of any other applicable US Packet SLA credits), times a US Packet Network Availability SLA Factor determined based on the average number of PVCs in service during the month, as set forth in the following table:</p> <table border="1" data-bbox="1325 943 1963 1219"> <thead> <tr> <th colspan="2" data-bbox="1325 943 1963 992">US Packet Network Availability SLA Factor</th> </tr> <tr> <th data-bbox="1325 992 1835 1073">Average Number of PVCs in Service During the Month</th> <th data-bbox="1835 992 1963 1073">SLA Factor</th> </tr> </thead> <tbody> <tr> <td data-bbox="1325 1073 1835 1122">At least 1, up to and including 49</td> <td data-bbox="1835 1073 1963 1122">0.05</td> </tr> <tr> <td data-bbox="1325 1122 1835 1170">More than 49, up to and including 99</td> <td data-bbox="1835 1122 1963 1170">0.10</td> </tr> <tr> <td data-bbox="1325 1170 1835 1219">More than 99</td> <td data-bbox="1835 1170 1963 1219">0.20</td> </tr> </tbody> </table>	US Packet Network Availability SLA Factor		Average Number of PVCs in Service During the Month	SLA Factor	At least 1, up to and including 49	0.05	More than 49, up to and including 99	0.10	More than 99	0.20
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More than 99	0.20												

SPECIFIC PERFORMANCE REFERENCE	SERVICE	MONITORING METHOD & SCHEDULE	DEDUCTIONS/FEEES TO BE ASSESSED
SOW 7.11.6 Service Request Performance	Contractor must complete Service Request on or before established due date	County Reports & Observation	50% of non-recurring charge if due date not met
SOW 8.1 Invoicing – Complete Data	Contractor shall make accessible to the County materially complete invoice and detailed billing data by agreed upon billing delivery date	Inspection	If the billing performance is not met, an automatic escalation process to the billing supervisor, the 2 nd failure escalated to the Customer Service Center Manager, the 3 rd failure escalated to the Program Manager and the 4 th failure escalated to the Project Director.

**TELECOMMUNICATION SERVICES CONTRACT
EXHIBIT A-3**

STATEMENT OF WORK

FOR

MANAGED IP SERVICES

**EXHIBIT A-3
STATEMENT OF WORK FOR
MANAGED IP SERVICES**

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STATEMENT OF WORK FOR
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**EXHIBIT A-3
STATEMENT OF WORK FOR
MANAGED IP SERVICES**

1.0 SCOPE

1.1 Scope

This Statement of Work (SOW) describes the Managed IP Services to be provided by Contractor involving services based on the Internet Protocol.

1.2 Network Services

These services include various levels of support of County's existing wide area data networks and, possibly over time, migrate into a new network design and technologies.

1.3 IP Telephony

These services include support of County's existing Cisco IP telephony infrastructure initially and Contractor hosted IP telephony services including voicemail, conferencing, and call center services.

County's IP telephony services are hosted from the ISD Downey Data Center and provided over the Enterprise Network to various facilities, except for the Sheriff's Department, which hosts its IP telephony environment out of its Norwalk data center and provides services to various facilities via the Sheriff's Data Network (SDN). The Department of Health Services (DHS) will implement IP telephony servers in its main hospital facilities and provide services to the clinic facilities that are associated with the hospital via the DHS portion of County's Enterprise Network. The DHS network is logically isolated from the rest of County's Enterprise Network due to HIPAA concerns.

The ISD Hosted IP telephony services are provided from a Cisco Call Manager cluster in the Downey Data Center. In addition to the Call Manager Cluster, there are Unity voice mail servers, an Emergency Responder (e911) server, and a Conferencing server. There is a separate Call Manager cluster that serves an IP Contact Center (IPCC) Enterprise Edition that provides partitionable call center services to various locations in County. The telephony Call Manager servers, Unity servers, and IPCC servers are mirrored in the Orange County Data Center to provide complete redundancy to the environment. Gateways at the various facilities provide access

to telephone company trunks and Survivable Remote Site Telephony (SRST) services are enabled on each gateway to provide back up services in case of a network failure.

The IP telephony deployment strategy is to implement IP telephony for any new facilities or any facility requiring an upgrade to their telephone system or call center.

ISD has implemented the Cisco Unity voice mail system as part of its hosted IP telephony services. Voice mail services are provided through this system that is hosted in the Downey Data Center. The voice messages are stored in a Microsoft Exchange server. This voice mail service is provided only to users of the ISD hosted IP telephony services. Approximately two-thousand (2,000) voice mail boxes are currently in use.

2.0 QUALITY CONTROL

Contractor shall establish and utilize a comprehensive Quality Control Plan (QC Plan) to assure County a consistently high level of service throughout the term of the Contract. The QC Plan shall be submitted to County's Program Manager for review. The QC Plan shall minimally include the following:

- 2.1. Method of monitoring to ensure that Contract requirements are being met;
- 2.2 A record of all inspections conducted by Contractor, any corrective action taken, the time a problem was first identified, a clear description of the problem, and the time elapsed between identification and completed corrective action, shall be provided to County upon request.

3.0 DEFINITIONS

- 3.1 **Alarm:** The term "Alarm" shall mean an alarm which is an Alert that indicates a critical function has failed. Such information could be Hardware Failures, Interfaces Failures or Circuit Failures.
- 3.2 **Alert:** The term "Alert" shall mean the alert generated from the device that indicates an internal/external change has occurred. Such information can range from Hardware Changes, Device Access from console or Telnet, or Circuit failures.

- 3.3 **Call Center Services:** The term “Call Center Services” shall have the meaning set forth in Subparagraph 8.2.7 (Call Center Services).
- 3.4 **FM:** The term “FM” shall refer to fully managed services and shall have the meaning set forth in Paragraph 8.1 (Fully Managed Maintenance and Support Services).
- 3.5 **Functional Requirements:** The term “Functional Requirements” shall have the meaning set forth in Paragraph 5.7 (Functional Requirements).
- 3.6 **MO:** The term “MO” shall refer to monitoring only services and shall have the meaning set forth in Paragraph 7.0 (Monitoring Only of Existing Network Locations (Monitoring Only devices)).
- 3.7 **MNFR:** The term “MNFR” shall refer to managed/no field response services and shall have the meaning set forth in Paragraph 5.0 (Maintenance, Operations, and Management of Existing Network Locations (Fully Managed Devices)).
- 3.8 **MSP:** The term “MSP” shall refer to managed services provider and shall mean an individual or group contractually obligated to provide network monitoring, maintenance, and/or management services for County.
- 3.9 **NMS:** The term “NMS” shall refer to the network management system which is the system responsible for managing a portion of a network.
- 3.10 **Network Core:** The term “Network Core” shall mean a device or devices that interconnect Network Edge devices. These devices could be located at County and/or Contractor locations.
- 3.11 **Network Edge:** The term “Network Edge” shall mean a single-ended network node that interfaces the customer
- 3.12 **Performance Requirements:** The term “Performance Requirements” shall have the meaning set forth in Paragraph 5.8 (Performance Requirements).

4.0 CONTRACT RESPONSIBILITIES

County’s and Contractor’s responsibilities are as follows:

4.1 **County Responsibilities**

County shall administer the Contract according to Paragraph 6.0 (Administration of Contract – County) of the base document of the Contract.

4.2 **Contractor Responsibilities**

Contractor shall administer the Contract according to Paragraph 7.0 (Administration of Contract – Contractor) of the base document of the Contract. Contractor shall assign a sufficient number of employees to perform the required work. At least one (1) employee on site shall be authorized to act for Contractor in every detail and must speak and understand English.

4.2.1 Contractor's Program Manager

Contractor's Program Manager shall be responsible for the duties set forth in Paragraph 7.2 (Contractor's Program Manager) of the base document of the Contract and shall be responsible for the management of all activities relating to the conversion of existing County network nodes to any of the services specified herein and the design and construction of the NGEN as required. This person shall have at least five (5) years experience managing similar projects.

4.2.2 Contractor's Technical Lead

This engineer shall be trained in all of the networking technologies used on County network and shall possess advanced certification on the equipment manufacturer's products and technologies. In the case of the Fully Managed network that is currently based on Cisco Systems technologies, the minimum acceptable certification is a valid Cisco Certified Network Professional (CCNP) and Contractor shall provide County the Certificate Validation Number for verification. For the NGEN, an equivalent level of manufacturer certification will be required. This engineer shall have at least five years of experience with this type of networking technology and shall have specific in-depth knowledge of the NGEN and develop the same understanding of the LANet and EN within three (3) months of Contract award.

4.2.3 Contractor's Additional Defined Local Staff

Contractor shall provide the following local staff with a work reporting location within the greater Los Angeles area (within

Los Angeles or adjoining counties) to attend meetings and serve as local liaisons between County and Contractor on technical, business, or service matters.

- A. Network Operations Engineer – At least one individual of senior network engineer classification or higher with understanding of Contractor-managed and Contractor-monitored networks. This engineer shall be trained in all of the networking technologies used on County network and shall possess advanced certification on the equipment manufacturer’s products and technologies. In the case of the Fully Managed network that is currently based on Cisco Systems technologies, the minimum acceptable certification is a valid CCNP and Contractor shall provide County the Certificate Validation Number for verification. For the NGEN, an equivalent level of manufacturer certification will be required.
- B. Network Design Engineer – This engineer shall be trained in all of the networking technologies used on County network and shall possess advanced certification on the equipment manufacturer’s products and technologies. In the case of the Fully Managed network that is currently based on Cisco Systems technologies, the minimum acceptable certification is a valid CCNP and Contractor shall provide County the Certificate Validation Number for verification. For the NGEN, an equivalent level of manufacturer certification will be required.
- C. Service Manager – At least one (1) management-level individual within Contractor’s service delivery organization who has authority to escalate service issues raised by County. This individual shall also serve as the local single-point-of-contact between County and Contractor’s organization.

5.0 MAINTENANCE, OPERATIONS, AND MANAGEMENT OF EXISTING NETWORK LOCATIONS (FULLY MANAGED DEVICES)

5.1 Monitoring

Contractor shall monitor the status of all designated FM devices - including any transport and County-facing devices—and their inter-connecting circuits and wiring to ensure optimal operation, to detect

faults, and to allow for timely isolation and resolution of network problems. This monitoring shall be provided twenty-four (24) hours a day, seven (7) days a week for the term of the Contract.

5.1.1 Network Management System Infrastructure Responsibility

Contractor must provide and maintain all systems, software, and licenses to interface Contractor's NMS with County's internal network and to meet the requirements described in this SOW relating to the Fully Managed service.

The service boundary is the Ethernet port of the router. The billable labor approval process shall be developed between County and Contractor and shall be priced in accordance to Exhibit B-3 (Pricing Schedule for Managed IP Services). Billing shall start only when authorized County personnel requests Contractor's assistance to resolve a failure beyond the service boundary.

Contractor requires Out of Band Modems for all managed configurations. Contractor shall use ION Networks Secure Modems to provide OOB access to the Cisco routers included in the Managed Router Service. The ION modems do not require the use of static passwords, replacing them with a challenge/response system that uses 3DES algorithm to provide an authentication system. ION Secure Modems also provide an audit trail of access to connected devices, including detailed forensic data of all activities such as "break-in" attempts, log-ins, and administrative access. All modems will be centrally managed by Contractor. Contractor shall ensure security credentials along with site specific settings can be configured automatically through single sign-on procedures. Contractor shall credit County the rate, as set forth in Exhibit B, Pricing Schedule 3, of the ION appliances and associated servers required for the initial 111 EN sites upon conversion of all 111 EN sites to Managed Router Service within eight (8) months of contract effective date. In the event of an unavoidable delay in conversion completion, this requirement may be extended to no more than twelve (12) months from contract effective date.

5.1.2 NMS Views

Contractor shall create and maintain sufficient NMS capabilities to allow Contractor a real-time or near-real-time view of all Contractor-monitored devices. The views shall be capable of displaying—within the same viewing system—all of the devices that Contractor will monitor, including the FM

devices in this Paragraph 7.0 (Maintenance, Operations, and Management of Existing Network Locations (Fully Managed Devices)), the MNFR devices in Paragraph 8.0 (Maintenance, Operations, and Management Without Field Response of Existing Network Locations (Managed/No Field Response Devices), and the MO devices in Paragraph 9.0 (Monitoring Only of Existing Network Locations (Monitoring Only Devices)).

5.1.3 Identical County NMS View

Contractor shall provide County with visibility to monitor the Fully Managed devices as mutually agreed upon by County and Contractor.

5.1.4 Additional Customized NMS Views

Contractor shall also provide as multiple customized views of the NMS showing the status and Alarms of County-specified subsets of network devices and circuits. County anticipates requiring from twenty (20) to one-hundred (100) custom views. The subsets may be a combination of FM, MNFR, and MO devices, so Contractor NMS system must be capable of displaying all types of nodes in the same view. The customized views shall contain only the specified devices or circuits specified by County, and the views shall be reconfigurable as often as County wishes. These views may be made available to third-parties or to County end-users at County's discretion.

5.1.5 Access To Customized NMS Views

Each customized view shall be protected by a view-specific user identification and password, and shall be accessible remotely via County's internal network. It is desirable to County that accessibility to the customized views shall not be provisioned via the public Internet, however, if the customized views are provisioned via the public Internet, the access shall be encrypted by a method acceptable to County. It is desirable that the customized views be web browser-accessible and not require any software client installation. If that is not possible, then Contractor shall provide the licensed software needed to access those views.

5.1.6 Reconfiguration Of Customized NMS Views

County shall be able to configure or reconfigure the device or circuits defined in the NMS view or Contractor must perform the NMS configuration within twenty-four (24) hours of County's request at no additional charge. Changes will be

made to existing hardware or circuits within 24 hours. And corrections to incorrect data in the databases will also be made within 24 hours. This applies only to existing hardware, software or circuits.

A. SNMP And SYSLOG Access For County

Contractor will deliver Syslog via use of the EMS filtering in the Cisco routers under the following conditions:

1. Syslog will be filtered for Contractor sensitive and proprietary information.
2. Syslog will not be available until lab testing and certification takes place; approximately 13 weeks for testing, which cannot begin until contact execution and then upon lab availability.
3. Syslog output will be agreed between Contractor and County.
4. Syslog server owned, managed and maintained by County.
5. Contractor will provide sanitized Syslog via EMS solution supported by Contractor.
6. County Syslog data shall not be used for escalation purposes or for PRS credits.

5.1.7 Regular Polling Interval

Contractor NMS shall SNMP poll all Contractor-managed device interfaces at least once every fifteen (15) minutes. Monitoring services shall include the up/down state of all the monitored devices and interfaces in a near real-time manner. Contractor shall utilize the gathered information to facilitate proactive maintenance and repair of Contractor-managed devices.

5.1.8 Alerts And Alarms

Contractor shall monitor for real-time and historical Alerts and Alarms on Contractor-managed devices for both Syslog and SNMP (or equivalent) to enable Contractor to detect failures, including those occurring outside of the regular polling interval or those that may not result in an outage condition.

5.1.9 Network Management System

Contractor shall provide reactive & proactive Network Management Systems encompassing redundant server architecture & facilities-based redundancy to include:

- SunOS 5.10_Generic 108528-22 sun4u Sparc SUNW, Sun-Fire-480
- Redundant Power to each server - dual UPS and dual Generator (90 hours)
- Redundant LAN connectivity to each server
- Business Continuity Plans tested semi-annually
- Server Backup to include daily, weekly and monthly backups
- All client devices alarm to Raleigh and Phoenix node managers
- Raleigh associates can log into Phoenix NNM Servers
- Phoenix associates can log into Phoenix (or Raleigh) NNM Servers
- Ticketing can be swung to Alternate Support Centers (Phoenix I/TO servers)

All MRS licenses are included in the costs set forth in Exhibit B-3 (Pricing Schedule for Managed IP Services). Contractor shall deploy Sun Servers running the Solaris Operating System. Contractor shall update equipment as necessary.

5.1.10 Device Certification

Contractor shall review Contractor's certification list for all EN elements including hardware, software and transport media for prospective management and monitoring service. Contractor shall verify network element certifications, or add network elements to Contractor's certification list, or provide County with a list of non-certifiable elements within thirty (30) Business Days of Contract execution date. For network elements deemed not certifiable, Contractor shall provide County with recommendations to attain certification. Further, Contractor shall provide the above certification service for all LANet network elements as requested by County.

5.2 **Management**

5.2.1 Configuration Archive

Contractor shall maintain a configuration archive that preserves the configuration settings or scripts of all Contractor-managed devices. The archive shall record any changes made to the device and the user identification of the

system or person making the change. The configuration archive shall retain all configuration changes from all devices for a minimum period of 180 Days. The configuration archive shall also retain an end-of-day snapshot of all device configurations for a minimum period of two (2) years.

5.2.2 Moves, Adds, And Changes

Contractor shall perform all changes to Contractor-managed devices and associated management systems needed to add additional nodes into the Fully Managed service, to modify existing nodes, or to remove nodes from Contractor management. Contractor shall also make all changes needed to keep Contractor-managed nodes within the Functional and Performance Requirements as specified in Paragraph 5.7 (Functional Requirements) and Paragraph 5.8 (Performance Requirements). With the exception of the initial Commissioning Charge associated with adding a node into the Fully Managed service, Contractor shall perform move, add, and change activities at no additional charge to County.

5.2.3 County Test Equipment

Contractor shall allow County test equipment, including but not limited to RMON probes and protocol analyzers, within Contractor-managed network to facilitate application profiling or troubleshooting as deemed necessary by County. The test equipment may be directly connected to Contractor-managed devices or connected inline to the communications path via passive network taps. Contractor shall make the necessary configuration changes to Contractor-managed devices to facilitate such testing in conjunction with County staff that will operate the test equipment. County is responsible for the proper operation of the test equipment. In the event that a properly installed piece of test equipment causes a service abnormality, Contractor will not be responsible for outage times or service degradation levels.

5.2.4 County Network Security Equipment

Contractor shall allow County network security equipment, including but not limited to firewalls, intrusion detection sensors, intrusion prevention sensors, and sinkhole/blackhole routers, within Contractor-managed network to mitigate network security risks. The network security equipment may be directly connected to Contractor-managed devices and may make automated changes to real-time security threats without human intervention.

Contractor shall make the necessary configuration changes to Contractor-managed devices to facilitate the operation of County's network security equipment.

Contractor will allow read/write access to support the County's security requirements. Contractor will build a custom dedicated network management platform to support this requirement. This infrastructure provides redundancy at server and network levels. Contractor's rate, as set forth in Exhibit B-3 (Pricing Schedule for Managed IP Services), for the customized security platform will be credited back to County upon receipt by Contractor of \$5 million dollars in Managed IP Service billings. Should it be determined that Contractor is not at fault for an outage issue related to this paragraph, Contractor shall not be subject to the associated PRS remedy.

Contractor shall allow any CPE on the LAN-facing side of the County layer 2 switch. Due to unknown security impacts, equipment other than a layer 2 switch connected to the egress Ethernet port of the managed router shall require approval by Contractor. Approval shall be immediate for equipment on Contractor's list of certified hardware. Equipment not on Contractor's certified list shall require evaluation by Contractor.

5.2.5 County Content Delivery, Caching, And Traffic-Shaping Equipment

Contractor shall allow County content delivery, caching, and traffic-shaping equipment within Contractor-managed network to reduce network traffic and to accelerate service delivery to County's end users. The content delivery, caching, and traffic-shaping equipment may be directly connected to Contractor-managed devices or may be located elsewhere on County's networks. Contractor shall make the necessary configuration changes to Contractor-managed devices to facilitate the operation of County's content delivery, caching, and traffic-shaping equipment. County is responsible for the proper operation of the content delivery, caching, and traffic-shaping equipment. In the event that a properly installed piece of content delivery, caching, and traffic-shaping equipment causes a service abnormality, Contractor will not be responsible for outage times or service degradation levels.

5.2.6 Network Security Response

Contractor shall respond immediately to County-initiated network security changes or lawful information research requests from pre-approved County personnel, as directed by County. Contractor shall not be responsible for outcomes of such requests. Any changes or responses to information research requests shall be made immediately or as soon as reasonably practical to do so. Examples of such changes and requests include but are not limited to interface disablement; traffic or quality of service limitations; traffic restrictions by IP address, IP sub-network, port or protocol; changes to routing protocols to redirect or restrict traffic; and reports on real-time errors or utilization. The specific actions will be specified by County so Contractor does not need network security personnel for this purpose.

5.2.7 Alert And Alarm Correlation

Contractor shall detect Alerts and Alarms as reported by Contractor-managed devices or circuits and correlate all of the available information and determine if network components or communications circuits have failed or are in a problem state. Contractor shall then act upon this information to resolve the incident as provided in Paragraph 5.3 (Incident Management) and to avoid a future problem as provided in Paragraph 5.5 (Problem Management), or to refine Contractor's NMS systems.

5.3 **Incident Management**

5.3.1 Fault Management Procedures:

Contractor shall provide proactive monitoring twenty-four (24) hours a day, seven (7) days a week of all elements of the purchased services. The Contractor's network management center (NMC) shall act as the single point of contact to County for all fault reporting.

Transport Faults

- All transport problems (including access problems) shall be proactively monitored, isolated and resolved by Contractor.
- Contractor shall act as an agent for County regarding issues related to local access or 3rd party transport providers.

Contractor shall proactively monitor all of Contractor's end-to-end transport problems. Contractor shall coordinate all the issues regarding selected vendors.

Equipment Faults

- Contractor shall monitor all equipment, including WAN interfaces, LAN interfaces, frame relay or ATM ports and PVC's for which it has responsibility.
- All equipment related problems will be isolated and identified as either physical or logical in nature.
- Problems with equipment under maintenance responsibility of Contractor shall be diagnosed and resolved.
- Contractor shall provide on-site technical support as deemed necessary to meet designated service levels.

Contractor shall proactively monitor all of Contractor's end-to-end equipment issues. Contractor shall coordinate the Contractor-selected maintenance vendors.

5.3.2 Triage

If a Contractor-managed device or circuit has failed or is in a problem state, Contractor shall determine whether the fault condition exists due to a problem on Contractor-managed network or on County-managed network. Based on the outcome of this process defined by Contractor, Contractor shall either repair the fault (if on Contractor-managed network) or dispatch the incident to County for repair (if on County-managed infrastructure).

5.3.3 Contractor Trouble Tickets

Contractor shall Operate and Maintain an internal trouble ticket management system. Contractor shall open trouble tickets within their own ticket management system for tracking purposes on all Alarm notifications. All tickets shall have a unique ticket identifier for references and shall contain description of the problem and a historic record of all actions performed by Contractor related to that incident. Contractor shall open trouble tickets or clear trouble within fifteen (15) minutes on all Alarm notifications.

5.3.4 Reporting Tickets to County

Contractor shall report Contractor's ticket to the ISD Customer Assistance Division so that County can track the issue in County's trouble ticket management system and

correlate Contractor's tickets with County's tickets. It is desirable that Contractor's trouble ticket management system interfaces with the ISD's trouble ticket management system (Peregrine Service Center) to provide automatic ticket creation. All costs related to developing, implementing, or maintaining such an interface shall be the responsibility of Contractor.

5.3.5 Troubleshooting

If Contractor determines the fault is with a Contractor-managed device or circuit, Contractor is responsible for root cause analysis and for all actions required to correct the fault.

5.3.6 Out-Of-Scope Devices Or Circuits

If Contractor determines the trouble is with a non-Contractor-managed device or circuit, Contractor shall notify County of that determination by opening a trouble ticket with the ISD Customer Assistance Division. Contractor shall convey all information regarding the incident such as site location and error messages to County. County shall then determine the root cause of the problem and take corrective action. Contractor shall be available to clarify Contractor-provided information and to perform any testing required to verify successful incident resolution.

5.4 **Repair**

5.4.1 Support Responsibilities

Contractor shall be responsible for hardware, software, and configuration support for any and all of the failed or failing components for devices on Contractor-managed network. Contractor shall, as soon as possible, remedy the incident through configuration changes, software updates, operating system reload, hardware replacement, or whatever is necessary to resolve the problem and in a manner consistent with County's Change Management procedures.

5.4.2 Hardware Repair

Contractor shall be responsible for repairing or replacing any Contractor-managed hardware device or component to meet Paragraph 5.7 (Functional Requirements) and Paragraph 5.8 (Performance Requirements).

5.4.3 Software Repair

Contractor shall be responsible for resolving all Contractor-managed device software issues, including the ability for the software to meet Paragraph 5.7 (Functional Requirements) and Paragraph 5.8 (Performance Requirements), respectively, and the mitigation of security vulnerabilities and software defects per the manufacturer's recommendations.

5.4.4 Manufacturer Escalation

Contractor shall be responsible for any interaction or escalation with the hardware or software manufacturer(s) of Contractor-managed devices.

5.4.5 Field Response And Repair

Should Contractor fail to diagnose or repair any defect remotely, Contractor shall dispatch qualified personnel arrive at the affected location(s) and restore service within the prescribed interval specified in Subparagraph 5.8.5 (Field Response).

5.4.6 Carrier Coordination

Contractor shall coordinate with the carrier(s) for any WAN circuits interconnecting any Contractor-managed devices to repair or restore services. Contractor is responsible for any and all escalation with the carrier(s) for service problems and testing.

5.4.7 Closure of Trouble Tickets

Contractor trouble ticket and County trouble ticket shall not be closed until the incident has been resolved. County contact will verify with the end-users that the incident has been resolved. County ticket and Contractor ticket may then be closed. Tickets may also be closed with mutual agreement by County and Contractor.

5.5.8 Trouble Ticket Escalation

Contractor shall have a trouble ticket escalation process to expedite incident resolution. As part of this defined process, Contractor's organizational management shall have visibility of the issue and should be updated as to the timely resolution. This process shall have both automatic and manual escalation and notification steps. Contractor shall notify a designated County management contact during such escalations.

Escalation & Notification Procedures:

Severity 1/Critical Site Impacting Events

- CEM (Client Escalation Mgr) , Department Manager, CED (Client Escalation Dir), and Division within 30 minutes

Severity 1/Non Critical Site Impacting Events

- CEM at 1 hour
- Department Manager at 2 hour
- CED and Division at 4 hour

Inputs

- Severity 1 problem identified in problem management system
- Call from Service Management identifying critical service impact
- Call from client identifying critical service impact
- Notification from other Contractor work center (another GCSC, Network Management Center, SONET Maintenance Center or Cable Network - Management Center) identifying critical service impact

5.5 Problem Management

5.5.1 Examination of Trends

Contractor shall analyze trends of Alerts and Alarms from its trouble ticket system, statistical information gathered from monitored devices, and frequency of Alerts and Alarms from NMS systems to detect chronic, degrading, or impending problems.

Contractor shall use Performance Capacity Service (PCS) to identify capacity-changing network trends and to alert County of potential performance degradation. PCS shall analyze and document all exception or Out-of-Spec (OOS) conditions. All written network change recommendations shall be provided to County. Contractor's PCS shall provide the following analysis:

- Exception analysis (monthly)
- Forecasting analysis (monthly)
- Performance reporting (Up to the minute, hourly, daily, weekly, monthly)

5.5.2 Proactive Tickets

Contractor shall utilize the information determined during the examination of problem trends or statistics to open proactive trouble tickets to mitigate or avoid problems before they become service or performance impacting.

5.6 **Reporting**

Contractor shall provide regular pre-defined reports and ad hoc reporting capability for Contractor-managed devices and circuits. The scope and format of these reports are detailed in Paragraph 14.1 (Reports) and Paragraph 14.2 (Web Portals) and set forth in Technical Exhibit 5 (Reporting Requirements).

Contractor shall provide the following reports.

- Routers: CPU Utilization, router buffer utilization, buffer misses (Cisco routers only) and memory utilization.
- Router WAN Interfaces: Interface utilization (Frame Relay ports and PVCs, ATM ports and VCs, Private Lines), Discards (ATM/Frame Relay interfaces and Private Line interfaces) and network latency (Cisco Only) between adjacent router pairs.
- Router LAN Interfaces: Interface utilization, error rates, and Ethernet collision rates (Cisco only).
- A single monthly conference call can be established between County and Contractor's PCM network analyst to discuss findings and recommendations. The exception analysis shall be electronically mailed prior to any conferences and the statistical output shall be in Excel format.

5.7 **Functional Requirements**

Contractor shall manage and maintain the Contractor-managed nodes to meet the following Functional Requirements:

- a. Private Network
The internal County network shall not use the public Internet as transport for information between County locations. Contractor shall specify all transport medium and technologies in the network design.
- b. Geographic Requirements
The network shall support all geographic locations that require County network access to support County services.

- c. Virtual Private Network (VPN)
VPNs are defined as customer IP domains separated logically on a common network infrastructure. The network shall support a minimum of 100 VPNs with availability to all VPNs at all County locations. Unicast IP communication between VPNs that are not designated as shared services VPNs will be protected by Firewalls.
- d. Shared Services VPN
The network shall support shared services VPNs in which multiple customer VPNs have access to common resources within the shared services VPN, however the shared services VPN shall not permit data transit between customer VPNs.
- e. Application Support
The network shall support all existing customer applications currently being supported by County's existing network provider without modifications or adjustments to the customer applications or devices. The network shall have a migration path to support all future customer applications specified by County before final design acceptance by County.
- f. Multi-Protocol Support
The network shall provide multi-protocol support across the network. Protocols shall include, but not be limited to IP, IPX, and SNA. Support of protocols across the network via tunneling or encapsulation technologies is acceptable. All protocol support services across the network shall be highly reliable and fully redundant with automatic recovery of a failure.
- g. Multicast IP Service Support
The network shall support multicast IP services across the network. The multicast services shall be highly reliable and fully redundant with automatic recovery of a failure. The multicast IP service shall support multicast streams within a customer VPN and multicast streams that serve multiple customer VPNs.
- h. Voice Over IP (VoIP) Support
The network shall support VoIP signaling and real-time traffic across the network. The network shall be capable of delivering carrier-class telephony service for County VoIP

customers by meeting minimum VoIP requirements including:

- Delay – end-to-end delay must not exceed 150 ms
- Delay variation (jitter) – jitter must not add delay beyond what is left in the delay budget
- Packet loss – packet loss for telephony must not exceed one percent (1%).

i. Network Interface Support

The network shall support the following interface types to connect to customer edge devices:

- Gigabit Ethernet (copper & fiber)
- 10 Gigabit Ethernet

j. Maximum Transport Unit (MTU)

The network shall support end-to-end customer application packets with a MTU size of 1500 bytes without fragmentation.

k. Network Clock Synchronization

Contractor shall provide a Network Time Protocol (NTP) clock source to County that would allow County to pull from the identical clock source as Contractor to ensure the accuracy of timestamps.

l. Quality of Service

The network nodes shall provide reliable Quality of Service to assure an adequate level for the applications that are transported across the network under all network congestion conditions.

m. Emergency Restoration and Disaster Recovery

The network shall have allocated hardware and procedures to provide fast emergency restoration of a location that has lost network access for an extended period of time.

The detailed design specifications and as-built documentation shall be provided to the successful Contractor upon execution of the Contract. In addition to the specific staffing requirements in SOW Paragraph 4.2 (Contractor Responsibilities), Contractor shall maintain sufficient numbers of staff with appropriate skill sets to ensure the Contractor-managed nodes continue to meet the Functional Requirements.

In transitioning a node into Contractor's Fully Managed service, County shall ensure that the node is compliant with the detailed

design specifications provided to Contractor. Contractor shall verify that the node meets the detailed design specifications before being accepted into Contractor's Fully Managed service.

County expects that the detailed design governing the Fully Managed nodes will change over time due to available technology and current needs at the time. Therefore, County and Contractor shall review the detailed design (including the Functional Requirements) and modify the SOW through the Change Order process to reflect any changes.

5.8 Performance Requirements

Contractor shall meet the following Performance Requirements:

5.8.1 Network Availability

Network availability is defined as available network access to customers during defined periods of usage. Network availability per site shall meet or exceed the requirements as set forth in the PRS. Measurement will be calculated against the pool of sites that adopt this configuration. SLA will come into force when both data circuits are down and cannot transport traffic.

5.8.2 Network Latency

Network latency is defined as the average ping responses on primary circuits between Core and Edge devices. The average ping response will be measured by pinging each network node every five (5) minutes and taking the average ping response over a one (1) hour period. Network Latency per site shall meet or exceed the requirements as set forth in the PRS.

5.8.3 Dropped Packets

Dropped packets are defined as the percentage of packets dropped on primary circuits between Core and Edge devices. Dropped packets per site shall meet the requirements as set forth in the PRS.

5.8.4 Incident Response

Incident Response is defined as the percentage of trouble tickets created or trouble cleared within fifteen (15) minutes of Alarm notification and shall meet the requirements as set forth in the PRS.

5.8.5 Field Response

Field response is defined as the elapsed time for a field technician to be on site after ticket creation of a failure. Field response shall be less than two (2) hours when dispatch is required to the critical sites identified by County for 90 percent (90%) of the tickets created during the monthly reporting period and shall be less than four (4) hours when dispatch is required for all other sites for 100 percent (100%) of the time.

5.8.6 Restoration

Restoration is defined as the elapsed time to restore Contractor controlled transport and managed equipment after ticket creation of a failure. Restoration of Contractor controlled transport shall meet the requirements as set forth in the PRS.

5.8.7 Service Provisioning

Service provisioning is defined as the elapsed time to transition an existing County-managed site to Contractor's FM service after a service order has been accepted. Service provisioning due dates shall be established by a mutually agreed date by County and Contractor.

5.9 **Transition Plan**

Contractor shall submit to County for approval a transition plan to transition the existing MSP-managed devices to Contractor's FM service. Contractor's transition plan shall be submitted for County approval within ninety (90) Days of contract execution date. Contractor's submitted transition plan shall provide for transition to be complete one (1) year from contract execution.

Contractor shall fully assume the monitoring responsibilities of County-monitored nodes from County's monitoring systems no later than one year from the date of contract execution. It is desirable that the transition be completed as soon as possible without compromising the availability of the network or the manageability of the network by County.

Contractor shall participate in County's Change Management process and schedule all transition changes through County's Change Management authority.

It is desirable that the transition activities be performed with minimal or no impact to the delivery of network services. Should the

transition be disruptive, the transition may be scheduled outside of the facility business hours or on weekends at County's option. Contractor shall consider any staffing implications such a requirement may create when pricing the Commissioning Charge to bring nodes into FM service.

The transition plan shall include at a minimum:

- A project schedule incorporating all major tasks (including but not limited to contingency)
- Descriptions of all major steps required of County and Contractor to transition FM service to Contractor
- A test plan to verify the readiness of Contractor's NMS (including but not limited to the successful delivery of the required County views)
- A test plan for individual site transitions from the current County monitoring systems to Contractor's FM service.

6.0 MAINTENANCE, OPERATIONS, AND MANAGEMENT WITHOUT FIELD RESPONSE OF EXISTING NETWORK LOCATIONS (MANAGED/NO FIELD RESPONSE DEVICES)

6.1 Monitoring

Contractor shall monitor the status of all designated MNFR devices—including Transport and Customer Facing devices--and their inter-connecting links to ensure optimal operation, to detect faults, and to allow for timely isolation and remote resolution of network problems. This monitoring shall be provided twenty-four (24) hours a day, seven (7) days a week.

- 6.1.1 Network Management System Infrastructure Responsibility
Contractor must provide and maintain all systems, software, and licenses to interface Contractor's NMS with County's internal network and to meet the requirements described in this SOW relating to the MNFR service.

Contractor requires Out of Band Modems for all managed configurations. Contractor shall use ION Networks Secure Modems to provide OOB access to the Cisco routers included in the Managed Router Service. The ION modems do not require the use of static passwords, replacing them with a challenge/response system that uses 3DES algorithm

to provide an authentication system. ION Secure Modems also provide an audit trail of access to connected devices, including detailed forensic data of all activities such as “break-in” attempts, log-ins, and administrative access. All modems will be centrally managed by Contractor. Contractor shall ensure security credentials along with site specific settings can be configured automatically through single sign-on procedures. Contractor shall credit County the rate, as set forth in Exhibit B, Pricing Sheet 3, of the ION appliances and associated servers required for the initial 111 EN sites upon conversion of all 111 EN sites to Managed Router Service within eight (8) months of contract effective date. In the event of an unavoidable delay in conversion completion, this requirement may be extended to no more than twelve (12) months from Contract Effective Date.

The service boundary is the Ethernet port of the router. The billable labor approval process shall be developed between County and Contractor and shall be priced in accordance to Exhibit B-3 (Pricing Schedule for Managed IP Services). Billing shall start only when authorized County personnel requests Contractor’s assistance to resolve a failure beyond the service boundary.

6.1.2 NMS Views

Contractor shall create and maintain sufficient NMS capabilities to allow Contractor a real-time or near-real-time view of all Contractor-monitored devices. The views shall be capable of displaying—within the same viewing system—all of the devices that Contractor will monitor, including the FM devices of Paragraph 5.0 (Maintenance, Operations, and Management of Existing Network Locations (Fully Managed Devices)), the MNFR devices of this Paragraph 6.0 (Maintenance, Operations, and Management without Field Response of Existing Network Locations (Managed/No Field Response Devices), and the MO devices of Paragraph 7.0 (Monitoring Only of Existing Network Locations (Monitoring Only Devices) of this SOW.

6.1.3 Identical County NMS View

Contractor shall provide County with visibility to monitor the County-managed / no field response devices, as mutually agreed upon by County and Contractor.

6.1.4 Additional Customized NMS Views

Contractor shall also provide as many additional, customized views of the NMS showing the status and Alarms of County-specified subsets of network devices and circuits. County anticipates requiring from 20 to 100 custom views. The subsets may be a combination of FM, MNFR, and MO nodes, so Contractor NMS system must be capable of displaying all types of nodes in the same view. The customized views shall contain only the specified devices or circuits specified by County, and the views shall be reconfigurable as often as County wishes. These views may be made available to third-parties or to County end-users at County's discretion.

6.1.5 Access to Customized NMS Views

Each customized view shall be protected by a view-specific user identification and password, and shall be accessible by County staff remotely via County's internal network. It is desirable to County that accessibility to the customized views shall not be provisioned via the public Internet, however, if the customized views are provisioned via the public Internet, the access shall be encrypted by a method acceptable to County. It is desirable that this view be web browser-accessible and not require software client installation. If that is not possible, then Contractor shall provide the licensed software needed to access those views.

6.1.6 Reconfiguration of Customized NMS Views

County shall be able to configure or reconfigure the device or circuits defined in the NMS view or Contractor must perform the NMS configuration within twenty-four (24) hours of County's request at no additional charge. Changes will be made to existing hardware or circuits within 24 hours. And corrections to incorrect data in the databases will also be made within 24 hours. This applies only to existing hardware, software or circuits.

6.1.7 SNMP and Syslog Access for County

Contractor will deliver Syslog via use of the EMS filtering in the Cisco routers under the following conditions:

1. Syslog will be filtered for Contractor sensitive and proprietary information.
2. Syslog will not be available until lab testing and certification takes place; approximately 13 weeks for

testing, which cannot begin until contact execution and then upon lab availability.

3. Syslog output will be agreed between Contractor and County.
4. Syslog server owned, managed and maintained by County.
5. Contractor will provide sanitized Syslog via EMS solution supported by Contractor.
6. County Syslog data shall not be used for escalation purposes or for PRS credits.

6.1.8 Regular Polling Interval

Contractor NMS shall SNMP poll all of the MNFR devices' interfaces at least once every fifteen (15) minutes. Monitoring services shall include the up/down state of all the monitored devices and interfaces in a near real-time manner. Contractor shall utilize the gathered information to facilitate proactive maintenance, remote repair of the MNFR devices, and field repair dispatch to County.

6.1.9 Alerts and Alarms

Contractor shall monitor for real-time and historical Alerts and Alarms on Contractor-monitored devices for both Syslog and SNMP (or equivalent) to enable Contractor to detect failures outside of the regular polling interval or to detect problems that may not result in an outage condition.

6.1.10 Network Management System

Contractor shall provide reactive & proactive Network Management Systems encompassing redundant server architecture & facilities-based redundancy to include:

- SunOS 5.10_Generic 108528-22 sun4u Sparc SUNW, Sun-Fire-480
- Redundant Power to each server - dual UPS and dual Generator (90 hours)
- Redundant LAN connectivity to each server
- Business Continuity Plans tested semi-annually
- Server Backup to include daily, weekly and monthly backups
- All client devices alarm to Raleigh and Phoenix node managers

- Raleigh associates can log into Phoenix NNM Servers
- Phoenix associates can log into Phoenix (or Raleigh) NNM Servers
- Ticketing can be swung to Alternate Support Centers (Phoenix I/TO servers)

All MRS licenses are included in the costs set forth in Exhibit B-3 (Pricing Schedule for Managed IP Services). Contractor shall deploy Sun Servers running the Solaris Operating System. Contractor shall update equipment as necessary.

6.1.11 Device Certification

Contractor shall review Contractor's certification list for all EN elements including hardware, software and transport media for prospective management and monitoring service. Contractor shall verify network element certifications, or add network elements to Contractor's certification list, or provide County with a list of non-certifiable elements within thirty (30) Business Days of Contract execution date. For network elements deemed not certifiable, Contractor shall provide County with recommendations to attain certification. Further, Contractor shall provide the above certification service for all LANet network elements as requested by County.

6.2 **Management**

6.2.1 Configuration Archive

Contractor shall maintain a configuration archive that preserves the configuration settings or scripts of all Contractor-managed devices. The archive shall record any changes made to the device and the user identification of the system or person making the change. The configuration archive shall be configured to retain at least 180 Days of archived configurations from all devices.

6.2.2 Moves, Adds, and Changes

Contractor shall perform all changes to Contractor-managed devices and associated management systems needed to add additional nodes into the MNFR service, to modify existing nodes, or to remove nodes from Contractor management. Contractor shall also make all changes needed to keep Contractor-managed nodes within the Functional and Performance Requirements of this SOW. With the exception of the initial Commissioning Charge associated with adding a node into the MNFR service,

Contractor shall perform move, add, and change activities at no additional charge to County.

6.2.3 County Test Equipment

Contractor shall allow County test equipment, including but not limited to RMON probes and protocol analyzers, within Contractor-managed network to facilitate application profiling or troubleshooting as deemed necessary by County. The test equipment may be directly connected to Contractor-managed devices or connected inline to the communications path via passive network taps. Contractor shall make the necessary configuration changes to Contractor-managed devices to facilitate such testing in conjunction with County staff that will operate the test equipment. County is responsible for the proper operation of the test equipment. In the event that a properly installed piece of test equipment causes a service abnormality, Contractor will not be responsible for outage times or service degradation levels.

6.2.4 County Network Security Equipment

Contractor shall allow County network security equipment, including but not limited to firewalls, intrusion detection sensors, intrusion prevention sensors, and sinkhole/blackhole routers, within Contractor-managed network to mitigate network security risks. The network security equipment may be directly connected to Contractor-managed devices and may make automated changes to real-time security threats without human intervention. Contractor shall make the necessary configuration changes to Contractor-managed devices to facilitate the operation of County's network security equipment.

Contractor will allow read/write access to support the County's security requirements. Contractor will build a custom dedicated network management platform to support this requirement. This infrastructure provides redundancy at server and network levels. Contractor's rate, as set forth in Exhibit B-3 (Pricing Schedule for Managed IP Services), for the customized security platform will be credited back to County upon receipt by Contractor of \$5 million dollars in Managed IP Service billings. Should it be determined that Contractor is not at fault for an outage issue related to this paragraph, Contractor shall not be subject to the associated PRS remedy.

Contractor shall allow any CPE on the LAN-facing side of the County layer 2 switch. Due to unknown security impacts, equipment other than a layer 2 switch connected to the egress Ethernet port of the managed router shall require approval by Contractor. Approval shall be immediate for equipment on Contractor's list of certified hardware. Equipment not on Contractor's certified list shall require evaluation by Contractor.

6.2.5 County Content Delivery, Caching, And Traffic-Shaping Equipment

Contractor shall allow County content delivery, caching, and traffic-shaping equipment within Contractor-managed network to reduce network traffic and to accelerate service delivery to County's end users. The content delivery, caching, and traffic-shaping equipment may be directly connected to Contractor-managed devices or may be located elsewhere on County's networks. Contractor shall make the necessary configuration changes to Contractor-managed devices to facilitate the operation of County's content delivery, caching, and traffic-shaping equipment. County is responsible for the proper operation of the content delivery, caching, and traffic-shaping equipment. In the event that a properly installed piece of content delivery, caching, and traffic-shaping equipment causes a service abnormality, Contractor will not be responsible for outage times or service degradation levels.

6.2.6 Network Security Response

Contractor shall respond immediately to County-initiated network security changes or lawful information research requests from pre-approved County personnel, as directed by County. Contractor shall not be responsible for outcomes of such requests. Any changes or responses to information research requests shall be made immediately or as soon as reasonably practical to do so. Examples of such changes and requests include but are not limited to interface disablement; traffic or quality of service limitations; traffic restrictions by IP address, IP sub-network, port or protocol; changes to routing protocols to redirect or restrict traffic; and reports on real-time errors or utilization. The specific actions will be specified by County so Contractor does not need network security personnel for this purpose

6.2.7 Alert and Alarm Correlation

Contractor shall detect Alerts and Alarms as reported by Contractor-managed devices or circuits and correlate all of the available information and determine if network components or communications circuits have failed or are in a problem state. Contractor shall then act upon this information to resolve the incident as provided in Paragraph 6.3 (Incident Management) and to avoid a future problem as provided in Paragraph 6.5 (Problem Management), or to refine Contractor's NMS systems.

6.3 **Incident Management**

6.3.1 Fault Management Procedures:

Contractor shall provide proactive monitoring twenty-four (24) hours a day, seven (7) days a week of all elements of the purchased services. The Contractor's NMC shall act as the single point of contact to County for all fault reporting.

Transport Faults

- All transport problems (including access problems) shall be proactively monitored, isolated and resolved by Contractor.
- Contractor shall act as an agent for County regarding issues related to local access or 3rd party transport providers.

Contractor shall proactively monitor all of Contractor's end-to-end transport problems. Contractor shall coordinate all the issues regarding selected vendors.

Equipment Faults

- Contractor shall monitor all equipment, including WAN interfaces, LAN interfaces, frame relay or ATM ports and PVC's for which it has responsibility.
- All equipment related problems will be isolated and identified as either physical or logical in nature.
- Problems with equipment under maintenance responsibility of Contractor shall be diagnosed and resolved.
- Contractor shall provide on-site technical support as deemed necessary to meet designated service levels.

Contractor shall proactively monitor all of Contractor's end-to-end equipment issues. Contractor shall coordinate the Contractor-selected maintenance vendors.

6.3.2 Triage

After determining that a Contractor-managed device or circuit has failed or is in a problem state, Contractor shall then determine whether the fault condition exists due to a problem on Contractor-managed network or on County-managed network. Based on this determination Contractor shall either remotely repair the fault (if on Contractor-managed network and if the fault can be repaired remotely), dispatch the incident to County for field repair (if on Contractor-managed network and the fault requires on-site personnel), or dispatch the incident to County for repair (if on County-managed infrastructure).

6.3.3 Contractor Trouble Tickets

Contractor shall have and operate an internal trouble ticket management system. Contractor shall open trouble tickets within their own ticket management system for tracking purposes on all Alarm notifications. All tickets shall have a unique ticket identifier for references and shall contain description of the problem and a historic record of all actions performed by Contractor related to that incident. Contractor shall open trouble tickets or clear trouble within fifteen (15) minutes on all Alarm notifications.

6.3.4 Reporting Tickets to County

Contractor shall report Contractor's ticket to the ISD Customer Assistance Division so that County can track the issue in County's trouble ticket management system and correlate Contractor's tickets with County's tickets. It is desirable that Contractor's trouble ticket management system interfaces with the ISD's trouble ticket management system (Peregrine ServiceCenter) to provide automatic ticket creation. All costs related to developing, implementing, or maintaining such an interface shall be the responsibility of Contractor.

6.3.5 Troubleshooting

If Contractor determines the fault is with a Contractor-managed device or circuit, Contractor is responsible for root cause analysis and all remote actions required correcting the fault. If the fault requires on-site troubleshooting, Contractor shall notify County personnel and direct County staff under

the guidance of Contractor remote staff. Whether or not the fault requires remote or on-site troubleshooting, the troubleshooting of the problem shall be the responsibility of Contractor. Contractor shall successfully troubleshoot the fault within two (2) hours after trouble ticket creation at least 90 percent (90%) of the time.

6.3.6 Out-Of-Scope Devices or Circuits

If Contractor determines the trouble is with a non-Contractor-managed device or circuit, Contractor shall notify County of that determination by opening a trouble ticket with the ISD Customer Assistance Division. Contractor shall convey all information regarding the incident such as site location and error messages to County. County shall then determine the root cause of the problem and take corrective action. Contractor shall be available to clarify Contractor-provided information and to perform any testing required to verify successful incident resolution.

6.4 Repair

6.4.1 Support Responsibilities

Contractor shall be responsible for software and configuration support for any and all of the failed or failing components for devices on Contractor-managed network. Contractor shall, as soon as possible, remedy the incident through configuration changes, software updates, operating system reload, or whatever is necessary to resolve the problem and in a manner consistent with County's Change Management procedures, except as stated in Subparagraph 6.4.2 (Hardware Repair).

6.4.2 Hardware Repair

Contractor shall be for diagnosing Contractor-managed hardware failures remotely where possible and then dispatching County field maintenance personnel to repair or replace the failed or failing components. County shall have the responsibility for equipment sparing and RMA returns to the equipment vendor(s) as applicable.

6.4.3 Software Repair

Contractor shall be responsible for resolving all Contractor-managed device software issues, including the ability for the software to meet the Functional and Performance Requirements in Paragraph 6.7 (Performance Requirements) and 6.8 (Transition Plan), respectively, and

the mitigation of security vulnerabilities and software defects per the manufacturer's recommendations.

6.4.4 Manufacturer Escalation

Contractor shall be responsible for any interaction or escalation with the hardware or software manufacturer(s) of Contractor-managed devices with the exception of RMA returns or replacements due to failure, which will be a County responsibility.

6.4.5 Field Response and Repair

Should Contractor not be able to diagnose or repair any defect remotely, Contractor shall inform County that on-site troubleshooting or hardware repair or replacement is required. County shall then dispatch field maintenance personnel to the site and perform the troubleshooting or repair under the guidance of Contractor's remote staff. Although County staff will perform field response and repair, Contractor has overall responsibility for the troubleshooting and resolution of the incident.

6.4.6 Field Response and Repair Dispatch Procedure

When County field maintenance dispatch is required, Contractor shall notify County by notifying the ISD Customer Assistance Division. When requesting a dispatch, Contractor shall note the trouble ticket numbers, the site requiring on-site personnel, the nature of the problem, and the expected actions that County personnel will be performing while on site.

6.4.7 Carrier Coordination

Contractor shall coordinate with the carrier(s) for any WAN circuits interconnecting any Contractor-managed devices to repair or restore services. Contractor is responsible for any and all escalation with the carrier(s) for service problems and testing. Should the carrier require an on-site joint meeting for troubleshooting or move/add/change activity, Contractor shall request a County field maintenance dispatch while continuing to be engaged in the coordination remotely.

6.4.8 Closure of Trouble Tickets

Contractor trouble ticket and County trouble ticket shall not be closed until the incident has been resolved. County contact will verify with the end-users that the incident has been resolved. County ticket and Contractor ticket may then

be closed. Tickets may also be closed with mutual agreement by County and Contractor.

6.4.9 Trouble Ticket Escalation

Contractor shall have a trouble ticket escalation process to expedite incident resolution by increasing the technical resources available to assist resolving the trouble ticket and Contractor's organizational management's visibility of the issue. This process shall have both automatic and manual escalation and notification steps. Contractor shall notify a designated County management contact during such escalations.

Escalation & Notification Procedures:

Severity 1/Critical Site Impacting Events

- CEM (Client Escalation Mgr) , Department Manager, CED (Client Escalation Dir), and Division within 30 minutes

Severity 1/Non Critical Site Impacting Events

- CEM at 1 hour
- Department Manager at 2 hour
- CED and Division at 4 hour

Inputs

- Severity 1 problem identified in problem management system
- Call from Service Management identifying critical service impact
- Call from client identifying critical service impact
- Notification from other Contractor work center (another GCSC, Network Management Center, SONET Maintenance Center or Cable Network - Management Center) identifying critical service impact

6.5 **Problem Management**

6.5.1 Examination of Trends

Contractor shall analyze trends of Alerts and Alarms from its trouble ticket system, statistical information gathered from monitored devices, and frequency of Alerts and Alarms from NMS systems to detect chronic, degrading, or impending problems.

Contractor shall use Performance Capacity Service (PCS) to identify capacity-changing network trends and to alert County of potential performance degradation. PCS shall analyze and document all exception or Out-of-Spec (OOS) conditions. All written network change recommendations shall be provided to County. Contractor's PCS shall provide the following analysis:

- Exception analysis (monthly)
- Forecasting analysis (monthly)
- Performance reporting (Up to the minute, hourly, daily, weekly, monthly)

6.5.2 Proactive Tickets

Contractor shall utilize the information determined during the examination of problem trends or statistics to open proactive trouble tickets to mitigate or avoid problems before they become service or performance impacting.

6.6 **Reporting**

Contractor shall provide regular pre-defined reports and ad hoc reporting capability for the MNFR devices and circuits. The scope and format of these reports are detailed in Paragraph 14.1 (Reports) and Paragraph 14.2 (Web Portal) and as set forth in Technical Exhibit 5 (Reporting Requirements).

Contractor shall provide the following reports.

- Routers: CPU Utilization, router buffer utilization and buffer misses (Cisco routers only).
- Router WAN Interfaces: Interface utilization (Frame Relay ports and PVCs, ATM ports and VCs, Private Lines), Discards (ATM/Frame Relay interfaces and Private Line interfaces) and network latency (Cisco Only) between adjacent router pairs.
- Router LAN Interfaces: Interface utilization, error rates (Token Ring), and Ethernet collision rates (Cisco only).
- A single monthly conference call can be established between County and Contractor's PCM network analyst to discuss findings and recommendations. The exception analysis shall be electronically mailed prior to any conferences and the statistical output shall be in Excel format.

6.7 Functional Requirements

Contractor shall manage the MNFR nodes to meet the following Functional Requirements:

6.7.1 Private Network

The internal County network shall not use the public Internet as transport for information between County locations. Contractor shall specify all transport medium and technologies in the network design.

6.7.2 Geographic Requirements

The network shall support all geographic locations that require County network access to support County services.

6.7.3 Virtual Private Network (VPN)

VPNs are defined as customer IP domains separated logically on a common network infrastructure. The network shall support a minimum of 100 VPNs with availability to all VPNs at all County locations. Unicast IP communication between VPNs that are not designated as shared services VPNs will be protected by Firewalls.

6.7.4 Shared Services VPN

The network shall support shared services VPNs in which multiple customer VPNs have access to common resources within the shared services VPN, however the shared services VPN shall not permit data transit between customer VPNs.

6.7.5 Application Support

The network shall support all existing customer applications currently being supported by County's existing network provider without modifications or adjustments to the customer applications or devices. The network shall have a migration path to support all future customer applications specified by County before final design acceptance by County.

6.7.6 Multi-Protocol Support

The network shall provide multi-protocol support across the network. Protocols shall include, but not be limited to IP, IPX, and SNA. Support of protocols across the network via tunneling or encapsulation technologies is acceptable. All protocol support services across the network shall be highly reliable and fully redundant with automatic recovery of a failure.

6.7.7 Multicast IP Service Support

The network shall support multicast IP services across the network. The multicast services shall be highly reliable and fully redundant with automatic recovery of a failure. The multicast IP service shall support multicast streams within a customer VPN and multicast streams that serve multiple customer VPNs.

6.7.8 Voice Over IP (VoIP) Support

The network shall support VoIP signaling and real-time traffic across the network. The network shall be capable of delivering carrier-class telephony service for County VoIP customers by meeting minimum VoIP requirements including:

- Delay – end-to-end delay must not exceed 150 ms
- Delay variation (jitter) – jitter must not add delay beyond what is left in the delay budget
- Packet loss – packet loss for telephony must not exceed one percent (1%)

6.7.9 Network Interface Support

The network shall support the following interface types to connect to customer edge devices:

- Gigabit Ethernet (copper & fiber)
- 10 Gigabit Ethernet

6.7.10 Maximum Transport Unit (MTU)

The network shall support end-to-end customer application packets with a MTU size of 1500 bytes without fragmentation.

6.7.11 Network Clock Synchronization

Contractor shall provide a NTP clock source to County that would allow County to pull from the identical clock source as Contractor to ensure the accuracy of timestamps.

6.7.12 Quality of Service

The network nodes shall provide reliable Quality of Service to assure an adequate level for the applications that are transported across the network under all network congestion conditions.

6.7.13 Emergency Restoration and Disaster Recovery

The network shall have allocated hardware and procedures to provide fast emergency restoration of a location that has lost network access for an extended period of time.

The detailed design specifications and as-built documentation shall be provided to the successful Contractor upon execution of the Contract. In addition to the specific staffing requirements in Paragraph 4.2 (Contractor Responsibilities), Contractor shall maintain sufficient numbers of staff with appropriate skill sets to ensure the MNFR nodes continue to meet the Functional Requirements.

In transitioning a node into Contractor's MNFR service, County shall ensure that the node is compliant with the detailed design specifications provided to Contractor. Contractor shall verify that the node meets the detailed design specifications before being accepted into Contractor's MNFR service.

County expects that the detailed design governing the MNFR nodes will change over time due to available technology and current needs at the time. Therefore, County and Contractor shall review the detailed design (including the Functional Requirements) and modify the SOW through the Change Order process to reflect any changes.

6.8 **Performance Requirements**

In addition to the specific staffing requirements in Paragraph 4.2 (Contractor Responsibilities), Contractor shall maintain sufficient numbers of staff with appropriate skill sets to meet Functional Requirements of the MNFR service option and to meet the following Performance Requirements:

6.8.1 Network Latency

Network latency is defined as the average ping responses on primary circuits between Core and Edge devices. The average ping response will be measured by pinging each network node every five (5) minutes and taking the average ping response over a one (1) hour period. Network Latency per site shall meet or exceed the requirements as set forth in the PRS.

6.8.2 Dropped Packets

Dropped packets are defined as the percentage of packets dropped on primary circuits between Core and Edge devices. Dropped packets per site shall meet the requirements as set forth in the PRS.

6.8.3 Incident Response

Incident Response is defined as the percentage of trouble tickets created or trouble cleared within fifteen (15) minutes of Alarm notification. Incident Response shall meet the requirements as set forth in the PRS.

6.8.4 Fault Determination

Initial fault determination is defined as the percentage of user affected outages diagnosed within two (2) hours of ticket creation. Fault Determination shall meet the requirements as set forth in the PRS.

6.9 **Transition Plan**

Contractor shall develop, manage, and implement a plan to transition the monitoring of County-monitored network from County to Contractor's MNFR service.

Contractor shall fully assume the management responsibilities of County-monitored nodes from County's monitoring systems no later than one (1) year from the date of Contract execution. It is desirable that the transition be completed as soon as possible without compromising the availability of the network or the manageability of the network by County.

Contractor shall participate in County's Change Management process and schedule all transition changes through County's Change Management authority.

It is desirable that the transition activities be performed with minimal or no impact to the delivery of network services. Should the transition be disruptive, the transition may be scheduled outside of the facility business hours or on weekends at County's option. Contractor shall consider any staffing implications such a requirement may create when pricing the Commissioning Charge to bring nodes into MNFR service.

The transition plan shall include at a minimum:

- A project schedule incorporating all major tasks (including but not limited to contingency)
- Descriptions of all major steps required of County and Contractor to transition MNFR service to Contractor
- A test plan to verify the readiness of Contractor's NMS system (including but not limited to the successful delivery of the required County views)
- A test plan for individual site transitions from the current County monitoring systems to Contractor's MNFR service

7.0 MONITORING ONLY OF EXISTING NETWORK LOCATIONS (MONITORING ONLY DEVICES)

7.1 Monitoring

Contractor shall monitor the status of all designated MO devices including Transport and Customer Facing devices, and their inter-connecting links to ensure optimal operation, to detect faults, and to allow for timely isolation and resolution of network problems by County staff. This monitoring shall be provided twenty-four (24) hours a day, seven (7) days a week, for the term of the Contract.

7.1.1 Network Management System Infrastructure Responsibility

Contractor must provide and maintain all systems, software, and licenses to interface Contractor's NMS with County's internal network and to meet the requirements described in this SOW relating to the MO service.

The service boundary is the Ethernet port of the router. The billable labor approval process shall be developed between County and Contractor and shall be priced in accordance to Exhibit B-3 (Pricing Schedule for Managed IP Services). Billing shall start only when authorized County personnel requests Contractor's assistance to resolve a failure beyond the service boundary.

7.1.2 SNMP and Syslog Access to County-Managed Devices

County shall provide SNMP read-only access and Syslog logging to Contractor's NMS on all County-managed devices that will be monitored by Contractor. Normally a read-only access will be provided unless Contractor can show that a write access is necessary to provide required services.

7.1.3 Regular Polling Interval

Contractor shall poll all of Contractor-monitored devices' interfaces at least once every fifteen (15) minutes. Monitoring services shall include the up/down state of all the monitored devices and interfaces in a near real-time manner to enable dispatch to County in the event of failure or problem with County-managed devices or circuits.

7.1.4 Incident Management

Contractor will ping monitor sites. Failed ping response tickets will be automatically emailed to customer.

7.1.5 Closure of Trouble Tickets

Contractor provides automatic monitoring and alarm notification to the County. Upon email notification to the County, the Contractor ticket is closed.

7.1.6 Network Management System

Contractor shall provide reactive & proactive Network Management Systems encompassing redundant server architecture & facilities-based redundancy to include:

- SunOS 5.10_Generic 108528-22 sun4u Sparc SUNW, Sun-Fire-480
- Redundant Power to each server - dual UPS and dual Generator (90 hours)
- Redundant LAN connectivity to each server
- Business Continuity Plans tested semi-annually
- Server Backup to include daily, weekly and monthly backups
- All client devices alarm to Raleigh and Phoenix node managers
- Raleigh associates can log into Phoenix NNM Servers
- Phoenix associates can log into Phoenix (or Raleigh) NNM Servers
- Ticketing can be swung to Alternate Support Centers (Phoenix I/TO servers)

All MRS licenses are included in the costs set forth in Exhibit B-3 (Pricing Schedule for Managed IP Services). Contractor shall deploy Sun Servers running the Solaris Operating System. Contractor will update equipment as needed.

7.1.7 County Network Security Equipment

Contractor shall allow any CPE on the LAN-facing side of the County layer 2 switch.

7.2 Performance Requirements

Contractor shall meet the following Performance Requirements:

INCIDENT RESPONSE - Incident Response is defined as the percentage of trouble tickets created or trouble cleared within fifteen (15) minutes of Alarm notification. Incident Response shall be greater than 95 percent (95%) of the Alarm notifications during the monthly reporting period.

7.3 Transition Plan

Contractor shall submit to County for approval a transition plan to transition the existing MSP-managed devices to Contractor's MO service. Contractor's transition plan shall be submitted for County approval within ninety (90) Days of Contract execution date. Contractor's submitted transition plan shall provide for transition to be complete one (1) year from contract execution date.

Contractor shall fully assume the monitoring responsibilities of County-monitored nodes from County's monitoring systems no later than one year from the date of contract execution. It is desirable that the transition be completed as soon as possible without compromising the availability of the network or the manageability of the network by County.

Contractor shall participate in County's Change Management process and schedule all transition changes through County's Change Management authority.

It is desirable that the transition activities be performed with minimal or no impact to the delivery of network services. Should the transition be disruptive, the transition may be scheduled outside of the facility business hours or on weekends at County's option. Contractor shall consider any staffing implications such a requirement may create when pricing the Commissioning Charge to bring nodes into MO service.

The transition plan shall include at a minimum:

- A project schedule incorporating all major tasks (including but not limited to contingency)
- Descriptions of all major steps required of County and Contractor to transition MO service to Contractor

- A test plan to verify the readiness of Contractor's NMS system (including but not limited to the successful delivery of the required County views)
- A test plan for individual site transitions from the current County monitoring systems to Contractor's MO service
- A description on how the billing will be applied as more sites are transitioned to Contractor's MO service over time.

8.0 IP TELEPHONY SERVICES

8.1 Fully Managed Maintenance and Support Services

Contractor shall provide FM for designated existing County owned IP Telephony systems. Additional systems and components may be designated for Contractor's FM during the term of the Contract.

The ISD Hosted IP telephony services are currently provided from a Cisco Call Manager cluster in the Downey Data Center. In addition to the Call Manager Cluster, there are Unity voice mail servers, Emergency Responder (e911) server, and Conferencing server. There is a separate Call Manager cluster that serves an IP Contact Center (IPCC) Enterprise edition that provides partitionable call center services to various locations in County. The telephony Call Manager servers, Unity servers, and IPCC servers are mirrored in the Orange County Data Center to provide complete redundancy to the environment. Gateways at the various facilities provide access to telephone company trunks and Survivable Remote Site Telephony (SRST) services are enabled on each gateway to provide back up services in case of a network failure. There are also stand alone VoIP systems (Call Manager and Unity servers) that service individual facilities.

FM shall include:

- Remote Monitoring
- Incident Management
- Hardware/Software Support and Maintenance
- Change Management
- Operation Services
- Reporting

Contractor shall implement FM within three months of contract award. Additional systems and components may be added to the environment during the term of the Contract.

Regardless of the location where Contractor provides Monitoring and Management Services, Contractor shall provide dedicated local technical staff supporting County so that they gain an understanding of County systems and facilities.

8.1.1 Remote Monitoring

- A. Contractor shall monitor the status of the IP telephony dedicated components and the VoIP components in the converged LAN and WAN infrastructure as set forth herein. If any remote connectivity from outside County is required, then Contractor shall be responsible for establishing and maintaining the network connection to the outside interfaces of County's extranet firewalls. Remote Monitoring Services shall include the up/down state of all the monitored devices as well as acquisition, investigation, and interpretation of all statistical information provided by the devices to ensure the overall health, stability, and availability of the entire system.
- B. **Access to Monitored Devices**
County will provide access to Contractor to monitor the designated devices. Normally a read-only access will be provided unless Contractor can show that a write access is necessary to provide required services. All access to devices must be via an access control server to log all persons accessing network and IP telephony components. All access to County systems and equipment shall be in accordance with County security policies and directives.
- C. **Polling**
Contractor shall poll all devices that have been assigned to Contractor to monitor at least every fifteen (15) minutes.
- D. Contractor shall monitor the status of IP telephony components including but not limited to:

- Status of PSTN trunks connected to voice gateways.
- Status of Quality of Service [QoS] between IP telephone endpoints.
- QoS parameters on switches, routers, and gateways used in the IP telephony service delivery.
- Hardware, software, and firmware of all servers, gateways, gatekeepers, routers, and switches used in the IP telephony service delivery.
- Operating system and associated services and processes of servers used in the IP telephony service delivery
- IP telephony applications such as Call Manager, Unity, Contact Center, etc.

E. Contractor shall monitor for all the following types of events:

General event types:

- Non-response to polls
- Re-initialization after power down
- Node unreachable
- Failure of services or processes
- Services or processes re-start error
- Services or process threshold exceptions
- Operating authentication error through security log
- General server/environment health

Application threshold events:

- Cisco Unity errors
- Active Directory-related status and errors
- VoIP Manager Client Communication services errors
- Data growth and shrink rates in databases
- Failed logon attempts
- Active Directory connection and read response time
- Directory replication failed
- Excessive voice quality errors
- Media list exhausted
- Route list exhausted

Environmental threshold events:

- NIC I/O error status
- Hard disk/array status
- Temperature thresholds
- Fan status
- CPU utilization
- Memory utilization percentage
- Paging/swap files utilization
- Disk partition utilization
- Power
- Free memory
- Primary drive free space
- Low server heartbeat rate

Router and switch events:

- Up/Down on all managed interfaces
- Up/Down on chassis modules
- Data circuits
- Voice circuits
- D channel out of services

- F. Contractor shall gather statistical data from the monitored devices identified below, interpret the data, and act on any data that indicates a current or pending issue impacting the delivery of IP telephony services.

Call Manager, Unity, Contact Center, Emergency Responder, Conferencing, etc., servers:

- Communication interface statistics
- Server hardware environmental sensors
- Operating system parameters
- Application metrics
- Availability statistics

IP telephony enabled LAN switches:

- Communication interface statistics
- Hardware environmental sensors
- QoS statistics

Gateways and IP telephony enabled routers:

- Communication interface statistics
- WAN circuit specific statistics
- Hardware environmental sensors

Uninterruptible Power Supplies supporting IP telephony components:

- Hardware environmental sensors
- Output status
- Battery status

8.1.2 Incident Management.

Contractor shall provide Incident Management services. Incident Management includes the response to a monitored Alert or Alarm condition, determining the source and cause of the Alarm, resolving the Alarm and/or establishing a trouble ticket in Contractor's internal trouble ticket management system to track the Alert or Alarm's ultimate resolution.

A. Alerts and Alarms

Contractor shall monitor for Alerts and Alarms all IP telephony related devices assigned by County. Contractor shall detect Alerts and Alarms as reported by the devices, correlated all the Alerts and Alarms, and determine what hardware or software components have failed, or are in a problem state.

B. Contractor Trouble Tickets

Contractor shall have and operate an internal automated trouble ticket management system to establish and track all problems, either identified by Contractor or identified by County. Contractor shall open a trouble ticket within its trouble ticket management system for tracking purposes. The trouble ticket management system shall record and report on information such as the initial Alert or Alarm condition, the equipment or circuit in question, the location of the problem, the name of the reporting and/or recording person, the time of the incident, and, noted by time stamp, all events and all actions taken to resolve the problem.

- C. Reporting Tickets to County
Contractor shall report the open ticket to the designated County contact so that County can track the same problem. Contractor's trouble ticket management system shall be capable of interfacing with the ISD's Service Center trouble ticket management system (Peregrine Service Center) to provide automatic ticket creation and updating. Contractor shall update the status of the problem resolution, such as: what steps have been taken, what tests have been done, and their results, where and who has the problem be escalated to, and what was the final resolution. Contractor shall update the trouble ticket whenever any actions have been taken or reported, or least, every hour.
- D. Incident Management Performance Requirements
Contractor shall identify the problem, create the ticket, and notify County of the problems within the requirements as set forth in the PRS.
- E. Problem Escalation
Contractor shall automatically escalate problem tickets within their operation to higher skilled staff, and to County management within specific time parameters based on the severity of the problem.
- F. Troubleshooting
Contractor shall troubleshoot the problem, determine the cause, and remedy the problem if possible remotely, or dispatch Contractor's field staff, if providing that support, and/or notify County to dispatch its technical staff, all within one (1) hour from problem Alert for ninety percent (90%) all problems ticketed.
- G. Support
If Contractor has hardware and/or software support responsibility for any of the failed, or failing components, then Contractor shall immediately remedy the problem through configuration changes, software updates or reload, hardware replacement, or whatever is necessary to resolve the problem within the time frame specified in the specified performance standard.

- H. **Manufacturer Escalation and Repair**
Contractor shall escalate to the manufacturer of any device that Contractor cannot determine the problem and resolution. Contractor shall be responsible for follow up until the problem is resolved.
- I. **Carrier Coordination**
Contractor shall coordinate with the carrier for any PSTN circuits connected to any monitored gateway device to repair or restore services.
- J. **County Support Coordination**
If Contractor does not have hardware or software support responsibility for any of the failed, or failing components, such as LAN or WAN components, then Contractor shall notify the designated County contact(s) of the diagnosis of the problem. County contact will notify its technical staff, or other responsible parties, of the problem and diagnosis. Contractor's monitoring and troubleshooting services shall be available to assist and work with the responding technical staff to remedy the problem.
- K. **Closure of Problem Tickets**
Contractor problem ticket and County problem tickets shall not be closed until the problem has been resolved. County contact will verify with the user that the problem has been resolved. County ticket and Contractor ticket may then be closed.
- L. **Pro-active Problem Management**
Contractor shall provide problem management services as part of the Remote Monitoring and Management Services. Contractor shall utilize the problem ticket database, as well as statistical information gathered from monitored devices, to analyze trends of repeated incidents, or degrading components. Contractor shall utilize the information determined in the problem management process to open pro-active tickets to resolve repeated problems or prevent impending problems.

8.1.3 Hardware/Software Support and Maintenance

Contractor shall provide all support and maintenance of hardware and software in designated locations of County owned IP telephony environment.

- A. **Certified Staff**
Contractor's staff shall be fully certified by the manufacturers of the hardware and software components to perform any of the tasks required to provide hardware and software support. Contractor shall provide documentation that their employees have the proper certifications for performing work on County systems or equipment.

- B. **Inventory**
Contractor shall maintain a current inventory of all supported devices with current hardware, firmware, and software revision levels.

- C. **Manufacturer's Warranty**
Contractor shall provide the extended hardware and software service support from the device manufacturer (Cisco SmartNet for most devices). Where Contractor provides manufacturer extended support, Contractor shall be responsible for all costs and level of support acquired, and continue to be responsible for Performance Requirements specified herein regardless of the level of service acquired from the manufacturer. Contractor shall have enough spare equipment in stock to maintain Performance Requirements specified herein.

- D. **Back-up**
Contractor shall perform back-ups of servers, gateways, and any other supported devices in the IP telephony environment.
 - 1. Contractor shall perform back-ups of all databases and configuration files whenever any changes are made to any supported devices.
 - 2. Contractor shall perform weekly back-ups of all databases and configuration files for all supported devices Countywide.
 - 3. Contractor shall store back-ups at the premises of the devices and a separate copy at a remote location.

- E. **Repair Response**
Contractor shall replace or repair any failed hardware or software components.
 - 1. Contractor shall replace or repair any component, make any necessary configuration changes, or perform any other remedy to bring any service affecting problems back into full functional and business operation within four (4) hours of notification for any problems affecting an entire site.
 - 2. Contractor shall replace or repair any component, make any necessary configuration changes, or perform any other remedy to bring any other service affecting problems back into full functional and business operation within the requirements as set forth in the PRS.

- F. **Trouble notification**
Notification of problems shall be from Contractors remote monitoring service, a County help desk or Network Control Center, or from directly from an authorized County employee.

- G. **Restoration**
Contractor shall restore applications, databases, and configurations on devices as needed to restore service.

- H. **Manufacturer Contact**
Contractor shall contact and work with manufacturer representatives to resolve any issues in resolving device problems.

- I. **Manufacturer's Returns**
Contractor shall coordinate Return Material Authorizations (RMA) with the manufacturers for replacement of failed hardware under maintenance agreements. Contractor shall purge the returned equipment of any sensitive County data, configuration, and other information.

- J. **Software**
Contractor shall upgrade and/or patch software to the level certified by the contractor. Contractor shall utilize

their Change Management processes for the software upgrades as well as hardware replacements.

- K. Access to County Systems
All access to County systems and equipment shall be in accordance with County security policies and directives. Contractor employees may be required to undergo security background checks as set forth in Paragraph 7.14 (Background and Security Investigations) of the base document of the Contract.

8.1.4 Change Management

- A. Contractor shall coordinate all adds, moves, changes, upgrades, patches, etc., to any IP telephony components designated by County. Contractor shall coordinate with other County staff and/or contractors that are making changes to County network components that may impact IP telephony service. The change management process shall be in cooperation and coordinated with existing County Change Control processes. Actual adds, moves, and changes to IP telephony components may be done by Contractor, if engaged for that service, or by others.
- B. Contractor shall utilize an automated change control software product for coordination and documentation of all IP telephony adds, moves, and changes to any hardware, software, or configuration components. It is desirable that Contractor's change control software interface with County's Service Center system for tracking change activity.
- C. Change requests shall be provided to Contractor by County staff, or Contractor staff if engaged in other support services, or designated others via a web portal (may be same web portal as used in other services provided in the Contract).
- D. Contractor shall maintain the database of all changes, classify the type of change (based on agreed upon factors), schedule the change, and notify any affected parties of the impending change.
- E. If an affected party notifies Contractor, within agreed upon time limits, of possible issues based on the

impending change, Contractor shall hold the change, notify all parties of the hold, and coordinate a meeting or conference call to resolve any possible issues. After resolution of any issues, Contractor shall re-schedule the change.

- F. Contractor shall ensure that all changes have planned fall-backs, fully documented. A change timeline shall contain a fall-back point where fallback will be invoked.
- G. Contractor shall verify the successful resolution of the change and then close out the change request.
- H. Contractor shall provide reports, or on-line reporting capability, to County on all change request activities. Reports shall include each change number, the title or nature of the change, the date of the change, the system/location/component involved in the change, primary person responsible for the change, the change status, and any comments relating to the status or issues related to the change.

8.1.5 Operation Services

Operation Services involve the support of the IP telephony applications, server operating systems, and databases. Contractor shall be responsible for all daily operational activities of the IP telephony environment. Contractor shall ensure that all activities such as additions, changes, and deletions to databases, configuration changes to devices, call center scripting and message support, etc., are in accordance with the overall County IP telephony architecture, industry best practices, and policies and practices provided by County.

- A. Contractor shall maintain and manage the overall County IP telephony dial plan. Contractor shall coordinate telephone number assignments for new projects, ensure correct database and gateway configurations and routing rules are implemented, and work toward a uniform number plan that may permit inter-department dialing.
- B. Contractor shall manage and maintain all device configurations and ensure that manufacturer and industry standards and best practices are used.

Contractor shall coordinate any changes to configurations, hardware changes, and software updates.

- C. Contractor shall manage and maintain the databases of all the devices that provide IP telephony and supporting services. Contractor shall ensure that databases are not corrupted, that standard conventions are used, and that are data images for all devices are backed-up.
- D. Contractor shall maintain an accurate inventory of hardware and software licenses for devices and services. Contractor shall provide a monthly report of all hardware and software licenses to County. The report shall indicate any additions, deletions, or changes during the prior month and shall indicate the expiration date of all licenses.
- E. Contractor shall provide administrative support adds, deletions, and changes to the IP call centers; adds, moves, and changes to supervisory and agent stations; assists user group administrators and supervisors in their use of the systems, do adds, changes, and deletes to media files, scripts, call flows, etc., as requested by County.

8.1.6 Reporting

Contractor shall provide regular pre-defined reports and ad hoc reporting capability for Contractor-managed devices and circuits and trouble tickets.

1. Web Portal

Contractor shall provide a web portal for County staff to view the status of all Contractor tickets. The portal shall be dedicated for County use. The portal shall not contain any advertising or any other non-County material.

The Web portal shall be partitioned and password protected to allow only authorized County staff to view and modify tickets only within their user group (usually the ISD CAC or a County department).

A general log-in procedure shall be available for any County staff to only view current tickets without the ability to modify them in any way.

The Web portal shall provide an inventory of all devices being monitored by Contractor. Inventory shall include name of device, serial number, maintenance support, and last configuration update.

The Web portal shall provide access to all open tickets (as limited by user group) including date and time stamps for all activity, descriptions of all activities in regard to isolating and resolving the problems, and all notifications and escalations.

2. Reports

The Web portal shall provide on-line reports. Reports shall be available on a daily, weekly, or monthly reporting basis. The following reports shall be available.

- Performance reports showing the utilization and performance of monitored components shall be available.
- Availability reports of individual monitored devices as well as groups of similar devices and the overall system shall be available
- Exception report showing high and low exceptions by device shall be available.
- Problem ticket reporting shall provide the following reports over any selected timeframe:
 - Meantime to notify County of ticket creation from problem Alert
 - Mean time to isolate the cause of a problem
 - Mean time to resolve a problem
 - Mean time to resolve multiple problems
 - Problem analysis
 - Tickets by site, user group (department), or Countywide
- Field Services reports showing all adds, moves, and changes activities.

8.1.7 Implementation Services

Contractor shall provide installation and field (adds, moves, and changes) services. The Field Services will involved the additions, removals, and changes to IP phone instruments at existing IP telephony locations, installations of new locations that involve only a small number if IP phones, or changes to existing equipment configurations that are outside the scope of repair and maintenance activities. Contractor shall

provide Project Implementation services which involve the implementation of a large number of IP phones and a new location, or a major upgrade or re-arrangement at an existing IP telephony location. The use of Contractor for these services is solely at the discretion of County. County reserves the right to use Contractor, its own staff, or third parties to accomplish these services.

A. Field Services (Adds, Moves, and Changes)

Contractor shall provide staff to perform the actual adds, moves, and changes to hardware, software, and/or configurations at any County facility as directed by County. This may include the installation of IP telephone instruments, physical re-arrangement of existing IP telephone instruments, hardware or software changes to gateways, or replacements of IP telephone instruments or installation, termination, and testing of cable or fiber.

1. Contractor shall be issued a work order, ATSS order, or similar instruction to perform a field service by County. County will negotiate a completion time for each work order with Contractor prior to work order issuance.
2. Contractor shall track all work orders and provide a monthly report to County detailing each work order, the specified time to complete the work order, and the actual time to complete the work order. Contractor shall complete all work orders within the time specified on the work order ninety percent (90%) of the time for all work orders issued for the month.

B. Project Implementation

Contractor shall provide a full suite of implementation services to implement IP telephony from small to very large locations. Contractor staff shall be certified by the manufacturers to perform the tasks required to implement the hardware and software. Each project shall be designed and priced based on the requirements furnished by County or gathered by County with the assistance of Contractor.

8.2 Hosted IP Telephony Services

Hosted IP telephony business services shall be provided by Contractor to any County facility within County. These services shall be hosted in equipment at Contractor's premises and provided to County's offices via Contractor's private wide area network service or the Enterprise Network. Contractor shall provide an interface point at County facility where County LAN infrastructure will be connected to Contractor's gateway device. The gateway for Hosted IP telephony services may be the same device as the wide area network gateway. County will provide power, space, and reasonable environmental conditioning for Contractor's gateway. IP telephone instruments may be provided by County or by Contractor as determined by County. The provisioning of the telephone instruments will be determined at the start of an implementation project or order for services.

Hosted IP services shall include:

- Basic Hosted IP Telephone Line Features
- Conferencing
- Voice mail
- Unified messaging
- IP trunking
- IP call center

8.2.1 Basic Hosted IP Telephone Line Features

Each Hosted IP telephone 'line' shall have a unique NPA-NNX-XXXX telephone number and have the following basic features and services included in the monthly service charge:

- A. User Group Calling (Extension to Extension Calling)
Closed user group calling capability shall be provided. A group of Hosted IP telephones may call any other IP telephone in that group, anywhere in County, as a 4- or 5-digit extension number. There shall be the capability for at least 200 groups with up to 40,000 numbers in a group. There shall be no usage charges, or call detail, for any calls within a group, or within the Hosted IP telephone system. Calls outside the user group shall require a '9' access digit.
- B. Outbound Calling
Each IP telephone line (unless restricted) shall be able to call anywhere within the PSTN in the United

States (50 states, Washington D.C., Virgin Islands) without any usage charges. Call detail of all outbound calls shall be provided. All international calls shall be directed to County's contracted long distance carrier.

- C. **Call Transfer/3-Way Consultation**
The IP telephone user shall be able to transfer an existing call to another IP telephone user. The IP telephone user shall also be able to enable a three-way conference by adding the existing call to the newly placed call. The IP telephone user shall then be able to disconnect from the call that remains in progress.
- D. **Call Hold**
The Call Hold feature shall enable an IP telephone user to place an existing call on hold while placing another call or answering an incoming call. The IP telephone user shall be able to alternate between the two calls.
- E. **Call Forward-Fixed**
Call Forwarding - Fixed shall automatically re-route incoming calls to a pre-selected IP telephone whenever the called number is busy or does not answer within a pre-defined number of rings.
- F. **Call Forward - Variable**
Call Forward - Variable shall enable the IP telephone user to re-route any incoming calls to any other number. This shall be accomplished by the IP telephone user dialing a predefined code plus the forwarded IP telephone number.
- G. **Call Restriction Levels**
Each Hosted IP telephone line shall have a restriction level associated with it that allows or denies access to other lines and features inside and outside the system. Restriction levels will be defined by County's staff. Up to ten (10) levels may be defined. Restriction levels may include receipt of incoming calls only, calling within a pre-defined user group of numbers only, blocking of certain NPAs and/or NNXs, time of day blocking, full unrestricted access to PSTN lines, etc.

- H. Call Pickup
Call Pickup shall allow an IP telephone user to answer a call ringing at any other IP telephone in a defined pickup group.
- I. Call Park
Call Park shall enable an IP telephone to place a call on hold that can then be retrieved from any other IP telephone in the user group.
- J. Last Number Re-dial
Last Number Re-dial shall automatically re-dial the last number called from the IP telephone by dialing a simple code or by programming a button on an IP telephone instrument.
- K. Speed Dialing - Individual
An IP telephone user shall be able to program at least ten (10) telephone numbers (in addition to numbers that may be programmed in the telephone instrument) that can be out-dialed by use of simplified access codes and numbers.
- L. Automatic Call Back
Automatic Call Back shall allow an IP telephone user to automatically re-dial a busy Hosted IP line as soon as the line is free.
- M. Ringdown Line
When a Ringdown IP telephone line goes off-hook it shall automatically dial a pre-defined telephone number.
- N. Assume Dial 9 Service
Assume Dial 9 Service shall enable an IP telephone line to automatically access an outside line whenever the IP telephone line goes off-hook. These lines shall be able to emulate standard business lines and/or PBX trunks.
- O. Call Waiting
Call Waiting shall Alert a busy IP telephone line with a tone or visual indication on the telephone instrument that indicates that another call is waiting. The IP telephone user may place the original call on hold and

answer the new call. Call Waiting may be temporarily canceled by dialing a code.

- P. Hunt Groups
The Hosted IP system shall be able to route inbound calls to a predetermined sequence of telephone numbers until it is answered.
- Q. Multi Line Appearance
The Hosted IP telephone system shall support the ability for multiple line appearances to operate on a user IP telephone instrument.
- R. Message Waiting Indicator
The Hosted IP telephone system shall provide a visual indication on an IP telephone instrument (if equipped) that a message is waiting for review.
- S. Limited Call Acceptance
Limited Call Acceptance permits an IP telephone line to only accept incoming calls from a pre-defined list of telephone numbers. At least thirty (30) numbers shall be able to be on the acceptable list.
- T. Call Detail
Call Detail shall provide a detailed record of every call made by each IP telephone line, except internal system calls, including date, starting time, duration, and number dialed. The Call Detail shall be available to County as a real time stream and monthly data disc.
- U. Music on Hold
Music shall be played to callers placed on hold within the Hosted IP telephone system. Music sources shall not contain any commercial or advertising messages. Music on hold shall be able to be removed from any or all IP telephone lines as determined by County.
- V. Uniform Call Distribution
Uniform Call Distribution shall route incoming calls evenly to a group of pre-defined IP lines, in the order received.

- W. Caller ID
The telephone number of the calling party shall be displayed on the IP telephone instrument (if so equipped).
- X. Call Block
Users shall be able to selectively block incoming calls from their IP telephone line. Entries for the blocking list may be entered via the web portal.

8.2.2 On-Line Directory

A. Functional Requirements

Contractor shall be capable of providing an online directory service with real time updates of personnel, fax numbers and other information. As an option, Contractor must provide the following online directory features:

- An on line directory of all County personnel, searchable by employee names, and on site contractor names and their e mail addresses, County office addresses and telephone numbers, department fax numbers, conference room telephone numbers, video rooms and major department listings.
- Contractor must make available and maintain the online directory that is securely accessible to all County employees from County Intranet using standard browsers. Contractor shall provide LDAP and SQL Intranet access to the directory for County application and process automation needs.
- Accessible on a secure, network accessible channel (intranet) for querying and reporting.
- Selective blocking of the display of information

B. Contractor shall support the following Online Directory operational requirements:

- Create and distribute custom exports (e.g., Excel) in requested format, as needed, by

business units, mailroom or corporate communications.

- Maintained in a real time mode within twenty-four (24) hours of adds/moves/changes/deletions

C. Management and Reporting Requirements

Contractor shall support the following Online Directory management and reporting requirements:

- Technical point of contact for application support and minor programming changes for the Web based directory at no additional cost to County.

8.2.3 Conferencing

Contractor shall provide Conferencing services through the Hosted IP telephony service. Conferencing service administration and operation shall be via a web portal. The Conferencing services shall have the capability of integrating with Microsoft Outlook client software on County desktop devices.

Contractor shall size the system ports to permit several simultaneous small conferences as well as for very large conferences of 100 or more participants. Contractor shall increase port capacity as the number of Hosted IP telephone lines increase. Contractor shall ensure that are always enough system ports available.

- A. The conferencing system shall provide a conference ID number and passwords to the user that scheduled the conference. A 'host' password and a participant's password shall be provided.
- B. For non-Hosted IP telephony system users, the scheduler, or host, will be responsible for notifying participants of the date/time and conference ID and participant password.
- C. At the scheduled time, participants may dial into the conference system and access the conference after being prompted for the conference ID and password.
- D. There shall be entry and exit tones announcing participants or, if invoked by the host, user name

announcements, when entering and leaving the conference.

- E. Additional conference participants may be added to the conference during the conference by the host.
- F. The conference may be recorded as determined by the host. Recording shall be made available to the host upon completion of the conference via the web portal.
- G. The host will be billed for the conference based on time and participant ports scheduled. Billing for time and participants shall vary based on the way each participant access the conference; via the internal IP number, external direct dial number, or 8XX number.
- H. Basic conferencing features for system users shall include:
 - 1. Announced entry and departure
 - 2. Lists all participants attending the meeting
 - 3. Conferencing scheduling must be integrated with Outlook by setting up voice and Web conferences directly from a Outlook meeting request form
 - 4. Users shall be able to schedule recurring Meetings from Outlook
 - 5. Breakout sessions, projected to be available in 2008
 - 6. Roll call
 - 7. Mute
 - 8. Out-dial capability
 - 9. Lock meeting
 - 10. Screened entry, projected to be available in 2008
 - 11. Option for users to hold voice and Web meetings with a personal meeting ID and without the need for scheduling
 - 12. Automatic recording and playback of meeting sessions
 - 13. Lecture-Style Meetings with Q&A: Listen-only meetings with facilitated question and answer sessions
 - 14. Allow meeting organizer to mute and un-mute, change speaking ability, record, lock, eject, and end meeting

15. Search for users by calling a sequence of main phone, alternate phone, and pager numbers This service is available on AT&T's Enhanced Crisis Management Service
16. Users can prerecord messages for other participants to hear before entering the meeting This service is available with Executive Service only.
17. Users can automatically notify invitees for meetings scheduled from Outlook
18. Users can automatically notify invitees when meeting is updated or cancelled.
19. Users can receive notifications that automatically populate user's Outlook calendar.
20. Users are able to join a voice and Web conference directly from Outlook calendar entry.

8.2.4 Hosted Voice Mail Services

In conjunction with the Hosted IP telephone services, Contractor shall provide Hosted voice mail services. The voice mail services shall be actively managed by Contractor to ensure sufficient database space, ports, network bandwidth, etc. are always available to provide non-blocking, reliable, service. Contractor shall size the voice mail system to maintain a maximum of twenty (20) minutes of messages per user. A web interface is desirable for the user and the administrators to manage the features for each mailbox and the user group. The voice mail system shall provide the following features:

A. User Groups

The Hosted voice mail system shall be partitionable into closed user groups for administrative purposes. Usually these user groups will be County departments and will be the same as the IP telephony user groups. Designated administrators in each of these departments will be given rights to administer features and functions for their department (user group). However, designated ISD staff shall have administrative rights to all County user groups and system-wide parameters. The closed users groups will not interfere with actual voice mail traffic; incoming, forwarding, distribution groups, etc. All County voice mail usage will be common throughout the system.

- B. **User Administration**
Hosted IP voice mail user shall be able to access their voice mail features and settings via a web portal. This should be the same web portal as their IP telephone service. From the web portal the user shall be to make changes to their settings. The user group administrator for the voice mail user may override individual user settings.
- C. **Caller Access**
Callers shall be connected to a user's voice mail box if the user's telephone line is in use or if there is no answer after a set number of rings as determined by the user.
- D. **Greetings**
Voice mail users shall be able to create both primary and alternative greeting messages. It shall be easy to switch back and forth from the primary and alternative messages. Messages shall be easily changed from both the user's telephone line or remotely from any line.
- E. **User Notification**
The voice mail system shall notify the user that voice mail has been received. A message waiting light on the IP telephone instrument shall be activated when there are unopened messages by the voice mail system. The message waiting indicator signal shall be received by the telephone instrument within one (1) minute of message receipt.
- F. **User Access**
Users shall be able to access, review, and manipulate their voice mail both from their primary telephone line and remotely from any line. A local or toll-free access number shall be provided to permit users to access the voice mail system, enter their unique password code and mailbox number (usually the telephone number) to enter their voice mail box.
- G. **Passwords**
Users shall be able to create their own unique password codes for accessing their voice mail box. These passwords shall be able to be changed at any time by the user. Password lengths shall be

selectable by County to correspond to existing password structures.

H. Message Review

Upon accessing their voice mail box, users shall be able to review all their messages. Each message shall be announced with the date and time the message was received. Users shall be able to pause, fast-forward, back up, and go to the beginning or the end of all the messages at any time by using the telephone instrument dial pad or special function keys. The user shall be able to erase a message before completion of playback.

I. Message Handling

Users shall be able to save, replay or erase any message. Users shall be able to forward any message or reply to any message by entering the recipient voice mail (telephone) number. Messages may be replied to or forwarded to any other voice mail box in the entire system. System prompts shall assist users in message handling.

J. Message Distribution

Users shall be able to record a message for delivery

K. Message Class Marks

Messages shall be able to be marked as 'urgent' messages that shall be then placed ahead of all other messages in the recipient's voice mail box. Messages shall be able to be marked as 'private' messages that shall then not allow them to be forwarded to any other voice mail box. Messages shall be able to be marked for 'notification of receipt' which shall notify the user that the recipient has listened to the sent message.

L. Follow Me Service

The voice mail user shall be able to program secondary telephone numbers (cell phone, remote office, home, etc.) for the voice mail system to access when an incoming call is answered. The voice mail system will request the caller's name. The voice mail system shall attempt to call the user in the order the secondary telephone numbers have been programmed. Upon answer by the user on a

secondary telephone number, the voice mail system will announce the caller's name whereupon the user can accept or reject the call. The rejected call will result in the calling party being notified that the caller could not be reached and that a message may be left. Follow me secondary numbers may be programmed by the voice mail user via the user web portal. It is desirable that settings are day and time sensitive, i.e. callers are forwarded to different secondary numbers, or directly to voice mail, based on the day and time of day. The user group administrator may override follow me services for an individual user or the entire group.

M. Outcall Notification

In addition to Follow Me service, the voice mail system shall be able to automatically alert an email address.

N. Transfer to Receptionist

Users shall be able to program their voice mail box to allow callers to transfer to a receptionist rather than to leave a message. The receptionist may be any telephone number within any of County's telephone systems.

O. Automated Attendant Services

The Hosted IP voice mail service shall include automated attendant services. The automated attendant service shall allow callers to route themselves via voice menus to the service, employee, or information they are seeking via entries from their telephone keypad.

1. Operation

The automated attendant service shall answer an incoming call from any type of line (POTS, centrex-type, toll-free), give a voice greeting and menu of choices, receive the callers choice via keypad entry, route the call to the telephone line, voice mail box, or pre-recorded announcement associated with the received entry, or route the caller to a receptionist or information recording if no entry is received or the caller enters '0'. Multiple layers of menu choices shall be available with multiple choices per menu. The system

capacity shall be easily expandable to handle additional traffic loads.

2. Messages

Menu and end messages shall be able to be changed at any time via password protected remote access. Pre-recorded 'after hours', 'holiday', and 'emergency' messages shall be automatically played based on day and time and/or upon password protected remote access activation.

3. Reports

Reports shall be available via a web portal at the end of each reporting cycle as established at implementation of the service to the user group administrator for each system.

P. Interactive Voice Response Services

The Hosted IP voice mail service shall be capable of providing interactive voice response services for specialized County functions. These services include database look up and text to voice translation initiated by a numeric entry made by a caller after a prompt from an automated attendant, voice recognition to validate access, routing of calls to special functions or persons, load leveling by system callback from ANI and/or later time commitment, fax back capability, etc.

Q. Integration with existing systems

The Hosted IP voice mail services shall be capable of integrating with existing County owned and contracted voice mail services and systems so that voice mails made are distributed and forwarded anywhere in County regardless of serving platform.

8.2.5 Unified Messaging

The IP telephony system and voice mail system shall be capable of integrating with the existing County e-mail systems. This integration would permit listing of all pending voice mail messages, would permit e-mail messages to be accessed remotely from the voice mail system and provide a text to voice translation for the user, and would allow voice mail messages to be recorded and stored as digital files for future use within departmental files. The contacts lists in the user's desktop client will interface with and/or replace the

web portal personal directory. Most departments (and sometimes several within a department) operate their own email servers. County uses primarily Microsoft Exchange and Novell GroupWise.

Contractor shall support the following desktop environments:

Operating Systems

- Microsoft Windows NT (Service Pack 6)
- Microsoft Windows 2000
- Microsoft Windows XP
- Microsoft Windows XP Service Pack 2 Outlook
- Microsoft Outlook 2002 (Service Pack 3 or later).
- Microsoft Outlook 2003 version 1.0.9.1
- Microsoft Exchange - IMAP4 complaint

8.2.6 IP Trunking

Contractor shall provide IP trunking services to existing County PBXs. Service shall be provided over Contractor's wide area network service. Existing telephone numbers shall be ported over to Contractor's service. Existing PBXs shall interface with the IP trunking at Contractor's gateway device.

- A. All General Hosted IP Telephone Service Requirements, Technical Standards and Requirements shall apply to IP trunking service.
- B. Contractor's gateway shall be able to provide PRI ISDN and T-1 interfaces in accordance with industry standards.

8.2.7 Call Center Services

In conjunction with the Hosted IP services, Contractor shall provide Call Center Services. Call Center Services shall permit multiple, independent call centers to operate at any location in County that can be reached via the IP wide area network. Any IP phone provided by the Hosted IP telephony services, and telephone instruments in other telephone systems that can be connected to the Hosted IP telephony services via IP gateways, shall be able to be an 'agent' phone in a virtual call center. Web based call center application shall be provided as part of the Call Center Services. Call Center inputs may be voice calls, text messages, or emails.

A. Automatic Call Distribution

The Call Center Services shall provide automatic call distribution for incoming calls to defined telephone number(s) at a number of locations throughout County.

1. The Call Center Services shall support an unlimited number of agents, agent groups, queues, routing schemes and steps per routing scheme.
2. The Call Center Services shall provide several music/message on hold choices for each agent group. The Service shall be able to play multiple messages or music sources to callers while on hold.
3. Agents shall be able to maintain membership in simultaneous workshops and receive queued calls based on skill configurations.
4. Caller shall be notified of the potential wait times.
5. Calls (or other input) shall wait in queue for pre-determined duration, or based on the status of other queues or agent skill groups, and then be escalated to other queues.
6. Callers shall be given an option for a callback which will call them back in the order their call was received.
7. The Call Center Services shall be able to interface to various County applications for database look-up and/or customer service tracking.
8. The Call Center Services shall be able to route calls based on various parameters such as time of day, agent skill groups, call loading, and as specified below, for each Call Center group.
9. The Call Center Services shall be able to route calls based on ANI or DNIS.
10. Calls shall be able to be routed to the last agent the caller spoke with on a prior call.

11. The Call Center Services shall be able to route calls based on database lookup.

12. The Call Center Services shall be able to offer choices to the caller while in queue. The caller shall be able to enter a DTMF digit at any time while in queue to hear other options without being removed from the queue.

B. Supervision

The Call Center Services shall provide for supervisory agent positions that shall be able to monitor, manage, and view information on all the lines and agents assigned to that supervisor. There may be multiple supervisors over a group and a supervisor may have access rights to multiple agent groups.

1. Supervisors shall be able to see a detailed list of agents by workgroup or team and view their current status.

2. Supervisors shall be able to view a list of current statistics (number of agents logged in, number on calls, etc.) Statistical information shall be available in numerical and graphical form.

3. All agent, calls queued, and other pertinent information shall be able to be displayed on wall boards. The information to be displayed shall be configurable by County.

4. Real time information on the number of calls queued, longest duration in queue, Performance Requirements, etc. shall be available on the agent and supervisor's desktop

5. Detail on each of the calls in queue such as callerID, duration of call, etc. shall be available to the supervisor

6. A supervisor shall be able to move a call to an available agent for answering

7. A Supervisor shall be able to answer any call in queue regardless of the position of the call in queue.
8. Supervisors shall be able to monitor the status of lines or particular agent stations and view the particular call on that line or station.

C. Administration

Authorized managers in County user groups (usually departments) shall be able to administer the call center(s) within their user group via a Web interface.

1. The administrator shall be able to add lines, stations, and ACD agents (probably using the tools provided with the Hosted IP telephony services).
2. The administrator shall be able to configure agent workgroups, set supervisor rights and access to different workgroups, and view all current queues and all statistics for all workgroups within the user group
3. The administrator shall be able to configure the various reports content and frequency of issuance.
4. The administrator shall be able to establish skill parameters for agents and workgroups.

D. Application Development

Contractor shall provide application development tools to assist ongoing operation and management of Hosted Call Center Services. The tools shall permit County to upgrade, enhance, and modify existing Call Center Services

1. The tools access should be via a Web based interface
2. The tools shall permit authorized County staff to design call flows, IVR prompts and messages, establish interfaces to external databases, etc.
3. The tools shall be graphical to ease design

4. The tools shall incorporate all Call Center Services such as voice mail, IVR, email, fax, text messaging, CTI, etc.
5. The tools shall allow modification to existing Call Center Services without disruption to callers in queue

E. Email Integration

The Call Center Services shall process incoming user emails and also interface to existing County email systems.

1. Emails from the public shall be processed by the Call Center Services in the same manner as incoming voice calls.
2. Emails shall be able to be routed to specific skilled agents for processing.
3. Service Alerts and management information shall be automatically emailed by the Call Center Services to designated County staff.

F. Interactive Voice Response

The Call Center Services shall provide IVR capability to front-end any County call center requirements.

1. The IVR Service shall be able to integrate to any ODBC compliant database.
2. The IVR Service shall be able to integrate to several databases simultaneously for use with a single caller or for multiple call center instances.
3. The IVR shall support multiple define minimums languages.
4. The IVR shall support several define minimums levels of prompts
5. The IVR Service shall provide text to speech services.

G. Computer Telephony Integration (CTI)
CTI capability must be available for interfacing to multiple third party applications and databases for a Call Center Services and permit multiple call centers to also access those same and/or other applications and databases. Input via the caller from prompts from the IVR and/or ANI/DNIS information shall enable a query to and response from a third party application or database and present the response information on the agents desktop device. Response data from the third party applications and/or databases shall permit steering of the calls to specific workgroups, skill sets, or individual agents.

H. Voice Mail Integration
The Call Center Services shall utilize the Hosted IP voice mail services in conjunction with the Hosted IP telephony services.

1. Callers shall be able to leave a message while in queue
2. Callers shall be able to maintain their position in queue after leaving a message
3. Callers shall be able to cancel their message or re-record their message.
4. Agents and Supervisors shall be able to see that messages have been entered by callers in queue.
5. Messages shall be able to be sent via email to other agents, supervisors, or attached to database information.

I. Agent Station Hardware and Software
The Call Center Services should make use of the same Hosted IP telephony telephone instruments that are used for IP telephony services. The Call Center Services should also utilize software based 'soft-phones' and telephone instruments working on non-IP telephone systems. Each phone shall have the following features available:

- Audio Volume Adjust
- Auto Echo Cancellation

- Call Forward Busy
- Call Forward No Answer
- Call Forward All Calls
- Call Hold / Release
- Call Park / Pickup
- Call Transfer
- Call Waiting
- Calling Line ID Line and Name
- Chat
- Conference (unicast)
- Last Number Redial
- Ringer Pitch Adjust
- Ringer Volume Adjust
- Speakerphone Mute
- Speed Dial (Auto-Dial)

J. Reporting

The Call Center Services shall provide a complete suite of standard reports and the ability to produce custom, on demand, reports.

1. Report capability shall be integrated into the Call Center Services and not require County to use a separate application or database.
2. Real time reporting of agents, lines, queues, etc. shall not interfere with any call processing
3. Reports shall be available from any agent's or supervisor's workstation via a web interface.
4. Reports shall be able to be sent to any networked printer.
5. Schedules for output of standard reports shall be able to be modified by the user group call center administrator.
6. Report data shall be archived by Contractor for the term of the Contract to provide year-to-date and other long term trend reporting.

K. Recording

Call Center Services shall allow calls, both incoming and outgoing, to be recorded for instant playback and for archiving.

1. Calls shall be digitally recorded and indexed for retrieval by agent, queue, time of day, dialed number, etc.
2. The Call Center Services shall allow all calls to be recorded if required by County for a specific user group and/or call center
3. The Call Center Services shall allow the agent to record calls at the agent's initiation.
4. The Call Center Services shall allow the supervisor of the user group call center to initiate call recording for a specific agent or group of agents
5. The Call Center Services shall allow an agent to search and retrieve recorded calls.
6. The Call Center Services shall allow the supervisor of a user group to search and retrieve recorded calls
7. The Call Center Services shall provide secure access to all recordings for a user group call center via a web interface.
8. The Call Center Services shall provide a monthly hard media (CD or DVD) of all recorded calls that is indexed for search and retrieval

- L. The Web collaboration service shall provide Web callbacks.

The Call Center Services shall provide integrated Web collaboration services.

1. The Web collaboration service shall be able to act on any HTML event such as send a fax, make a telephone call, generate an email, etc.
2. The Web collaboration service shall work with interactive web page applications.

3. The Web collaboration service shall interface with any ODBC compliant database to allow user queries and database updates
4. The Web collaboration service shall provide an integrated chat service.
5. Text messaging shall be routed the same as telephone calls.
6. Text messaging shall be capable of having pre-defined text for agents to respond quickly to frequently asked questions.
7. The Web collaboration service shall integrate with Microsoft Net meeting for providing voice and video over the Internet with agents.

M. Fax Management

The Call Center Services shall be able to route incoming faxes the same as telephone calls.

1. The Fax management service shall permit an agent to access faxes on the desktop, manipulate them (re-orient, resize, gray scale), print them, and/or attach to email
2. The Fax management service shall provide for sending faxes
3. The Fax management service shall provide OCR and text to speech capability.

8.2.8 User Administration

Hosted IP telephone user shall be able to access their IP telephone features and settings via a web portal. This should be the same web portal as their IP voice mail service. From the web portal the user shall be to make changes to their settings such as speed dial numbers, location information, call forward, etc. The user group administrator for the IP telephone user may override individual user settings.

- A. The user shall be able to input and modify a personal phone directory from the web portal. The user shall be able to dial directly from the phone directory.
- B. The user shall be able to set up incoming call controls such as sending the call to voice mail or sending the call to another answering point, depending on the caller ID or the user's availability.
- C. The shall be call detail records for the user that list all calls received, dialed, or missed, with name and number if from a user of the Hosted IP telephony services.

8.2.9 User Group Administration

The Hosted IP telephone system shall be partitionable into closed user groups for administrative purposes. These will usually be the same user groups used for extension to extension calling, but not always. Usually these user groups will be County departments. Designated administrators in each of these departments will be given rights to administers features and functions for their department (user group). However, designated ISD staff shall have administrative rights to all County user groups and system-wide parameters. These closed users groups are for administration only and will not interfere with actual phone traffic routing. Group administrators shall have access to their group only via a web portal.

- A. The Group administrator shall be able to add, modify or remove users, reset passwords, modify hunt groups and automated attendants.
- B. All phone numbers and other resources under the responsibility of the administrator shall be listed via the web portal for modification.

8.2.10 System Administration

As described above, designated ISD staff will have system-wide administrative rights to manage countywide policy directives regarding call restrictions, international calling, 900/976 blocking, etc. System-wide inventory and reports shall be available to manage these functions. Secure system-wide access shall be via a web portal.

8.2.11 Call Control Services

Contractor shall be able to provide the following controls to minimize abuse and fraudulent use of County's telephone services. County may require that these controls be implemented automatically by Contractor whenever any new Hosted IP line is installed, moved, or re-arranged in any way. These system-wide controls shall only be able to be modified by the System Administrator. These controls apply to IP trunking services as well as Hosted IP telephony services and implemented in accordance with Technical Exhibit 4 (Default Line Blocking Matrix). County shall identify in writing all County staff authorized to direct Contractor under this Subparagraph 8.2.11.

A. Call Blocking

Contractor shall provide individual portal blocking of specific telephone numbers such as off-shore toll free (800, 888, etc.) numbers or area codes and/or prefixes as directed by County which shall apply to all of County's lines unless individually and specifically exempted in writing by authorized staff of County.

B. 900/976 Calls

Unless an IP line is individually and specifically unrestricted in writing by authorized staff of County, all lines shall be blocked from accessing any 900 area code and 976 prefix 'information services' telephone numbers.

C. 0, 00, 0+ Access

Any County IP line (unless restricted by the local telephone system) shall be able to access Contractor's Operator services. Access to any other contractor or carrier via dialing 0 or 00 shall be blocked on all lines unless individually and specifically unrestricted in writing by authorized staff of County. Access to 0+ for dialing calling card calls shall be available from any County IP line (unless restricted by the local telephone system) unless individually and specifically restricted in writing by authorized County staff. Contractor's Operators shall not complete any call for any County user unless the user produces a valid calling card. Contractor's Operators shall not pass the call to another contractor's or carrier's operators for handling.

- D. 10XXX
Unless individually and specifically unrestricted in writing by authorized County staff, all access to any contractor or carrier other than Contractor by use of a 10XXX code shall be blocked. Contractor shall be responsible for insuring that no calls are placed using any other contractor or carrier either by 10XXX access or by changing of the PIC code for the individual line. County will not be responsible for any charges by any unauthorized carrier.
- E. International Calls
Unless individually and specifically unrestricted in writing by authorized County staff, all international calls (any calls outside included domestic long distance dialing range) shall be blocked.
- F. Incoming Call Blocking
Contractor shall block incoming calls, either direct calls, or '800/888' calls, from specific numbers or areas as directed by County staff. Blocking shall be based on the calling ANI number. This blocking shall be used to thwart attempted hacking from suspected or known locations of fraudulent activities.
- G. Call Return or Extension Services
Unless individually and specifically unrestricted in writing by authorized County staff, all 'call return' or automatic completion or extending of a call through 411 services, or any other special calling feature not called out in these specifications that incurs a fee for use shall be blocked.

8.2.12 Operator Services

Contractor shall provide telephone operators that shall provide the following special functions.

- A. Directory Assistance
Contractor's directory assistance operators shall be available twenty-four (24) hours a day, seven (7) days a week. They shall be accessed by dialing 411 (after obtaining Contractor's IP dial tone). Contractor's operators shall have access to all published directory listings in the country. Contractor's operator staffing shall be at a level so that all County calls shall be answered within three (3) rings, ninety percent (90%)

of the time. In lieu of live Directory Assistance operators, Contractor may provide a web based directory assistance service to all Hosted IP services users.

B. Operator Assistance

Contractor shall have a twenty-four (24) hours a day, seven (7) days a week, operator service. Contractor's operators shall be accessed by dialing '0' from any Hosted IP telephone lines, or any PBX IP trunk line after dialing the outside access digit (if the line is so un-restricted). Contractor's operator staffing shall be at a level so that all County calls shall be answered within three (3) rings, ninety percent (90%) of the time. County users shall not receive a busy tone when calling Contractor's operators. The operators shall have the capability to verify busy signals and barge in for emergencies.

C. Collect Calls

Contractor's operators shall place outgoing collect calls for County users. However, unless individually and specifically authorized in writing by authorized County staff, no County lines shall accept, nor pay for, any incoming collect calls, regardless of whether the called party accepts the call and charges. Contractor shall be responsible to prevent collect calls from being accepted and billed to non-authorized County lines.

D. Third-Party Calls

Contractor's operator shall place outgoing third-party calls for County users. However, County will not accept, nor pay charges for, any incoming third party calls charged to County lines. Contractor shall be responsible for preventing any such billings from taking place.

8.2.13 E911 services

Contractor shall comply with the local number portability regulations and emergency service requirements including E9-1-1 services to identify the location of an originating IP telephone line and route the call to the appropriate Public Safety Answering Point (PSAP). Contractor will be responsible for updating the E911 database when equipment is moved. For IP trunking, the termination address of the IP trunk circuit shall be used. For Hosted IP telephone

services, more specific location information is required. This shall be a combination of Contractor supplied information and user supplied location information via the user's web interface.

The users of VoIP services shall be capable of placing an emergency call to 911 and transmitting the location (floor number and room number) of the caller to the PSAP. The voice services are required to send the call and the Calling Party Number (CPN) over Centralized Automatic Message Accounting (CAMA) trunks to the PSAP. The PSAP will be capable of using the CPN or the Caller Emergency Service Identification (CESID) number to look up the street address of the caller. The PSAP uses an Automatic Location Information (ALI) database to determine the caller's location.

All locations shall be capable of routing 911 calls over local trunks to the local PSAP.

Calls to the PSAP must be routed over a dedicated CAMA trunk. Contractor shall be responsible for:

- Coordination of the ordering and installation of CAMA trunks
- Loading the master ALI database to the LEC ALI database
- Updating the LEC ALI database
- Archiving the ALI database

8.2.14 Technical Standards

Contractor's IP telephony infrastructure supporting their Hosted IP telephony services shall conform to the following Standards:

- IETF RFC 2132 for DHCP
- IPv4. IPv6 when and where offered commercially by Contractor
- IETF RFC 1349 ToS, 2474, 2475 DiffServ
- ITU-T E.164
- ITU-T G.711, G.723.x, G.726, G.728, or G.729.x
- ITU-T H.248.1 (MEGACO), H.323, H.350 when and where offered commercially by Contractor
- ITU-T and T.38,
- Media Gateway Control Protocol (MGCP) IETF RFC 3435 when and where offered commercially by Contractor

- IETF RFC 3550 Real-Time Transport Protocol (RTP)
- IETF RFC 3261 SIP (Session Initiation Protocol)
 - User Agents
 - UAC
 - UAS
 - B2BUA
 - Address of Record
 - ENUM
 - SIP Islands
- IETF RFC 768 User Datagram Protocol (UDP).

8.2.15 SIP and Presence

In the future County may deploy a SIP-enabled presence capability that allows end users to use SIP telephony clients on the 802.11 a/b/g wireless network. The presence feature will allow County employees the ability to originate calls using their wireless SIP client and have those calls routed through the voice communications system.

The proposed VoIP system must have the ability to interface to County provided wireless SIP end-points using SIP standards. The system must also have the ability to interface to other SIP servers using SIP trunking standards.

8.2.16 Performance Requirements

The Hosted IP telephony services shall meet the Performance Requirements listed below. Contractor shall provide monthly reports on actual performance. County reserves the right to verify performance via third party testing.

- Availability – 99.99 percent (99.99%)
- Jitter (delay variance) – Less than 15 ms
- Packet Loss – Maximum .5 percent (.5%)
- Latency/Delay – 130 ms one way
- Mean Opinion Score ITU P.800 – 3.6 or above
- Dial Tone Delay – Not to exceed three (3) seconds for any call
- Call Setup Time – Not to exceed three (3) seconds for any call
- Echo Cancellation – Embedded echo cancellation to published ITU-T recommendations
- Grade of Service - P.01

8.2.17 Use of County LANs

Contractor's IP telephony services will need to operate on County's existing LAN infrastructures at County's facilities.

- A. Contractor shall identify the minimum requirements for County's LAN infrastructure at any facility that is necessary to support Contractor's Hosted IP telephony services.
- B. Contractor shall provide a network assessment at each facility where Hosted IP services are to be provided. Contractor shall provide a report to County identifying any issues that need to be resolved that would prevent the provisioning of Contractor's Hosted IP services from operating satisfactorily and within the Performance Requirement Summary (PRS).
- C. Network assessment by Contractor shall be at a reasonable cost per assessment to County.

8.2.18 Premises IP Telephone Instruments

Multiple makes and models of SIP based IP telephone instruments shall be able to work with Contractor's Hosted IP services. Contractor may, at County's option at the start of an implementation project, or order for services, be required to provide IP premises equipment. County reserves the right to install IP phones with its own staff or through the use of other service providers.

- A. Contractor shall identify all makes and models of IP telephone instruments and other devices and interface standards that are certified to work with Contractor's Hosted IP telephony services. Contractor's IP telephone instruments selection shall provide the following:
- B. There shall be a least two (2) different make/models of IP single line/appearance telephone instruments that support call waiting indicator, speaker, and ringer volume control
- C. There shall be a least two (2) different make/models of multi-line/appearance (four (4) line minimum) telephone instruments that support call waiting indicator, speaker, ringer volume control, and six (6) programmable function keys.

- D. There shall be a least two (2) different make/models of multi-line/appearance (four (4) line minimum) telephone instruments that support call waiting indicator, speaker, ringer volume control, LCD display, and six (6) programmable function keys.
- E. There shall be a least two (2) different make/models of table-top IP telephone conferencing instruments.

8.2.19 Security

Contractor shall provide state-of-the-art information security programs to their network infrastructure that is providing Hosted IP services. These security devices and management may be the same as those provided with Contractor's wide area services, or shall be in addition to those if Hosted IP services are provided to a County location via a network connection provided in a different manner. Contractor shall agree and comply with the following LA County security measures to ensure the protection of Hosted IP services:

- A. Contractor must review and adhere to all applicable LA County IT written security policies, procedures and standards.
- B. Contractor shall provide firewalls, Intrusion Detection Systems (IDS), and Intrusion Protection Systems (IPS) functions that detect and prevent unauthorized access at the ingress/egress point to their network that is providing Hosted IP services.
- C. Contractor must monitor and respond to all incidents that are detected by these systems in a timely manner according to the SLAs.
- D. Contractor must establish help desk call-back list and written escalation procedures that shall be provided to County.
- E. Contractor must connect to 'LA County extranet' define via secure methods such as private or dedicated circuits.
- F. Contractor must provide specific TCP/IP source and destination addresses - and port numbers for all

connectivity. This information will be used to define access-list and firewall restrictions to control access to and from the resources. This information should also be utilized at Contractor network access-points as well.

- G. Contractor must encrypt any sensitive data (personal information) in transmission and at-rest in accordance to County's 'Security Standards for Network Connections to External Entities'.
- H. Contractor must employ authentication methods prior to accessing County resources (servers, routers). Each user must have unique user identity and strong passwords.
- I. Contractor shall enable logging and auditing functions on servers and applications - review logs on a regular basis.
- J. Contractor shall maintain their PC and server anti-virus program and regularly update definitions.
- K. Contractor shall also establish and implement PC and server OS security base-lines and keep security patches up-to-date.
- L. Contractor shall conduct background checks Ensure that only 'authorized' staff is granted access to County systems.
- M. Contractor shall have formal written approval process for changes to County connections or access.
- N. Contractor shall have dedicated IT Security personnel on staff.

8.2.20 Migration to Hosted IP Services

Contractor shall provide a migration plan to migrate all existing service provider's Hosted IP telephony services to Contractor services. The plan shall ensure that there will be no down time to County users during the migration. Migration shall not cost County any more that the contracted one-time and monthly rates for IP telephony services. The migration to Contractor's services shall be completed within seven (7) months of the contract effective date. In addition,

Contractor shall:

- A. Within seven (7) months after the contract effective date, Contractor shall, with assistance of County, develop a migration strategy to migrate County's current installed base of telephony services to Contractor's Hosted IP telephony services. Ultimate decision to migrate any or all services shall be County's.
- B. Contractor's migration plan shall include migrating existing premises-based IP telephony systems and services to Contractor's services. Since the current IP telephony systems utilize Cisco's Skinny Client Control Protocol (SCCP), Contractor shall identify whether any changes will be necessary to telephone instruments in order to migrate (such as to a SIP environment) to Contractor's services. Contractor shall identify how any replacements, upgrades, or reconfigurations of the telephone instruments or systems will be accomplished, any costs involved, and how it may affect the users.
- C. Contractor's migration plan shall include migrating existing analog centrex-type services to Contractor's Hosted IP telephony services. The Plan shall include LAN network assessments, business analysis of telephony requirements, cutover phasing to match business operations, equipment identification and costs, installation costs, etc.
- D. Contractor's migration plan shall include migrating existing PBX systems to Contractor's Hosted IP telephony services. Contractor shall identify the same issues for PBX migration as for centrex-type services.
- E. Contractor's migration plan shall include an overall architecture and strategy to achieve County-wide integrated voice mail, email, call centers, and internal and external calling services.

9.0 IP TELEPHONY DESIGN AND CONSULTING SERVICES

Contractor shall provide expert design and consulting services as requested by County. Contractor shall assist in the design and evaluation of the overall architecture and design of the IP telephony environment,

design of specific IP telephony implementations including call centers, enhancements or upgrades to the IP telephony hardware and software, and expert level troubleshooting of system problems. The types of services envisioned include:

9.1 **Assessment**

Contractor shall provide business analysis and technical staff to work with County departments in the scoping of new IP telephony implementations.

9.1.1 Contractor shall review the department's current telephony environment, business rules and applications, policies, reporting requirements, and staffing to propose a project scope that may include IP telephony, voice mail, and/or call center services.

9.1.2 Contractor shall do an assessment of the proposed site's network environment and make a recommendation on any enhancements required to support the IP telephony environment.

9.1.3 Contractor shall prepare a preliminary design and cost estimate and present the recommendations to County.

9.2 **Design**

Contractor shall design the IP telephony system, and any supporting systems, in accordance with County-approved design recommendations and cost estimate. Contractor's design shall be in accordance with the overall County IP telephony architecture.

9.2.1 Contractor design staff shall be certified in designing IP telephony and other supporting systems by the manufacturer of the proposed equipment.

9.2.2 Contractor's final design shall include a list of all equipment to be procured, a drawing of how all components are connected, and a SOW covering all work to be done.

9.2.3 Contractor's equipment list shall be a schedule of materials and services that includes manufacturer, item description, manufacturer's part number, quantity, and estimated costs.

9.3 Call Center Applications Design

Contractor shall included in all Call Center design the specific applications and interfaces to meet business requirements as provided by County.

9.3.1 Call Center Applications Design may include Interactive Voice Response and/or Computer Telephony Integration interfaces to existing software, applications, or databases.

9.3.2 Call Center Applications Design shall include redundancies and back-ups to meet availability and business continuity requirements.

9.3.3 Call Center Applications Design shall include call routing, call flows, scripting, and message queue points.

9.3.4 Call Center Applications Design shall include screen pops and overall desktop presentation.

10.0 DESIGN, IMPLEMENTATION, AND TRANSITION TO NEXT GENERATION ENTERPRISE NETWORK (NGEN)

Contractor shall design the NGEN with the capacity for replacement of the existing EN and expansion to include LANet nodes and new County sites as directed by County. Contractor shall provide a network design document which shall include an overall NGEN network diagram, hardware specifications, network circuit specifications, and detailed descriptions of network technologies used in the design. The NGEN design shall meet or exceed all design, functionality, performance, and security requirements detailed in Paragraph 10.1 (Design Requirements) through Paragraph 10.4 (Network Security Requirements). Upon acceptance of NGEN design by County, Contractor shall test and implement the network as specified in Paragraph 10.5 (Network Testing and Implementation). The NGEN design is open to County owned private network, service offering from Contractor owned network, or a combination of both.

10.1 Design Requirements

10.1.1 Design Principles

Contractor shall design the NGEN network architecture with proven network design principles and technologies and provide a detailed description of each used to establish the baseline network design.

10.1.2 Design Equipment

Contractor shall design the NGEN network with state-of-the-art equipment. Contractor shall be responsible for all equipment maintenance and upgrades for the life of the contract including all contract extensions. This includes the application of manufacturer repairs for security vulnerabilities, software bugs, and hardware anomalies.

10.1.3 Network Core Requirements

Contractor shall design the NGEN core to be very highly reliable and scalable. The hardware shall be owned and solely used by County with the exception of equipment used by vendor owned services. Contractor shall provide technical design information for the proposed network devices including hardware specifications and software features. Contractor shall fully manage the NGEN core devices. There shall be no costs to County associated with the Network Core installation, management, maintenance or expansion. Contractor shall structure the network pricing so that all expenses associated with the Network Core shall be encumbered in the NGEN edge node costs.

10.1.4 Network Edge Requirements

Contractor shall design various models for NGEN edge nodes. Contractor shall provide technical design information for the proposed edge models including hardware specifications and software features. All NGEN edge hardware will be owned by County with the exception of equipment used by vendor owned services.

10.1.5 Network Circuit Requirements

Contractor shall design the NGEN network with highly reliable, scalable, and ubiquitous network circuits. Contractor shall provide technical design information for the proposed network circuits which shows transport media type and bandwidth capacity for all links between NGEN devices.

10.1.6 Connection To Existing County Network

Contractor shall design a highly available Network-to-Network Interface (NNI) between the NGEN and existing County networks. The NNI will facilitate communication of customer traffic between NGEN and existing County Networks. The NNI shall support all existing customer applications which traverse the NNI without modifications or adjustments to the customer applications or devices.

10.1.7 Firewall Inter-VPN Communication

Contractor shall design a highly available and secure inter-VPN connection point. The inter-VPN connection point will allow communication between different VPNs under the protection of firewall control.

10.2 **Functional Requirements**

10.2.1 Private Network

The internal County network shall not use the public Internet as transport for information between County locations. Contractor shall specify all transport medium and technologies in the network design.

10.2.2 Geographic Requirements

The network shall support all geographic locations that require County network access to support County services.

10.2.3 Virtual Private Network (VPN)

VPNs are defined as customer IP domains separated logically on a common network infrastructure. The network shall support a minimum of 100 VPNs with availability to all VPNs at all County locations. Unicast IP communication between VPNs that are not designated as shared services VPNs will be protected by Firewalls.

10.2.4 Shared Services VPN

The network shall support shared services VPNs in which multiple customer VPNs have access to common resources within the shared services VPN, however the shared services VPN shall not permit data transit between customer VPNs.

10.2.5 Application Support

The network shall support all existing customer applications without modifications or adjustments to the customer applications or devices. The network shall have a migration path to support all future customer applications specified by County before final design acceptance by County.

10.2.6 Multi-Protocol Support

The network shall provide multi-protocol support across the network. Protocols shall include, but not be limited to IP, IPX, and SNA. Support of protocols across the network via tunneling or encapsulation technologies is acceptable. All

protocol support services across the network shall be highly reliable and fully redundant with automatic recovery of a failure.

10.2.7 Layer 2 Protocol Support

The network shall support layer 2 connectivity over single broadcast domains between geographically dispersed locations on the network. Layer 2 protocol support across the network shall be highly reliable and fully redundant with automatic recovery of a failure.

10.2.8 Multicast IP Service Support

The network shall support multicast IP services across the network. The multicast services shall be highly reliable and fully redundant with automatic recovery of a failure. The multicast IP service shall support multicast streams within a customer VPN and multicast streams that serve multiple customer VPNs.

10.2.9 Voice Over IP (VoIP) Support

The network shall support VoIP signaling and real-time traffic across the network. The network shall be capable of delivering carrier-class telephony service for County VoIP customers by meeting minimum VoIP requirements including:

- Delay – end-to-end delay must not exceed 150 ms
- Delay variation (jitter) – jitter must not add delay beyond what is left in the delay budget
- Packet loss – packet loss for telephony must not exceed 1 percent (1%)

10.2.10 Network Interface Support

The network shall support the following interface types to connect to customer edge devices:

- 10/100 BaseT Ethernet
- Gigabit Ethernet (copper & fiber)
- 10 Gigabit Ethernet

10.2.11 Maximum Transport Unit (MTU)

The network shall support end-to-end customer application packets with a MTU size of 1500 bytes without fragmentation.

10.2.12 Network Clock Synchronization

The network devices shall be synchronized from the master clock. The network devices shall be able to accept clocking from one interface and distribute clocking to other interfaces.

10.2.13 Quality of Service and Traffic Engineering

The network nodes shall provide reliable Quality of Service and Traffic Engineering to assure an adequate level for the applications that are transported across the network under all network congestion conditions.

10.2.14 IPV6 Capability

The network shall have the capability to transport IPV6 customer applications across the network. The network shall have the capability to fully migrate to IPV6) when commercially available from Contractor.

10.2.15 Emergency Restoration and Disaster Recovery

The network shall have allocated hardware and procedures to provide fast emergency restoration of a location that has lost network access for an extended period of time.

10.2.16 Hardware Warranty

County owned network devices shall be have a one (1) year warranty beginning upon installation/integration of new equipment. The warranty shall provide free replacement of defective hardware and software, free technical assistance and maintenance of equipment. Contractors shall provide pricing for extended warranties, up to three (3) years.

10.3 Performance Requirements

10.3.1 Network Availability

Network availability is defined as available network access to customers during defined periods of usage. Network availability per site shall meet or exceed the requirements as set forth in the PRS. Measurement will be calculated against the pool of sites that adopt this configuration. PRS will come into force when both data circuits are down and cannot transport traffic.

10.3.2 Network Latency

Network latency is defined as the average ping responses on primary circuits between Core and Edge devices. The

average ping response will be measured by pinging each network node every five (5) minutes and taking the average ping response over a one (1) hour period. Network Latency per site shall meet or exceed the the requirements as set forth in the PRS

10.3.3 Dropped Packets

Dropped packets are defined as the percentage of packets dropped on primary circuits between Core and Edge devices. Dropped packets per site shall meet the requirements as set forth in the PRS.

10.3.4 Incident Response

Incident Response is defined as the percentage of trouble tickets created or trouble cleared within the requirements as set forth in the PRS.

10.3.5 Field Response

Field response is defined as the elapsed time for a field technician to be on site after ticket creation of a failure. Field response shall meet the requirements as set forth in the PRS.

10.3.6 Restoration

Restoration is defined as the elapsed time to restore Contractor controlled transport and managed equipment after ticket creation of a failure. Restoration of Contractor controlled transport shall meet the requirements as set forth in the PRS.

10.3.7 Service Provisioning

Service provisioning is defined as the elapsed time to provision a new network site after a service order has been accepted. Service provisioning due dates shall be established by a mutually agreed date by County and Contractor.

10.4 Network Security Requirements

10.4.1 Policy and Compliance

Contractor shall initially and periodically review County written Information Security Policies, Standards, and Procedures and ensure that County Networks are in compliance.

10.4.2 Security Vulnerabilities and Updates

All network devices will have software reviews to identify potential vulnerabilities as announced by the manufacturer, Contractor, County, or any other security advisory source.

10.4.3 Physical Site Security

Network devices shall have appropriate physical site security to guard against theft, vandalism and any other unauthorized physical access. Equipment being replaced or terminated must be properly cleansed or purged of all configuration information and protected from unauthorized access while on site.

10.4.4 Network Device Access Control

Appropriate controls shall be in place to prevent unauthorized access to network devices. All network devices shall display a warning banner upon access stating authorized access only.

Contractor shall implement and maintain secure authentication devices that have the capability to require all users to authenticate prior to accessing the network devices.

Contractor shall develop and follow formal user registration and de-registration procedures for all systems that include restriction and controls for privileged access, password management procedures, and regular review of user access rights.

Authentication systems shall include support for the following:

- Unique user identification profiles and attributes
- Encrypted, secure logon procedures
- Limits set for logon attempts
- Adherence to County password standards
- Log each logon attempt with time and date stamp

All SNMP community strings must be changed from Default settings and have access control lists restricting SNMP access to specified network management stations.

Contractor shall provide full or limited device access to County personnel and third party support personnel as directed by County and approved by County Management.

10.4.5 Network Firewalls

All connections from County (trusted) network to external (un-trusted) networks must be protected by firewalls and approved by County management.

All firewalls must provide logging capabilities. Contractor staff must be assigned to review firewall logs on a regular basis to detect anomalies, threats, and unauthorized activity. Appropriate notifications and reporting must be implemented to Alert staff and management to security violations and threats.

All requests for modification of firewall rules must go through a security review and management approval prior to implementation.

10.4.6 Network Admission Control (NAC)

The network shall have the capability to enforce security policy compliance on all devices seeking to access network computing resources, thereby limiting damage from emerging security threats. The NAC shall allow network access only to compliant and trusted endpoint devices (PCs, servers, and PDAs, for example) and can restrict the access of noncompliant devices.

The network shall have the capability to validate end user devices to meet minimum security profile requirements (i.e. MS OS patches, anti-virus updates, etc.). If an end user device fails to meet the security profile requirements, the network shall place the device into a quarantined network location to allow the user to properly secure the device.

The NAC shall have the capability to integrate with multivendor security and management software.

The NAC shall have the capability to assess all endpoints across all access media including LAN, wireless connectivity, remote access, and WAN.

10.4.7 Encryption of Data-in-transit

The network shall have the capability to encrypt confidential or sensitive data across the network using all

current and future US encryption standards. Encryption services across the network shall be highly reliable and fully redundant with automatic recovery of a failure.

10.5 Network Testing and Implementation

10.5.1 Laboratory Pilot Test

Upon acceptance of NGEN design by County, Contractor shall build a NGEN lab in Contractor's lab facility to simulate five County nodes of various size and features. The nodes to be simulated for the NGEN lab shall be specified by County.

Contractor shall develop a NGEN lab test plan to test performance, functionality, and availability of the NGEN architecture. County shall review and approve the NGEN lab test plan.

Contractor shall run the NGEN lab test plan. County will witness and validate all NGEN lab tests. The NGEN lab test plan shall be accepted by County when all lab tests pass criteria specified in the NGEN lab test plan.

10.5.2 Field Pilot Test

Upon acceptance of NGEN lab test by County, Contractor shall implement the NGEN pilot at the five (5) County locations simulated in the NGEN lab.

Contractor shall develop a NGEN pilot test plan to test performance, functionality, and availability of the pilot network. County shall review and approve the NGEN pilot test plan.

Contractor shall run the NGEN pilot test plan. County will witness and validate all NGEN pilot tests. The NGEN pilot test plan shall be accepted by County when all pilot tests pass criteria specified in the NGEN pilot test plan.

10.5.3 Field Pilot Migration

Upon acceptance of the NGEN pilot test by County, Contractor shall migrate customer traffic onto the NGEN pilot network.

Contractor shall develop a migration strategy document outlining the steps required to migrate customer traffic onto the NGEN node. The migration strategy shall include

activities required to prepare for customer cutover, activities required during customer cutover, and activities required to test and validate customer cutover success.

Contractor shall follow the migration strategy document to migrate customer traffic to the NGEN pilot network nodes.

Contractor shall fully manage NGEN pilot nodes upon successful customer traffic migration.

The NGEN pilot network shall be accepted by County after thirty (30) Days of continuous and successful operation after customer migration. Successful operation is defined as support of all customer applications under normal network conditions.

10.5.4 Expansion of NGEN Network

Upon acceptance of the NGEN pilot network by County, Contractor shall implement and migrate additional County locations as directed by County.

Contractor shall develop an implementation plan document outlining the steps required to install, provision, and test additional NGEN Edge Nodes.

Contractor shall follow the implementation plan and migrate customer traffic to NGEN Edge Nodes.

County may choose to have County personnel implement NGEN Edge Nodes. Contractor shall “fully manage” or “monitor only” the new NGEN Nodes as directed by County.

10.6 **NGEN Management Requirements**

10.6.1 Fully Managed Requirements

Fully managed NGEN node requirements are specified in Paragraph 5.0 (Maintenance, Operations, and Management of Existing Network Locations (Fully Managed Devices)).

10.6.2 Monitor and Troubleshooting Requirements

Monitor and Troubleshooting NGEN node requirements are specified in Paragraph 6.0 (Maintenance, Operations, and Management without Field Response of Existing Network Locations (Managed/No Field Response Devices)).

10.6.3 Monitor Only Requirements

Monitor Only NGEN node requirements are specified in Paragraph 7.0 (Monitoring Only of Existing Network Locations (Monitoring Only Devices)).

11.0 INVENTORY AND ORDER MANAGEMENT

County's Telemangement Order System described in Paragraph 11.1 (County's Telemangement Order System) contains all the information relating to the ordering of services from initiation to finalization. Contractor shall interface with County's Telemangement Order System for the administration and processing of service requests and service orders and for directing and accomplishing provisioning of the requested services, including identifying configuration changes needed on end-user equipment to make it compatible with Contractor's communications systems. A confirmation of all service orders placed in the system shall be generated to the ordering entity. The confirmation shall include the due date, cost of service requested, and tracking number. County's billing system shall compare the final bill with the cost estimate. If the charges are in excess of quoted charges, Contractor shall provide an explanation. When no explanation is provided, or the excess charges cannot be justified to County's satisfaction, the original quoted costs will apply.

11.1 County's Telemangement Order System

County's Telemangement Order System is an off-the-shelf product from Symphony Services that has several custom programs designed specifically for County. The system is a web-based application that resides behind County firewall. Contractor shall comply with current County data security procedures as follows to gain access to the Telemangement Order System.

- Complete County's Security Data Request form;
- Request an RSA SecurID Card to log on Network (Current cost \$75.00 each)
- Down load the Cisco VPN Client 5.
- URL for EMS11

11.2 **Service Order Process**

The normal service order process shall follow the sequence outlined below:

- Service Price Quote (optional step)
- Service Requests
- Service Request Authorization
- Service Request Acknowledgment
- Service Order Proposal Issuance
- Service Order Proposal Acceptance
- Service Order Implementation
- Service Order Completion Notification
- Service Acceptance

The detailed requirements for service ordering are described in the following Paragraphs.

11.3 **Service Price Quote**

Contractor shall utilize County's Telemangement order System to electronically provide a service price quote that is not binding to County and at no cost to County. Contractor's quotes shall identify all nonrecurring and recurring costs along with the service availability interval expected. The price quote shall be based upon the following information provided by County:

- Type of service and features
- Locations for service delivery
- Service due date
- Agency department requesting the service
- Any additional information required to complete the price quote

Authorized County representative may at County's option request a price quote prior to placing a service order. The Service Request format shall be used for price quote requests. All relevant fields of information in the Service Request format shall be transmitted via the Telemangement Order System to Contractor. Contractor shall provide a price quotation within two (2) Business Days which includes all recurring charges, all non recurring costs and the time frame for performing the work.

11.4 Service Requests

Each authorized County representative will submit to Contractor a request for initiating, adding, changing or terminating service. Contractor shall be responsible for directing and accomplishing all tasks associated with processing the service request.

The Service Request is the official communication to Contractor from County that additions, changes or deletions of services are desired. This request shall contain a complete description of the work to be done, related inventory and billing information, time frames and site information. The Service Request shall include the following fields of information:

- Service Request Number – A unique number assigned to Service Requests by County's Telemangement Order System. Contractor shall enter this number as part of the service ordering process and shall ensure that this number is passed through on all billing processes and is shown on the detailed billing data for verification and tracking purposes. Contractor shall be able to accommodate various formats of characters and numbers.
- Order Analyst – The name of the authorized individual placing the order
- Order Date and Time – Date and time the order was placed
- Due Date – Requested or officially scheduled completion date
- Priority – A classification that determines the urgency of the Service
- Inventory Number – For existing services this is the NPA-NNX-XXXX that uniquely identifies a specific line or number
- User Name – The employee or function associated with the service
- Site Info – Address and building specific location
- Contact Name – For access, coordination and installation
- Telephone Number – Of the access person
- Org code- The number associated with the cost center to which the service is (will be) billed
- Project Name or Application – Describes an application, function or project associated with this service
- Status – Upon order placement this is an initial order. This field may be used to reflect order acknowledgment, any delays or postponements, work in process, completion, acceptance, etc.

The Service Request may also contain narrative or attachments which completely describes the work to be done.

11.5 Verify Authorization of Service Request

Upon receipt of a Service Request, Contractor shall verify that the individual requesting the service is authorized to submit the Service Request. County's Program Manager or designee will provide to Contractor a current list of County staff who are authorized to initiate Service Requests. Contractor shall not process any service request without verification of County staff authorization or an explicit exception authorization from County's Program Manager or designees.

11.6 Service Request Acknowledgment

The Service Request Acknowledgment is a response transmitted by Contractor via the Telemanagement Order System which updates the Service Request status as having been received by Contractor. This acknowledgment shall be received within four (4) hours following the issuance of the service request by County. Requests issued after 3:00 p.m. must be acknowledged the next business morning.

11.7 Service Request Proposal Issuance and Acceptance

Following acknowledgment of the Service Request by Contractor, Contractor shall provide County with Service Request response via the Telemanagement Order System. The response shall include the completion date, binding post, Contractor's contact name and phone number, and any other information relevant to the completion of the Service Request. This response shall be submitted to County no later than three (3) Business Days following Service Request acknowledgment by Contractor.

11.8 Implementation

Contractor shall perform the actions and tasks required to complete the Service Request. Contractor shall coordinate with County or CPE service providers regarding any agreed upon County or CPE service provider's actions that are required to fulfill the order. Any changes or additional information by County or Contractor shall be communicated both electronically via the Telemanagement Order System as well as by direct telephone contact.

11.9 Service Request Notification of Completion

Contractor shall notify the County contact person specified in the Service Request by telephone when the service order has been

completed. The official notification must be made via the Telemangement Order System within twenty-four (24) hours after service order completion. Verbal notification shall not substitute for official notification.

11.10 Changes During Service Request Process

11.10.1 Cancellation of Service Request

Except for Service Requests that due to their size and/or complexity require Project Coordination, as that term will be mutually agreed upon by County and Contractor within thirty (30) Days of Contractor's receipt of a Service Request, Contractor shall accept from County a notice of Service Request cancellation that it receives more than five (5) Business Days before the service due date without County incurring any charge. Cancellation by County within the last five (5) Business Days prior to the service due date shall qualify Contractor to request from County's Program Manager consideration for cost reimbursement of reasonably incurred costs. Contractor shall provide County's Program Manager with a description of its procedures for order cancellation.

11.10.2 Change of Service Request Completion Date

County requests for a delay of Service Request completion date more than three (3) Business Days prior to the service due date shall be accepted by Contractor at no cost to County. County requests for a delay within three (3) Business Days before the service due date may incur a delay charge. A Service Request delayed by County longer than forty-five (45) Days from the original promised due date is presumed canceled unless County and Contractor agree otherwise. Contractor shall not delay a Service Request completion date unless agreed to by the authorized County staff requesting the service. County is responsible for all additional costs reasonably incurred by Contractor as a result of a County requested delay under this Subparagraph 11.10.2 provided Contractor has made appropriate notification to County of the additional costs that may be applicable.

11.11 Service Request Interval (Response Time)

A Service Request Interval is the interval of time between receipt of a Service Request acceptance by Contractor and the issuance of a Service Request completion notice by Contractor. Contractor shall

make Service Request Interval information available to County staff for each type of service. Service Request Intervals defined herein are not applicable to the initial transition from existing service providers to Contractor's services. Service Request Intervals are:

- Standard Service Request Intervals
- Emergency Service Request Intervals
- Expedited Service Request Intervals
- Negotiated Service Request Intervals

Contractor shall accept Service Requests in bulk or singly using Standard and Expedited Service Request Intervals. Service Requests for new or enhanced service trials or demonstrations also may be ordered using Standard and Expedited Service Intervals. The costs for Standard and Expedited Service Request Intervals shall be in accordance with the costs provided in the contract.

11.11.1 Standard Service Request Interval

Contractor shall provide County with a set of Standard Service Request Intervals for each type of service provided and shall meet the requirements as set forth in the PRS.

11.11.2 Emergency Service Request Interval

In the event of life or property threatening emergencies, County Program Manager or designees or other specifically identified County staff, may require Contractor to complete a Service Request in the shortest possible time. County Program Manager may waive planned completion of other Service Requests during an emergency.

11.11.3 Expedited Service Request Interval

This situation is not an emergency but is one in which the Standard Service Request Interval would bring hardship to the user. The expedite condition may be requested any time during the Service Request process. When County formally requests an Expedited Service Request Interval, related expedite charges are committed even though County might subsequently cancel the order. Secondly, if Contractor does not meet the expedite date, related expedite charges do not apply.

11.11.4 Negotiated Service Request Interval

This situation involves an expedited service request date that is determined by negotiations between County and Contractor. This procedure will be utilized when County

desires a shorter than Standard Service Request Interval and Contractor agrees to attempt to meet the compressed date with a Standard Service Request Interval price. In this case, no expedite charges shall be applied.

11.11.5 Bulk Service Order Processing

Contractor shall provide the ability for County to submit requests for multiple services or features via a single Service Order Request, e.g., multiple service locations, multiple services at single location and multiple quantities of a single service or feature. Contractor shall be responsible for obtaining the unique order identifier for each of the components of the bulk service order.

11.11.6 Service Order Tracking

Contractor shall provide service order tracking capabilities to County Program Manager or designee and authorized County staff via the on-line system and/or interface to County's Telemangement Order System. This capability shall provide the means to determine the status of service orders from order request to order completion via an audit trail. Service order tracking shall also identify the status of all outstanding service orders by various groupings, i.e., by services, by agency departments, by service due dates, by special project names, by CPE provider, and by locations. If due dates are not met and new due dates are established, the new due dates shall be reported as subsequent due dates' and tracked and reported as such.

11.11.7 Service Order Performance

Contractor shall adhere to the performance levels for all implementation activities as submitted in their proposal for standard service intervals, or as negotiated between County and Contractor for specific service orders during the term of the Contract.

Service Requests for New or Enhanced Service Trials or Demonstrations

Contractor shall identify and notify County's Program Manager or designee of any Service Requests it receives that are not within the current scope of the contract(s). Without written permission from County's Program Manager or designee, Contractor shall not accept any order that is not within the scope of the contract(s) for service. Contractor shall obtain written permission from

County's Program Manager or designee prior to conducting service trials.

11.11.8 Procedure for Trials

Contractor shall provide County's Program Manager or designee a description of their procedures for ordering trials or new or expanded services following contract(s) award. A trial is defined as the use of proposed future enhancements by an agency department that takes place for an agreed upon period of time, at agreed upon locations.

11.11.9 Trial Initiation

Contractor shall provide written notification to County's Program Manager or designee prior to initiation of any trial program with any department. This notification shall include the start date and duration, a copy of the estimate of costs that Contractor gave to the agency department, and the Paragraph of the contract service the trial proposes to enhance. County's Program Manager or designee will respond with approval or rejection within fifteen (15) Days after receipt of the notification. If the trial is approved by County's Program Manager or designee, Contractor shall not charge more than the cost estimate. Contractor shall report the status of all trials to County's Program Manager or designee.

11.12 Acceptance of Services

After Contractor transitions or installs service, County may, at its sole option, begin testing of the Service in accordance with the applicable acceptance test plan(s) or, in the absence of such plan, in a manner consistent with technology industry testing practices, to determine that the service is performing in accordance with all applicable requirements of this SOW and Contract.

11.12.1 Acceptance Testing

The service shall be accepted by County when the applicable acceptance test plan has been successfully completed or, in the absence of such test plan, when County's Program Director determines, consistent with technology industry standards, that the service has no material deficiencies. County will give Contractor notice of acceptance as provided in the applicable acceptance test plan or, in the absence of such test plan, within thirty (30) Days of the successful completion of testing. Should

County not provide notice within thirty (30) days it shall be deemed as accepted. Testing to ensure services continue to operate without material deficiencies as additional sites are added shall be provided pursuant to this SOW. Contractor will not turn over service to County for purposes other than for testing prior to acceptance unless partial acceptance is defined and agreed upon by both County and Contractor in the applicable test plan should a test plan exist..

11.12.2 Failed Acceptance Testing

If service has not successfully passed the applicable acceptance test, County's Program Manager will promptly notify Contractor in writing of such failure, specifying the manner in which the services failed. Contractor shall immediately commence such necessary corrections, repairs and modifications to the service as will permit the service to be ready for retesting. Contractor shall notify County's Program Manager when such corrections, repairs and modifications have been completed, and the acceptance test shall begin again. If, after the acceptance test has been completed for a second time, and the service again fails to pass the acceptance test, County's Program manager shall promptly notify Contractor in writing, specifying the manner in which the service failed. Contractor shall immediately commence such necessary correction, repairs and modification to the service as will permit the service to be ready for retesting. Such procedure shall continue until such time as County notifies Contractor in writing either (1) of the successful completion of testing, or (2) that County has made a determination that satisfactory progress toward successful completion is not being made, in which latter event County shall have the right to terminate the at-issue service.

11.12.3 Remedies for Failed Service Termination

In the event of a failed service termination under this Paragraph 11.0 (Inventory and Order Management), Contractor shall reimburse County for any costs paid to Contractor for the trial services by County or at County's sole option any reimbursement due to it may be credited against other sums due and payable by County to Contractor.

12.0 BILLING

This Paragraph 12.0 (Billing) addresses the delivery of invoices and detailed billing data to County's Program Manager and County departments. County's intention is for Contractor to provide a single invoice to County for all services centrally. County reserves the right to require Contractor to provide invoices directly to County departments. This Paragraph 12.0 (Billing) also addresses Contractor's responsibility in resolving billing disputes, providing periodic traffic and budget forecasts, and maintaining detailed billing data for access by County. Contractor shall interface with County's Telecommunications Expense Management System to provide the billing requirements.

12.1 Invoicing

Contractor shall provide a single invoice containing the actual charges for all services provided by Contractor in accordance with the contract pricing for services. The invoice shall consolidate all services for those users Contractor serves. Detailed billing data shall be accessible to County's Program Manager or designee at the same time as the Invoice is presented. The invoice and detailed billing data shall be presented no later than the 15th day following the end of the billing period, which should be a calendar month (1st day of the month through the last day of the month) unless agreed to otherwise by County's Billing Manager.

12.1.1 Any missing charges/accounts shall deem the Invoice and detailed billing data as incomplete. The incomplete portion of the invoices will not be approved by County for payment. The complete undisputed portion of invoices shall be paid pursuant to the time frames as defined in Paragraph 5.0 (Contract Pricing and Invoicing) of the base document of the Contract. Contractor shall present corrected invoice and billing data within two (2) billing cycles after County notifies Contractor of the incomplete billing data.

12.1.2 Contractor shall invoice for all services within ninety (90) days after the services are rendered. All charges not billed within ninety (90) days shall be borne by Contractor without recourse to County unless a request for an extension is approved in writing by County's Billing Manager within this ninety (90) day period.

12.2 Paper and Detailed Billing Data

Contractor's detailed bill data records shall balance to the corresponding monthly invoice. If a discrepancy is found, County

will consider both formats incomplete.

12.3 Balancing of Invoice and Detailed Billing Data

Contractor's detailed bill data records shall balance to the corresponding monthly invoice. If a discrepancy is found, County will consider both formats incomplete. The incomplete portion of the invoices will not be approved by County for payment. The complete portion of invoices shall be paid pursuant to the time frames as defined in Paragraph 5.0 (Contract Pricing and Invoicing) of the base document of the Contract. Contractor shall present corrected invoice and billing data within two (2) billing cycles after County notifies Contractor of the incomplete billing data. All charges not billed within two (2) billing cycles after County notifies Contractor of the balancing discrepancy shall be borne by Contractor without recourse to County unless a request for an extension is approved in writing by County's Billing Manager within this two (2) billing cycle period.

12.4 Effective Billing Date (EBD)

Contractor shall start billing for services on the starting EBD. The starting EBD shall be the date when the service is accepted (based on the successful completion of acceptance testing) but no earlier than the date requested in Paragraph 11.0 (Inventory and Order Management).

12.4.1 Initiation/Installation Charges

For service additions at a County facility where service is already being provided, the initiation/installation charge for the addition will be charged in its entirety in the first month following initiation/installation.

12.4.2 Service Termination

Contractor shall terminate billing effective upon County's requested date for service disconnection.

12.4.3 Invoice and Detailed Billing Data Changes

Contractor shall provide a sample of the changed invoice/detailed billing data to County's Billing Manager or designee, to facilitate the reconfiguration of their systems, as soon as possible, in advance of any change. Invoice or detailed billing data format/content changes initiated at the direction of Contractor shall be at no cost to County.

12.4.4 Special Billing Arrangements

Any temporary or intermittent deviation or modification of the billing procedures set forth in Paragraph 12.0 (Billing) shall be considered a special billing arrangement. In the event Contractor believes a special billing arrangement is necessary, Contractor shall submit requests for special billing arrangements to County's Billing Manager for approval. Contractor shall not implement the requested special billing arrangement prior to receipt of written approval from County's Billing Manager.

12.4.5 New Service Billing

Upon service acceptance by County as provided in Paragraph 11.12 (Acceptance of Service), the billing module of the Telemangement Order System shall be updated by Contractor. Contractor shall initiate billing for the new service on the Effective Billing Date. The Effective Billing Date shall be either the date when the service is accepted by County or the date requested for service by County, whichever is later.

12.4.6 Billing for Added Service Offerings

In the event additional service offerings are added to the Contract, Contractor shall coordinate the billing arrangements with County's Billing Manager for each added service in advance of providing that service.

12.5 Data Exchange

Contractor shall provide County with electronic access to all detailed billing data in a mutually acceptable format. Contractor will store/house the detailed billing data in a data warehouse for receipt by County. County may obtain the detailed billing data by accessing the data warehouse. Appropriate security features shall be provided to ensure only authorized County staff and managers can access the detailed billing data.

12.6 Data Retention

All detailed billing data, hard copy letters, memorandum, credits and adjustment data pertaining to the billing of Contractor services shall be retained by Contractor and made accessible to County as directed in Paragraph 8.37 (Record Retention and Inspection/Audit Settlement) of the base document of the Contract.

12.7 Tax Exempt Status

Contractor shall ensure that County's accounts are appropriately identified with Tax Exempt status.

12.8 Charges from other Vendors

Any charges, not requested by authorized County personnel, appearing on the invoice or the detailed billing data from Vendors other than Contractor will be considered abuse and County is not responsible for those charges. (For example: the PIC is changed by non-authorized County personnel; non-contracted charge amounts incurred on that line will not be the responsibility of County)

12.9 Unassociated Billing Management

Should instances arise where unassociated bills are generated by Contractor, Contractor shall be responsible for all investigation and resolution to get the bill(s) included on the summary account. Contractor shall not be responsible for any Unassociated Billing incurred on a specific line prior to the Transition PIC conversion of that line. Contractor shall not control or be responsible for County end user 1010XXX dialing or dial around.

Detailed billing information shall be available to County upon request for Unassociated Billing charges.

Contractor shall proactively search all lines and identify, resolve and re-rate any incorrectly PIC'd lines.

Contractor shall provide all resources required to manage the billing accounts and any billing anomalies therein. Unassociated billing or any other billing charges will be carried over to the summary bill, once resolved, and will not be paid by County separately.

Contractor shall resolve all Unassociated Billing issues within two (2) billing cycles from the time of notification by County and will reflect the change no later than the third billing cycle invoice. Bills added to the summary account must be re-rated to the Contracted rate by Contractor.

Contractor shall meet with County to report on performance of billing, including metrics of bill management and verification of corrected rates on a quarterly basis.

12.10 Collections

Contractor shall ensure that no past-due County accounts are sent to outside collection agencies for collection. All Contractor collection efforts will be conducted directly with County by Contractor.

12.11 Third Party Calls

Contractor shall be responsible for preventing any third party calls charged to County by Contractor. County will not accept, nor pay charges for these calls.

12.12 Rate Validation/Invoice Accuracy

Within sixty (60) Days of Contract execution, Contractor shall submit a Rate Validation reporting design to County's Program Manager or designee for approval. Using the approved report, Contractor shall conduct quarterly reviews on March 31, June 30, September 30, December 31, of all invoices sent to County to ensure rates are accurate. A written report of the review shall be provided to County Project Manager or designee within fifteen (15) Days of completion of the quarterly verification. Any inaccuracies found during the review shall be corrected and adjustments made on the following bill cycle.

12.13 Billing Adjustments

Contractor shall provide to County's Billing Manager or designee a monthly summary of credit and debit billing adjustments. The summary shall include, but not be limited to the number and types of adjustments identified, the number of adjustments resolved and the number and types of adjustments that are outstanding.

Contractor shall ensure that all billing debits and credits, including associated taxes, are detailed on the invoice and the detailed billing data at the BTN level and, if possible, the station level. If an adjustment is found to exceed \$20,000, Contractor shall notify County's Billing Manager before processing the adjustment to the invoice. No separate rebates are allowed.

12.14 System Verification Testing

Contractor shall provide a test and acceptance plan that shall specify the test procedures for verifying all County billing requirements, as specified in this Paragraph 12.0 (Billing). The test

and acceptance plan shall be submitted to County Program Manager or designee for approval. The plan shall be submitted no later than ninety (90) Days prior to the scheduled start of billing transition. The Test and Acceptance Plan shall include, but not be limited to, the following:

- Assuring that Service Request data is transmitted through County's Telemangement Order System to Contractor's billing system and then to the invoice. The detailed billing data must be accessed by County and transmitted to County's Telecommunications Expense Management System. The data must be successfully processed by the billing module of County's telecommunications expense management system.
- Initiating pricing tests for all services according to sample data furnished by County's Program Manager or designee.

Following approval of the test and acceptance auditing plan by County's Program Manager or designee, Contractor shall participate in an acceptance test within ninety (90) Days. No County initiated service orders will be processed for billing until County's Program Manager certifies that Contractor's billing deliverables meet the approved criteria agreed upon in the test and acceptance auditing plan. County's Program Manager reserves the right to require the development of additional test plans and/or to conduct joint testing with Contractor's billing system during the life of the contract.

12.15 Fraud Control Services

Contractor shall have an active fraud control service. Service shall be in operation twenty-four (24) hours a day, seven (7) days a week, and shall automatically monitor County's usage patterns and detect possible fraudulent use of County telecommunication services. Contractor shall notify County Program Manager or designee immediately upon detection of any possible misuse, abuse, or fraud.

12.16 Traffic Monitoring

Contractor shall operate real time automated tools for the monitoring of all traffic activity on all County lines for possible fraudulent use. Contractor shall monitor traffic detail for all outgoing local, LATA toll, and 800 Number incoming calls.

12.17 Detection

Contractor shall establish thresholds in their monitoring systems to detect activities such as major increases in traffic after hours or weekends from any line, any abnormal increases or peaks in traffic from any line during the Business Day, increase or abnormally high calling to particular numbers or areas, new or abnormally long holding times for calls from any line or to any number or area, increases in the number of calls or the holding time for incoming calls to any County line or group of lines, the simultaneous use of the same authorization code number or calling card number, increase or abnormally high number of calls from an authorization code number or calling card number, activity in unassigned voice mailboxes, etc.

12.18 Notification

Contractor shall establish with County a notification policy and procedure to alert County when possible fraudulent activities are detected. The policy and procedure shall include:

- Thresholds where Contractor is authorized to immediately disconnect service and/or block calling privileges and then notify the authorized County staff of the action,
- Thresholds where Contractor immediately notifies County staff of a possible problem for the user to investigate and determine appropriate action, and
- Thresholds where County and Contractor will continue to monitor and investigate.

12.19 Prosecution

Contractor shall assist law enforcement authorities in investigation and prosecution of any and all individuals responsible for fraudulent activities using County telecommunications services.

12.20 Education

Contractor shall provide on-going education to County telecommunication staff on the methods of fraud and misuse detection, prevention and identification of areas of vulnerability, and recommended alternatives and solutions. Contractor shall also provide on going educational presentations and material to educate County employees on how to avoid becoming the victim of fraudulent telecommunication activities.

12.21 External Information Sources

Contractor shall subscribe to and monitor fraud information bulletins, which identify current telephone numbers that should be blocked and area codes/prefixes/office numbers that originate high volumes of fraudulent traffic. This information shall be shared with County and shall be implemented in the call blocking controls.

12.22 Fraud Reports

Contractor shall develop, within three months of Contract award, and prepare on an individual case basis monthly recurring reports to detect fraudulent activities. Reports shall include most frequently called numbers (with filters to eliminate legitimate usage) and longest holding times to and from lines. Contractor shall also provide complete call detail reports within five (5) Business Days of request for any lines or services having been identified as having possible fraudulent activity.

12.23 Abuse, Misuse and Fraud Plan

Contractor shall submit an Abuse, Misuse and Fraud Plan to County specifying the monitoring and threshold notification alarms for approval by County thirty (30) Days after Contract effective date. Once accepted, this document may be changed at any time by mutual agreement of both parties to reflect new threats, techniques and responses needed to keep the monitoring effective and current.

12.24 Fraudulent Call Liability

County shall not be financially liable for any calls that have been identified as being fraudulent in origin by County and Contractor; provided, however, that County will be liable if fraud occurs and County is at fault, including any misuse or abuse by its employees and contractors.

12.25 Call Trace Service

Contractor shall provide an immediate call trace service upon request of the authorized County staff.

13.0 TRANSITION OF NETWORK SERVICES

13.1 Transition Plan for Maintenance, Operations, and Management of Existing Network Locations (Fully Managed Devices)

Contractor shall submit to County for approval a transition plan to transition the existing MSP-managed devices to Contractor's FM service. Contractor's transition plan shall be submitted for County approval within sixty (60) Days of contract execution date. Contractor's submitted transition plan shall provide for transition to be complete one (1) year from contract execution date. County shall reasonably cooperate with Contractor to accomplish this transition time frame.

Contractor shall fully assume the full management responsibilities of all Contractor-managed nodes from the current MSP no later than one (1) year from the date of contract execution. It is desirable that the transition be completed as soon as possible without compromising the availability of the network or the manageability of the network by either the current MSP or Contractor.

Contractor shall participate in County's Change Management process and schedule all transition changes through County's Change Management authority.

It is desirable that the transition activities be performed with minimal or no impact to the delivery of network services. Should the transition be disruptive, the transition may be scheduled outside of the facility business hours or on weekends at County's option. Contractor shall consider any staffing implications such a requirement may create when pricing the Commissioning Charge to bring nodes into FM service.

The transition plan shall include at a minimum:

- A project schedule incorporating all major tasks (including but not limited to contingency)
- Descriptions of all major steps required of Contractor, County, and the current MSP to transition FM service to Contractor
- A test plan to verify the readiness of Contractor's NMS system (including but not limited to the successful delivery of the required County views)
- A test plan for individual site transitions from the current MSP to Contractor's FM service

- A description on how the billing will be applied as more sites are transitioned to Contractor's FM service over time.

14.0 ONGOING MANAGEMENT AND OPERATIONS OF NETWORK SERVICES

14.1 Reports

Contractor shall provide regular formal reports, ad hoc reports, and a web-based portal for the purpose of reporting on PRS performance, capacity planning, and other statistics. Detailed report requirements are provided in this Paragraph 14.0 and in Technical Exhibit 5 (Reporting Requirements). These reports and portals shall make use of the data gathered from Contractor's NMS systems, from Contractor's problem ticket system, from the telecommunications carriers, and from Contractor-managed or – monitored devices themselves.

14.1.1 Regular Pre-Defined Reports

Contractor shall provide written reports on a weekly, monthly, and quarterly basis. Summary tables showing reports required for particular services are included in Paragraph 5.0 (Maintenance, Operations, and Management of Existing Network Locations (Fully Managed Devices)), Paragraph 6.0 (Maintenance, Operations, and Management without Field Response of Existing Network Locations (Managed/No Field Response Devices)), and Paragraph 7.0 (Monitoring Only of Existing Network Locations (Monitoring Only Devices)). The information to be contained in these reports is detailed in Technical Exhibit 5 (Reporting Requirements). Contractor shall present all reports orally at County's request to allow for clarification, corrections, or further refinement of any information provided in the reports. Contractor shall also make all reports available in an online web-accessible portal.

14.1.2 Ad-Hoc Reports

Contractor shall provide the capability for County to generate ad-hoc (on-demand) reports. The report types are defined in Technical Exhibit 5 (Reporting Requirements). The ability to generate ad-hoc reports is required for both the Fully Managed Devices and MO services.

14.1.3 Report Scope

Contractor's reporting system shall be capable of reporting on any and all monitored devices. Contractor's reporting system shall be capable of reporting on any circuit connecting Contractor-managed devices. The ad-hoc reports shall be user-definable on any desired date or time range within the preceding thirty (30) Days.

14.1.4 Report Format

Reports shall be available both in graphical and tabular formats. Graphic components shall be available in JPEG format and tabular data shall be available in either Microsoft Excel or Comma-Separated Variable (CSV) format. The reports may also be presented in HTML or Adobe Acrobat (PDF) format. The graphical and tabular information shall be separately accessible in the formats mentioned.

14.1.5 Report Availability and Distribution

All reports are County property and should be marked as confidential unless otherwise specified by County's Program Manager.

14.2 **Web Portal**

Contractor shall provide a Web Portal for County staff to view the status of all Contractor tickets, to view all formal reports from Contractor, to access files and documents related to the Services provided under the Contract, and to generate ad-hoc reports.

14.2.1 Available Hours

The portal shall be available twenty-four (24) hours a day, seven (7) days a week. However, Contractor may perform routine maintenance not to exceed one (1) hour per day on a schedule agreed upon by County and Contractor.

14.2.2 Access Method

The Web portal shall be Web-accessible from County's internal network. It is desirable that all content on the Web portal be accessible using a standard Web browser without the need for proprietary software or extensions.

14.2.3 Web Portal Infrastructure Responsibility

Contractor shall provide and maintain all systems, software, licenses, and communications devices and circuits to interface Contractor's Web Portal system with

County's internal network for County access to the Web Portal.

14.2.4 Access Controls

The Web Portal shall be partitioned and password protected to allow only authorized County staff to view or modify any content. Each authorized County user shall have their own username and password, and Contractor shall have a mechanism to add, remove, or reset passwords of users upon County request. It is desirable that the usernames and passwords of the Web Portal system are identical or linked to the other Contractor systems that County may utilize to reduce the number of unique usernames and passwords that staff must have.

14.2.5 Confidentiality

As the Web Portal is likely to contain confidential information, Contractor must provide adequate data security to ensure that only authorized users may view the content both in transit and at rest.

14.2.6 Problem Tickets

Contractor shall provide a Web Portal to view the status and details of Contractor's Open or Closed problem tickets. County staff shall have the ability to browse or search Contractor problem tickets directly via this Web Portal or by hyperlink to the appropriate system that has such reporting capability.

14.2.7 Formal Reports

Contractor shall store electronic copies of all required weekly, monthly, and quarterly reports on the Web Portal. The reports shall be stored in Adobe Acrobat format (PDF). The Web Portal shall archive all formal reports, including corrected or amended versions, for the duration of the Contract. All formal reports shall be accessible by County immediately via the Web Portal without manual intervention by Contractor.

14.2.8 Ad-Hoc Reports

The capability for County staff to generate ad-hoc reports as specified above shall be incorporated into the Web Portal or presented as a hyperlink to the Web-accessible NMS system that has such reporting capability.

14.2.9 Documentation Repository

The Web Portal shall have the capability to store as electronic files as necessary to fully document the activities, configurations, and other information required of Contractor in this SOW. Contractor shall provide a secure mechanism for County staff to add relevant content to this repository. The documentation repository of the Web Portal shall have the capability to be searched and organized in hierarchical folders as deemed necessary by County.

14.2.10 Network Management Views

The Web Portal shall directly display the required NMS views or hyperlink to the appropriate NMS system that has such capability.

14.2.11 Inventory Information

The Web Portal shall contain an up-to-date listing of all hardware and circuits under management or monitoring by Contractor. This information may be generated out of a Contractor database or manually updated in a file by Contractor. At a minimum, the hardware inventory shall include the device identifier (name), location (by both site acronym and street address), manufacturer, model number, serial number, memory/storage capacities, operating system version, and major cards/blades/components. The circuit inventory shall include, at a minimum, the carrier, circuit identifiers, type, speed, and termination locations (by both site acronyms and street addresses).

14.2.12 End of Contract Web Portal Data Copy

At the conclusion of the Contract, Contractor must provide one electronic copy of all documents and information stored on the Web Portal on optical or magnetic storage media acceptable by County at the time. The information shall not be encrypted and shall not require proprietary software to access the data.

14.2.13 Report Availability and Distribution

All reports are official County property and shall be listed as confidential unless otherwise specified.

14.3 Training

14.3.1 Training

A. Contractor Responsibilities

Contractor will prepare a Training Plan and the required materials to prepare County staff to convert LANet and the EN to any or all of the services described herein, and to understand at an engineering level the NGEN design and operation. Contractor will provide the Training Plan ninety (90) Days after Contract award. Contractor will deliver the initial training sessions thirty (30) Days prior to the implementation of each service of NGEN deployment. The training will be provided in at least four sessions, per an agreed schedule. The classes shall be broken up into engineering, maintenance, and operations specialties with special focus being given to each during the classes. The Training Plan will include but is not limited to:

- Contractor's Network Management operation
- Contractor's Network trouble ticketing procedures
- Design and operation of the NGEN

B. County Responsibilities

- County will review and work with Contractor on modifications to the content and schedule of training.
- County will approve Training Plan procedures, material and schedule.

14.4 Technology Refresh

Contractor shall ensure that all hardware and software be supported by the equipment vendor throughout the life of the contract. County recognizes that technical obsolescence can occur within a matter of years for some classes of equipment. To avoid this, Contractor shall use equipment that is state of the art at the time of implementation, and the design of the NGEN shall incorporate the ability to change specific models of equipment as required by changes in technology. If at some point during the life of the Contract, the parties agree that it is necessary to upgrade

hardware or software, this shall come at no cost to County except in the instance of it being required for new functionality requested by County that is not supported by the existing equipment.

15.0 MEETINGS

15.1 Executive Briefing

Contractor shall host a meeting with County executive staff to provide information on performance of the network and all associated activities. Included in this briefing will be handouts and executive summaries that will cover accomplishments and any outstanding issues that are not resolved from the meetings set forth in Paragraph 15.3 (Program Meetings) in a timely matter. This meeting will be held annually, within thirty (30) Days of the beginning of each Contract year.

15.2 Network Technical Briefing

Contractor shall host a meeting with County Technical Staff to provide information on performance of the network and all associated activities. Included in this briefing will be handouts that follow the format set forth in Paragraph 15.1 (Executive Briefing) with detailed information on areas of overall network performance and SLA attainment. A detailed description of accomplishments for the previous twelve month period will be required with information on future enhancements to the network that shall affect operations or performance. The meeting will be held annually, within thirty (30) Days of the beginning of each Contract year.

15.3 Program Meetings

Contractor shall attend program meetings to discuss contractual, billing, service, and other business issues that may arise. Contractor's Program Manager (or authorized designee) and Service Manager (or designee) shall be in attendance. County may call such meetings as it deems necessary but intends that these meetings be held on a monthly basis.

15.4 Project Meetings

Contractor shall attend project meetings to discuss transition, implementation, ordering, and other planning or deployment issues that may arise. Contractor's Service Manager (or designee), Network Operations Engineer, and Network Design Engineer shall be in attendance. County may call such meetings as it deems

necessary but intends that these meetings be held weekly or twice-per-month depending on project activities.

15.5 Technical Meetings

Contractor shall attend technical meetings to discuss operational, troubleshooting, design, and other technical issues that may arise. Contractor's Network Operations Engineer and Network Design Engineer shall be in attendance. County may call such meetings as it deems necessary but intends that these meetings be held weekly

15.6 Quarterly Technology Update Meetings

Contractor shall attend Quarterly Technology Update Meetings, to be scheduled by County once each calendar quarter. Contractor shall provide County with a technical presentation describing changes made to network services and functions since the last report. Contractor shall provide a technical presentation of available and/or potential additional services and functionality, including improvements to redundancy and fault tolerance in the network design that could be provided using existing installed equipment or by installation of additional equipment.

16.0 PERFORMANCE REQUIREMENTS SUMMARY

Technical Exhibit 2 (Performance Requirements Summary (PRS)) lists required services that will be monitored by County during the term of the Contract. All listings of services used in the PRS are intended to be completely consistent with the Contract and this SOW, and are not meant in any case to create, extend, revise, or expand any obligation of Contractor beyond that defined in the Contract and this SOW. In any case of apparent inconsistency between services as stated in the Contract and this SOW and the PRS, the meaning apparent in the Contract and this SOW will prevail. If any service seems to be created in this PRS which is not clearly and forthrightly set forth in the Contract and this SOW, that apparent service will be null and void and place no requirement on Contractor. All requirements in the PRS will be measured and reported on by Contractor on a monthly basis unless otherwise identified. The assessments will be paid by Contractor quarterly as billing adjustments (i.e., credits). Financial penalties will be applied once per failure. In the event a failure involves more than one PRS, Contractor will only pay the PRS with the highest financial remedy; provided that, at no time will the total cash refund due County for any given month for a single circuit, service or facility exceed 100% of the monthly recurring charge for that circuit, service or facility. Should Contract standard not be met for any

service requirement for a quarter, Contractor's Program Manager shall manage the process until such time the service level meets Contract requirements for no less than a quarter period of time. PRS requirements do not apply to out of territory services unless the service is a facilities-based service provided by Contractor. Additionally, when Contractor's performance does not conform to the requirements of the PRS and/or the Contract, County will have the option to apply the following non-performance remedies:

- 15.1 Require Contractor to implement a formal corrective action plan, subject to approval by County. In the plan, Contractor must include reasons for the unacceptable performance, specific steps to return performance to an acceptable level, and monitoring methods to prevent recurrence.

--- End Managed IP Services Statement of Work---

EXHIBIT A-3: STATEMENT OF WORK FOR MANAGED IP SERVICES
TECHNICAL EXHIBIT 1
LIST OF DELIVERABLES

DELIVERABLE	STATEMENT OF WORK REFERENCE	DUE or START DATE	DEDUCTIONS/FEES TO BE ASSESSED
Quality Control Plan	SOW Paragraph 2.0	Date to be agreed	\$100 per day late
Transition Plan	SOW 5.9, 6.9, 7.3	Contract Effective Date + 90 days	\$250 per day late
Migration to Hosted IP Services Plan	SOW 8.2.20	Contract Effective Date + 7 months	\$100 per day late
NGEN Design	SOW 10.0	Date to be agreed	\$50 per day late
NGEN Lab Test Plan	SOW 10.5	Date to be agreed	\$100 per day late
NGEN Field Test Plan	SOW 10.5	Date to be agreed	\$250 per day late
NGEN Migration Strategy	SOW 10.5	Date to be agreed	\$250 per day late
NGEN Implementation Plan	SOW 10.5	Date to be agreed	\$250 per day late
Standard Service Request Intervals	SOW 11.11.1	Date to be agreed	\$25 per day late
Billing Test and Acceptance Plan	SOW 12.14	90 days prior to start of billing transition	Not Applicable
Transition Plan	SOW 13.1	Contract Effective Date + 60 days	\$250 per day late
Training Plan	SOW 14.3.1	Contract Effective Date + 90 days	\$250 per day late

STOP CLOCK CONDITIONS

Stop clock conditions include, but are not limited to:

- Waiting for after-hours test or customer release.
- Time after a circuit has been restored, but end user requests ticket remain open for observation.

Inside Wire problems:

- Inside wire installer other than AT&T contracted to a building or campus.
- Conduit congestion.
- No riser cable.
- Additional time is required to approve inside wire installation.
- Trouble caused by power fluctuation or failure on the customer premises.
- Any site that requires additional AT&T facilities.

Contact/access problems:

- Access not arranged by site contact or entity representative.
- Site contact refuses access to technician.
- Insufficient or incorrect site contact information which prevents access.
- Any problem or delay caused by County or Participating Entity staff.
- Any problem or delay caused by end user applications.
- Repair/replacement of CPE not provided by AT&T.
- Failure of the trouble ticket originator to return a call or respond to a message from AT&T's technician for on-line close-out of trouble tickets.
- Any scheduled preventative maintenance.

Stop clock does not apply to:

- The time it takes for a outside technician to arrive at an unmanned test point.
- Testing initiated by AT&T.
- Power fluctuation at AT&T's or Subcontractor's central office.

Parameter	Product	SOW Reference	Requirement	Interval	Unit	Metric	Calculation	Reporting	Exclusions	Remedy
ENTERPRISE NETWORK										
Network Availability	OPT-E-MAN	5.8.1	99.995%	Monthly	Each Site	Cumulative minutes of user outage	$\text{Network Availability} = \frac{[24 \text{ hours} \times \text{days in month} \times 60 \text{ minutes} \times \text{number of customer sites}] - \text{network outage time (measured in minutes)}}{[24 \text{ hours} \times \text{days in month} \times 60 \text{ minutes} \times \text{number of customer sites}]}$	Monthly by site	Failures caused by County, cable cuts, natural disasters, water damage, heat damage.	The County shall be credited for an interruption of 10 seconds or more as follows: the credit shall be at the rate of 10/8640 of the monthly charges for the service for each period of 5 minutes or major fraction thereof that the interruption continues. The credit allowance(s) for service interruptions shall not exceed 100% of the applicable monthly rates.
	ATM & Frame Relay	5.8.1	99.990%	Monthly	Each Site	For PremierSERVSM ATM and Frame Relay Services provided to the County, Contractor is committed to maintaining data throughput across the Contractor-provided, County-specific network at a Standard Frame/Cell Delivery Ratio of 99.99% per PVC/VPC/VCC from ingress switch port to egress switch port during each calendar month, under normal conditions.	Standard Frame/Cell Delivery Ratio = Total County-specific Frames/Cells that successfully egress the network/Total number of County-specific Frames/Cells offered to the network	County is responsible for notifying Contractor when the County-specific Standard Frame/Cell Delivery Ratio average falls below 99.99% for a PVC/VPC/VCC within the calendar month. County must request a service credit within forty-five (45) calendar days after the end of the calendar month in which the failure occurred.	Failures caused by County, cable cuts, natural disasters, water damage, heat damage.	Upon verification by Contractor that the actual County-specific Standard Frame/Cell Delivery Ratio for a PVC/VPC/VCC was below 99.99%, Contractor has thirty (30) calendar days to correct the problem. If after thirty (30) calendar days the Standard Frame/Cell Delivery Ratio is still below 99.99%, County will be entitled to a service credit equal to: <ul style="list-style-type: none"> • 50% of the monthly recurring charges for all affected Ports and/or PVC/VPC/VCCs for the subsequent month in which the County-specific Frame/Cell Delivery Ratio average was below 99.99%.

Exhibit A-3: SOW for Managed IP Services
 Technical Exhibit 2: Performance Requirements Summary

Parameter	Product	SOW Reference	Requirement	Interval	Unit	Metric	Calculation	Reporting	Exclusions	Remedy
	PNT	10.3.1	Greater than 99.995%	Monthly	Each Site	Cumulative minutes of user outage	$((\text{Total month minutes available}) - (\text{sum of user outage minutes during month})) / (\text{total month minutes available}) \times 100$	On a per claim basis	Failures caused by County, cable cuts, natural disasters, water damage, heat damage. Outage time that is outside of the standard operating hours of the local access provider used by Contractor for the affected MIS Port.	See Sheet 2 for MIS Site Availability/Time to Restore SLA Credit Table
	MRS	5.8.1, 10.3.1	99.0% w/o Backup 99.6% w/ ISDN Backup 99.8% w/ Dual Lines/Single Router 99.9% w/ Dual Lines/Dual Router	Monthly	Each Site	Cumulative minutes of user outage	Total * Scheduled Minutes of Availability for Site- Total Minutes of Unavailability for Site *100/ Total Scheduled Minutes of Availability for Use	Monthly by site	Failures caused by County, cable cuts, natural disasters, water damage, heat damage.	Pro-rated percentage of monthly fee by site based on length of outage
Network Latency	OPT-E-MAN	5.8.2	Compliant where possible, noting latency is not a function of bandwidth, it is a function of distance.	Monthly	Each Site	Average ping response between core and edge devices over 1 hour of a ping to each network node every 5 minutes	Latency is calculated as the measurement of time taken for a customer frame to go from one end of the network (origination point) to the other end (termination point). The measurement will consist of measuring the time it takes to "ping" or travel from the origination to termination ports for the connection in question. Latency is measured by averaging sample measurements taken during a 30 day period between network terminating equipment to which the customer ports are attached when the OPT-E-MAN® network is available.	Monthly by site	Any site where primary circuit is down; County may exclude sites where specific applications may cause high latency for short periods of time.	If after 30 days, the service performance for that parameter is still less than the committed level, the customer will be provided a service credit equal to 25% of the monthly recurring charge for that service parameter for all affected ports for the month in which the service parameters fall below (or above) the committed level.
	ATM & Frame Relay	5.8.2	50 ms one way	Monthly	Each Site	Standard Latency is measured from ingress switch port to egress switch port during each calendar month.		County is responsible for notifying Contractor when their average County-specific Frame/Cell delay falls below the committed level. County must request a Service credit within forty-five (45) calendar days of the end of the calendar month when the excessive delay occurred.	Any site where primary circuit is down; County may exclude sites where specific applications may cause high latency for short periods of time.	Upon verification by Contractor that the County-specific Frame/Cell delay did not meet the committed level, Contractor has thirty (30) calendar days to correct the problem. If after thirty (30) calendar days the Frame/Cell delay is still greater than the committed level, the County will be entitled to a service credit equal to: <ul style="list-style-type: none"> 50% of the monthly recurring charges for all affected Ports and/or PVCs/VPC/VCCs for the subsequent month in which the County-specific Frame/Cell delay was below the committed level.

Exhibit A-3: SOW for Managed IP Services
 Technical Exhibit 2: Performance Requirements Summary

Parameter	Product	SOW Reference	Requirement	Interval	Unit	Metric	Calculation	Reporting	Exclusions	Remedy
	PNT	10.3.2	37 ms across all offered PNT speeds up to OC48.	Monthly	Each Site	<p>"MIS Latency" is a monthly measure of the AT&T network-wide delay within the Region or between Regions, which is the average interval of time it takes during the applicable calendar month for test packets of data to travel between all selected pairs of AT&T Network Backbone Nodes in the Region(s). Specifically, the time it takes test packets to travel from one AT&T Network Backbone Node in a pair to another and back is measured for all selected pairs of AT&T Network Backbone Nodes in the Region(s) over the month. Latency for the month is the average of all of these measurements.</p> <p>"AT&T Network Backbone Nodes" are the core routing nodes in the AT&T Network.</p>		On a per claim basis	Any site where primary circuit is down; County may exclude sites where specific applications may cause high latency for short periods of time.	If Contractor does not meet a performance objective in a given calendar month, County will be eligible for a MIS Latency SLA credit equal to 1/30th of County's total discounted MIS Monthly Charges for all MIS Ports in the affected Region(s) for that month.
	MRS	10.3.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dropped Packets	OPT-E-MAN	5.8.3	Bronze 99.5% Packet Delivery Rate Silver 99.9% Packet Delivery Rate	Monthly	Each Site	PDR is expressed as a percentage of Ethernet frames offered to the network that successfully traverse the network, end-to-end, within the CIR, and within a 30 day period.	Packet Delivery Rate (PDR) is a measurement of the actual amount of useful and non-redundant information that is transmitted or processed from end-to-end across the network. It is a function of bandwidth, error performance, congestion and other factors. PDR is expressed as a percentage of Ethernet frames offered to the network that successfully traverse the network, end-to-end, within the CIR, and within a 30 day period. PDR is calculated as the total number of effective Ethernet frames, per port, that successfully traverse the network divided by the total number of effective Ethernet frames, per port, offered to the network within a 30 day period. Those frames that violate the maximum range will be excluded from the calculation. PDR is measured by averaging sample measurements taken during a 30 day period from network terminating equipment to network terminating equipment to which the customer ports are attached when the OPT-E-MAN network is available.	Monthly by site	Any site where primary circuit is down; County may exclude sites where specific applications may cause high latency for short periods of time.	If after 30 days, the service performance for that parameter is still less than the committed level, the customer will be provided a service credit equal to 25% of the monthly recurring charge for that service parameter for all affected ports for the month in which the service parameters fall below (or above) the committed level.

Exhibit A-3: SOW for Managed IP Services
 Technical Exhibit 2: Performance Requirements Summary

Parameter	Product	SOW Reference	Requirement	Interval	Unit	Metric	Calculation	Reporting	Exclusions	Remedy
	ATM & Frame Relay	5.8.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	PNT	10.3.3	99.95% delivery rate 100% of the time. Equal to or less than .05%	Monthly	Each Site	The "MIS Data Delivery Percentage" for a Region or between Regions is the average Data Delivery percentage for that month for all selected pairs of AT&T IP Backbone Nodes in the Region(s) calculated by dividing Data Received by Data Delivered and multiplying by 100. "Data Delivered" is the number of test packets of data delivered in a month by AT&T to an ingress router at an AT&T Network Backbone Node for delivery to an egress router at the other specific AT&T Network Backbone Node in the selected pair. "Data Received" is the number of such test packets of data that are actually received by the egress router at the other AT&T Network Backbone Node		On a per claim basis	Any site where primary circuit is down; County may exclude sites where specific applications may cause high latency for short periods of time.	If Contractor does not meet this performance objective in a given calendar month, County will be eligible for a MIS Data Delivery PRS credit equal to 1/30th of County's total discounted covered MIS Monthly Charges for all MIS Ports in the affected Region(s) for that month.
	MRS	10.3.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Incident Response	OPT-E-MAN	5.8.4	Greater than 95%	Monthly	Each incident	Trouble ticket created or trouble cleared within 15 minutes of alarm	$((\text{Total trouble tickets created or trouble cleared}) - (\text{trouble tickets created or troubles cleared greater than 15 minutes after alarm})) / (\text{Total trouble tickets created or trouble cleared}) \times 100$	Monthly by incident and for total network		This is a Service Level Objective and is not subject to remedy.
	ATM & Frame Relay	5.8.4	Contractor does not measure this parameter. Restoration covers this item.	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	PNT	10.3.4	Contractor does not measure this parameter. Restoration covers this item.	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	MRS	10.3.4	15 minutes, 95% of the time	Monthly	Each incident	Incident Response within 15 minutes, 95% of the time 160 Fully Managed Sites, 43 3rd Party Vendor Sites and 664 Ping-Only Sites	$((\text{Total trouble tickets created or trouble cleared}) - (\text{trouble tickets created or troubles cleared greater than 15 minutes after alarm})) / (\text{Total trouble tickets created or trouble cleared}) \times 100$	Contractor will provide a PRS Report monthly, via the Web, showing the attainment of Service Level Objectives for the month just ended.		The penalty associated with this PRS will be limited to 10% of the monthly MRS management fee for each site causing the missed PRS, once the target is missed for 3 consecutive months.
Field Response	OPT-E-MAN	5.8.5	Contractor does not measure this parameter. Restoration covers this item.	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Exhibit A-3: SOW for Managed IP Services
 Technical Exhibit 2: Performance Requirements Summary

Parameter	Product	SOW Reference	Requirement	Interval	Unit	Metric	Calculation	Reporting	Exclusions	Remedy
	ATM & Frame Relay	5.8.5	Contractor does not measure this parameter. Restoration covers this item.	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	PNT	10.3.5	Contractor does not measure this parameter. Restoration covers this item.	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	MRS	10.3.5	90% of the time	Monthly	Each Field Dispatch	2 hours to be on site after ticket creation for critical County sites set forth in Technical Exhibit 3 (Critical Sites), 4 hours to be on site after ticket creation for remaining sites.	$((\text{Total trouble tickets requiring dispatch}) - (\text{qualified technician on-site more than 2 hours/4 hours after ticket creation})) / (\text{Total trouble tickets requiring dispatch}) \times 100$	Monthly by each dispatch and for total network	Physical access limitations; or as requested by County	10% of monthly fee for each site causing the missed PRS. The penalty associated with this PRS will be limited to 10% of monthly fee for each site causing the missed PRS.
Restoration	OPT-E-MAN	5.8.6	4 Hour Mean time to repair.	Monthly	Each network outage	MTTR: 4 hrs. end-to-end, including the local loop, per month	$((\text{Total number of user affected outages}) - (\text{number of user affected outages lasting more than 4 hours from ticket creation})) / (\text{Total number of user affected outages}) \times 100$	Monthly by each outage and for total network	Physical access limitations; or as requested by County	This is a Service Level Objective and is not subject to remedy.
	ATM & Frame Relay	5.8.6	4 hours after a trouble ticket is opened	Monthly	Each network outage	2 hours after ticket creation for Contractor controlled transport for critical County sites set forth in Technical Exhibit 3 (Critical Sites) and 4 hours after ticket creation for all remaining sites, per PVC/VPC/VCC, Port or Port and Access outage in all regions. This includes the Access and equipment when provided by Contractor. This applies only to those troubles reported by County to the Data Service Center (DSC).		County is responsible for notifying Contractor of any outages that exceed the 2 or 4 hour maximum .	Physical access limitations; or as requested by County	County must request a service credit within forty-five (45) calendar days after the failure(s) occurred. Upon verification by Contractor that the actual repair time for any PVC/VPC/VCC, Port or Port and Access exceeded the 2 or 4 hour maximum described above, County will be entitled to a service credit equal to: • 50% of the monthly recurring charges for all affected Ports and/or PVC/VPC/VCCs for month in which the outages occurred.
	PNT	10.3.6	Greater than 90%	Monthly	Each network outage	Any outage receives a credit.	Measurement of Time to Restore begins when a trouble ticket is opened by Contractor and County releases the affected Service Component(s) to Contractor and ends when Contractor makes its first attempt to notify County that the problem has been resolved and the Service Component(s) are restored and available for County to use.		Outage time that is outside of the standard operating hours of the local access provider used by Contractor for the affected MIS Port.	See Sheet 2 for MIS Site Availability/Time to Restore SLA Credit Table
	MRS	10.3.6	90% of the time	Monthly	Each network outage	2 hours after ticket creation for Contractor controlled transport for critical County sites set forth in Technical Exhibit 3 (Critical Sites) and 4 hours after ticket creation for all remaining sites, per PVC/VPC/VCC, Port or Port and Access outage in all regions. This includes the Access and equipment when provided by Contractor. This applies only to those troubles reported by County to the Data Service Center (DSC).	$((\text{Total trouble tickets requiring dispatch}) - (\text{qualified technician on-site more than 2 hours/4 hours after ticket creation})) / (\text{Total trouble tickets requiring dispatch}) \times 100$	Monthly by each outage and for total network.	Physical access limitations; or as requested by County.	10% of monthly MRS management fee for each site causing the missed PRS. The penalty associated with this PRS will be limited to 10% of monthly MRS management fee for each site causing the missed PRS.

Exhibit A-3: SOW for Managed IP Services
 Technical Exhibit 2: Performance Requirements Summary

Parameter	Product	SOW Reference	Requirement	Interval	Unit	Metric	Calculation	Reporting	Exclusions	Remedy
Service Provisioning	OPT-E-MAN	5.8.7	30 days for 5 sites or less with no special construction requirements	Monthly	Each service request	30 days for 5 sites or less with no special construction requirements	Subject to 5 sites or less with no special construction requirements.	Monthly by each order and for total network	No transport facility available.	This is a Service Level Objective and is not subject to remedy.
	ATM & Frame Relay	5.8.7	By agreed Due Date	Monthly	Each service request	Negotiated Due Date			No transport facility available.	Customer is responsible for notifying Company of any missed due dates. Customer must request a Service credit within forty-five (45) calendar days after the missed due date occurred. Upon verification by Company that the due date was missed, the Customer will be provided a service credit equal to: <ul style="list-style-type: none"> 100% of the monthly recurring charges for one month of Service for each Port and/or PVC/VP/VCC in which the FOC due date was missed.
	PNT	10.3.7	By agreed Due Date (typical timeline is 30 days for T1 42 days for T3 63 days for OC3)	Monthly	Each service request	Per site type.				If Contractor does not meet this performance objective for a Covered Access Arrangement, County will be entitled to an On-Time Provisioning PRS credit equal to one month's discounted monthly recurring charge for the Service Component(s) that is not installed on time, after the installation is completed.
	MRS	10.3.7	On-time site implementation based upon mutually agreed schedule of dates	By site implemented.	Individual Site Installation and Enablement	Completion of Each Site On Time	Measure of on-time site implementation based upon mutually agreed to schedule of dates between the Customer and AT&T	On going throughout the installation process.	Physical access and facility limitations.	50% Of subject Site(s) Installation Charge
IP TELEPHONY										
Availability		8.2.16	99.9%	Monthly	Each IP phone line, voice mail box, and agent at a system site	Cumulative minutes of user outage	Percentage of time the Service is available and usable by the Client. Availability is measured from the AT&T management system to the Client sites via the access routers and includes the AT&T IP Telephony and LAN Service components	Monthly by site and for total all sites managed	Failures caused by County managed components, cable cuts	Client will be entitled to a credit determined by the number of affected in scope service components used in the calculation of the outage duration. A one-time credit of 10% of the billed amount of the monthly recurring management fees for affected components will be issued.
Incident Response		8.1.2.D	Greater than 95%	Monthly	Each incident	A monthly measurement of response time for Severity Levels 1 and 2 service outages.	AT&T will respond to troubles no less than 95% of the time in aggregate in a given month: Severity 1 = 30 Minutes Severity 2 = 1 Hour	Monthly by incident and for all sites managed		This is a Service Level Objective and is not applicable to Remedy.
Repair Response		8.1.3.E	Greater than 90%	Monthly	Each outage - IP line, voice mail box, or agent	Severity 1 & 2 = 4 Hrs. for remote restores Severity 1 & 2 = 8 Hrs. for restores requiring dispatch	A monthly measurement of restoration time for service outages that require dispatch or no dispatch is required. Severity 1 & 2 = 4 Hrs. for remote restores Severity 1 & 2 = 8 Hrs. for restores requiring dispatch	Monthly by each outage and for all sites managed	County maintained components, physical access limitations; or as requested by County	This is a Service Level Objective and is not applicable to Remedy.

Exhibit A-3: SOW for Managed IP Services
 Technical Exhibit 2: Performance Requirements Summary

Parameter	Product	SOW Reference	Requirement	Interval	Unit	Metric	Calculation	Reporting	Exclusions	Remedy
IP Service Provisioning		11.11.1	Greater than 95%	Monthly	Each IP line, voice mail box, or agent position order (new or relocation)	95% completion for each category of MACD (Soft, Hard, Project) measured monthly.	Completion of MACD orders for standard Service components in a standard or mutually agreed-to time frame.	Monthly by each order and for all sites managed		Soft MACD - \$20 for each Soft MACD missed. Hard MACD - \$100 for each Hard MACD missed. Project MACD - 50% of Project MACD charge.

**EXHIBIT A-3: STATEMENT OF WORK FOR MANAGED IP SERVICES
 TECHNICAL EXHIBIT 3
 CRITICAL SITES (ENTERPRISE NETWORK INVENTORY)**

Network Type	Site Name	Site Address	Hardware Model	Bandwidth / Sustained Cell Rate (Mbps)	Average ATM Utilization (%) *
EN	Downey Data Center	9150 E Imperial Hwy, Downey	12008, (2) 7606, 7513, 7301	155	<5%
EN	ISD Headquarters	1100 N. Eastern Ave, Los Angeles	12008, 7606, 7513, 7301	155	<5%
EN	Hall of Administration	500 W Temple, Los Angeles	7606, 7304	37.36	29.09%
EN	Alhambra Public Works	900 S. Fremont, Alhambra	7606, 7304	34.00	<5%
EN	Health Services Administration	313 N. Figueroa St., Los Angeles	7606, 7304	32.00	30.00%
EN	USC Medical Center	1200 N. State Street, Los Angeles	7606, 7304	32.00	30.00%
EN	Ferguson	5555 S. Ferguson Drive, Los Angeles	7606, 7304	29.00	21.30%
EN	Harbor UCLA Medical Center	1000 W. Carson St., Torrance	7606, 7304	29.00	7.10%
EN	Martin Luther King/Drew	12021 Wilmington Avenue, Los Angeles, CA	7606, 7304	29.00	<5%
EN	Olive View Hospital	14445 Olive View Drive, Sylmar	7606, 7304	29.00	8.80%

* Data for Average ATM Utilization is from a March 2007 report

**EXHIBIT A-3: STATEMENT OF WORK FOR MANAGED IP SERVICES
 TECHNICAL EXHIBIT 4
 DEFAULT LINE BLOCKING MATRIX**

- UL** 411
- UL** Access to "0" Operator
- UL** Caller ID (outgoing)
- UL** Collect calls
- UL** Long Distance, International
- UL** Operator assisted calls billed to County
- US** *69 Call Return
- US** 1010 codes
- US** 3rd party calls
- US** 800 forwards to 900
- US** 900/976
- US** Cramming
- US** IntraLATA carrier can be changed
- US** InterLATA carrier can be changed
- US** Nationwide 411
- US** Operator transfer to non-agreement carrier
- US** Unauthorized credit cards

IP phone line	IP Trunks
Y	N
N	N
Y	Y
Y	Y
Y	Y
Y	Y
Y	Y
Y	Y
Y	Y
Y	Y
Y	Y
Y	Y
Y	Y
Y	N
Y	Y
Y	Y

US=Unauthorized Service, not allowed on any County line
UL=Unauthorized Line, allowed or not allowed on a line by line basis
Y= Shall be blocked unless specifically authorized in writing
N= Shall not be blocked

**EXHIBIT A-3: STATEMENT OF WORK FOR MANAGED IP SERVICES
TECHNICAL EXHIBIT 5
REPORTING REQUIREMENTS**

The following table summarizes required reports and their frequency. For comparison purposes, the FM, MNFR, and MO requirements are shown side-by-side, with an 'X' denoting a required report and a '-' (dash) indicating no reporting requirement. Paragraph 14.1 (Reports) of the SOW addresses the scope and format of the reports and Paragraph 14.2 (Web Portal) of the SOW details how the reports must be integrated into the required Web Portal.

#	Report	Frequency	Fully Managed (FM)	MNFR – Managed/No Field Response services	Monitoring Only (MO)
1	Trouble Ticket Summary	Weekly	X	X	X
2	Change Management Summary	Weekly	X	X	-
3	Incident Response	Monthly	X	X	X
4	Field Response and Restoration	Monthly	X	X	-
5	Top Statistical Performance	Monthly	X	X	-
6	Bottom Statistical Performance	Monthly	X	X	-
7	Overall Network Availability	Quarterly	X	X	-
8	Capacity Planning	Quarterly	X	X	-
9	Ad-Hoc Reports	Continuous	X	X	X
10	Annual Executive Summary Reports	Yearly	X	X	X

WEEKLY REPORTS – The Contractor shall provide the following weekly reports:

- 1. TROUBLE TICKET SUMMARY – Containing summaries of every Contractor trouble ticket handled during the prior calendar week. The report shall be organized in two categories: Closed Tickets and Open Tickets. Each summary shall contain:
 - The Contractor’s trouble ticket number
 - The County’s corresponding trouble ticket number
 - The County’s site acronym and facility name of the site principally involved in the trouble
 - The creation date and time of the ticket, expressed in Pacific Time
 - A very brief, 1-line summary of the trouble
 - The resolution (i.e. root cause) of the trouble, if the ticket is closed
 - The current status of the trouble, if the ticket is open
 - The closure date and time of the ticket, expressed in Pacific Time, if the ticket is closed
 - The network downtime associated with the trouble, with a reason given if the time is listed as “none,” “0:00,” or similar designation as to why there was no downtime.
 - A brief, one paragraph description of the major actions performed or the root cause of the trouble
 - Outage Type – Each ticket shall be identified as one of the following outage types:
 - No trouble found – The Contractor was unable to verify a failure or discover root cause upon investigation
 - Clear on test by Contractor or Carrier – The trouble cleared upon the Contractor or Carrier conducting diagnostic testing
 - SLA affecting outages – Any failure that contributes to the Contractor not meeting one of the Service Level Agreements
 - Recurring or previously reported outages —Any failure that is materially the same as a failure previously encountered on the same device at the same location.
- 2. CHANGE MANAGEMENT SUMMARY – Containing summaries of every network change performed by the Contractor during the prior calendar week. Each summary shall contain:
 - The Contractor’s change request number (or problem management ticket, if applicable)
 - The County’s corresponding change request number
 - The County’s site acronym and facility name of the site impacted by the change. If multiple sites are affected, all of those sites should be listed. If the impact can be described

more succinctly while conveying the same meaning, that description may be substituted (e.g. “all backup devices in the EN” or “all Health Services sites”)

- The scheduled date and time of the change and outage length (the “change window”)
- The date and time the change was completed.
- A very brief, 1-line summary of the change
- The current status of the change using the approved status language to be provided by the County.
- A brief, one paragraph description of the major actions performed during the change and the purpose of the change. For example: “Upgraded the operating system on Hall of Administration router to (revision level) to mitigate a severe security vulnerability on the recommendation of the equipment vendor.”

MONTHLY REPORTS – The Contractor shall provide a monthly written report (with graphical representation where applicable) containing at minimum, the following information. The monthly report shall also contain the values of the previous two reporting periods (if available) for comparison purposes:

- **3. INCIDENT RESPONSE** – Containing the following information related to the Contractor’s actual performance in responding to alarms:
 - Total number of incidents cleared within 15 minutes of alarm
 - Total number of trouble tickets created within 15 minutes of alarm
 - Total number of incidents
 - Percentage of either alarms cleared within 15 minutes of incident or trouble tickets created within 15 minutes (Total number of incidents cleared within 15 minutes plus total number of trouble tickets created within 15 minutes divided by the total number of incidents)
- **4. FIELD RESPONSE AND RESTORATION** – Containing the following information related to the Contractor’s actual performance in field response and restoring service:
 - Total number of incidents requiring field response
 - Total number of incidents where elapsed time to Contractor arrival on site was less than 2 hours from ticket creation
 - Percentage of incidents meeting the SLA for Field Response of less than 2 hours
 - Total number of incidents
 - Total number of incidents where elapsed time to restoration of service was less than 2 hours
 - Percentage of incidents meeting the SLA for Restoration of Service of less than 2 hours

- 5. TOP STATISTICAL LOCATIONS – Report shall include a minimum of 10 locations or 10 percent of the Contractor monitored devices (whichever is greater), containing the following information and sorted by rank order:
 - Greatest average network availability by location or device
 - Greatest average latency by location from Contractor’s NMS system
 - Greatest average CPU utilization by device
 - Greatest peak bandwidth utilization in kilobits per second or megabits per second per location
 - Greatest average bandwidth utilization as percentage of available committed bandwidth per location
 - Greatest peak bandwidth utilization in kilobits per second or megabits per second per interface
 - Greatest average bandwidth utilization in kilobits per second or megabits per second per interface
 - Greatest peak memory utilization by device

- 6. BOTTOM STATISTICAL LOCATIONS – Report shall include a minimum of 10 locations or 10 percent of the Contractor monitored devices (whichever is greater), containing the following information and sorted by rank order:
 - Lowest average network availability by location or device
 - Lowest average latency by location from Contractor’s NMS system
 - Lowest average CPU utilization by device
 - Lowest peak bandwidth utilization in kilobits per second or megabits per second per location
 - Lowest average bandwidth utilization as percentage of available committed bandwidth per location
 - Lowest peak bandwidth utilization in kilobits per second or megabits per second per interface
 - Lowest average bandwidth utilization in kilobits per second or megabits per second per interface
 - Lowest peak memory utilization by device

QUARTERLY REPORTS – The Contractor shall provide a quarterly written report with the following information (with graphical representations where applicable). The quarterly report shall also contain the values of the previous four reporting periods (if available) for comparison purposes:

- 7. OVERALL NETWORK AVAILABILITY – Containing the following information:
 - Percentage uptime for the Contractor-managed (FM) network, inclusive of all devices

- Percentage uptime for the Managed/No Field Response services (MNFR), inclusive of all devices
 - Percentage uptime for the Contractor-monitored (MO) network, inclusive of all devices
- 8. CAPACITY PLANNING – Containing a list of devices and locations where the Contractor projects that the values in the following categories may exceed recommended values within the next 30, 60, or 90 days based on data extrapolation from the previous 90 day period or other considerations. If Contractor projects no devices and locations will exceed the recommended values, the top 10 devices and locations will be analyzed. The Contractor shall include the specific methodology or considerations used in making the projections. The Contractor shall include the projected values for 30/60/90 days as well as a table showing the recommended (based on manufacturer or industry standards) or SLA thresholds for each of the following categories:
 - Memory utilization
 - CPU utilization
 - Buffer utilization
 - Bandwidth utilization – average and peak

9. AD-HOC REPORTS – The Contractor shall provide the capability for the County to generate the following ad-hoc (on demand) reports. The ad-hoc reports shall be user-definable on any desired date or time range within the preceding 30 calendar days.

- Interface or subinterface (if applicable) average and peak utilization over time, in kilobits per second or megabits per second as appropriate
- Circuit average and peak utilization over time, including information on the applicable guaranteed or committed rate for the circuit, in kilobits or megabits per second as appropriate
- Device average and peak latency over time, in round-trip milliseconds, measured from the Contractor’s NMS system
- Device average and peak processor utilization over time, in percent
- Device average and peak memory utilization over time, in percent
- Device average and peak buffer utilization over time, in percent

10. ANNUAL EXECUTIVE SUMMARY REPORTS – The Contractor shall provide the County with a report containing a summary of the MONTHLY REPORTS for the previous 12 months in the following categories.

- Overall Bandwidth Utilized by the EN, LANET, and NGEN in Megabits over the specified time period
- Overall Bandwidth as a percentage of committed bandwidth over the specified time period
- SLA affecting outages – Any failure that contributes to the Contractor not meeting one of the Service Level Agreements

- Total number of incidents requiring field response
- Total number of incidents
- Aggregate average CPU utilization
- Average peak bandwidth utilization in kilobits per second or megabits per second
- Average bandwidth utilization as percentage of available committed bandwidth
- Percentage uptime for the Contractor-managed (FM) network, inclusive of all devices
- Percentage uptime for the Managed/No Field Response services (MNFR) inclusive of all devices
- Percentage uptime for the Contractor-monitored (MO) network, inclusive of all devices

**TELECOMMUNICATIONS SERVICES CONTRACT
EXHIBIT B-1: PRICING SCHEDULE FOR LOCAL SERVICES**

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TELECOMMUNICATIONS SERVICES CONTRACT
EXHIBIT B-1: PRICING SCHEDULE FOR LOCAL SERVICES

Line Item	Product/Feature Name	Contractor Unique Service Identifier	One-Time Install Cost per Item	Monthly Recurring Cost per item	Units	One-Time Changes Cost per Item
1	Analog (Measured) Business Line	1MB	\$ 125.00	\$ 8.31	line	\$ -
2	Call Forwarding	ESM	\$ 5.70	\$ 3.89	line	\$ -
3	Busy Call Forwarding	EVB	\$ 5.70	\$ 3.89	line	\$ -
4	Delayed Call Forwarding	EVD	\$ 5.70	\$ 3.99	line	\$ -
5	Call Waiting	ESX	\$ 5.70	\$ 3.89	line	\$ -
6	Caller ID	CNM	\$ 5.70	\$ 7.12	line	\$ -
7	Selective Call Forwarding	CSF	\$ 5.70	\$ 4.65	line	\$ -
8	Hunting	HTG	\$ 30.00	\$ 0.50	line	\$ -
9	Speed Calling	ESL	\$ 5.70	\$ 3.89	line	\$ -
10	Three-way Calling	ESC	\$ 5.70	\$ 3.89	line	\$ -
11	Call Return	CCR	\$ 5.70	\$ 4.65	line	\$ -
12	Call Screen	CCB	\$ 5.70	\$ 4.65	line	\$ -
13	Priority Ringing	CLP	\$ 5.70	\$ 4.65	line	\$ -
14	Repeat Dialing	CRP	\$ 5.70	\$ 4.65	line	\$ -
15	Call Trace	CALTR	\$ 5.70	\$ 4.65	line	\$ -
16	Remote Access to Call Forwarding	RAF	\$ 5.70	\$ 1.38	line	\$ -
17	PBX Trunks					
18	Basic Trunks - 1-way outbound	BM3	\$ 70.75	\$ 9.00	trunk	\$ -
19	Basic Trunks - 1-way inbound	BMN	\$ 70.75	\$ 18.00	trunk	\$ -
20	Basic Trunks - 2-way	BMBXX	\$ 85.00	\$ 10.00	trunk	\$ -
21	Basic Trunks - DID	BMN	\$ 70.75	\$ 18.00	trunk	\$ -
22	Assured Trunks - 1-way outbound	TM3	\$ 85.00	\$ 10.00	trunk	\$ -
23	Assured Trunks - 1-way inbound	TM4	\$ 85.00	\$ 10.00	trunk	\$ -
24	Assured Trunks - 2-way	TMB	\$ 85.00	\$ 10.00	trunk	\$ -
25	Assured Trunks - DID	TMN	\$ 85.00	\$ 19.35	trunk	\$ -
26	Direct Inward Dial Stations (20)	ND1	\$ 142.49	\$ 14.25	trunk	\$ -
27	Direct Inward Dial Stations (100 init.)	ND8	\$ 400.00	\$ 20.00	trunk	\$ -
28	Direct Inward Dial Stations (100 addit.)	NDA	\$ 70.00	\$ 20.00	trunk	\$ -
29	Off-Premise Extension	SLA/RXR	\$ 70.00	\$ 12.00	trunk	\$ -
30	Foreign Exchange Service	1MBFC	\$ 351.94	\$ 23.46	trunk	\$ -
31	Remote Call Forwarding	BM/ML/NB	\$ -	\$ 17.10	trunk	\$ -
32						
33	Additional Services					
34	Foreign Exchange Line	1MBFN	\$ 351.94	\$ 28.88	line	\$ -
35	Foreign Exchange and Prefix Line	1MBFP	\$ 351.94	\$ 11.95	line	\$ -

TELECOMMUNICATIONS SERVICES CONTRACT
EXHIBIT B-1: PRICING SCHEDULE FOR LOCAL SERVICES

Line Item	Product/Feature Name	Contractor Unique Service Identifier	One-Time Install Cost per Item	Monthly Recurring Cost per item	Units	One-Time Changes Cost per Item
36	Measured Rate Business Serv Line Sharing Basis	1MBLS	\$ 125.00	\$ 8.31	line	\$ -
37	Measured Rate Business Serv Line Sharing Toll/CI Restrict	1MBLT	\$ 125.00	\$ 8.31	line	\$ -
38	Measured Rate Business Svc With Toll Restriction	1MBTS	\$ 125.00	\$ 8.31	line	\$ -
39	Measured Rate Business Svc	1ML	\$ 125.00	\$ 8.31	line	\$ -
40	Foreign Exchange Line	1MLFC	\$ 351.94	\$ 28.88	line	\$ -
41	Foreign Exchange Measured RateMulti-line Service	1MLFN	\$ 351.94	\$ 28.88	line	\$ -
42	Measured Rate Business Serv Line Sharing Basis	1MLLS	\$ 125.00	\$ 8.31	line	\$ -
43	Busy Call Forwarding Extended	EVC	\$ 5.70	\$ 3.99	line	\$ -
44	Additional Trunk Line - Basic	BM2	\$ 70.75	\$ 9.00	line	\$ -
45	Additional Trunk Line - Assured	TM2	\$ 85.00	\$ 10.00	line	\$ -
46	FOREIGN EXCHANGE ADDITIONAL TRUNK	TM2FC	\$ 285.00	\$ 26.60	trunk	\$ -
47	FOREIGN EXCHANGE TRUNK	TM3CN	\$ 270.72	\$ 32.54	trunk	\$ -
48	FOREIGN EXCHANGE OUTGOING TRUNK	TM3FC	\$ 270.72	\$ 23.46	trunk	\$ -
49	FOREIGN EXCHANGE TRUNK	TMBFC	\$ 270.72	\$ 23.46	trunk	\$ -
50	1ST COMBO TRUNK GROUP PRI	PB1	\$ 70.75	\$ 9.00	trunk	\$ -
51	ADDL MEASURED TRUNK PRI	PB2	\$ 70.75	\$ 9.00	trunk	\$ -
52	IN ONLY MEASURED TRUNK PRI	PB4	\$ 70.75	\$ 9.00	trunk	\$ -
53	BASIC OUT ONLY TRUNK	BM3	\$ 70.75	\$ 9.00	trunk	\$ -
54	1ST TRUNK LINE	BMS	\$ 70.75	\$ 9.00	trunk	\$ -
55	INTEGRATED PATHWAY OUT ONLY TRUNK	TM3	\$ 85.00	\$ 10.00	trunk	\$ -
56	PBX Trunk Stop Hunt Contrl Arrngmnt	93B	\$ 85.00	\$ 26.22	trunk	\$ -
57	PBX Trunk Availability Control Arrangement - First group of six trunks or less	P89	\$ 200.00	\$ 13.80	trunk group	\$ -
58	Off-Premise Extension					
59	Different Wire Center or	per line			per line	
60	PB Exchange within LATA					
61	(SLA, RXR++)					
62	Wire Center to Wire Center					
63	Appropriate Mileage (1L5XX)	1L5XX		\$ 25.81	1st mile or less	\$ -
64		1L5XX		\$ 2.06	per add'l mile per line	\$ -
65	In GTEC Territory (a)					
66	Contiguous					

TELECOMMUNICATIONS SERVICES CONTRACT
EXHIBIT B-1: PRICING SCHEDULE FOR LOCAL SERVICES

Line Item	Product/Feature Name	Contractor Unique Service Identifier	One-Time Install Cost per Item	Monthly Recurring Cost per item	Units	One-Time Changes Cost per Item
67	(SLA, RXR++)					
69	From Cust Prem to common	1LHBV	\$ 322.97	\$ -	per line	\$ -
70	GTEC Boundary (1LHBV)	1L5XX	\$ -	\$ 0.95	per 1/2 mile per line	\$ -
72	In GTEC territory (a)					
73	Non-contiguous (SLA, RXR++)					
76		1LHB4	\$ 512.95	\$ -	per line	\$ -
77	Rate Center to Rate Center	1L5XX	\$ -	\$ 1.90	per mile per line	\$ -
78	(1LHB4)					
79	a. Plus applicable charges as specified by GTEC					
81	Off-Premise Extension					
82	PBX Station					
83	Same Wire Center	per station			per station	
84	(PXBSE)	(PXBSE)			per station	\$ -
85	(1LVBP)	(1LVBP)	\$ 455.96	\$ 44.08	per station	\$ -
88	Same Exchange, Different Wire					
89	Center or Contiguous Exchange	(PBXSE OR PBSDC)			per station	
90	(PBXSE OR PBSDC)				per station	\$ -
91	(1LVAP)	(1LVAP)	\$ 455.96	\$ 44.08	per station	\$ -
92	Appropriate Mileage (1L5XX)					
93		1L5XX	\$ -	\$ 23.75	1st mile or less	\$ -
94			\$ -	\$ 2.06	per add'l mile per line	
95	RCF Additional access path, each	RCA	\$ -	\$ 17.10	line	\$ -

TELECOMMUNICATIONS SERVICES CONTRACT
EXHIBIT B-1: PRICING SCHEDULE FOR LOCAL SERVICES

Line Item	Product/Feature Name	Contractor Unique Service Identifier	One-Time Install Cost per Item	Monthly Recurring Cost per item	Units	One-Time Changes Cost per Item
1	Centrex-type Basic Line	RXR++	\$ 70.00	\$ 12.00	line	\$ -
2	Station-to-Station Calling	N/A		included	line	\$ -
3	Call Transfer/3-Way Consultation	E8A		included	line	\$ -
4	Call Hold	EAB		included	line	\$ -
5	Call Forward – Fixed	E9G++		included	line	\$ -
6	Call Forward Busy	E6G++		included	line	\$ -
7	Call Forward – Variable	EAT		included	line	\$ -
8	Call Forward Variable - Unlimited	ESMCS		included	line	\$ -
9	Call Restriction Levels	N/A		included	line	\$ -
10	Call Pickup	E3P		included	line	\$ -
11	Last Number Re-dial	DMSLR		included	line	\$ -
12	Message Waiting Indicator	EMW		included	line	\$ -
13	Caller ID Blocking	CNMCS		included	line	\$ -
14	Other Centrex-type Station Line Features					
15	Line/Station Hunting	HTG	\$ 30.00	\$ 0.50	line	\$ -
16	Automatic Call Back	SAK	\$ -	\$ 0.25	line	\$ -
17	Assume Dial 9 Service	RXR++	\$ 70.00	\$ 12.00	line	\$ -
18	Automatic Re-Dial	DMSAD	\$ -	\$ 0.15	line	\$ -
19	Caller ID	CAL1D	\$ -	\$ 3.25	line	\$ -
20	Call Waiting	E6CCS	\$ -	\$ 0.10	line	\$ -
21	Limited Call Acceptance	CALAC	\$ 23.75	\$ 5.00	line	\$ -
22	Ring Down Line	DMSAL	\$ -	\$ 0.25	line	\$ -
23	Speed Dialing – Individual	SPC30	\$ -	\$ 0.50	line	\$ -
24	Speed Dialing – System/Group	SPD30	\$ -	\$ 0.10	line	\$ -
25	Call Trace	CLRTR	\$ 7.00	\$ 0.35	line	\$ -
26	Remote Access to Call Forwarding	RAFCA	\$ 7.00	\$ 0.10	line	\$ -
27	Call Screen	CALBL	\$ 7.00	\$ 0.50	line	\$ -
28	Call Park	CPARK	\$ -	\$ 0.71	line	\$ -
29	Station Controlled (Large) - Conferencing	MMELG	\$ 185.00	\$ 115.00	line	\$ -
30	Station Controlled (Small) - Conferencing	See Below			line	\$ -
31	Centrex Reserve Numbers	R1SCX	\$ -	\$ 25.00	line	\$ -
32	Station Call Detail	Deleted by County		\$ -	line	\$ -
33						
34	Additional Services					
35	Speed Calling Individual - 50 Numbers - ea station.	SPC50	\$ 4.00	\$ 0.50	line	\$ -
36	Speed Calling Individual - 70 Numbers - ea station.	SPC70	\$ -	\$ 0.50	line	\$ -

TELECOMMUNICATIONS SERVICES CONTRACT
EXHIBIT B-1: PRICING SCHEDULE FOR LOCAL SERVICES

Line Item	Product/Feature Name	Contractor Unique Service Identifier	One-Time Install Cost per Item	Monthly Recurring Cost per item	Units	One-Time Changes Cost per Item
37	Speed Calling Group - 50 Numbers - ea station.	SPD50	\$ -	\$ 0.10	line	\$ -
38	Speed Calling Group - 70 Numbers - ea station.	SPD70	\$ -	\$ 0.10	line	\$ -
39	Speed Call - Grp - 30 code chng - ESS	ESHC3	\$ -	\$ 0.10	line	
40	Speed Call - Grp - 6 to 10 code - cust chng - ea line.	ESHC6	\$ -	\$ 0.10	line	
41	Station Controlled (Small) - Conferencing - DMS100	DMS6P	\$ -	\$ 0.05	line	\$ -
42	Station Controlled (Small) - Conferencing - 5ESS	SWCLN	\$ 15.00	\$ -	line	\$ -
43	Automatic Callback Calling - Com Equip	ACY	\$ 565.00	\$ 0.04	line	\$ -
44	Area Wide Centrex, per Dialing Plan Number, per line	AWCX3	\$ 1.95	\$ 2.00	line	\$ -
45	Centrex -ISDN Feat Pkg.	BAPKG	\$ 150.00	\$ 16.00	line	\$ -
46	DR & CW - AT&T Class A&B - per prim. sta (W/ DRR)	BRT	\$ -	\$ 0.10	line	\$ -
47	Dial Plan for Adv. Solutions - Basic, per station	D6PAB	\$ -	\$ -	line	\$ -
48	Attendant Console Feature Package - ea console.	DCVSP	\$ 379.96	\$ 166.71	line	\$ -
49	Direct Digital Interface - Transport Facility Termination	DDA++	\$ -	\$ 320.00	line	\$ -
50	Directed Call Pickup - ea line. (W/DPG)	DMA1E	\$ -	\$ 0.15	line	\$ -
51	Automatic Dial -ea.	DMSAD	\$ -	\$ 0.15	line	\$ -
52	Centrex Direct Connect (Automatic line) - ea	DMSAL	\$ -	\$ 0.25	line	\$ -
53	Call Park - ea station.	DMSCP	\$ -	\$ 0.75	line	\$ -
54	Executive Busy Override - ea sta.	DMSEB	\$ 0.25	\$ -	line	\$ -
55	Group Intercom	DMSGC	\$ -	\$ 1.81	line	\$ -
56	Make Set Busy - ea station.	DMSSB	\$ -	\$ 0.10	line	\$ -
57	Uniform Call Distribution - Group - ea.	DMSUC	\$ 150.09	\$ 40.00	line	\$ -
58	Do Not Disturb - Attendant	DND	\$ 189.98	\$ 55.57	line	\$ -
59	Directed Call Pickup - ea Group.	DPG	\$ 94.99	\$ 5.00	line	\$ -
60	Distinctive Ringing - AT&T Comm. Eq. - per System.	DRR	\$ 190.93	\$ 5.00	line	\$ -
61	Call Waiting - Originating (sta to sta only) - ea sta.	ESZ	\$ -	\$ 0.10	line	\$ -
62	Message Waiting - each console	EWA	\$ 156.74	\$ 9.50	line	\$ -
63	Message Waiting - with Electornic Bus. Set - ea line.	EWB	\$ 30.00	\$ 0.10	line	\$ -
64	Flex. Rpts. Pkg. Charge to Establish - sys.	FRP	\$ 333.63	\$ 21.38	line	\$ -
65	FRS - Basic Service w/ 1 Pattern	FRSBA	\$ 810.00	\$ 15.00	line	\$ -
66	FRS - Additional Patterns	FRSPT	\$ 80.74	\$ 0.95	line	\$ -
67	System Distinctive Ringing - per system.	GDR	\$ 201.00	\$ 0.50	line	\$ -
68	Key Short List - ea.	KSH	\$ -	\$ 0.10	line	\$ -
69	Centrex Management Service - estab. svc. per system	MSC	\$ 435.00	\$ -	line	\$ -
70	Centrex Routed Number ea. Number	R1SCX	\$ -	\$ -	line	\$ -
71	Extension Line - Non-Cont. Prop. Same Exch. N/Key.	RVY	\$ 16.15	\$ 9.40	line	\$ -
72	Exchange and Toll Diverting - ea arrangement.	RXL	\$ -	\$ 0.50	line	\$ -
73	Line Selection Arrangement TL/IXPL - ea.	RXN++	\$ 142.49	\$ 65.00	line	\$ -

TELECOMMUNICATIONS SERVICES CONTRACT
EXHIBIT B-1: PRICING SCHEDULE FOR LOCAL SERVICES

Line Item	Product/Feature Name	Contractor Unique Service Identifier	One-Time Install Cost per Item	Monthly Recurring Cost per item	Units	One-Time Changes Cost per Item
74	Dial Plan for Adv. Solutions - System Establishment, per system	SEPA3	\$ 200.00	\$ -	Centrex Group	\$ -
75	Centrex Routed Number per route established	SEPR1	\$ 150.00	\$ -	line	\$ -
76	Ctx Smart 100 Lines	SM01X	\$ 600.00	\$ 118.74	line	\$ -
77	Ctx Smart 101 - 400 Lines	SM02X	\$ 600.00	\$ 118.74	line	\$ -
78	Ctx Smart 401 - 1000 Lines	SM03X	\$ 2,475.00	\$ 750.00	line	\$ -
79	Ctx Smart 1001 - 2000 Lines	SM04X	\$ 3,100.00	\$ 1,000.00	line	\$ -
80	Ctx Smart 2001 + Lines	SM05X	\$ 4,200.00	\$ 2,000.00	line	\$ -
81	Virtual Directory Number - Mult. Appear. ea line.	VDNA+	\$ 5.00	\$ 0.45	line	\$ -
82	Virtual Directory Number - Primary Appear. ea.	VDPA+	\$ 5.00	\$ 0.45	line	\$ -
83	SMDR TAMA - Common Equipment.	ZZBYB	\$ 161.48	\$ 33.77	line	\$ -
84	Sectional Billing Agency Account	ZZFAG	\$ 23.75	\$ 0.11	line	\$ -
85	Pilot Account Sectional Billing	ZZFPA	\$ -	\$ 0.10	line	\$ -

TELECOMMUNICATIONS SERVICES CONTRACT
EXHIBIT B-1: PRICING SCHEDULE FOR LOCAL SERVICES

Line Item	Product/Feature Name	Contractor Unique Service Identifier	One-Time Install Cost per Item	Monthly Recurring Cost per item	Units	One-Time Changes Cost per Item
1	Call Center Services					
2	Automated Attendant	N/A	\$ -	\$ 49.00	per port	\$ -
3	Automatic/Uniform Call Distribution (ACD/UCD)	1CMSY	\$ 700.00	\$ 42.00	group	\$ -
4	Interactive Voice Response (IVR)	N/A	\$ 900.00	\$ 275.00	per port	\$ -
5	Call Center Functions*					
6	Incoming Call Queue (included)	N/A	\$ -	\$ -	item	\$ -
7	Call Priority (included)	N/A	\$ -	\$ -	item	\$ -
8	Call Delay Announcement	1CMM2	\$ 142.49	\$ 12.00	item	\$ -
9	Music in Queue	1CMM3	\$ 166.23	\$ 12.00	item	\$ -
10						
11	Additional Services					
12	UCD Arrg - Fwd Call Info - com eq	A5VFC	\$ 2,374.78	\$ 225.00	group	\$ -
13	UCD Arrg - Music in Queue - ea.	A6MDM	\$ 284.97	\$ 75.00	group	\$ -
14	UCD Arrg - Silence in Queue - ea.	A6SDM	\$ 284.97	\$ 47.50	group	\$ -
15	UCD Arrg - Queueing - Delay Announcement - ea.	A8GDM	\$ 170.98	\$ 55.00	group	\$ -
16	Uniform Call Distribution - Centrex line feature - ea.	DMSCD	\$ 40.00	\$ 0.85	line	\$ -
17	C.C. Mgr: Basic Agent Package	1CMA1	\$ 71.24	\$ 4.00	agent	\$ -
18	C.C. Mgr: Call Alert Package	1CMA2	\$ 71.24	\$ 1.10	agent	\$ -
19	C.C. Mgr: Call Tracking Package	1CMA4	\$ 71.24	\$ 2.10	agent	\$ -
20	C.C. Mgr: MIS Package	1CMM1	\$ 474.96	\$ 42.50	group	\$ -
21	C.C. Mgr: Call Delay Announcemtns, ea.	1CMM2	\$ 142.49	\$ 12.00	announcement	\$ -
22	C.C. Mgr: Music in Queue	1CMM3	\$ 166.23	\$ 12.00	queue	\$ -
23	C.C. Mgr: Basic Supervisor Package	1CMS1	\$ 71.24	\$ 10.00	supervisor	\$ -

* ONLY IN DMS SWITCH

TELECOMMUNICATIONS SERVICES CONTRACT
EXHIBIT B-1: PRICING SCHEDULE FOR LOCAL SERVICES

Line Item	Product/Feature Name	Contractor Unique Service Identifier	One-Time Install Cost per Item	Monthly Recurring Cost per item	Units	One-Time Changes Cost per Item
1	Calling Services					
2	Local Calls	N/A	\$ -	\$ 0.0081	minutes	\$ -
3	Zone Calls	N/A	\$ -	\$ 0.0230	minutes	\$ -
4	Intra-LATA Calls	N/A	\$ -	\$ 0.0230	minutes	\$ -
5	Inbound Toll-free Calls	N/A	\$ -	\$ 0.0230	minutes	\$ -
6	900 Services	N/A		charge to be determined		
7	Call Control Services					
8	900/976 Calls	N/A	\$ -	\$ -	minutes	\$ -

TELECOMMUNICATIONS SERVICES CONTRACT
EXHIBIT B-1: PRICING SCHEDULE FOR LOCAL SERVICES

Line Item	Product/Feature Name	Contractor Unique Service Identifier	One-Time Install Cost per Item	Monthly Recurring Cost per item	Units	One-Time Changes Cost per Item
1	Operator Services					
2	Directory Assistance	N/A	\$ -	\$ 0.45	call	\$ -
3	Operator Assistance	N/A	\$ -	\$ 0.95	call	\$ -
4	Collect Calls	N/A	\$ -	\$ 0.95	call	\$ -
5	Voice Mail		\$ -	\$ 4.00	mailbox	\$ -
6	Switched Data Services					
7	Integrated Services Digital Network (ISDN)					
8	Basic Rate Interface (BRI)	1M+SL	\$ 125.00	\$ 8.75	line	\$ -
9	Primary Rate Interface (PRI)	PRAS1	\$ 1,287.00	\$ 154.56	line	\$ -
10	Switched 56 Services	DP56K	\$ 474.96	\$ 38.35	line	\$ -
11						
12	Additional Services					
13	Operator Assistance : Person to Person	N/A		\$ 0.95	line	\$ -
14	Operator Assistance : Person to Person	N/A		\$ 0.95	line	\$ -
15	Operator Assistance : Third Party Billed	N/A		\$ 0.95	line	\$ -
16	National Directory Assistance	N/A		\$ 0.95	line	\$ -
	TSP SYS PRIORITY RESTORATION SERVICE:					
17	PRIMARY CONTRACTOR	PR5PC	\$ 345.00	\$ 4.74	line	\$ -
18	ALTERNAT ROUTE	PRAAR	\$ 142.49	\$ 9.50	line	\$ -
19	DELUXE CALL TRANSFER	PRACF	\$ 94.99	\$ 42.75	line	\$ -
20	DIALING PLAN	PRADP	\$ 175.00	\$ 50.00	line	\$ -
21	INFORM 911	PRAE9	\$ 142.49	\$ 118.74	trunk group	\$ -
22	ENHANCED ALTERNATE ROUTE	PRAER	\$ -	\$ 47.50	trunk group	\$ -
23	PACKAGE 2	PRAS2	\$ 1,287.00	\$ 154.56	line	\$ -
24	PACKAGE 3	PRAS3	\$ 1,287.00	\$ 172.50	line	\$ -
25	PRI SUBGROUP	PRASG	\$ 118.74	\$ 9.50	trunk group	\$ -
26	ISDN BRI Usage Intra-state sw-sw day	SDSSD	\$ -	\$ 0.16	line	\$ -
27	ISDN BRI Usage Intra-state sw-sw eve	SDSSE	\$ -	\$ 0.14	line	\$ -
28	ISDN BRI Usage Intra-state sw-sw night	SDSEE	\$ -	\$ 0.14	line	\$ -
29	SDS 56 Test Line	SD56TL	\$ -	\$ 15.00	line	\$ -
30	Expedite Option	EODXP	\$ 400.00	\$ -	line	\$ -
31	Call Router/IVR (Per Port)	BVMXP	\$ -	\$ 190.00	port	\$ -
32	Call Router/IVR Set Up	PBCCR	\$ 1,000.00	\$ -	application	\$ -
33	DIVA Auto Attendant	1CRVK	\$ 500.00	\$ -	application	\$ -
34	DIVA Studio Recording	DYFEX	\$ 1,000.00	\$ -	application	\$ -
35	DIVA Multi- Language	DYFLX	\$ 250.00	\$ -	language	\$ -

TELECOMMUNICATIONS SERVICES CONTRACT
EXHIBIT B-1: PRICING SCHEDULE FOR LOCAL SERVICES

Line Item	Product/Feature Name	Contractor Unique Service Identifier	One-Time Install Cost per Item	Monthly Recurring Cost per item	Units	One-Time Changes Cost per Item
36	DIVA Port	DYXB3	\$ -	\$ 200.00	port	\$ -
37	DIVA Names Directory Add on per portT	DYFAX	\$ -	\$ 15.00	port	\$ -
38	DIVA TDD Add on per port	DYFGX	\$ -	\$ 10.00	port	\$ -
39	DIVA Call Library Add on per port	DYFBX	\$ -	\$ 20.00	port	\$ -
40	DIVA Voice Form Add on per port	DYFCX	\$ -	\$ 20.00	port	\$ -
41	DIVA Zip Code Locator Add on per port	DYFDX	\$ -	\$ 20.00	port	\$ -
42	Call Proceesing Text to Speech	N/A	\$ 4,800.00	\$ 185.00	port	\$ -

TELECOMMUNICATIONS SERVICES CONTRACT
EXHIBIT B-1: PRICING SCHEDULE FOR LOCAL SERVICES

Line Item	Product/Feature Name	Contractor Unique Service Identifier	One-Time Install Cost per Item	Monthly Recurring Cost per item	Units	Distance Charge per mile	One-Time Changes Cost per Item
1	Private Line Services						
2	Analog Private Lines	T6E4X	\$ 565.13	\$ 40.20	circuit	\$ 2.06	\$ -
3	Digital Private Lines						
4	1200 baud	N/A	\$ -	\$ -	circuit	\$ -	\$ -
5	2400 baud	VAN0P	\$ 678.00	\$ 39.00	circuit	\$ 1.18	\$ -
6	4800 baud	VAN1P	\$ 678.00	\$ 39.00	circuit	\$ 1.18	\$ -
7	9600 baud	VAN2P	\$ 678.00	\$ 39.00	circuit	\$ 1.18	\$ -
8	19200 baud	VAN3P	\$ 678.00	\$ 39.00	circuit	\$ 1.18	\$ -
9	32000 baud	N/A	\$ -	\$ -	circuit	\$ -	\$ -
10	38400 baud	N/A	\$ -	\$ -	circuit	\$ -	\$ -
11	56000 baud	VAN4P	\$ 678.00	\$ 39.00	circuit	\$ 1.18	\$ -
12	64000 baud	VAN7P	\$ 678.00	\$ 39.00	circuit	\$ 1.18	\$ -
13	Secondary Channel	DFOSC	\$ -	\$ 4.60	circuit	\$ -	\$ -
14	T1 Services	TMECS	\$ 633.50	\$ 88.00	circuit	\$ 10.00	\$ -
15	Fractional T1 Services	TMECS	\$ 633.50	\$ 88.00	circuit	\$ 10.00	\$ -
16	DS3 Services	Z35AC	\$ 990.00	\$ 1,100.00	circuit	\$ 36.75	\$ -
17	Synchronous Optical Network (SONET)						
18	OC1	ICB	\$ -	\$ -	circuit	\$ -	\$ -
19	OC3c Channelized	ICB	\$ -	\$ -	circuit	\$ -	\$ -
20	OC3 Unchannelized	ICB	\$ -	\$ -	circuit	\$ -	\$ -
21	OC12	ICB	\$ -	\$ -	circuit	\$ -	\$ -
22	OC3c Channelized	ICB	\$ -	\$ -	circuit	\$ -	\$ -
23	OC3 Unchannelized	LLAL3	\$ 2,844.63	\$ 3,318.74	circuit	\$ 135.08	\$ -
24	OC48	ICB	\$ -	\$ -	circuit	\$ -	\$ -
25	OC192	ICB	\$ -	\$ -	circuit	\$ -	\$ -
26	Frame Relay Services						
27	Frame Relay DS0	VAN++	\$ 978.00	\$ 78.00	port+access	\$ -	\$ -
28	Frame Relay DS1	FC154, TMECS	\$ 933.50	\$ 340.00	port+access	\$ -	\$ -
29	Frame Relay DS3	FR37M, Z35AC	\$ 1,944.00	\$ 2,085.00	port+access	\$ -	\$ -
30	Data Link Connection Identifier (DLCI)	RELAY, RELAC	\$ -	\$ 5.00	each	\$ -	\$ -
31	Additional Services						
32	Analog fixed mileage	1L5XX	\$ -	\$ 23.71	mile	\$ -	\$ -
33	ADN fixed mileage	1L5XX	\$ -	\$ 3.00	mile	\$ -	\$ -
34	ADN Bridging	DFOBR	\$ -	\$ 5.50	line	\$ -	\$ -
35	ADN Network Interface Arrangement	MQO	\$ -	\$ 40.00	arrangement	\$ -	\$ -
36	ADN DSO Network Reconfiguration	DFOCO	\$ -	\$ 2.40	line	\$ -	\$ -

TELECOMMUNICATIONS SERVICES CONTRACT
EXHIBIT B-1: PRICING SCHEDULE FOR LOCAL SERVICES

Line Item	Product/Feature Name	Contractor Unique Service Identifier	One-Time Install Cost per Item	Monthly Recurring Cost per item	Units	Distance Charge per mile	One-Time Changes Cost per Item
37	Crossconnect Service	CCOSR	\$ 170.24	\$ 292.67	line	\$ -	\$ -
38	ADN DSO Chan Term in Co-location Cage DS0 Chan Term circuit card in a non-regulated premises mux	CCD1G	\$ -	\$ 14.74	channel termination	\$ -	\$ -
39	DS1 fixed mileage	CHPDC	\$ -	\$ 75.00	channel termination	\$ -	\$ -
40	DS1 chan term in a co-location cage	1L5XX	\$ -	\$ 50.00	mile	\$ -	\$ -
41	Fractional T1 Fixed Mileage	CCDS1	\$ -	\$ 7.76	channel termination	\$ -	\$ -
42	DS3 FIXED MILEAGE	1L5XX	\$ -	\$ 50.00	mile	\$ -	\$ -
43	DS3 CHAN TERM W/RECONFIGURATION	1L5XX	\$ -	\$ 300.00	mile	\$ -	\$ -
44	VG 36 2 Wire Chan Term Multi Pt	Z33AC	\$ 1,040.00	\$ 1,310.00	channel termination	\$ -	\$ -
45	Telegraph Access IPLS (Fiber Loop) & InterLATA 2 Wire Chan Term	T6E2D	\$ 565.13	\$ 31.67	channel termination	\$ -	\$ -
46	DC 4 Wire POT Chan Term IPLS & InterLATA	T6E2X	\$ 565.13	\$ 31.67	channel termination	\$ -	\$ -
47	VG36 4 Wire Chan Term	T6E4D	\$ 565.13	\$ 40.20	channel termination	\$ -	\$ -
48	Utility POT 2 Wire Chan Term & InterLATAIPLS	T6E4X	\$ 565.13	\$ 40.20	channel termination	\$ -	\$ -
49	Utility POT 2 Wire Chan Term & InterLATAIPLS	T6EC2	\$ 565.13	\$ 31.67	channel termination	\$ -	\$ -
50	High Capacity DS1 Chan Term 2 Yr term	T6ECS	\$565.13/\$497.81	\$ 19.54	channel termination	\$ -	\$ -
51	Alarm Voice Frequency 4 Wire Chan Term	T6XG2	\$ -	\$ 155.00	channel termination	\$ -	\$ -
52	Alarm Voice Frequency 2 Wire Chan Term	BCND4	\$ 35.00	\$ 4.76	channel termination	\$ -	\$ -
53	2 Wire Chan Term Bridge VG Data	BCNV2	\$ 35.00	\$ 4.76	channel termination	\$ -	\$ -
54	Bridge Metallic - 3 Premises location	BCND2	\$ 35.00	\$ 4.76	channel termination	\$ -	\$ -
55	2 Wire Chan Term Bridge VG Service	BCNM3	\$ 35.00	\$ 4.76	channel termination	\$ -	\$ -
56	4 Wire Chan Term Bridge VG Service	BCNV2	\$ 35.00	\$ 4.76	channel termination	\$ -	\$ -
57	Signalling Capability Per Term	BCNV4	\$ 35.00	\$ 4.76	channel termination	\$ -	\$ -
58	C-Conditioning on Voice Grade Circuit	XSSNO	\$ -	\$ 0.46	termination	\$ -	\$ -
59	Conditioning on Voice Grade for InterLATA/interstate	GN3RR	\$123.98/\$293.95	\$ 31.39	circuit	\$ -	\$ -
60	VG32 Automatic Ringdown	P3H	\$123.98/\$293.95	\$ 31.39	circuit	\$ -	\$ -
61	Voice Grade Telemetry & Alarm Interlata	XSSLR	\$ -	\$ 0.46	circuit	\$ -	\$ -
62	Voice Grade Dial Signal Arrangement	CNLRX	\$35.00/\$81.00	\$ 4.76	circuit	\$ -	\$ -
63	Frame Relay - 128 port and access	XPL	\$ -	\$ 7.99	circuit	\$ -	\$ -
64	Frame Relay - 384 port and access	FR128	\$ 933.50	\$ 208.00	port+access	\$ -	\$ -
65	Frame Relay NNI Port Connection	FR384	\$ 933.50	\$ 266.00	port+access	\$ -	\$ -
66		NNP7X	\$ 325.00	\$ 285.00	port+access	\$ -	\$ -

TELECOMMUNICATIONS SERVICES CONTRACT
EXHIBIT B-1: PRICING SCHEDULE FOR LOCAL SERVICES

Line Item	Product/Feature Name	Contractor Unique Service Identifier	One-Time Install Cost per Item	Monthly Recurring Cost per item	Units	One-Time Changes Cost per Item
1	DSL Services					
2	384kbps down/128kbps up	N/A	\$ -	\$ 37.50	line	\$ -
3	768kbps down/128kbps up	N/A	\$ -	\$ 37.50	line	\$ -
4	1.5mbps down/384kbps up	N/A	\$ -	\$ 37.50	line	\$ -
5	3mbps down/512kbps up	N/A	\$ -	\$ 47.50	line	\$ -
6	6mbps down/768kbps up	N/A	\$ -	\$ 62.50	line	\$ -
7	1.5mbps down/1.5mbps up	N/A	\$ 300.00	\$ 399.65	line	\$ -
8	Remote local area network connect	N/A	\$ 150.00	\$ 74.40	line	\$ -
9	ATM Service					
10	DS1	TMECS, MT71U	\$ 1,028.50	\$ 353.00	port+access	\$ -
11	DS3	Z35AC	\$ 2,113.00	\$ 2,085.00	port+access	\$ -
12	OC1	N/A			port+access	\$ -
13	OC3	FP5CX	\$ 3,967.63	\$ 4,648.74	port+access	\$ -
14	OC12 (ICB)	FP5DX	ICB	ICB	port+access	\$ -
15	OC48	FP5EX	ICB	ICB	port+access	\$ -
16	OC192	N/A			port+access	\$ -
17	DS3 SCR 3Mbps/PCR 12Mbps	N/A			port+access	\$ -
18	DS3 SCR 5Mbps/PCR 25Mbps	Z35AC	\$ 2,113.00	\$ 1,755.00	port+access	\$ -
19	DS3 SCR 10Mbps/PCR 40Mbps	Z35AC	\$ 2,113.00	\$ 1,855.00	port+access	\$ -
20	DS3 SCR 15Mbps/PCR 40Mbps	Z35AC	\$ 2,113.00	\$ 1,955.00	port+access	\$ -
21	DS3 SCR 20Mbps/PCR 40Mbps	Z35AC	\$ 2,113.00	\$ 2,055.00	port+access	\$ -
22	DS3 SCR 30Mbps/PCR 40Mbps	Z35AC	\$ 2,113.00	\$ 2,085.00	port+access	\$ -
23	DS3 SCR 40Mbps/PCR 140Mbps	Z35AC			port+access	\$ -
24	ATM IMA 3.072Mbps	AUT35, TMECS	\$ 2,167.00	\$ 699.00	line	\$ -
25	ATM IMA 4.608Mbps	AUT45, TMECS	\$ 2,950.50	\$ 862.00	line	\$ -
26	ATM IMA 6.144Mbps	AUT65, TMECS	\$ 3,734.00	\$ 1,204.00	line	\$ -
27	ATM IMA 7.680Mbps	APT3X, TMECS	\$ 4,667.50	\$ 1,353.00	line	\$ -
28	ATM IMA 9.216Mbps	APT3X, TMECS	\$ 5,301.00	\$ 1,501.00	line	\$ -
29	ATM IMA 10.752Mbps	APT3X, TMECS	\$ 5,934.50	\$ 1,650.00	line	\$ -
30	ATM IMA 12.288Mbps	AUT75, TMECS	\$ 6,568.00	\$ 1,799.00	line	\$ -
31	Additional Services					
32	ATM Virtual Channel Connection	CVC	\$ -	\$ 5.00	channel	\$ -
33	ATM Virtual Path Connection	VPC	\$ -	\$ 18.00	path	\$ -
34	DS3 SCR 3Mbps/PCR 12Mbps	N/A			port+access	\$ -
35	DS3 SCR 5Mbps/PCR 25Mbps	Z35AC	\$ 2,113.00	\$ 1,755.00	port+access	\$ -
36	DS3 SCR 10Mbps/PCR 40Mbps	Z35AC	\$ 2,113.00	\$ 1,855.00	port+access	\$ -

TELECOMMUNICATIONS SERVICES CONTRACT
EXHIBIT B-1: PRICING SCHEDULE FOR LOCAL SERVICES

Line Item	Product/Feature Name	Contractor Unique Service Identifier	One-Time Install Cost per Item	Monthly Recurring Cost per item	Units	One-Time Changes Cost per Item
37	DS3 SCR 15Mbps/PCR 40Mbps	Z35AC	\$ 2,113.00	\$ 1,955.00	port+access	\$ -
38	DS3 SCR 20Mbps/PCR 40Mbps	Z35AC	\$ 2,113.00	\$ 2,055.00	port+access	\$ -
39	DS3 SCR 30Mbps/PCR 40Mbps	Z35AC	\$ 2,113.00	\$ 2,085.00	port+access	\$ -
40	DS3 SCR 40Mbps/PCR 140Mbps	Z35AC			port+access	\$ -
41	DSL OOF Via Covad					
42	Covad - Single-User 768/128 Kbps ADSL	N/A	\$ 150.00	\$ 37.50	line	\$ -
43	Covad - Single User Enhanced 1.5 Mbps/384 Kbps ADSL	N/A	\$ 150.00	\$ 37.50	line	\$ -
44	Covad - Single User 3.0 Mbs/512 kbps ADSL	N/A	\$ 150.00	\$ 47.50	line	\$ -
45	Covad - Single User 6.0 Mbs/768 kbps ADSL	N/A	\$ 150.00	\$ 62.50	line	\$ -
46	ANIRA -IPSec Hourly Analog	6970	\$	\$ 0.49	hourly	\$ -
47	ANIRA - IPSec Hourly ISDN	6982	\$ -	\$ 0.49	b-chan/hour	\$ -
48	ANIRA - IPSec Toll-Free	6994	\$ -	\$ 0.49	hourly	\$ -
49	ANIRA - IPSec Monthly Analog	17563	\$ -	\$ 14.38	monthly	\$ -
50	ANIRA IPSec - Monthly Excess	17564	\$ -	\$ 1.00	hourly	\$ -
51	ANIRA – Third Party Access	16940	\$ -	\$ 4.00	user/month	\$ -
52	ANIRA – Bandwidth Connection Charge 64Kbps	17573	\$ -	\$ 47.30	connect	\$ -
53	ANIRA – Bandwidth Connection Charge 128Kbps	17574	\$ -	\$ 85.80	connect	\$ -
54	ANIRA – Bandwidth Connection Charge 192Kbps	17575	\$ -	\$ 123.20	connect	\$ -
55	ANIRA – Bandwidth Connection Charge 256Kbps	17576	\$ -	\$ 160.60	connect	\$ -
56	ANIRA – Bandwidth Connection Charge 320Kbps	17577	\$ -	\$ 198.00	connect	\$ -
57	ANIRA – Bandwidth Connection Charge 384Kbps	17578	\$ -	\$ 235.40	connect	\$ -
58	ANIRA – Bandwidth Connection Charge 448Kbps	17579	\$ -	\$ 271.70	connect	\$ -
59	ANIRA – Bandwidth Connection Charge 512Kbps	17580	\$ -	\$ 308.00	connect	\$ -
60	ANIRA – Bandwidth Connection Charge 576Kbps	17581	\$ -	\$ 323.40	connect	\$ -
61	ANIRA – Bandwidth Connection Charge 640Kbps	17582	\$ -	\$ 334.40	connect	\$ -
62	ANIRA – Bandwidth Connection Charge 704Kbps	17583	\$ -	\$ 345.40	connect	\$ -
63	ANIRA – Bandwidth Connection Charge 768Kbps	17584	\$ -	\$ 355.30	connect	\$ -
64	ANIRA – Bandwidth Connection Charge 832Kbps	17585	\$ -	\$ 365.20	connect	\$ -
65	ANIRA – Bandwidth Connection Charge 896Kbps	17586	\$ -	\$ 375.10	connect	\$ -
66	ANIRA – Bandwidth Connection Charge 960Kbps	17587	\$ -	\$ 385.00	connect	\$ -
67	ANIRA – Bandwidth Connection Charge 1024Kbps	17588	\$ -	\$ 394.90	connect	\$ -
68	ANIRA – Bandwidth Connection Charge 1536Kbps	17589	\$ -	\$ 557.70	connect	\$ -
69	ANIRA – Bandwidth Connection Charge 2MKbps	17590	\$ -	\$ 686.40	connect	\$ -
70	ANIRA – Bandwidth Connection Charge 3MKbps	17591	\$ -	\$ 723.80	connect	\$ -
71	ANIRA – Bandwidth Connection Charge 4MKbps	17592	\$ -	\$ 965.80	connect	\$ -
72	ANIRA – Bandwidth Connection Charge 5MKbps	17593	\$ -	\$ 1,206.70	connect	\$ -

TELECOMMUNICATIONS SERVICES CONTRACT
EXHIBIT B-1: PRICING SCHEDULE FOR LOCAL SERVICES

Line Item	Product/Feature Name	Contractor Unique Service Identifier	One-Time Install Cost per Item	Monthly Recurring Cost per item	Units	One-Time Changes Cost per Item
73	ANIRA – Bandwidth Connection Charge 6MKbps	17594	\$ -	\$ 1,447.60	connect	\$ -
74	ANIRA – Bandwidth Connection Charge 7MKbps	17595	\$ -	\$ 1,688.50	connect	\$ -
75	ANIRA – Bandwidth Connection Charge 8MKbps	17596	\$ -	\$ 1,929.40	connect	\$ -
76	ANIRA – Bandwidth Connection Charge 9MKbps	17597	\$ -	\$ 2,170.30	connect	\$ -
77	ANIRA – Bandwidth Connection Charge 10MKbps	17598	\$ -	\$ 2,411.20	connect	\$ -
78	ANIRA – Bandwidth Connection Charge 15MKbps	17599	\$ -	\$ 3,481.50	connect	\$ -
79	ANIRA – Bandwidth Connection Charge 20MKbps	17600	\$ -	\$ 4,640.90	connect	\$ -
80	ANIRA – Bandwidth Connection Charge 25MKbps	17601	\$ -	\$ 5,801.40	connect	\$ -
81	ANIRA – Bandwidth Connection Charge 30MKbps	17602	\$ -	\$ 6,957.50	connect	\$ -
82	ANIRA – Bandwidth Connection Charge 35MKbps	17603	\$ -	\$ 8,121.30	connect	\$ -
83	ANIRA – Bandwidth Connection Charge 40MKbps	17604	\$ -	\$ 9,281.80	connect	\$ -
84	ANIRA - Managed Broadband Multi-User Service 144Kbps	17644	\$ 600.00	\$ 170.96	monthly	\$ -
85	ANIRA - Managed Broadband Multi-User Service 192Kbps	17645	\$ 600.00	\$ 170.96	monthly	\$ -
86	ANIRA - Managed Broadband Multi-User Service 384Kbps	17646	\$ 600.00	\$ 191.96	monthly	\$ -
87	ANIRA - Managed Broadband Multi-User Service 768Kbps	17648	\$ 600.00	\$ 247.96	monthly	\$ -
88	ANIRA - Managed Broadband Multi-User Service 1.1Mbps	17649	\$ 600.00	\$ 175.48	monthly	\$ -
89	ANIRA - Managed Broadband Multi-User Service 1.5Mbps	17650	\$ 600.00	\$ 197.98	monthly	\$ -
90	ANIRA -Managed Broadband Single User Service (ADSL and IDSL) 768/128Kbps	17641	\$ 300.00	\$ 55.96	monthly	\$ -
91	ANIRA -Managed Broadband Single User Service (ADSL and IDSL) 1.5M/384Kbps	17642	\$ 300.00	\$ 51.96	monthly	\$ -
92	ANIRA -Managed Broadband Single User Service (ADSL and IDSL) 144/144Kbps	17643	\$ 600.00	\$ 111.96	monthly	\$ -
93	Managed Broadband Multi-User VPN Device	17650c	\$ -	\$ 36.90	monthly	\$ -
94	ANIRA - Extended Access and Wi-Fi/Wired Ethernet	15172	\$ -	\$ 5.95	hourly	\$ -
95	ANIRA – Wi-Fi Access	17164	\$ -	\$ 6.25	hourly	\$ -

TELECOMMUNICATIONS SERVICES CONTRACT
EXHIBIT B-1: PRICING SCHEDULE FOR LOCAL SERVICES

Line Item	Product/Feature Name	Contractor Unique Service Identifier	One-Time Install Cost per Item	Monthly Recurring Cost per item	Units	One-Time Changes Cost per Item
1	Metro Ethernet	ICB	ICB	Individual Cost Basis		ICB
	Dense-Wave Division Multiplexing (DWDM) Optical					
2	Network	ICB	ICB	Individual Cost Basis		ICB
3	Multi-Protocol Label Switching *					
4	MPLS at DS1(Reuse of Frame/ATM local access)	N/A	500	443.3		0
5	MPLS at DS3 (Reuse of Frame/ATM local access)	N/A	500	5766.1		0
6	MPLS at OC3 (Reuse of Frame/ATM local access)	N/A	1000	17012.24		0
		ICB for Local Access (Port Only)				
7	MPLS at Gigabit Ethernet		1000	58960.5		0
8	Additional Services					
9	MPLS Port - 56 Kbps	N/A	\$500.00	\$117.00	port	\$ -
10	MPLS Port - 128 Kbps	N/A	\$500.00	\$248.52	port	\$ -
11	MPLS Port - 256 Kbps	N/A	\$500.00	\$278.00	port	\$ -
12	MPLS Port - 384 Kbps	N/A	\$500.00	\$312.11	port	\$ -
13	MPLS Port - 512 Kbps	N/A	\$500.00	\$343.56	port	\$ -
14	MPLS Port - 640 Kbps	N/A	\$500.00	\$334.40	port	\$ -
15	MPLS Port - 768 Kbps	N/A	\$500.00	\$338.94	port	\$ -
16	MPLS Port - 1024 Kbps	N/A	\$500.00	\$348.84	port	\$ -
17	MPLS Port - 3.088 Mbps	N/A	\$500.00	\$729.60	port	\$ -
18	MPLS Port - 4.632 Mbps	N/A	\$500.00	\$1,037.40	port	\$ -
19	MPLS Port - 5 Mbps	N/A	\$500.00	\$1,115.40	port	\$ -
20	MPLS Port - 6.176 Mbps	N/A	\$500.00	\$1,285.20	port	\$ -
21	MPLS Port - 7.720 Mbps	N/A	\$500.00	\$1,505.10	port	\$ -
22	MPLS Port - 9.264 Mbps	N/A	\$500.00	\$1,722.00	port	\$ -
23	MPLS Port - 10 Mbps	N/A	\$500.00	\$1,199.20	port	\$ -
24	MPLS Port - 12.352 Mbps	N/A	\$500.00	\$2,025.00	port	\$ -
25	MPLS Port - 15 Mbps	N/A	\$500.00	\$1,808.30	port	\$ -
26	MPLS Port - 20 Mbps	N/A	\$500.00	\$2,838.40	port	\$ -
27	MPLS Port - 25 Mbps	N/A	\$500.00	\$3,621.75	port	\$ -
28	MPLS Port - 30 Mbps	N/A	\$500.00	\$3,957.15	port	\$ -
29	MPLS Port - 45 Mbps	N/A	\$500.00	\$4,666.10	port	\$ -
30	MPLS Port - 155 Mbps	N/A	\$1,000.00	\$13,693.50	port	\$ -
31	MPLS Port - 1000 Mbps	N/A	\$1,000.00	\$58,960.50	port	\$ -

AT&T Pricing Clarification for Other Services Section 6.22

Extended Demarcation Wiring

Feature Name	Identifier	Feature Description	Non-Recurring Charge	Recurring Charge	Unit of Measure	Change Charge
Extended Demarcation - Copper	BWC+ RJ48s	Wiring services to extend Facilities from the Customer's MPOE to the Customer's point of utilization from a copper trunk or trunking equipment as described above. The copper demarcation point extension is up to 300 feet.	\$ 143.00	\$ -	each	\$ -
Extended Demarcation - Copper 25 Pair	SCED-C25	Wiring services to extend Facilities from the Customer's MPOE to the Customer's point of utilization from a copper trunk or trunking equipment as described above. The copper demarcation point extension is limited to 300 feet or less of a single Category	\$ 170.00	\$ -	each	\$ -
Extended Demarcation - Optical Fiber Link	SCED-O	Wiring services to extend Facilities from the Customer's MPOE to the Customer's point of utilization from a fiber trunk or trunking equipment as described above, Strand count required to provision one/each service only.	\$ 798.80	\$ -	each	\$ -

Station Wiring Services

Extended Demarcation - Copper	BWC+ RJ48s	Wiring services to extend Facilities from the Customer's MPOE to the Customer's point of utilization from a copper trunk or trunking equipment as described above. The copper demarcation point extension is up to 300 feet.	\$ 143.00	\$ -	each	\$ -
Extended Demarcation - Copper 25 Pair	SCED-C25	Wiring services to extend Facilities from the Customer's MPOE to the Customer's point of utilization from a copper trunk or trunking equipment as described above. The copper demarcation point extension is limited to 300 feet or less of a single Category	\$ 170.00	\$ -	each	\$ -
Extended Demarcation - Optical Fiber Link	SCED-O	Wiring services to extend Facilities from the Customer's MPOE to the Customer's point of utilization from a fiber trunk or trunking equipment as described above, Strand count required to provision one/each service only. The pricing of this item includes	\$ 798.80	\$ -	each	\$ -

Station Wiring Services

AT&T Pricing Clarification for Other Services Section 6.22

Extended Demarcation Wiring

Feature Name	Identifier	Feature Description	Non-Recurring Charge	Recurring Charge	Unit of Measure	Change Charge
Station Cabling – Horizontal Copper Cat 5e	SCIW-Cat5e	Wiring services for extending services from the Customer's Horizontal Crossconnect location to the Customer's station location utilizing one 4-pair Category 5e CMP UTP. The copper demarcation point extension is up to 300 feet Extended Termination wiring	\$ 387.10	\$ -	each	\$ -
Station Cabling – Horizontal Copper Cat 6	SCIW-Cat6	Wiring services for extending services from the Customer's Horizontal Crossconnect location to the Customer's station location utilizing one 4-pair Category 6 CMP UTP. The copper demarcation point extension is up to 300 feet.	\$ 477.70	\$ -	each	\$ -
Station Cabling – Horizontal Optical Fiber-IEEE 802.3Z	SCIW-O	Wiring services for extending services from the Customer's Horizontal Crossconnect location to the Customer's station location utilizing one 2-Strand Multimode 62.5/125 or 50.125 um optical fiber cable for speeds not greater than 1 Gbps (IEEE802.3Z). CMP	\$ -	\$ 1,360.00	each	\$ -
Station Cabling – Horizontal Copper - Identify, Test and Label	SCIW-ITL	Wiring services to identify, test, and label existing horizontal station wiring per single station location. We will identify, test, and label customer's existing horizontal cable/wire. When testing multiple cables, we will replace up to 5% of jacks.	\$ -	\$ 16.50	each	\$ -
Inside Wiring Services						
Station Cabling–Install r-Inside Wiring	IWLR-T-1 (regular hours)	Labor only; technician/inside wireman properly trained and experienced in the installation of inside wire station cabling for new and existing buildings. The inside wireman can rod a conduit, place innerduct and pull inside cable and wire.	\$ 108.30	\$ -	hour	\$ -
Station Cabling–Technician-Inside wiring	IWLR-T-2 (regular hours)	Labor only; Technician properly trained at an expert level for installation, termination, testing, and troubleshooting of copper wiring related to station cabling as identified in this section. Labor only; technician properly trained and experienced.	\$ 108.30	\$ -	hour	\$ -

AT&T Pricing Clarification for Other Services Section 6.22

Extended Demarcation Wiring

Feature Name	Identifier	Feature Description	Non-Recurring Charge	Recurring Charge	Unit of Measure	Change Charge
Station Cabling—Technician-Optical Fiber-Inside Wiring	IWLR-T-3 (regular hours)	Labor only; technician properly trained at an expert level for installation, termination, testing, and troubleshooting of optical fiber cabling related to station cabling as identified in this section. The labor rate is for work performed during normal business hours	\$ 108.30	\$ -	hour	\$ -
Design Engineer	SCIWS-DE-BIC	Labor-only charge for BICSI/RCDD-certified design engineer when required. The labor rate is for work performed during normal business hours.	\$ 114.00	\$ -	hour	\$ -

Station and Inside Wiring Services

JM8 Jack	JM8	Eight-pin connecting device; holds one 2- or 4-wire circuit (non-registered).	\$ 3.00	\$ -	each	\$ -
RJA2X Jack	RJA2X	Converts one modular jack to two modular jacks.	\$ 3.00	\$ -	each	\$ -
RJA5X Jack	RJA5X	Data jack—multiple mounting arrangement (maximum 8 lines).	\$ 75.00	\$ -	each	\$ -
RJM2X Jack	RJM2X	50-pin miniature ribbon connector to connect a maximum of eight jacks to customer's data equipment.	\$ 250.00	\$ -	each	\$ -
RJM3X Jack	RJM3X	Data jack—multiple line data jack (maximum eight lines). Each mounting cabinet supports a maximum of 16 data jacks.	\$ 50.00	\$ -	each	\$ -
RJM4X Jack	RJM4X	Data jack—multiple line data jack with rack mounting for up to four 8-line multiple data jacks.	\$ 225.00	\$ -	each	\$ -
RJWPH Jack	RJWPH	Weatherproof housing for RJ11C and RJ14C.	\$ 16.00	\$ -	each	\$ -
RJ1CX Jack	RJ1CX	Single line four-wire T/R - T1/R1 E/M, SB/SG, eight-pos mini-modular jack.	\$ 3.00	\$ -	each	\$ -
RJ1DC Jack	RJ1DC	Used with terminal equipment and four-wire exchange access; bridged connection of single line wire tip and ring and T1/R1	\$ 3.00	\$ -	each	\$ -
RJ11C Jack	RJ11C	Used with single-line telephone sets; four-contact, mini-modular; bridged connection tip and ring; baseboard surface or flush mount.	\$ 3.00	\$ -	each	\$ -
RJ11W Jack	RJ11W	Same as RJ11C, wall mount.	\$ 3.00	\$ -	each	\$ -

AT&T Pricing Clarification for Other Services Section 6.22

Extended Demarcation Wiring

Feature Name	Identifier	Feature Description	Non-Recurring Charge	Recurring Charge	Unit of Measure	Change Charge
RJ14C Jack	RJ14C	Used with two-line devices; modular bridged connection of two-line tip and ring; surface or flush mount.	\$ 3.00	\$ -	each	\$ -
RJ14W Jack	RJ14W	Same as RJ14C, wall mount.	\$ 3.00	\$ -	each	\$ -
RJ14X Jack	RJ14X	Sixth position modular jack with a sliding cover to facilitate testing or each line. Holds up to two 2-wire circuits.	\$ 3.00	\$ -	each	\$ -
RJ15C Jack	RJ15C	Used with boards and Rvs single-line, bridged connection; weatherproof tip and ring.	\$ 33.00	\$ -	each	\$ -
RJ16X Jack	RJ16X	Used with data equipment having mode indication; -9dBm permissive, bridged connection of a single line tip and ring. Used with RJ36X.	\$ 3.00	\$ -	each	\$ -
RJ17C Jack	RJ17C	Special non-key telephone sets used in hospital critical care areas with 625H connecting block; bridged connection of a single line; tip and ring.	\$ 6.00	\$ -	each	\$ -
RJ18C Jack	RJ18C	Single two-wire T/R with make-busy leads, bridged connection, six-position hardware.	\$ 3.00	\$ -	each	\$ -
RJ25C Jack	RJ25C	Used with non-key telephone sets or ancillary devices; bridged connection of three lines maximum; tip and ring.	\$ 10.00	\$ -	each	\$ -
RJ31X Jack	RJ31X	Standard miniature modular jack for series connections.	\$ 6.00	\$ -	each	\$ -
RJ32X Jack	RJ32X	Standard miniature modular jack for series connections.	\$ 6.00	\$ -	each	\$ -
RJ38X Jack	RJ38X	Standard miniature modular jack for series connections.	\$ 6.00	\$ -	each	\$ -
RJ41S Jack	RJ41S	Universal data jack.	\$ 36.00	\$ -	each	\$ -
RJ45S Jack	RJ45S	Programmed data jack. Dial-up, not for T-1s.	\$ 36.00	\$ -	each	\$ -
RJ48C Jack	RJ48C	Single-line four-wire, 1.544-Mbps bridged connection, eight-position hardware; digital data/GDT/ADN.	\$ 3.00	\$ -	each	\$ -
RJ48S Jack	RJ48S	Eight-position jack to connect terminal equipment for single line. Holds one 4-wire circuit.	\$ 6.00	\$ -	each	\$ -

AT&T Pricing Clarification for Other Services Section 6.22

Extended Demarcation Wiring

Feature Name	Identifier	Feature Description	Non-Recurring Charge	Recurring Charge	Unit of Measure	Change Charge
RJ48T Jack	RJ48T	Eight-position ribbon jack to connect up to 12 lines of terminal equipment.	\$ 36.00	\$ -	each	\$ -
RJ48X Jack	RJ48X	Eight-position jack to connect terminal equipment for single line 1.544.	\$ 36.00	\$ -	each	\$ -
RJ61X Jack	RJ61X	Standard miniature jack for bridged connections.	\$ 6.00	\$ -	each	\$ -
SJA11 Jack	SJA11	Data jack two-wire, switched data services 56 - single line.	\$ 3.00	\$ -	each	\$ -
SJA56 Jack	SJA56	Data jack four-wire, switched data services 56 - multiple lines.	\$ 3.00	\$ -	each	\$ -
RJ2DX Jack	RJ2DX	Standard 50-pin miniature ribbon connector jack for bridged connections.	\$ 36.00	\$ -	each	\$ -
RJ2EX Jack	RJ2EX	Standard 50-pin miniature ribbon connector jack for bridged connections.	\$ 36.00	\$ -	each	\$ -
RJ2FX Jack	RJ2FX	Standard 50-pin miniature ribbon connector jack for bridged connections.	\$ 36.00	\$ -	each	\$ -
RJ2GX Jack	RJ2GX	Standard 50-pin miniature ribbon connector jack for bridged connections.	\$ 36.00	\$ -	each	\$ -
RJ2HX Jack	RJ2HX	Standard 50-pin miniature ribbon connector jack for bridged connections.	\$ 36.00	\$ -	each	\$ -
RJ2MB Jack	RJ2MB	Standard 50-pin miniature ribbon connector jack for bridged connections.	\$ 36.00	\$ -	each	\$ -
RJ21X Jack	RJ21X	Standard 50-pin miniature ribbon connector jack for bridged connections.	\$ 36.00	\$ -	each	\$ -
RJ26S Jack	RJ26S	Used with Data Exchange Service; line circuit card for use with RJ26X.	\$ 36.00	\$ -	each	\$ -
RJ26X Jack	RJ26X	Used with Data Exchange Service; multiple-line universal data jack; eight lines maximum, common equipment.	\$ 36.00	\$ -	each	\$ -
RJ27X Jack	RJ27X	Adaptor cord for RJ26X. Requires RJ26X.	\$ 36.00	\$ -	each	\$ -
RJ48H Jack	RJ48H	Up to 12 lines, four-wire, 1.544-Mbps bridged connection, 50-position hardware.	\$ 36.00	\$ -	each	\$ -
RJ48M Jack	RJ48M	Up to eight lines, four-wire, 1.544-Mbps bridged connection, 50-position hardware.	\$ 36.00	\$ -	each	\$ -
SJA57 Jack	SJA57	Connections of terminal equipment and multi-line terminating systems and communications systems; digital jacks; SDS 56.	\$ 36.00	\$ -	each	\$ -

AT&T Pricing Clarification for Other Services Section 6.22

Extended Demarcation Wiring

Feature Name	Identifier	Feature Description	Non-Recurring Charge	Recurring Charge	Unit of Measure	Change Charge
Inside Wire Repair Plan - Voice	RPB	This inside wire repair plan covers simple voice services jacks. This repair plan applies to Centrex, PBX and Business Access Lines.	\$ -	\$ 0.51	each/line	\$ -
Inside Wire Repair Plan - Data	RPL	This inside wire repair plan covers leased data line jacks.	\$ -	\$ 3.59	each/circuit termination	\$ -

AT&T Pricing Clarification for Other Services Section 6.22

Feature Name	Identifier	Feature Description	Non-Recurring Charge	Unit of Measure
Aastra EBS M5008 Enhanced Telephone Set	M5008	(Enhanced telephone set) Loop powered so set works during power outages. Has 8 programmable line/feature keys & color-coded Hold and Release keys .	\$ 107.00	each
Aastra - EBS M5216	M5216	The M5216 is recommended when you need a central answering position or ACD support. It offers unique functionality, making it the perfect solution for call centers or other high-volume calling applications. Combined with the M522 Meridian Mate Expansion Module, the M5216 is also recommended as a mini-console. The 2-line X 24-character liquid crystal display can deliver call information such as call progress, queue status, and calling name and number.	\$ 275.00	each
Aastra - EBS M5316	M5316	Hands free operation permits you to engage in a conference call while simultaneously performing others tasks. Thirteen programmable line/feature keys let you tailor your set to suit your needs. The Program key lets you further customize local features on your set, such as time and date.	\$ 275.00	each
Aastra - EBS M522 Add-On Module	M522	The M522 Meridian Mate Expansion Module is compatible with both the M5216 and M5316. The M522 is a 22-button expansion unit, with associated LCD indicators, providing additional keys for lines or features.	\$ 80.00	each
Aastra - EBS Single Support Stand	M522A	Single support stand to be used with the EBS M522 Add-On Module.	\$ 7.00	each

AT&T Pricing Clarification

ANIRA Pricing Clarification

ANIRA requires pricing for both the Remote Location (DSL) and the Host Location as was the case with the RLAN product. The ANIRA Host connection has the following components:

1. AVPN Port and access pricing (see AVPN pricing)
2. ANIRA Bandwidth Connection pricing

The bandwidth required for the Host connection is based upon the requirements of the applications being run and the estimated utilization. For multi user sites AT&T suggests using 64 Kbps per site as a starting estimate.

Example:

200 remote site network

Item	MRC	One Time	Quantity	Total MRC	Total Onetime
DSL with VPN	\$74.40	\$150.00	200	\$14,880.00	\$30,000.00
ANIRA Bandwidth Connection (15 Mbps)	\$3,481.50	\$0.00	1	\$3,481.50	\$0.00
AVPN Port (15 Mbps)	\$1,808.30	\$500.00	1	\$1,808.30	\$500.00
DS3 Access			1	\$1,100.00	\$990.00
Total				\$21,269.80	\$31,490.00

**Professional Telecommunications
L.A. County Price List**

Part #	Description	AT&T Price	Customer Price
VU-ACD/100 MIS Turnkey System,			
6100	20 Agent System	31,701.00	33,665.00
6101	50 Agent System	35,276.00	37,455.00
6102	150 Agent System	41,938.00	44,454.00
6103	300 Agent System	56,925.00	60,340.00
6104	500 Agent System	74,463.00	78,930.00
6105	1000 Agent System	88,263.00	93,558.00
	Systems over 1000 Agents, call for quote		
2121	Remote Terminal License (Supervisor)	1,800.00	2,160.00
2445	DMS-100 Link Interface - Multi Link	8,000.00	9,600.00
2446	VU-ACD/InterLink	8,000.00	9,600.00
Software - Adherence/Scheduler			
2511	Enhanced FMS Interface Option	3,846.00	4,615.00
2512	Schedule Port Interface	7,500.00	9,000.00
Software - Stat-VU			
2601	Stat-VU License 10 Agents	2,000.00	2,400.00
2602	Stat-VU License 20 Agents	3,000.00	3,600.00
2603	Stat-VU License 50 Agents	6,000.00	7,200.00
2604	Stat-VU License 75 Agents	8,500.00	10,200.00
2605	Stat-VU Expansion 10 to 20 Agents	1,500.00	1,800.00
2606	Stat-VU Expansion 10 to 50 Agents	4,500.00	5,400.00
2607	Stat-VU Expansion 10 to 75 Agents	7,000.00	8,400.00
2608	Stat-VU Expansion 20 to 50 Agents	3,500.00	4,200.00
2609	Stat-VU Expansion 20 to 75 Agents	6,000.00	7,200.00
2610	Stat-VU Expansion 50 to 75 Agents	3,000.00	3,600.00
2604	Custom VU Reporter w/Scheduler (per terminal)		-
5130	DL230M Monochrome Display Board 30 Characters	2,000.00	2,400.00
5131	DL23C TriColor Board 30 Characters	2,900.00	3,480.00
VU-ACD/100 MIS Software Annual Warranty			
3100	Maintenance, Post Warranty 20 Agent	1,771.00	2,125.00
3101	Maintenance, Post Warranty 50 Agent	2,593.00	311.60
3102	Maintenance, Post Warranty 150 Agent	4,933.00	5,919.00
3103	Maintenance, Post Warranty 300 Agent	7,337.00	8,804.00
3104	Maintenance, Post Warranty 500 Agent	9,614.00	11,536.00
3105	Maintenance, Post Warranty 1000 Agent	12,903.00	15,483.00
3106	Maintenance, Post Warranty 1500 Agent	17,710.00	21,252.00
3107	Maintenance, Post Warranty 2000 Agent	21,505.00	25,806.00
3108	Maintenance, Post Warranty 3000 Agent	27,830.00	33,396.00
3110	Maintenance, Post Warranty Remote Term, DOS	253.00	298.00
3111	Maintenance, Post Warranty Remote Term, Windows	414.00	496.80
			-
Stat-VU Warranty			
			-
3400	Stat-VU 10 Agent Maintenance*	460.00	552.00
3401	Stat-VU 20 Agent Maintenance*	690.00	828.00
3402	Stat-VU 50 Agent Maintenance*	1,380.00	1,656.00
3403	Stat-VU 75 Agent Maintenance*	1,955.00	2,346.00
Services			
			-
4000	Technical Support Out of Warranty Bus. Hrs. (Per/Hr)	175.00	210.00
4001	Technical Support Out of Warranty NonBus. Hrs. (Per/Hr)	250.00	300.00
4003	Recertification of Out of Warranty System	1,000.00	1,200.00
4004	System Integration/Configuration Level 1 to 2	1,800.00	2,160.00
4005	System Integration/Configuration Level 3	2,500.00	3,000.00

**Professional Telecommunications
L.A. County Price List**

Part #	Description	AT&T Price	Customer Price
4007	System Integration Customer Supplied Hardware	2,500.00	3,000.00
4008	Installation and/or Training On Site Per Day	1,800.00	2,160.00
4012	Data Conversion more than 12 months/per month	400.00	480.00
CC Announcer			
8300	CC Announcer 1 Channel MT	19,692.00	23,630.40
8301	CC Announcer 1 Channel RM	26,308.00	31,569.60
8302	CC Announcer Additional Channel	1,900.00	2,280.00
8312	CC Announcer Installation/Training	4,500.00	5,400.00
8315	CC Announcer Maintenance, 1 Channel	2,490.00	2,988.00
8316	CC Announcer Maintenance, Additional Channels	188.00	225.60
Encore Digital Recorder/Logger			
8200	Encore 12 Ports Turnkey	18,813.00	22,575.60
8201	Encore 24 Ports Turnkey	26,094.00	31,312.80
8202	Encore 36 Ports Turnkey	32,386.00	38,863.20
8203	Encore 48 Ports Turnkey	39,795.00	47,754.00
8204	Encore 60 Ports Turnkey	49,440.00	59,328.00
	For system over 60 ports call for quote		
8240	Small Business IDE Recorder 4 Ports	13,907.00	16,688.40
8241	Small Business IDE Recorder 8 Ports	15,339.00	18,406.80
8242	Small Business IDE Recorder 12 Ports	16,769.00	20,122.80
8243	Small Business IDE Recorder 16 Ports	18,200.00	21,840.00
8244	Small Business IDE Recorder 20 Ports	19,631.00	23,557.20
8245	Small Business IDE Recorder 24 Ports	21,061.00	25,273.00
8205	Installation Services per Day	1,800.00	2,160.00
8206	T-1 Interface (add per 24 ports)	3,294.00	3,952.00
8207	Direct Digital Interface (add per 24 ports)	4,118.00	4,941.60
8208	Advanced Service Observation Module	5,385.00	6,462.00
8209	Advanced Service Observation Module - Per Agent Schedule	134.00	160.80
8211	CDR/SMDR		-
8227	Screen Recording License	5,385.00	6,462.00
8228	Screen Recorder Per Agent License	194.00	232.80
8229	Screen Playback per reviewer	538.00	645.60
8230	TLP 104 Headset Adapter	48.00	57.60
8233	Live Monitor, per user	1,000.00	1,200.00
8234	Web Explorer, per user	5,000.00	6,000.00
8235	CRI 376 Adapters	306.00	367.20
8293	Trunked Radio 1-12 channels	3,570.00	4,284.00
8294	Trunked Radio 12+ Channels	4,440.00	5,328.00
*Prices are for base systems and will vary depending on customer configuration requirements			
TC02F	Telecorder 2 Channel recorder	670.00	788.24
TC04F	Telecorder 4 Channel Recorder	970.00	1,141.00
TR4	Total Recall - 4 Channel Recorder	4,950.00	5,940.00
TR8	Total Recall - 8 Channel Recorder	6,180.00	7,416.00
TR12	Total Recall - 12 Channel Recorder	7,140.00	8,568.00
TR16	Total Recall - 16 Channel Recorder	7,940.00	9,528.00
TR20	Total Recall - 20 Channel Recorder	9,240.00	11,088.00
TR24	Total Recall - 24 Channel Recorder	9,900.00	11,880.00
TR28	Total Recall - 28 Channel Recorder	10,800.00	12,960.00
TR32	Total Recall - 32 Channel Recorder	11,500.00	13,800.00
Ph2PC	Phone2PC Call Center Agent Recorder	449.00	538.80

**TELECOMMUNICATIONS SERVICES CONTRACT
EXHIBIT B-2: PRICING SCHEDULE FOR LONG DISTANCE**

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**TELECOMMUNICATIONS SERVICES CONTRACT
EXHIBIT B-2: PRICING SCHEDULE FOR LONG DISTANCE**

INTERNATIONAL LONG DISTANCE

Line Item	Called Country	Contractor Unique Service Identifier	Contractor Cost per Minute (\$)
1	Australia	AG	\$0.107
2	Canada	CN	0.041
3	China	CI	0.184
4	Dominican Republic	DR	0.206
5	El Salvador	ES	0.318
6	France	FR	0.103
7	Germany	GE	0.103
8	Guatemala	GT	0.275
9	Honduras	HR	0.369
10	Hong Kong	HK	0.103
11	Israel	IS	0.180
12	Italy	IT	0.103
13	Jamaica	JM	0.430
14	Korea	KO	0.103
15	Mexico	MX	0.100
16	Phillipines	PH	0.253
17	Portugal	PO	0.103
18	Samoa	WS	0.558
19	Taiwan	TW	0.103
20	Thailand	TH	0.279
21	United Kingdom	EN	0.050
22	Argentina	AG	0.318
23	Armenia	AP	0.318
24	Austria	AS	0.111
25	Bahamas	BA	0.154
26	Bermuda	AM	0.189
27	Bolivia	BO	0.361
28	Brazil	BZ	0.245
29	Cayman Islands	CQ	0.223
30	Chile, Easter Island	CH	0.227
31	Colombia	CL	0.292
32	Costa Rica	CR	0.232
33	Ecuador	EC	0.335
34	Egypt	EG	0.477
35	Greece	GC	0.154
36	Grenada, Carriacou	GN	0.378
37	Indonesia & Portuguese Tim	IO	0.331
38	Iran	IX	0.675
39	Ireland	IR	0.111
40	Japan	JP	0.086
41	Libya	LY	0.498
42	Marshal Islands	RS	0.447
43	Morocco	MR	0.464
44	Netherlands	HD	0.103
45	Nicaragua	NG	0.356
46	Peru	PU	0.356
47	Romania	RO	0.361
48	Russia	RU	0.253
49	Saudi Arabia	SR	0.589
50	Spain	SP	0.103
51	Sweden	SW	0.111
52	Tonga Islands	TG	0.627
53	Turkey	TU	0.292
54	Viet Nam	VN	0.576
55	Int'l Directory Assistance	per call	\$4.95

TELECOMMUNICATIONS SERVICES CONTRACT
EXHIBIT B-2: PRICING SCHEDULE FOR LONG DISTANCE

DOMESTIC LONG DISTANCE

Line Item	Product/Feature Name	Contractor Cost	Units
1	DIRECT DIAL INTERLATA	\$0.0230	Minutes
2	DIRECTORY ASSISTANCE	1.0000	Calls
3	OPERATOR ASSISTANCE	1.0000	Minutes
4	TOLL FREE CALLING	0.0230	Minutes
5	CALLING CARD	0.0230	Minutes
6	Additional Services		
7	InterState/InterLATA		
8	Partially Connected (D/S)	0.0175	Minutes
9	Partially Connected (S/D)	0.0175	Minutes
10	Fully Connected (D/D)	0.0130	Minutes
11	Megacom 800	0.0175	Minutes
12	IntraState/IntraLATA		
13	Partially Connected (D/S)	0.0175	Minutes
14	Partially Connected (S/D)	0.0175	Minutes
15	Fully Connected (D/D)	0.0130	Minutes
16	Megacom 800 (S/D)	0.0180	Minutes
17	IntraState/InterLATA		
18	Standard (S/S)	0.0230	Minutes
19	Partially Connected (D/S)	0.0175	Minutes
20	Partially Connected (S/D)	0.0175	Minutes
21	Fully Connected (D/D)	0.0130	Minutes
22	Megacom 800 (S/D)	0.0180	Minutes
23	IntraState/InterLATA		
24	Shared Access for Switched Service	0.0000	Minutes
25	Static Integrated Network Access	0.0000	Minutes
26	Split Access Flexible Egress	5.1300	Minutes
27	Tailored Call Coverage	0.0000	Minutes
28	Area Code Routing/Exchange	0.0000	Minutes
29	Point of Call Routing	0.0000	Minutes
30	Day of Week Routing	0.0000	Minutes
31	Holiday Routing	0.0000	Minutes
32	Time of Day Routing	0.0000	Minutes
33	Alternate Routing/Selection Routing	0.0000	Minutes
34	Network Call Redirect/Alternate Routing	0.0000	Minutes
35	Percentage Allocation Routing/Quick Call Allocator	0.0000	Minutes
36	Call Overflow	0.0000	Minutes
37	Dialed Number Identification Service	0.0000	Minutes
38	Real Time Number Identification Service	0.0000	Minutes
39	NetPROTECT Toll Fraud Protection Service	0.0000	Minutes
40	Call Prompter/Voice Prompter/Menu Routing	0.0000	Minutes
41	Courtesy Response	0.0000	Minutes
		\$55,000 MRC/	
42	Toll Free SCR Application	\$120,000 NRC	Application
43	Call Transfer/Transfer Connect - Courtesy Transfer	0.0100	Minutes
44	Call Transfer/Transfer Connect - Consult and Transfer	0.0210	Minutes
45	Call Transfer/Transfer Connect - Conference and Transfer	0.0310	Minutes
46	Message Announcement	0.0210	Minutes
47	Customized Agent Announcement	0.0310	Minutes
48	Toll Free Multimedia Calling (TFMM) Dedicated Access	0.3510	Minutes
49	Toll Free Multimedia Calling (TFMM) Switched Access	0.4240	Minutes
50	Agent Routing/Next Available Agent Routing (NAAR)	0.0310	Minutes
		RC/	
51	Network Queing	\$150,000 NRC	Application
52	Network Queing Announcements	0.0310	Application

TELECOMMUNICATIONS SERVICES CONTRACT
EXHIBIT B-2: PRICING SCHEDULE FOR LONG DISTANCE

DOMESTIC DATA SERVICES

Line Item	Product/Feature Name	Contractor Unique Service Identifier	Contractor Install Charge	Contractor Install Quantity	Contractor Monthly Charge	Units	Evaluation Monthly Quantity	Contractor Mileage Charge	Contractor Change Charge
1	SONET Service								
2	OC1	N/A	ICB	0.1	ICB	port+access	1	\$ -	ICB
3	OC3	N/A	ICB	0.1	ICB	port+access	1	\$ -	ICB
4	OC12	N/A	ICB	0.1	ICB	port+access	1	\$ -	ICB
5	OC48	N/A	ICB	0.1	ICB	port+access	1	\$ -	ICB
6	OC192	N/A	ICB	0.1	ICB	port+access	1	\$ -	ICB
7	Frame Relay Service								
8	Frame Relay DS0	14614, VAN++	\$ 978.00	0.1	\$ 78.00	port+access	1	\$ -	\$50.00
9	Frame Relay DS1	14621, TMECS	\$ 300.00	0.1	\$ 517.00	port+access	15	\$ -	\$50.00
10	Frame Relay DS3	14637, Z35AC	\$ 1,654.00	0.1	\$ 2,235.00	port+access	5	\$ -	\$50.00
11	Data Link Connection Identifier (DLCI)	RELAY, RELAC	See below	1	See below	each	20	\$ -	\$50.00
12	ATM Service								
13	DS1 (1.544 Mbps/1.536 Mbps)	MT71U, TMECS	\$ 395.00	0.1	\$ 530.00	port+access	1	\$ -	\$ 50.00
14	DS3 (44.736 Mbps/43.008 Mbps)	MT73U, Z35AC	\$ 1,123.00	0.1	\$ 2,235.00	port+access	1	\$ -	\$ 50.00
15	OC1 (51.840 Mbps/49.538 Mbps)	N/A	N/A	0.1	N/A	port+access	1	\$ -	N/A
16	OC3 (155.520 Mbps/148.608 Mbps)	FP5CX,	\$ 3,800.00	0.1	\$ 4,250.00	port+access	1	\$ -	\$ 50.00
17	OC12 (622.080 Mbps/594.432 Mbps)	FP5DX,	ICB	0.1	ICB	port+access	1	\$ -	\$ 50.00
18	OC48 (2488.320 Mbps/2405.376 Mbps)	FP5EX,	ICB	0.1	ICB	port+access	1	\$ -	ICB
19	OC192 (9953.280 Mbps/9621.504 Mbps)	GP5A5,	ICB	0.1	ICB	port+access	1	\$ -	ICB
20	Fractional DS3 (3Mbps/12Mbps)	N/A	N/A	0.1	N/A	port+access	1	\$ -	N/A
21	Fractional DS3 (5Mbps/25Mbps)	Z35AC,	\$ 1,654.00	0.1	\$ 1,950.00	port+access	1	\$ -	\$ 50.00
22	Fractional DS3 (10Mbps/40Mbps)	Z35AC,	\$ 1,654.00	0.1	\$ 1,950.00	port+access	1	\$ -	\$ 50.00
23	Fractional DS3 (15Mbps/40Mbps)	Z35AC,	\$ 1,654.00	0.1	\$ 1,950.00	port+access	1	\$ -	\$ 50.00
24	Fractional DS3 (20Mbps/40Mbps)	Z35AC,	\$ 1,654.00	0.1	\$ 1,950.00	port+access	1	\$ -	\$ 50.00
25	Fractional DS3 (30Mbps/40Mbps)	Z35AC,	\$ 1,654.00	0.1	\$ 2,235.00	port+access	1	\$ -	\$ 50.00
26	Fractional OC3 (40Mbps/140Mbps)	FP5CX,	\$ 3,800.00	0.1	\$ 4,250.00	port+access	1	\$ -	\$ 50.00
27	IMA – 3.072Mbps	AUT35, TMECS	\$ 900.00	0.1	\$ 1,053.00	port+access	1	\$ -	\$ 50.00
28	IMA – 4.608Mbps	AUT45, TMECS	\$ 1,050.00	0.1	\$ 1,393.00	port+access	1	\$ -	\$ 50.00
29	IMA – 6.144Mbps	AUT65, TMECS	\$ 1,200.00	0.1	\$ 1,912.00	port+access	1	\$ -	\$ 50.00
30	IMA – 7.680Mbps	APT3X, TMECS	\$ 1,500.00	0.1	\$ 2,238.00	port+access	1	\$ -	\$ 50.00
31	IMA – 9.216Mbps	APT3X, TMECS	\$ 1,500.00	0.1	\$ 2,563.00	port+access	1	\$ -	\$ 50.00
32	IMA – 10.752Mbps	APT3X, TMECS	\$ 1,500.00	0.1	\$ 2,889.00	port+access	1	\$ -	\$ 50.00
33	IMA – 12.288Mbps	AUT75, TMECS	\$ 1,500.00	0.1	\$ 3,215.00	port+access	1	\$ -	\$ 50.00
34	Additional Services								
35	Frame Relay 128K	14615, TMECS	\$ 300.00		\$ 385.00	port+access		\$ -	\$ 50.00
36	Frame Relay 384K	14617, TMECS	\$ 300.00		\$ 443.00	port+access		\$ -	\$ 50.00

TELECOMMUNICATIONS SERVICES CONTRACT
EXHIBIT B-2: PRICING SCHEDULE FOR LONG DISTANCE

DOMESTIC DATA SERVICES

Line Item	Product/Feature Name	Contractor Unique Service Identifier	Contractor Install Charge	Contractor Install Quantity	Contractor Monthly Charge	Units	Evaluation Monthly Quantity	Contractor Mileage Charge	Contractor Change Charge
37	Frame Relay 512K	14618, TMECS	\$ 300.00		\$ 473.00	port+access		\$ -	\$ 50.00
38	Frame Relay UBR PVC - 4 kbps	CIR4	\$ -		\$ 3.50	Each		\$ -	\$ 50.00
39	Frame Relay UBR PVC - 8 kbps	CIR8	\$ -		\$ 6.96	Each		\$ -	\$ 50.00
40	Frame Relay UBR PVC - 16 kbps	CIR16	\$ -		\$ 13.87	Each		\$ -	\$ 50.00
41	Frame Relay UBR PVC - 32 kbps	CIR32	\$ -		\$ 27.62	Each		\$ -	\$ 50.00
42	Frame Relay UBR PVC - 48 kbps	CIR48	\$ -		\$ 41.28	Each		\$ -	\$ 50.00
43	Frame Relay UBR PVC - 56 kbps	CIR56	\$ -		\$ 47.99	Each		\$ -	\$ 50.00
44	Frame Relay UBR PVC - 64 kbps	CIR64	\$ -		\$ 54.72	Each		\$ -	\$ 50.00
45	Frame Relay UBR PVC - 128 kbps	CIR128	\$ -		\$ 106.88	Each		\$ -	\$ 50.00
46	Frame Relay UBR PVC - 192 kbps	CIR192	\$ -		\$ 144.96	Each		\$ -	\$ 50.00
47	Frame Relay UBR PVC - 256 kbps	CIR256	\$ -		\$ 174.08	Each		\$ -	\$ 50.00
48	Frame Relay UBR PVC - 320 kbps	CIR320	\$ -		\$ 193.60	Each		\$ -	\$ 50.00
49	Frame Relay UBR PVC - 384 kbps	CIR384	\$ -		\$ 218.88	Each		\$ -	\$ 50.00
50	Frame Relay UBR PVC - 448 kbps	CIR448	\$ -		\$ 237.44	Each		\$ -	\$ 50.00
51	Frame Relay UBR PVC - 512 kbps	CIR512	\$ -		\$ 250.88	Each		\$ -	\$ 50.00
52	Frame Relay UBR PVC - 576 kbps	CIR576	\$ -		\$ 264.96	Each		\$ -	\$ 50.00
53	Frame Relay UBR PVC - 640 kbps	CIR640	\$ -		\$ 278.40	Each		\$ -	\$ 50.00
54	Frame Relay UBR PVC - 704 kbps	CIR704	\$ -		\$ 288.64	Each		\$ -	\$ 50.00
55	Frame Relay UBR PVC - 768 kbps	CIR768	\$ -		\$ 295.68	Each		\$ -	\$ 50.00
56	Frame Relay UBR PVC - 832 kbps	CIR832	\$ -		\$ 303.68	Each		\$ -	\$ 50.00
57	Frame Relay UBR PVC - 896 kbps	CIR896	\$ -		\$ 309.12	Each		\$ -	\$ 50.00
58	Frame Relay UBR PVC - 960 kbps	CIR960	\$ -		\$ 312.00	Each		\$ -	\$ 50.00
59	Frame Relay UBR PVC - 1.024 Mbps	CIR1K	\$ -		\$ 322.56	Each		\$ -	\$ 50.00
60	Frame Relay UBR PVC - 1.536 Mbps	CIR15K	\$ -		\$ 376.32	Each		\$ -	\$ 50.00
61	Frame Relay UBR PVC - 2.0 Mbps	CIR2M	\$ -		\$ 470.00	Each		\$ -	\$ 50.00
62	Frame Relay UBR PVC - 3.0 Mbps	CIR3M	\$ -		\$ 675.00	Each		\$ -	\$ 50.00
63	Frame Relay UBR PVC - 4.0 Mbps	CIR4M	\$ -		\$ 860.00	Each		\$ -	\$ 50.00
64	Frame Relay UBR PVC - 5.0 Mbps	CIR5M	\$ -		\$ 1,025.00	Each		\$ -	\$ 50.00
65	Frame Relay UBR PVC - 6.0 Mbps	CIR6M	\$ -		\$ 1,170.00	Each		\$ -	\$ 50.00
66	Frame Relay UBR PVC - 7.0 Mbps	CIR7M	\$ -		\$ 1,295.00	Each		\$ -	\$ 50.00
67	Frame Relay UBR PVC - 8.0 Mbps	CIR8M	\$ -		\$ 1,400.00	Each		\$ -	\$ 50.00
68	Frame Relay UBR PVC - 9.0 Mbps	CIR9M	\$ -		\$ 1,485.00	Each		\$ -	\$ 50.00
69	Frame Relay UBR PVC - 10.0 Mbps	CIR10M	\$ -		\$ 1,600.00	Each		\$ -	\$ 50.00
70	Frame Relay UBR PVC - 15.0 Mbps	CIR15M	\$ -		\$ 2,100.00	Each		\$ -	\$ 50.00
71	Frame Relay UBR PVC - 20.0 Mbps	CIR20M	\$ -		\$ 2,640.00	Each		\$ -	\$ 50.00
72	Frame Relay UBR PVC - 25.0 Mbps	CIR25M	\$ -		\$ 3,125.00	Each		\$ -	\$ 50.00

TELECOMMUNICATIONS SERVICES CONTRACT
EXHIBIT B-2: PRICING SCHEDULE FOR LONG DISTANCE

DOMESTIC DATA SERVICES

Line Item	Product/Feature Name	Contractor Unique Service Identifier	Contractor Install Charge	Contractor Install Quantity	Contractor Monthly Charge	Units	Evaluation Monthly Quantity	Contractor Mileage Charge	Contractor Change Charge
73	Frame Relay UBR PVC - 30.0 Mbps	CIR30M	\$ -		\$ 3,600.00	Each		\$ -	\$ 50.00
74	Frame Relay UBR PVC - 35.0 Mbps	CIR35M	\$ -		\$ 4,095.00	Each		\$ -	\$ 50.00
75	Frame Relay UBR PVC - 40.0 Mbps	CIR40M	\$ -		\$ 4,640.00	Each		\$ -	\$ 50.00
76	ATM UBR PVC - 256 kbps	UBR256	\$ -		\$ 174.08	Each		\$ -	\$ 50.00
77	ATM UBR PVC - 384 kbps	UBR384	\$ -		\$ 218.88	Each		\$ -	\$ 50.00
78	ATM UBR PVC - 512 kbps	UBR512	\$ -		\$ 250.88	Each		\$ -	\$ 50.00
79	ATM UBR PVC - 768 kbps	UBR768	\$ -		\$ 295.68	Each		\$ -	\$ 50.00
80	ATM UBR PVC - 1.024 Mbps	UBR133	\$ -		\$ 322.56	Each		\$ -	\$ 50.00
81	ATM UBR PVC - 1.536 Mbps	UBR134	\$ -		\$ 376.32	Each		\$ -	\$ 50.00
82	ATM UBR PVC - 2.0 Mbps	UBR135	\$ -		\$ 470.00	Each		\$ -	\$ 50.00
83	ATM UBR PVC - 3.0 Mbps	UBR136	\$ -		\$ 675.00	Each		\$ -	\$ 50.00
84	ATM UBR PVC - 4.0 Mbps	UBR137	\$ -		\$ 860.00	Each		\$ -	\$ 50.00
85	ATM UBR PVC - 6.0 Mbps	UBR138	\$ -		\$ 1,170.00	Each		\$ -	\$ 50.00
86	ATM UBR PVC - 8.0 Mbps	UBR139	\$ -		\$ 1,400.00	Each		\$ -	\$ 50.00
87	ATM UBR PVC - 10 Mbps	UBR140	\$ -		\$ 1,600.00	Each		\$ -	\$ 50.00
88	ATM UBR PVC - 11 Mbps	UBR141	\$ -		\$ 1,650.00	Each		\$ -	\$ 50.00
89	ATM UBR PVC -12 Mbps	UBR142	\$ -		\$ 1,740.00	Each		\$ -	\$ 50.00
90	ATM UBR PVC - 15 Mbps	UBR143	\$ -		\$ 2,100.00	Each		\$ -	\$ 50.00
91	ATM UBR PVC - 19 Mbps	UBR144	\$ -		\$ 2,470.00	Each		\$ -	\$ 50.00
92	ATM UBR PVC - 30 Mbps	UBR145	\$ -		\$ 3,600.00	Each		\$ -	\$ 50.00
93	ATM UBR PVC - 35 Mbps	UBR146	\$ -		\$ 4,095.00	Each		\$ -	\$ 50.00
94	ATM UBR PVC - 45 Mbps	UBR147	\$ -		\$ 5,175.00	Each		\$ -	\$ 50.00
95	ATM UBR PVC - 70 Mbps	UBR148	\$ -		\$ 7,700.00	Each		\$ -	\$ 50.00
96	ATM UBR PVC - 100 Mbps	UBR149	\$ -		\$ 10,500.00	Each		\$ -	\$ 50.00
97	ATM UBR PVC - 125 Mbps	UBR150	\$ -		\$ 12,500.00	Each		\$ -	\$ 50.00
98	ATM UBR PVC - 145 Mbps	UBR151	\$ -		\$ 13,775.00	Each		\$ -	\$ 50.00
99	ATM VBR PVC - 128 kbps	VBT128	\$ -		\$ 128.26	Each		\$ -	\$ 50.00
100	ATM VBR PVC - 256 kbps	VBT256	\$ -		\$ 208.90	Each		\$ -	\$ 50.00
101	ATM VBR PVC - 384 kbps	VBT384	\$ -		\$ 262.66	Each		\$ -	\$ 50.00
102	ATM VBR PVC - 512 kbps	VBT512	\$ -		\$ 301.06	Each		\$ -	\$ 50.00
103	ATM VBR PVC - 768 kbps	VBT768	\$ -		\$ 354.82	Each		\$ -	\$ 50.00
104	ATM VBR PVC - 1.024 Mbps	VBT1K	\$ -		\$ 387.07	Each		\$ -	\$ 50.00
105	ATM VBR PVC - 1.536 Mbps	VBT15K	\$ -		\$ 451.58	Each		\$ -	\$ 50.00
106	ATM VBR PVC - 2.0 Mbps	VBT2	\$ -		\$ 564.00	Each		\$ -	\$ 50.00
107	ATM VBR PVC - 3.0 Mbps	VBT3	\$ -		\$ 810.00	Each		\$ -	\$ 50.00
108	ATM VBR PVC - 4.0 Mbps	VBT4	\$ -		\$ 1,032.00	Each		\$ -	\$ 50.00

TELECOMMUNICATIONS SERVICES CONTRACT
EXHIBIT B-2: PRICING SCHEDULE FOR LONG DISTANCE

DOMESTIC DATA SERVICES

Line Item	Product/Feature Name	Contractor Unique Service Identifier	Contractor Install Charge	Contractor Install Quantity	Contractor Monthly Charge	Units	Evaluation Monthly Quantity	Contractor Mileage Charge	Contractor Change Charge
109	ATM VBR PVC - 6.0 Mbps	VBT6	\$ -		\$ 1,404.00	Each		\$ -	\$ 50.00
110	ATM VBR PVC - 8.0 Mbps	VBT8	\$ -		\$ 1,680.00	Each		\$ -	\$ 50.00
111	ATM VBR PVC - 10 Mbps	VBT10	\$ -		\$ 1,920.00	Each		\$ -	\$ 50.00
112	ATM VBR PVC - 12 Mbps	VBT12	\$ -		\$ 1,980.00	Each		\$ -	\$ 50.00
113	ATM VBR PVC - 15 Mbps	VBT15	\$ -		\$ 2,088.00	Each		\$ -	\$ 50.00
114	ATM VBR PVC - 19 Mbps	VBT19	\$ -		\$ 2,520.00	Each		\$ -	\$ 50.00
115	ATM VBR PVC - 20 Mbps	VBT20	\$ -		\$ 2,964.00	Each		\$ -	\$ 50.00
116	ATM VBR PVC - 30 Mbps	VBT30	\$ -		\$ 4,320.00	Each		\$ -	\$ 50.00
117	ATM VBR PVC - 35 Mbps	VBT35	\$ -		\$ 4,914.00	Each		\$ -	\$ 50.00
118	ATM VBR PVC - 45 Mbps	VBT45	\$ -		\$ 6,210.00	Each		\$ -	\$ 50.00
119	ATM VBR PVC - 70 Mbps	VBT70	\$ -		\$ 9,240.00	Each		\$ -	\$ 50.00
120	ATM VBR PVC - 100 Mbps	VBT100	\$ -		\$ 12,600.00	Each		\$ -	\$ 50.00
121	ATM VBR PVC - 125 Mbps	VBT125	\$ -		\$ 15,000.00	Each		\$ -	\$ 50.00
122	ATM VBR PVC - 145 Mbps	VBT145	\$ -		\$ 16,530.00	Each		\$ -	\$ 50.00
123	ATM CBR PVC - 128 kbps	CBR128	\$ -		\$ 187.04	Each		\$ -	\$ 50.00
124	ATM CBR PVC - 256 kbps	CBR256	\$ -		\$ 304.64	Each		\$ -	\$ 50.00
125	ATM CBR PVC - 384 kbps	CBR384	\$ -		\$ 383.04	Each		\$ -	\$ 50.00
126	ATM CBR PVC - 512 kbps	CBR512	\$ -		\$ 439.04	Each		\$ -	\$ 50.00
127	ATM CBR PVC - 768 kbps	CBR768	\$ -		\$ 517.44	Each		\$ -	\$ 50.00
128	ATM CBR PVC - 1.024 Mbps	CBR1K	\$ -		\$ 564.48	Each		\$ -	\$ 50.00
129	ATM CBR PVC - 1.536 Mbps	CBR15K	\$ -		\$ 658.56	Each		\$ -	\$ 50.00
130	ATM CBR PVC - 2.0 Mbps	CBR2	\$ -		\$ 822.50	Each		\$ -	\$ 50.00
131	ATM CBR PVC - 3.0 Mbps	CBR3	\$ -		\$ 1,181.25	Each		\$ -	\$ 50.00
132	ATM CBR PVC - 4.0 Mbps	CBR4	\$ -		\$ 1,505.00	Each		\$ -	\$ 50.00
133	ATM CBR PVC - 6.0 Mbps	CBR6	\$ -		\$ 2,047.50	Each		\$ -	\$ 50.00
134	ATM CBR PVC - 8.0 Mbps	CBR8	\$ -		\$ 2,450.00	Each		\$ -	\$ 50.00
135	ATM CBR PVC - 10 Mbps	CBR10	\$ -		\$ 2,800.00	Each		\$ -	\$ 50.00
136	ATM CBR PVC - 11 Mbps	CBR11	\$ -		\$ 2,887.50	Each		\$ -	\$ 50.00
137	ATM CBR PVC - 12 Mbps	CBR128	\$ -		\$ 3,045.00	Each		\$ -	\$ 50.00
138	ATM CBR PVC - 15 Mbps	CBR15	\$ -		\$ 3,675.00	Each		\$ -	\$ 50.00
139	ATM CBR PVC - 19 Mbps	CBR19	\$ -		\$ 4,322.50	Each		\$ -	\$ 50.00
140	ATM CBR PVC - 30 Mbps	CBR30	\$ -		\$ 6,300.00	Each		\$ -	\$ 50.00
141	ATM CBR PVC - 35 Mbps	CBR35	\$ -		\$ 7,166.25	Each		\$ -	\$ 50.00
142	ATM CBR PVC - 45 Mbps	CBR45	\$ -		\$ 9,056.25	Each		\$ -	\$ 50.00
143	ATM CBR PVC - 70 Mbps	CBR70	\$ -		\$ 13,475.00	Each		\$ -	\$ 50.00
144	ATM CBR PVC - 100 Mbps	CBR100	\$ -		\$ 18,375.00	Each		\$ -	\$ 50.00

TELECOMMUNICATIONS SERVICES CONTRACT
EXHIBIT B-2: PRICING SCHEDULE FOR LONG DISTANCE

DOMESTIC DATA SERVICES

Line Item	Product/Feature Name	Contractor Unique Service Identifier	Contractor Install Charge	Contractor Install Quantity	Contractor Monthly Charge	Units	Evaluation Monthly Quantity	Contractor Mileage Charge	Contractor Change Charge
145	ATM CBR PVC - 125 Mbps	CBR125	\$ -		\$ 21,875.00	Each		\$ -	\$ 50.00
146	ATM CBR PVC - 145 Mbps	CBR145	\$ -		\$ 24,106.25	Each		\$ -	\$ 50.00
147	AVPN Port Charges only *								
148	MPLS Port - 56 Kbps	N/A	\$ 500.00		\$ 117.00	per port		\$ -	\$ -
149	MPLS Port - 128 Kbps	N/A	\$ 500.00		\$ 248.52	per port		\$ -	\$ -
150	MPLS Port - 256 Kbps	N/A	\$ 500.00		\$ 278.00	per port		\$ -	\$ -
151	MPLS Port - 384 Kbps	N/A	\$ 500.00		\$ 312.11	per port		\$ -	\$ -
152	MPLS Port - 512 Kbps	N/A	\$ 500.00		\$ 343.56	per port		\$ -	\$ -
153	MPLS Port - 640 Kbps	N/A	\$ 500.00		\$ 334.40	per port		\$ -	\$ -
154	MPLS Port - 768 Kbps	N/A	\$ 500.00		\$ 338.94	per port		\$ -	\$ -
155	MPLS Port - 1024 Kbps	N/A	\$ 500.00		\$ 348.84	per port		\$ -	\$ -
156	MPLS Port - 1.544 Mbps	N/A	\$ 500.00		\$ 355.30	per port		\$ -	\$ -
157	MPLS Port - 3.088 Mbps	N/A	\$ 500.00		\$ 729.60	per port		\$ -	\$ -
158	MPLS Port - 4.632 Mbps	N/A	\$ 500.00		\$ 1,037.40	per port		\$ -	\$ -
159	MPLS Port - 5 Mbps	N/A	\$ 500.00		\$ 1,115.40	per port		\$ -	\$ -
160	MPLS Port - 6.176 Mbps	N/A	\$ 500.00		\$ 1,285.20	per port		\$ -	\$ -
161	MPLS Port - 7.720 Mbps	N/A	\$ 500.00		\$ 1,505.10	per port		\$ -	\$ -
162	MPLS Port - 9.264 Mbps	N/A	\$ 500.00		\$ 1,722.00	per port		\$ -	\$ -
163	MPLS Port - 10 Mbps	N/A	\$ 500.00		\$ 1,199.20	per port		\$ -	\$ -
164	MPLS Port - 12.352 Mbps	N/A	\$ 500.00		\$ 2,025.00	per port		\$ -	\$ -
165	MPLS Port - 15 Mbps	N/A	\$ 500.00		\$ 1,808.30	per port		\$ -	\$ -
166	MPLS Port - 20 Mbps	N/A	\$ 500.00		\$ 2,838.40	per port		\$ -	\$ -
167	MPLS Port - 25 Mbps	N/A	\$ 500.00		\$ 3,621.75	per port		\$ -	\$ -
168	MPLS Port - 30 Mbps	N/A	\$ 500.00		\$ 3,957.15	per port		\$ -	\$ -
169	MPLS Port - 45 Mbps	N/A	\$ 500.00		\$ 4,666.10	per port		\$ -	\$ -
170	MPLS Port - 155 Mbps	N/A	\$ 500.00		\$ 13,693.50	per port		\$ -	\$ -
171	MPLS Port - 1000 Mbps	N/A	\$ 1,000.00		\$ 58,960.50	per port		\$ -	\$ -
172	Optical Mesh Service (OMS)	N/A	ICB		ICB			ICB	ICB

TELECOMMUNICATIONS SERVICES CONTRACT
EXHIBIT B-2: PRICING SCHEDULE FOR LONG DISTANCE

CONFERRING SERVICES

Line Item	Product/Feature Name	Contractor Unique Service Identifier	One-Time Install Cost per Item	Monthly Recurring Cost per item	Units	One-Time Changes Cost per Item
1	Audio Conference Calling					
2	Operator Conference Service	N/A	\$ -	\$ 0.1400	minutes	\$ -
3	Dial-in Conference Service (No host)	N/A	\$ -	\$ 0.0750	minutes	\$ -
4	Reservationless (Hosted)	N/A	\$ -	\$ 0.0450	minutes	\$ -
5	Video Conferencing Services					
6	Two-way Video Services	See below			seat-minute	
7	Multi-Point Services	See below			seat-minute	
8	Additional Services					
9	Standard - Operator Assisted - Dial Out	N/A	\$ -	\$ 0.2000	minutes	\$ -
10	Standard - Operator Assisted - Dial In - Caller Paid	N/A	\$ -	\$ 0.1300	minutes	\$ -
11	Standard - Automated - Dial In - Caller Paid	N/A	\$ -	\$ 0.0700	minutes	\$ -
12	Standard - Reservationless - Dial In - Caller Paid	N/A	\$ -	\$ 0.0440	minutes	\$ -
13	Premier - Operator Assisted - Dial In - Toll Free	N/A	\$ -	\$ 0.2500	minutes	\$ -
14	Web meeting	N/A	\$ -	\$ 0.1200	minutes	\$ -
15	Live Video 25:	N/A	\$ -	\$ 1,899.00	package	\$ -
16	25 Live participants	N/A	\$ -	\$ -		\$ -
17	Up to 200 views over 90 day archive	N/A	\$ -	\$ -		\$ -
18	Duration – 2 hours	N/A	\$ -	\$ -		\$ -
19	Price per additional live participant	N/A	\$ -	\$ 18.00	participant	\$ -
20	Price per additional archive participant	N/A	\$ -	\$ 18.00	participant	\$ -
21	Price per additional hour over 2 hours	N/A	\$ -	\$ 478.00	per hour	\$ -
22	Presentation Package	N/A	\$ -	\$ 599.00	package	\$ -
23	Price per month additional archive	N/A	\$ -	\$ 1,799.00	per month	\$ -
24	Live Video 100:	N/A	\$ -	\$ 2,399.00	package	\$ -
25	100 Live participants	N/A	\$ -			\$ -
26	Up to 500 views over 90 day archive	N/A	\$ -			\$ -
27	Duration – 2 hours	N/A	\$ -			\$ -
28	Price per additional live participant	N/A	\$ -	\$ 9.60	participant	\$ -
29	Price per additional archive participant	N/A	\$ -	\$ 9.60	participant	\$ -
30	Price per additional hour over 2 hours	N/A	\$ -	\$ 715.00	hour	\$ -
31	Presentation Package	N/A	\$ -	\$ 699.00	package	\$ -
32	Price per month additional archive	N/A	\$ -	\$ 1,899.00	per month	\$ -
33	Live Video 500:	N/A	\$ -	\$ 2,899.00	package	\$ -
34	500 Live participants	N/A	\$ -	\$ -		\$ -

TELECOMMUNICATIONS SERVICES CONTRACT
EXHIBIT B-2: PRICING SCHEDULE FOR LONG DISTANCE

CONFERRING SERVICES

Line Item	Product/Feature Name	Contractor Unique Service Identifier	One-Time Install Cost per Item	Monthly Recurring Cost per item	Units	One-Time Changes Cost per Item
35	Up to 1000 views over 90 day archive	N/A	\$ -	\$ -		\$ -
36	Duration – 2 hours	N/A	\$ -	\$ -		\$ -
37	Price per additional live participant	N/A	\$ -	\$ 6.00	participant	\$ -
38	Price per additional archive participant	N/A	\$ -	\$ 6.00	participant	\$ -
39	Price per additional hour over 2 hours	N/A	\$ -	\$ 958.00	hour	\$ -
40	Presentation Package	N/A	\$ -	\$ 799.00	package	\$ -
41	Price per month additional archive	N/A	\$ -	\$ 1,999.00	per month	\$ -
42	Live Video 1000:	N/A	\$ -	\$ 4,599.00	package	\$ -
43	1000 Live participants	N/A	\$ -	\$ -		\$ -
44	Up to 1000 views over 90 day archive	N/A	\$ -	\$ -		\$ -
45	Duration – 2 hours	N/A	\$ -	\$ -		\$ -
46	Price per additional live participant	N/A	\$ -	\$ 3.60	participant	\$ -
47	Price per additional archive participant	N/A	\$ -	\$ 3.60	participant	\$ -
48	Price per additional hour over 2 hours	N/A	\$ -	\$ 1,198.00	per hour	\$ -
49	Presentation Package	N/A	\$ -	\$ 849.00	package	\$ -
50	Price per month additional archive	N/A	\$ -	\$ 2,099.00	per month	\$ -
51	On-Demand Video 25:	N/A	\$ -	\$ 1,699.00	package	\$ -
52	Up to 25 views over 90 day archive	N/A	\$ -	\$ -		\$ -
53	Duration – 2 hours	N/A	\$ -	\$ -		\$ -
54	Price per additional archive participant	N/A	\$ -	\$ 18.00	participant	\$ -
55	Price per additional hour over 2 hours	N/A	\$ -	\$ 478.00	per hour	\$ -
56	Presentation Package	N/A	\$ -	\$ 478.00	package	\$ -
57	Price per month additional archive	N/A	\$ -	\$ 1,799.00	per month	\$ -
58	On-Demand Video 100:	N/A	\$ -	\$ 1,899.00	package	\$ -
59	Up to 100 views over 90 day archive	N/A	\$ -	\$ -		\$ -
60	Duration – 2 hours	N/A	\$ -	\$ -		\$ -
61	Price per additional archive participant	N/A	\$ -	\$ 9.60	participant	\$ -
62	Price per additional hour over 2 hours	N/A	\$ -	\$ 718.80	per hour	\$ -
63	Presentation Package	N/A	\$ -	\$ 599.00	package	\$ -
64	Price per month additional archive	N/A	\$ -	\$ 1,899.00	per month	\$ -
65	On-Demand Video 500:	N/A	\$ -	\$ 2,399.00	package	\$ -
66	Up to 500 views over 90 day archive	N/A	\$ -	\$ -		\$ -
67	Duration – 2 hours	N/A	\$ -	\$ -		\$ -
68	Price per additional archive participant	N/A	\$ -	\$ 6.00	participant	\$ -

TELECOMMUNICATIONS SERVICES CONTRACT
EXHIBIT B-2: PRICING SCHEDULE FOR LONG DISTANCE

CONFERRING SERVICES

Line Item	Product/Feature Name	Contractor Unique Service Identifier	One-Time Install Cost per Item	Monthly Recurring Cost per item	Units	One-Time Changes Cost per Item
69	Price per additional hour over 2 hours	N/A	\$ -	\$ 958.00	per hour	\$ -
70	Presentation Package	N/A	\$ -	\$ 699.00	package	\$ -
71	Price per month additional archive	N/A	\$ -	\$ 1,999.00	per month	\$ -
72	On-Demand Video 1000:	N/A	\$ -	\$ 2,899.00	package	\$ -
73	Up to 1000 views over 90 day archive	N/A	\$ -	\$ -		\$ -
74	Duration – 2 hours	N/A	\$ -	\$ -		\$ -
75	Price per additional archive participant	N/A	\$ -	\$ 3.60	participant	\$ -
76	Price per additional hour over 2 hours	N/A	\$ -	\$ 1,198.00	per hour	\$ -
77	Presentation Package	N/A	\$ -	\$ 799.00	package	\$ -
78	Price per month additional archive	N/A	\$ -	\$ 2,099.00	per month	\$ -
79	Streaming Options					
80	Standard Options					
	Up to 100 participants (listen via phone)	N/A	\$ -	\$ 480.00	Per conference (2 hours)	\$ -
81		N/A	\$ -	\$ 7.20	Per participant (over 100)	\$ -
82	Up to 500 participants (listen via phone)	N/A	\$ -	\$ 2,160.00	Per conference (2 hours)	\$ -
83		N/A	\$ -	\$ 4.80	Per participant (over 500)	\$ -
84	Up to 1000 participants (listen via phone)	N/A	\$ -	\$ 3,840.00	Per conference (2 hours)	\$ -
85		N/A	\$ -	\$ 2.40	Per participant (over 1000)	\$ -
86	Custom Registration Fields	N/A	\$ -	\$ 60.00	Per conference	\$ -
88	CD archive without Presentation Package	N/A	\$ -	\$ 220.00	CD + S&H	\$ -
89	CD archive with Presentation Package	N/A	\$ -	\$ 599.00	CD + S&H	\$ -
90	Copy of CDs	N/A	\$ -	\$ 15.00	per CD	\$ -
91	FTP of content archive	N/A	\$ -	\$ 60.00	Per conference	\$ -
	Additional Encoding Speeds (Video Only)	N/A	\$ -	\$ 480.00	Additional speed	\$ -
92						
93	Professional Services: Stream Consultation	N/A	\$ -	\$ 250.00	per hour	\$ -
94	Custom HTML Work (changes to the launch/listen page)	N/A	\$ -	\$ 250.00	per hour	\$ -
95	Custom Web Development (changes to player page)	N/A	\$ -	\$ 360.00	per hour	\$ -

TELECOMMUNICATIONS SERVICES CONTRACT
EXHIBIT B-2: PRICING SCHEDULE FOR LONG DISTANCE

CONFERRING SERVICES

Line Item	Product/Feature Name	Contractor Unique Service Identifier	One-Time Install Cost per Item	Monthly Recurring Cost per item	Units	One-Time Changes Cost per Item
96	Post-event Slide Timing Adjustments	N/A	\$ -	\$ 360.00	per hour	\$ -
97	AT&T Web Meeting Service, Per Seat (min of 20 Seats)	N/A	\$ -	\$ 115.00	per seat	\$ -
98	AT&T Executive Web Conference:	N/A	\$ -	\$ 0.40	per seat	\$ -
99	AT&T Executive Web Conference, Per Seat (min of 100 Seats)	N/A	\$ -	\$ 115.00	per seat	\$ -
100	Digitized Replay - Toll Free Dial In:	N/A	\$ -	\$ 0.30	minute	\$ -
101	Digitized Replay - Caller Paid Dial In:	N/A	\$ -	\$ 0.30	minute	\$ -
102	<u>Executive Conference Call Types</u>					
103	Domestic Operator Dial-Out	N/A	\$ -	\$ 0.45	minute	\$ -
104	Domestic Toll Free Dial-In	N/A	\$ -	\$ 0.32	minute	\$ -
105	Domestic Caller Paid Dial-In	N/A	\$ -	\$ 0.27	minute	\$ -
106	<u>Event Call Types</u>					
107	Domestic Operator Dial-Out	N/A	\$ -	\$ 0.45	minute	\$ -
108	Domestic Toll Free Dial-In	N/A	\$ -	\$ 0.25	minute	\$ -
109	Domestic Caller Paid Dial-In	N/A	\$ -	\$ 0.23	minute	\$ -
110	<u>Premier Call Types</u>					
111	Domestic Operator Dial-Out	N/A	\$ -	\$ 0.45	minute	\$ -
112	Domestic Toll Free Dial-In	N/A	\$ -	\$ 0.25	minute	\$ -
113	Domestic Caller Paid Dial-In	N/A	\$ -	\$ 0.23	minute	\$ -
114	<u>International Conference Calls</u>					
115	Operator Assisted Dial-Out, Discount off List Prices:	N/A	\$ -	50% discount	minute	\$ -
116	Toll Free Transport from Canada	N/A	\$ -	\$ 0.10	minute	\$ -
117	<u>AT&T Video TeleConference Component/Capability (Colorado)</u>	N/A	\$ -			
118	Video Bridge Port Charge –all speeds	N/A	\$ -	15% discount	per min/per port	\$ -
119	ISDN Dial-out –U.S. and non-U.S. terminations	N/A	\$ -	15% discount	per min/channel	\$ -

EXHIBIT B-3 MANAGED IP SERVICES

PRICING WORKSHEETS

- 1 [IP TELEPHONY](#)
 - Fully Managed
 - Individually Managed
 - Hosted IP Services
- 2 [FULLY MANAGED \(FM\)](#)
- 3 [MANAGED - NO FIELD RESPONSE \(MNFR\)](#)
- 4 [MONITOR ONLY \(MO\)](#)
- 5 [NEXT GENERATION EN \(NGEN\)](#)

EXHIBIT B-3

Sheet 2 - Pricing Worksheet For IP Telephony

SOW Section

10.1 Fully Managed Maintenance and Support Services

Specify initial start-up costs and subsequent monthly rates per device supported. Specify any additional devices and/or costs required to provide the complete service. These are estimated quantities. There is no guarantee of types or quantities of devices

Cisco Equipment Type	Model Number	Current OS Version	Current Software Version	Quantity	One Time Start Up Cost	Monthly Rate	One Time Start Up Cost	Monthly Rate
Call Manager server	7845	Win2k/SQL2k 2000.2.4sr2	4.1(3) SR2	8	\$ -	\$ 754.00	\$ -	\$ 6,032.00
Emergency Responder	7835	2000.2.4sr2	1.2(3a) SR2a	1	\$ 2,286.00	\$ 642.86	\$ 2,286.00	\$ 642.86
Personal Assistant	7835	Win2k 2000.2.4sr2		1	\$ 2,286.00	\$ 642.86	\$ 2,286.00	\$ 642.86
Conference Connection	7825	Win2k 2000.2.4sr2	1.2(2) SR2	1	\$ 2,286.00	\$ 642.86	\$ 2,286.00	\$ 642.86
Gatekeeper	3825	12.3(14) T2	N/A	2	\$ -	\$ 128.50	\$ -	\$ 257.00
Voice Gateway	3845	12.3		15	\$ -	\$ 128.50	\$ -	\$ 1,927.50
Voice Gateway	2851	12.3		45	\$ -	\$ 128.50	\$ -	\$ 5,782.50
Voice Gateway	2610			2	\$ -	\$ 128.50	\$ -	\$ 257.00
Voice Gateway	3825			2	\$ -	\$ 128.50	\$ -	\$ 257.00
IP Phones				6654	\$ -	\$ 6.97	\$ -	\$ 46,378.38

The price for the service in this section is bundled per County configuration of current equipment. The pricing is delivered only for this configuration. Other configurations are available upon request. The management price for 8 Call Managers includes the price for Unity boxes. The IP Phone price at \$6.97 also covers maintenance of the listed Voice Mail Boxes and IPCC agents.

10.1.8 Field Services

Unit Costs for Installation of phones and other devices

Device	Labor	Material	Total
Project Pricing on			
a per case basis			

Time and Material Hourly Rates

List various levels of project managers, engineers, technicians, and installers
 Include rates for wiring, cable, and fiber installation per ISD Standard 902

Level	Hourly Rate	Off Hours Rate	Certifications Held
Project Pricing on			
a per case basis			

Regular hours for the County are set at 7 A.M. to 6 P.M. Monday thru Friday

10.2 Hosted IP Telephony Services

		One Time Install Cost	Monthly Rate	
10.2.1	IP Phone Service with features	Per 'line'	\$ -	\$ 10.95

		One Time Install Cost	Monthly Rate	
10.2.2	On-line Directory	Per 'line"	\$ -	\$ -

		Per Conference	
10.2.3	Conferencing Services Dial in Conference	Per conference	\$ -

		Per User	Per Minute	
	Direct dial	per conf	\$ -	\$ 0.04
	1-800 dial	per conf	\$ -	\$ 0.045

Contractor reservationless conferencing is priced in two configurations. The dial in configuration is to a local telephone number. There are no setup charges. The price is charged on number of participant minutes for the conference. The 800 service conferencing provides a domestic 800 toll free number and the price is charged on number of participant minutes for the conference.

		One Time Install Cost	Monthly Rate	
10.2.4	Voice Mail Services	per mailbox	\$ -	\$ 4.00

			One Time Install Cost	Monthly Rate
10.2.6	IP Trunking	per T-1 access facility	\$ -	\$ 28.00

Price indicated is per concurrent call path. All calls between Flexible Reach and VDNA locations are considered on-net and do not incur a per minute rate. Each concurrent call path includes a block of 300 minutes off-net domestic long distance. The off-net price per minute is 2.3 ¢ after the block of 300 minutes is exhausted.

Description	Unit	One Time Install Cost	Monthly Rate
PNT 1.5Mbps	1	\$ -	\$ 449.50

			One Time Install Cost	Monthly Rate
10.2.7	Call Center Services	per agent 'A'	\$ -	\$ -

Includes 'D, E, H, I, J, K, & M'

			One Time Install Cost	Monthly Rate
	per supervisor agent 'B'		\$ -	\$ -

			One Time Install Cost	Monthly Rate
	per Administrator C'		\$ -	\$ -

			One Time Install Cost	Monthly Rate
IVR services 'F'	per port		\$ 4,800.00	\$ 160.00

			One Time Install Cost	Monthly Rate
CTI services 'G'	per agent		\$ -	\$ -

			One Time Install Cost	Monthly Rate
Web services 'L'	per agent		\$ -	\$ -

10.2.12 Operator Services

		Set Up Cost	Per Minute
Directory Assistance	per call	\$ 1.00	
Operator Assistance	per call	\$ 1.00	
Collect Calls	per call	\$ 1.00	
Third Party Calls	per call	\$ 1.00	

10.2.18 IP Phone Instruments

Make	Description	Model	Cost
See Attached			
Model List			

11 Design and Consulting Services

Hourly rates for design and consultation services by classification/certification of engineer/designer

Level	Hourly Rate	Certifications Held
Consultant	\$175	Individuals may vary. 3 to 5 yrs experience. Examples of a certification at this level CCNP.
Senior Consultant	\$200	Individuals may vary. 5 to 7 yrs experience. Examples of a certification at this level CCIE .
Principal Architect	\$250	Individuals may vary. 7 + yrs experience. Examples of a certification at this level CCIE and Advance College Degree.

EXHIBIT B-3
Sheet 2 - Pricing Worksheet For Fully Managed (FM) Option

The pricing shall be for the sites as described in Paragraph 5.0 of Exhibit A-3 Managed IP Services Statement of Work.

Type of Router & Circuit	One Time Charge	Router & Circuit Monthly MRS Charge	Bandwidth
Type A	\$ 925.00	\$ 649.81	Up to 10 Gigabits per second bandwidth
Type B	\$ 925.00	\$ 378.19	Up to 1 Gigabit per second bandwidth
Type C	\$ 925.00	\$ 514.86	Up to 150 Megabits per second bandwidth
Type D	\$ 925.00	\$ 426.53	Up to 40 Megabits per second bandwidth
Type E	\$ 925.00	\$ 459.86	Up to 6 Megabits per second bandwidth
Type F	\$ 925.00	\$ 175.00	Up to 1.5 Megabits per second bandwidth

ACCESS PLATFORM	One Time Charge	Monthly Rate
	\$113,000*	\$2,600

*Upon receipt of \$5,000,000 in module B3 revenue, excluding one time charges for the access platform and the ION appliances, Contractor will credit back to County the one time charge of \$113,000.

ION APPLIANCES	One Time Charge - including modem, PRIISM server hardware, cables, etc.	Monthly Rate
EN sites (111)	\$148,209*	\$14.93 per site

For the LA NET locations, the County will be required to purchase the SM110 modem at the following price:

LA Net Locations	One Time Charge	Monthly Rate
SM110 Modem	\$331.80 per modem	\$14.93 per site

Access and ION appliance rates would be in addition to the rate quoted above for the Managed Router Service.

*If County is willing to commit to converting all of the EN sites to MRS service within 8 months of the Contract Effective Date, Contractor will credit back to County the one time charge of \$148,209.

The price for fully managed service is the sum of network and equipment management and equipment maintenance. The equipment maintenance component was based on County supplied router information for each site type. Different router configurations would change the price of the equipment component. The pricing was derived using the County provided EN site equipment inventory. All sites in that list assumed a Cisco 7XXX router. Type F sites will be better served at T-1 speeds with a Cisco 28XX series router and Contractor priced these sites to that equipment configuration.

Type A and B sites cannot be implemented with Frame Relay or ATM with 10Gbps and 1 Gbps interfaces.

All fully managed sites will have site survey and on site install/migration of equipment following standard MRS processes.

MRS vendor maintenance is assumed for full management model.

IPFrameRelay PVC on T1 for management centers in Raleigh and Phoenix required. This price is not included.

All work will be performed during normal business hours. After hours work will be charged on a T&M basis.

Maintenance pricing is determined by the County's provided equipment list and will change if equipment changes are made.

EXHIBIT B-3
Sheet 3- Pricing Worksheet For Managed/No Field Response (MNFR)

The pricing shall be for the sites as described in Paragraph 6.0 of Exhibit A-3 Managed IP Services Statement of Work.

Type of Router & Circuit	One Time Charge	Router & Circuit Monthly MRS Charge	Bandwidth
Type A	\$ 925.00	\$ 225.00	Up to 10 Gigabits per second bandwidth
Type B	\$ 925.00	\$ 225.00	Up to 1 Gigabit per second bandwidth
Type C	\$ 925.00	\$ 225.00	Up to 150 Megabits per second bandwidth
Type D	\$ 925.00	\$ 225.00	Up to 40 Megabits per second bandwidth
Type E	\$ 925.00	\$ 225.00	Up to 6 Megabits per second bandwidth
Type F	\$ 925.00	\$ 140.00	Up to 1.5 Megabits per second bandwidth

ACCESS PLATFORM	One Time Charge	Monthly Rate
	\$113,000*	\$2,600

*Upon receipt of \$5,000,000 in module B3 revenue, excluding one time charges for the access platform and the ION appliances, Contractor will credit back to County the one time charge of \$113,000.

ION APPLIANCES	One Time Charge - including modem, PRIISM server hardware, cables, etc.	Monthly Rate
EN sites (111)	\$148,209*	\$14.93 per site

For the LA NET locations, the County will be required to purchase the SM110 modem at the following price:

LA Net Locations	One Time Charge	Monthly Rate
SM110 Modem	\$331.80 per modem	\$14.93 per site

Access and ION appliance rates would be in addition to the rate quoted above for the Managed Router Service.

*If County is willing to commit to converting all of the EN sites to MRS service within 8 months of the Contract Effective Date, Contractor will credit back to County the one time charge of \$148,209.

The price for fully managed service is the sum of network and equipment management and equipment maintenance. The equipment maintenance component was based on County supplied router information for each site type. Different router configurations would change the price of the equipment component. The pricing was derived using the County provided EN site equipment inventory. All sites in that list assumed a Cisco 7XXX router. Type F sites will be better served at T-1 speeds with a Cisco 28XX series router and Contractor priced these sites to that equipment configuration.

Type A and B sites cannot be implemented with Frame Relay or ATM with 10Gbps and 1 Gbps interfaces.

All managed sites may require a site survey and on site install/migration of equipment following standard MRS processes.

IPFrameRelay PVC on T1 for management centers in Raleigh and Phoenix required. This price is not included.

All work will be performed during normal business hours. After hours work will be charged on a T&M basis.

MRS Enablement team will inventory all 3rd party circuits and CPE.

EXHIBIT B-3
Sheet 4- Pricing Worksheet For Monitoring Only (MO) Option

The pricing shall be for the sites as described in Paragraph 7.0 of Exhibit A-3 Managed IP Services Statement of Work.

Type of Router & Circuit	One Time Charge	Router & Circuit Monthly MRS Charge	Bandwidth
Type A	\$ 300.00	\$ 55.00	Up to 10 Gigabits per second bandwidth
Type B	\$ 300.00	\$ 55.00	Up to 1 Gigabit per second bandwidth
Type C	\$ 300.00	\$ 55.00	Up to 150 Megabits per second bandwidth
Type D	\$ 300.00	\$ 55.00	Up to 40 Megabits per second bandwidth
Type E	\$ 300.00	\$ 55.00	Up to 6 Megabits per second bandwidth
Type F	\$ 300.00	\$ 55.00	Up to 1.5 Megabits per second bandwidth

IPFrameRelay PVC on T1 for management centers in Raleigh and Phoenix required. This price is not included.

All work will be performed during normal business hours. After hours work will be charged on a T&M basis.

EXHIBIT B-3
Sheet 5 - Pricing Worksheet For Next Generation Enterprise Network (NGEN)

The pricing shall be for the fully managed sites as described in Paragraph 10 of Exhibit A-3 Managed IP Services Statement of Work.

Type of Router & Circuit	One Time Charge	Router & Circuit Monthly MRS Charge	Bandwidth
Type A	\$ 7,750.00	\$ 9,649.81	Up to 10 Gigabits per second bandwidth
Type B	\$ 3,500.00	\$ 4,045.69	Up to 1 Gigabit per second bandwidth
Type C	\$ 3,500.00	\$ 3,448.19	Up to 150 Megabits per second bandwidth
Type D	\$ 3,500.00	\$ 2,130.69	Up to 40 Megabits per second bandwidth
Type E	\$ 925.00	\$ 2,014.86	Up to 6 Megabits per second bandwidth
Type F	\$ 925.00	\$ 624.50	Up to 1 Megabits per second bandwidth

Legend:

- Type A sites shall have: Up to 10 Gigabits per second Switched Ethernet port with a 5 Gbps Committed Information Rate
- Type B sites shall have: Up to 1 Gigabits per second Switched Ethernet port with a 1 Gbps Committed Information Rate
- Type C sites shall have: Up to 1 Gigabits per second Switched Ethernet port with a 500 Mbps Committed Information Rate
- Type D sites shall have: Up to 100 Megabits per second Switched Ethernet port with a 50 Mbps Committed Information Rate
- Type E sites shall have: Up to 6 Megabits per second provided by Multi Link Point to Point Protocol (MLPP)
- Type F sites shall have: Up to 1 Megabits per second MPLS T-1 interface

ACCESS PLATFORM	One Time Charge	Monthly Rate
	\$113,000*	\$2,600

*Upon receipt of \$5,000,000 in Exhibit A-3 revenue, excluding one time charges for the access platform and the ION appliances, credit back to County the one time charge of \$113,000.

ION APPLIANCES	One Time Charge - including modem, PRIISM server hardware, cables, etc.	Monthly Rate
EN sites (111)	\$148,209*	\$14.93 per site

For the LA NET locations, the County will be required to purchase the SM110 modem at the following price:

LA Net Locations	One Time Charge	Monthly Rate
SM110 Modem	\$331.80 per modem	\$14.93 per site

Access and ION appliance rates would be in addition to the rate quoted above for the Managed Router Service.

*If County is willing to commit to converting all of the EN sites to MRS service within 8 months of the Contract Effective Date, Contractor will credit back to County the one time charge of \$148,209.

The price for NGEN service is the sum of MPLS transport, network and equipment management and equipment maintenance. The equipment management component was based on County supplied router information for each site type. Different router configurations would change the price of the equipment component. The pricing was derived using the County provided EN site equipment inventory. All sites in that list assumed a Cisco 7XXX router. Type F sites will be better served at T-1 speeds with a Cisco 28XX series router and Contractor priced these sites to that equipment configuration.

All fully managed sites will have site survey and on site install/migration of equipment following standard MRS processes.

MRS vendor maintenance is assumed for full management model.

IPFrameRelay PVC on T-1 for management centers in Raleigh, NC and Phoenix, AZ required. This price is not included.

All work will be performed during normal business hours. After hours work will be charged on a T&M basis.

MRS Enablement team will inventory all 3rd party circuits and CPE.

CONTRACTOR'S EEO CERTIFICATION

SBC Global Services, Inc. d/b/a AT&T Global Services
Contractor Name

Address

36-3264367
Internal Revenue Service Employer Identification Number

GENERAL CERTIFICATION

In accordance with Section 4.32.010 of the Code of the County of Los Angeles, the contractor, supplier, or vendor certifies and agrees that all persons employed by such firm, its affiliates, subsidiaries, or holding companies are and will be treated equally by the firm without regard to or because of race, religion, ancestry, national origin, or sex and in compliance with all anti-discrimination laws of the United States of America and the State of California.

CONTRACTOR'S SPECIFIC CERTIFICATIONS

- 1. The Contractor has a written policy statement prohibiting discrimination in all phases of employment. Yes No
- 2. The Contractor periodically conducts a self analysis or utilization analysis of its work force. Yes No
- 3. The Contractor has a system for determining if its employment practices are discriminatory against protected groups. Yes No
- 4. Where problem areas are identified in employment practices, the Contractor has a system for taking reasonable corrective action, to include establishment of goals or timetables. Yes No

Robert D. Schwartz
Authorized Official's Printed Name and Title

Robert D. Schwartz 3-3-08
Authorized Official's Signature Date

COUNTY'S ADMINISTRATION**COUNTY'S PROGRAM DIRECTOR**

Name: Richard Sanchez
Title: General Manager, Information Technology Service
Address: 9150 E. Imperial Highway, MS-9
Downey, CA 90242
Telephone: (562) 940-2901
Facsimile: (562) 803-0724
E-Mail Address: rsanchez@isd.lacounty.gov

COUNTY'S PROGRAM MANAGER

Name: Thomas Lang
Title: Manager, Telecommunications Planning & Program Management
Address: Internal Services Department
9150 E. Imperial Highway, MS-13
Downey, CA 90242
Telephone: (562) 940-2217
Facsimile: (562) 940-3947
E-Mail Address: tlang@isd.lacounty.gov

COUNTY'S PROJECT MANAGER - LOCAL SERVICES & LONG DISTANCE

Name: Robert Aragon
Title: Manager, Premises Systems Division
Address: Internal Services Department
9150 E. Imperial Highway, MS-10
Downey, CA 90242
Telephone: (562) 940-2065
Facsimile: (562) 940-3847
E-Mail Address: raragon@isd.lacounty.gov

COUNTY'S PROJECT MANAGER – NETWORK SERVICES

Name: Scott Mueller
Title: Manager, Network Services Division
Address: Internal Services Department
1110 N. Eastern Avenue
Los Angeles, CA 90063
Telephone: (323) 267-2320
Facsimile: (323) 881-1866
E-Mail Address: smueller@isd.lacounty.gov

COUNTY'S ADMINISTRATION

COUNTY'S PROJECT MANAGER – VOICE OVER IP

Name: Robert King
Title: Director, Voice over IP
Address: Internal Services Department
9150 E. Imperial Highway, MS-9
Downey, CA 90242
Telephone: (562) 658-4328
Facsimile: (562) 940-1908
E-Mail Address: rking@isd.lacounty.gov

COUNTY'S BILLING MANAGER

Name: Eric Hawkins
Title: Manager, Telephone Utilities Support Services Section
Address: Internal Services Department
9150 E. Imperial Highway, MS-37
Downey, CA 90242
Telephone: (562) 940-4343
Facsimile: (562) 401-0047
E-Mail Address: ehawkins@isd.lacounty.gov

CONTRACTOR'S ADMINISTRATION**CONTRACTOR'S NAME: AT&T GLOBAL SERVICES, INC. DBA AT&T GLOBAL SERVICES****CONTRACTOR'S PROGRAM DIRECTOR**

Name: Robert D. Schwandt
Title: Program Director/ Regional Vice President
Address: 1150 S. Olive St., Suite 1820, Los Angeles, CA 90015
Telephone: 213-743-6800
Facsimile: 213-742-9640
E-Mail Address: robert.schwandt@att.com

CONTRACTOR'S PROGRAM MANAGER

Name: Marianne Lee
Title: Program Manager
Address: 1150 S. Olive St., Suite 1820, Los Angeles, CA 90015
Telephone: 213-743-6888
Facsimile: 213-742-9640
E-Mail Address: marianne.lee@att.com

CONTRACTOR'S ALTERNATE PROGRAM MANAGER

Name: Lynda Roush
Title: Sr. Project Manager
Address: 200 Center St. Promenade, Room 615, Anaheim, CA 92805
Telephone: 714-284-2323
Facsimile: 714-563-2470
E-Mail Address: lynda.roush@att.com

CONTRACTOR'S AREA MANAGER

Name: Sara Goldberg
Title: Area Manager
Address: 1150 S. Olive St., Suite 1600, Los Angeles, CA 90015
Telephone: 213-743-7711
Facsimile: 213-748-1645
E-Mail Address: sara.goldberg@att.com

CONTRACTOR'S ADMINISTRATION

CONTRACTOR'S SERVICE EXECUTIVE

Name: Roseann Aranda
Title: Service Executive
Address: 1150 S. Olive St., Suite 1630, Los Angeles, CA 90015
Telephone: 213-743-7712
Facsimile: 213-742-9635
E-Mail Address: roseann.aranda@att.com

CONTRACTOR'S TRANSITION MANAGER

Name: _____
Title: _____
Address: _____

Telephone: _____
Facsimile: _____
E-Mail Address: _____

Notices to Contractor shall be sent to the following:

Name: Marianne Lee
Title: Program Manager
Address: 1150 S. Olive St., Suite 1820, Los Angeles, CA 90015
Telephone: 213-743-6888
Facsimile: 213-742-9640
E-Mail Address: marianne.lee@att.com

CONTRACTOR ACKNOWLEDGEMENT AND CONFIDENTIALITY AGREEMENT

(Note: This certification is to be executed and returned to County with Contractor's executed Contract. Work cannot begin on the Contract until County receives this executed document.)

Contractor Name: AT&T Global Services, Inc. d/b/a AT&T Global Services Contract No. _____

GENERAL INFORMATION:

The Contractor referenced above has entered into a contract with the County of Los Angeles to provide certain services to the County. The County requires the Corporation to sign this Contractor Acknowledgement and Confidentiality Agreement.

CONTRACTOR ACKNOWLEDGEMENT:

Contractor understands and agrees that the Contractor employees, consultants, subcontractors and independent contractors (Contractor's Staff) that will provide services in the above referenced agreement are Contractor's sole responsibility. Contractor understands and agrees that Contractor's Staff must rely exclusively upon Contractor for payment of salary and any and all other benefits payable by virtue of Contractor's Staff's performance of work under the above-referenced contract.

Contractor understands and agrees that Contractor's Staff are not employees of the County of Los Angeles for any purpose whatsoever and that Contractor's Staff do not have and will not acquire any rights or benefits of any kind from the County of Los Angeles by virtue of my performance of work under the above-referenced contract. Contractor understands and agrees that Contractor's Staff will not acquire any rights or benefits from the County of Los Angeles pursuant to any agreement between any person or entity and the County of Los Angeles.

CONFIDENTIALITY AGREEMENT:

Contractor and Contractor's Staff may be involved with work pertaining to services provided by the County of Los Angeles and, if so, Contractor and Contractor's Staff may have access to confidential data and information pertaining to persons and/or entities receiving services from the County. In addition, Contractor and Contractor's Staff may also have access to proprietary information supplied by other vendors doing business with the County of Los Angeles. The County has a legal obligation to protect all such confidential data and information in its possession, especially data and information concerning health, criminal, and welfare recipient records. Contractor and Contractor's Staff understand that if they are involved in County work, the County must ensure that Contractor and Contractor's Staff, will protect the confidentiality of such data and information. Consequently, Contractor must sign this Confidentiality Agreement as a condition of work to be provided by Contractor's Staff for the County.

Contractor and Contractor's Staff hereby agrees that they will not divulge to any unauthorized person any data or information obtained while performing work pursuant to the above-referenced contract between Contractor and the County of Los Angeles. Contractor and Contractor's Staff agree to forward all requests for the release of any data or information received to County's Project Manager.

Contractor and Contractor's Staff agree to keep confidential all health, criminal, and welfare recipient records and all data and information pertaining to persons and/or entities receiving services from the County, design concepts, algorithms, programs, formats, documentation, Contractor proprietary information and all other original materials produced, created, or provided to Contractor and Contractor's Staff under the above-referenced contract. Contractor and Contractor's Staff agree to protect these confidential materials against disclosure to other than Contractor or County employees who have a need to know the information. Contractor and Contractor's Staff agree that if proprietary information supplied by other County vendors is provided to me during this employment, Contractor and Contractor's Staff shall keep such information confidential.

Contractor and Contractor's Staff agree to report any and all violations of this agreement by Contractor and Contractor's Staff and/or by any other person of whom Contractor and Contractor's Staff become aware.

Contractor and Contractor's Staff acknowledge that violation of this agreement may subject Contractor and Contractor's Staff to civil and/or criminal action and that the County of Los Angeles may seek all possible legal redress.

SIGNATURE: _____

DATE: ____/____/____

PRINTED NAME: _____

POSITION: _____

Title 2 ADMINISTRATION
Chapter 2.203.010 through 2.203.090
CONTRACTOR EMPLOYEE JURY SERVICE

2.203.010 Findings.

The board of supervisors makes the following findings. The county of Los Angeles allows its permanent, full-time employees unlimited jury service at their regular pay. Unfortunately, many businesses do not offer or are reducing or even eliminating compensation to employees who serve on juries. This creates a potential financial hardship for employees who do not receive their pay when called to jury service, and those employees often seek to be excused from having to serve. Although changes in the court rules make it more difficult to excuse a potential juror on grounds of financial hardship, potential jurors continue to be excused on this basis, especially from longer trials. This reduces the number of potential jurors and increases the burden on those employers, such as the county of Los Angeles, who pay their permanent, full-time employees while on juror duty. For these reasons, the county of Los Angeles has determined that it is appropriate to require that the businesses with which the county contracts possess reasonable jury service policies. (Ord. 2002-0015 § 1 (part), 2002)

2.203.020 Definitions.

The following definitions shall be applicable to this chapter:

- A. "Contractor" means a person, partnership, corporation or other entity which has a contract with the county or a subcontract with a county contractor and has received or will receive an aggregate sum of \$50,000 or more in any 12-month period under one or more such contracts or subcontracts.
- B. "Employee" means any California resident who is a full-time employee of a contractor under the laws of California.
- C. "Contract" means any agreement to provide goods to, or perform services for or on behalf of, the county but does not include:
 - 1. A contract where the board finds that special circumstances exist that justify a waiver of the requirements of this chapter; or
 - 2. A contract where federal or state law or a condition of a federal or state program mandates the use of a particular contractor; or
 - 3. A purchase made through a state or federal contract; or
 - 4. A monopoly purchase that is exclusive and proprietary to a specific manufacturer, distributor, or reseller, and must match and inter-member with existing supplies, equipment or systems maintained by the county pursuant to the Los Angeles County Purchasing Policy and Procedures Manual, Section P-3700 or a successor provision; or
 - 5. A revolving fund (petty cash) purchase pursuant to the Los Angeles County Fiscal Manual, Section 4.4.0 or a successor provision; or
 - 6. A purchase card purchase pursuant to the Los Angeles County Purchasing Policy and Procedures Manual, Section P-2810 or a successor provision; or
 - 7. A non-agreement purchase with a value of less than \$5,000 pursuant to the Los Angeles County Purchasing Policy and Procedures Manual, Section A-0300 or a successor provision; or
 - 8. A bona fide emergency purchase pursuant to the Los Angeles County Purchasing Policy and Procedures Manual, Section PP-1100 or a successor provision.

Title 2 ADMINISTRATION
Chapter 2.203.010 through 2.203.090
CONTRACTOR EMPLOYEE JURY SERVICE

- D. "Full time" means 40 hours or more worked per week, or a lesser number of hours if:
1. The lesser number is a recognized industry standard as determined by the chief administrative officer, or
 2. The contractor has a long-standing practice that defines the lesser number of hours as full time.
- E. "County" means the county of Los Angeles or any public entities for which the board of supervisors is the governing body. (Ord. 2002-0040 § 1, 2002: Ord. 2002-0015 § 1 (part), 2002)

2.203.030 Applicability.

This chapter shall apply to contractors who enter into contracts that commence after July 11, 2002. This chapter shall also apply to contractors with existing contracts which are extended into option years that commence after July 11, 2002. Contracts that commence after May 28, 2002, but before July 11, 2002, shall be subject to the provisions of this chapter only if the solicitations for such contracts stated that the chapter would be applicable. (Ord. 2002-0040 § 2, 2002: Ord. 2002-0015 § 1 (part), 2002)

2.203.040 Contractor Jury Service Policy.

A contractor shall have and adhere to a written policy that provides that its employees shall receive from the contractor, on an annual basis, no less than five days of regular pay for actual jury service. The policy may provide that employees deposit any fees received for such jury service with the contractor or that the contractor deduct from the employees' regular pay the fees received for jury service. (Ord. 2002-0015 § 1 (part), 2002)

2.203.050 Other Provisions.

- A. Administration. The chief administrative officer shall be responsible for the administration of this chapter. The chief administrative officer may, with the advice of county counsel, issue interpretations of the provisions of this chapter and shall issue written instructions on the implementation and ongoing administration of this chapter. Such instructions may provide for the delegation of functions to other county departments.
- B. Compliance Certification. At the time of seeking a contract, a contractor shall certify to the county that it has and adheres to a policy consistent with this chapter or will have and adhere to such a policy prior to award of the contract. (Ord. 2002-0015 § 1 (part), 2002)

2.203.060 Enforcement and Remedies.

For a contractor's violation of any provision of this chapter, the county department head responsible for administering the contract may do one or more of the following:

1. Recommend to the board of supervisors the termination of the contract; and/or,
2. Pursuant to chapter 2.202, seek the debarment of the contractor. (Ord. 2002-0015 § 1 (part), 2002)

Title 2 ADMINISTRATION
Chapter 2.203.010 through 2.203.090
CONTRACTOR EMPLOYEE JURY SERVICE

2.203.070. Exceptions.

- A. Other Laws. This chapter shall not be interpreted or applied to any contractor or to any employee in a manner inconsistent with the laws of the United States or California.
- B. Collective Bargaining Agreements. This chapter shall be superseded by a collective bargaining agreement that expressly so provides.
- C. Small Business. This chapter shall not be applied to any contractor that meets all of the following:
 - 1. Has ten or fewer employees during the contract period; and,
 - 2. Has annual gross revenues in the preceding twelve months which, if added to the annual amount of the contract awarded, are less than \$500,000; and,
 - 3. Is not an affiliate or subsidiary of a business dominant in its field of operation.

“Dominant in its field of operation” means having more than ten employees and annual gross revenues in the preceding twelve months which, if added to the annual amount of the contract awarded, exceed \$500,000.

“Affiliate or subsidiary of a business dominant in its field of operation” means a business which is at least 20 percent owned by a business dominant in its field of operation, or by partners, officers, directors, majority stockholders, or their equivalent, of a business dominant in that field of operation. (Ord. 2002-0015 § 1 (part), 2002)

2.203.090. Severability.

If any provision of this chapter is found invalid by a court of competent jurisdiction, the remaining provisions shall remain in full force and effect. (Ord. 2002-0015 § 1 (part), 2002)

SAFELY SURRENDERED BABY LAW

**Posters and Fact Sheets are available
in English and Spanish for printing
at the following website:**

www.babysafela.org

Safely Surrendered



No shame. No blame. No names.

In Los Angeles County: 1-877-BABY SAFE • 1-877-222-9723

www.babysafela.org



In Los Angeles County: 1-877-BABY SAFE • 1-877-222-8722

www.babysafe.org

Safely Surrendered Baby Law

What is the Safely Surrendered Baby Law?

California's Safely Surrendered Baby Law allows parents or other persons, with lawful custody, which means anyone to whom the parent has given permission to confidentially surrender a baby. As long as the baby is three days (72 hours) of age or younger and has not been abused or neglected, the baby may be surrendered without fear of arrest or prosecution.

Every baby deserves a chance for a healthy life. If someone you know is considering abandoning a baby, let her know there are other options. For three days (72 hours) after birth, a baby can be surrendered to staff at any hospital or fire station in Los Angeles County.

How does it work?

A distressed parent who is unable or unwilling to care for a baby can legally, confidentially, and safely surrender a baby within three days (72 hours) of birth. The baby must be handed to an employee at a hospital or fire station in Los Angeles County. As long as the baby shows no sign of abuse or neglect, no name or other information is required. In case the parent changes his or her mind at a later date and wants the baby back, staff will use bracelets to help connect them to each other. One bracelet will be placed on the baby, and a matching bracelet will be given to the parent or other surrendering adult.

What if a parent wants the baby back?

Parents who change their minds can begin the process of reclaiming their baby within 14 days. These parents should call the Los Angeles County Department of Children and Family Services at 1-800-540-4088.

Can only a parent bring in the baby?

No. While in most cases a parent will bring in the baby, the Law allows other people to bring in the baby if they have legal custody.

Does the parent or surrendering adult have to call before bringing in the baby?

No. A parent or surrendering adult can bring in a baby anytime, 24 hours a day, 7 days a week, as long as the parent or surrendering adult surrenders the baby to someone who works at the hospital or fire station.

Does the parent or surrendering adult have to tell anything to the people taking the baby?

No. However, hospital or fire station personnel will ask the surrendering party to fill out a questionnaire designed to gather important medical history information, which is very useful in caring for the baby. The questionnaire includes a stamped return envelope and can be sent in at a later time.

What happens to the baby?

The baby will be examined and given medical treatment. Upon release from the hospital, social workers immediately place the baby in a safe and loving home and begin the adoption process.

What happens to the parent or surrendering adult?

Once the parent or surrendering adult surrenders the baby to hospital or fire station personnel, they may leave at any time.

Why is California doing this?

The purpose of the Safely Surrendered Baby Law is to protect babies from being abandoned, hurt or killed by their parents. You may have heard tragic stories of babies left in dumpsters or public restrooms. Their parents may have been under severe emotional distress. The mothers may have hidden their pregnancies, fearful of what would happen if their families found out. Because they were afraid and had no one or nowhere to turn for help, they abandoned their babies. Abandoning a baby is illegal and places the baby in extreme danger. Too often, it results in the baby's death. The Safely Surrendered Baby Law prevents this tragedy from ever happening again in California.

A baby's story

Early in the morning on April 9, 2005, a healthy baby boy was safely surrendered to nurses at Harbor-UCLA Medical Center. The woman who brought the baby to the hospital identified herself as the baby's aunt and stated the baby's mother had asked her to bring the baby to the hospital on her behalf. The aunt was given a bracelet with a number matching the ankle placed on the baby; this would provide some identification in the event the mother changed her mind about surrendering the baby and wished to reclaim the baby in the 14-day period allowed by the Law. The aunt was also provided with a medical questionnaire and said she would have the mother complete and mail back in the stamped return envelope provided. The baby was examined by medical staff and pronounced healthy and full-term. He was placed with a loving family that had been approved to adopt him by the Department of Children and Family Services.



Ley de Entrega de Bebés *Sin Peligro*



Los recién nacidos pueden ser entregados en forma segura al personal de cualquier hospital o cuartel de bomberos del Condado de Los Ángeles

Sin pena. Sin culpa. Sin nombres.

En el Condado de Los Ángeles: 1-877-BABY SAFE • 1-877-222-9723

www.babysafela.org



En el Condado de Los Ángeles • 1-877-BABY SAFE • 1-877-222-8723

www.baby-safe.org

Ley de Entrega de Bebés Sin Peligro

¿Qué es la Ley de Entrega de Bebés sin Peligro?

La Ley de Entrega de Bebés sin Peligro de California permite la entrega confidencial de un recién nacido por parte de sus padres u otras personas con custodia legal, es decir cualquier persona a quien los padres le hayan dado permiso. Siempre que el bebé tenga tres días (72 horas) de vida o menos, y no haya sufrido abuso ni negligencia, pueden entregar al recién nacido sin temor de ser arrestados o procesados.

Cada recién nacido se merece la oportunidad de tener una vida saludable. Si alguien que usted conoce está pensando en abandonar a un recién nacido, infórmele que tiene otras opciones. Hasta tres días (72 horas) después del nacimiento, se puede entregar un recién nacido al personal de cualquier hospital o cuartel de bomberos del condado de Los Angeles.

¿Cómo funciona?

El padre/madre con dificultades que no pueda o no quiera cuidar de su recién nacido puede entregarlo en forma legal, confidencial y segura dentro de los tres días (72 horas) del nacimiento. El bebé debe ser entregado a un empleado de cualquier hospital o cuartel de bomberos del Condado de Los Angeles. Siempre que el bebé no presente signos de abuso o negligencia, no es necesario suministrar nombres ni información alguna. Si el padre/madre cambia de opinión posteriormente y desea recuperar a su bebé, los trabajadores utilizan bromuros para poder vincularlo. El bebé llevará un bromuro y el padre/madre o el adulto que lo entregó recibirá un bromuro igual.

¿Qué pasa si el padre/madre desea recuperar a su bebé?

Los padres que cambian de opinión pueden comenzar el proceso de reclutamiento recién nacido dentro de los 14 días. Estos padres deberán llamar al Departamento de Servicios para Niños y Familias (Department of Children and Family Services) del Condado de Los Angeles al 1-800-540-4008.

¿Sólo los padres podrán llevar al recién nacido?

No. Si bien en la mayoría de los casos son los padres los que llevan al bebé, la ley permite que otras personas lo hagan si tienen *custodia legal*.

¿Los padres o el adulto que entrega al bebé deben llamar antes de llevar al bebé?

No. El padre/madre o adulto puede llevar al bebé en cualquier momento, los 24 horas del día, los 7 días de la semana, siempre y cuando entreguen a su bebé a un empleado del hospital o cuartel de bomberos.

¿Es necesario que el padre/madre o adulto diga algo a las personas que reciben al bebé?

No. Sin embargo, el personal del hospital o cuartel de bomberos le pedirá a la persona que entregue al bebé que llene un cuestionario con la finalidad de acabar con los problemas médicos importantes, que resultan de gran utilidad para cuidar bien del bebé. El cuestionario incluye un sobre con el sello postal pagado para enviarlo en otro momento.

¿Qué pasará con el bebé?

El bebé será examinado y le brindarán atención médica. Cuando le den el alta del hospital, los trabajadores sociales inmediatamente ubicarán al bebé en un hogar seguro donde están bien atendido, y se comenzará el proceso de adopción.

¿Qué pasará con el padre/madre o adulto que entregó al bebé?

Una vez que los padres o adulto hayan entregado al bebé al personal del hospital o cuartel de bomberos, pueden irse en cualquier momento.

¿Por qué se está haciendo esto en California?

La finalidad de la Ley de Entrega de Bebés sin Peligro es proteger a los bebés para que no sean abandonados, lastimados o muertos por sus padres. Usted probablemente haya escuchado historias trágicas sobre bebés abandonados en las veredas o en basuras públicas. Los padres de esos bebés probablemente hayan estado pasando por dificultades emocionales graves. Las madres pueden haber ocultado su embarazo, por temor a lo que pasaría si sus familias se enteraran. Abandonaron a sus bebés porque sentían miedo y no tenían nadie a quien pedir ayuda. El abandono de un recién nacido es ilegal y pone al bebé en una situación de peligro extremo. Muy a menudo el abandono provoca la muerte del bebé. La Ley de Entrega de Bebés sin Peligro impide que vuelva a suceder esta tragedia en California.

Historia de un bebé

A la mañana temprano del día 9 de abril de 2005, se entregó un recién nacido saludable a las enfermeras del Harbor-UCLA Medical Center. La mujer que llevó el recién nacido al hospital se dio a conocer como la tía del bebé, y dijo que la madre lo había pedido que llevara al bebé al hospital en su nombre. Le entregaron a la tía un bromuro con un número que coincidía con la palabra del bebé, pero se volvió como identificación en caso de que la madre cambiara de opinión con respecto a la entrega del bebé y decidiera recuperarlo dentro del periodo de 14 días que permite esta ley. También le dieron a la tía un cuestionario médico, y ella dijo que la madre lo llamaría y lo recibiría de vuelta dentro del sobre con franqueo pagado que le habían dado. El personal médico examinó al bebé y se determinó que estaba saludable y a término. El bebé fue ubicado con una buena familia que ya había sido aprobada para adoptarlo por el Departamento de Servicios para Niños y Familias.



**CONTRACTOR'S OBLIGATIONS UNDER THE HEALTH INSURANCE
PORTABILITY AND ACCOUNTABILITY ACT OF 1996 (HIPAA)**

Under this Agreement, Contractor provides services ("Services") to County ("Covered Entity") and Contractor may receive, have access to, or create Protected Health Information in order to provide a portion of those Services. Covered Entity is subject to the Administrative Simplification requirements of the Health Insurance Portability and Accountability Act of 1996 (HIPAA) and regulations promulgated thereunder, including the Standards for Privacy of Individually Identifiable Health Information ("the Privacy Regulations") and the Health Insurance Reform: Security Standards ("the Security Regulations") at 45 Code of Federal Regulations Parts 160 and 164 ("together, the "Privacy and Security Regulations").

The Privacy and Security Regulations require Covered Entity to enter into a contract with Contractor in order to mandate certain protections for the privacy and security of Protected Health Information only for the portions of Services falling under the purview of the Privacy and Security Regulations, and those Regulations prohibit the disclosure to or use of Protected Health Information by Contractor if such a contract is not in place.

Therefore, only to the extent AT&T provides a service properly and reasonably falling under the purview of HIPAA, the parties agree as follows for the Services under the purview of HIPAA:

1.0 DEFINITIONS

- 1.1 "Disclose" and "Disclosure" means, with respect to Protected Health Information, the release, transfer, provision of access to, or divulging in any other manner of Protected Health Information outside Contractor's internal operations or to other than its employees.
- 1.2 "Electronic Media" has the same meaning as the term "electronic media" in 45 C.F.R. § 160.103. Electronic Media means (1) Electronic storage media including memory devices in computers (hard drives) and any removable/transportable digital memory medium, such as magnetic tape or disk, optical disk, or digital memory card; or (2) Transmission media used to exchange information already in electronic storage media. Transmission media include, for example, the internet (wide-open), extranet (using internet technology to link a business with information accessible only to collaborating parties), leased lines, dial-up lines, private networks, and the physical movement of removable/transportable electronic storage media. Certain transmissions, including of paper, via facsimile, and of voice, via telephone, are not considered to be transmissions via electronic media, because the information being exchanged did not exist in electronic form before the transmission.
- 1.3 "Electronic Protected Health Information" has the same meaning as the term "electronic protected health information" in 45 C.F.R. § 160.103. Electronic Protected Health Information means Protected Health Information that is (i) transmitted by electronic media; (ii) maintained in electronic media.
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- 1.4 “Individual” means the person who is the subject of Protected Health Information, and shall include a person who qualifies as a personal representative in accordance with 45 C.F.R. § 164.502(g).
- 1.5 “Protected Health Information” has the same meaning as the term “protected health information” in 45 C.F.R. § 164.503, limited to the information created or received by Contractor from or on behalf of Covered Entity. Protected Health Information includes information, whether oral or recorded in any form or medium, that (i) relates to the past, present, or future physical or mental health or condition of an Individual; the provision of health care to an Individual, or the past, present or future payment for the provision of health care to an Individual; (ii) identifies the Individual (or for which there is a reasonable basis for believing that the information can be used to identify the Individual); and (iii) is received by Contractor from or on behalf of Covered Entity, or is created by Contractor, or is made accessible to Contractor by Covered Entity. “Protected Health Information” includes Electronic Health Information.
- 1.6 “Required By Law” means a mandate contained in law that compels an entity to make a Use or Disclosure of Protected Health Information and that is enforceable in a court of law. Required by law includes, but is not limited to, court orders and court-ordered warrants; subpoenas or summons issued by a court, grand jury, a governmental or tribal inspector general, or any administrative body authorized to require the production of information; a civil or an authorized investigative demand; Medicare conditions of participation with respect to health care providers participating in the program; and statutes or regulations that require the production of information, including statutes or regulations that require such information if payment is sought under a government program providing benefits.
- 1.7 “Security Incident” means the attempted or successful unauthorized access, Use, Disclosure, modification, or destruction of information in, or interference with system operations of, an Information System which contains Electronic Protected Health Information. However, Security Incident does not include attempts to access an Information System when those attempts are not reasonably considered by Contractor to constitute an actual threat to the Information System.
- 1.8 “Services” has the same meaning as in the body of this Agreement.
- 1.9 “Use” or “Uses” mean, with respect to Protected Health Information, the sharing, employment, application, utilization, examination or analysis of such Information within Contractor’s internal operations.
- 1.10 Terms used, but not otherwise defined, in this Paragraph shall have the same meaning as those terms in the HIPAA Regulations.

2.0 OBLIGATIONS OF CONTRACTOR

2.1 Permitted Uses and Disclosures of Protected Health Information. Contractor:

- (a) shall Use and Disclose Protected Health Information as necessary to perform the Services, and as provided in Sub-sections 2.3, 2.4, 2.5, 2.6, 2.7, 2.8, 4.3 and 5.2 of this Agreement;
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- (b) shall Disclose Protected Health Information to Covered Entity upon request;
- (c) may, as necessary for the proper management and administration of its business or to carry out its legal responsibilities:
 - (i) Use Protected Health Information; and
 - (ii) Disclose Protected Health Information if the Disclosure is Required by Law.

Contractor shall not Use or Disclose Protected Health Information for any other purpose.

2.2 Adequate Safeguards for Protected Health Information. Contractor:

- (a) shall implement and maintain appropriate safeguards to prevent the Use or Disclosure of Protected Health Information in any manner other than as permitted by this Paragraph. Contractor agrees to limit the Use and Disclosure of Protected Health Information to the minimum necessary in accordance with the Privacy Regulation's minimum necessary standard.
- (b) effective as of April 20, 2005, specifically as to Electronic Health Information, shall implement and maintain administrative, physical, and technical safeguards that reasonably and appropriately protect the confidentiality, integrity, and availability of Electronic Protected Health Information.

2.3 Reporting Non-Permitted Use or Disclosure and Security Incidents. Contractor shall report to Covered Entity each Non-Permitted Use or Disclosure that is made by Contractor, its employees, representatives, agents or subcontractors, but is not specifically permitted by this Agreement, and effective as of April 20, 2005, shall report to Covered Entity each Security Incident of which Contractor becomes aware. The initial report shall be made by telephone call to the Covered Entity's HIPAA Privacy Officer within forty-eight (48) hours from the time the Contractor becomes aware of the Non-Permitted Use or Disclosure or Security Incident, followed by a full written report no later than ten (10) business days from the date the Contractor becomes aware of the non-permitted Use or Disclosure or Security Incident to the Chief Privacy Officer at:

Chief HIPAA Privacy Officer, County of Los Angeles
Kenneth Hahn Hall of Administration
500 West Temple St.
Suite 410
Los Angeles, CA 90012
(213) 974-2164

2.4 Mitigation of Harmful Effect. Contractor agrees to mitigate, to the extent practicable, any harmful effect that is known to Contractor of a Use or Disclosure of Protected Health Information by Contractor in violation of the requirements of this Paragraph.

- 2.5. Availability of Internal Practices, Books and Records to Government Agencies. Contractor agrees to make its internal practices, books and records relating to the Use and Disclosure of Protected Health Information available to the Secretary of the federal Department of Health and Human Services for purposes of determining Covered Entity's compliance with the Privacy and Security Regulations. Contractor shall immediately notify Covered Entity of any requests made by the Secretary and provide Covered Entity with copies of any documents produced in response to such request.
- 2.6 Access to Protected Health Information. Contractor shall, to the extent Covered Entity determines that any Protected Health Information constitutes a "designated record set" as defined by 45 C.F.R. § 164.501, make the Protected Health Information specified by Covered Entity available to the Individual(s) identified by Covered Entity as being entitled to access and copy that Protected Health Information. Contractor shall provide such access for inspection of that Protected Health Information within two (2) business days after receipt of request from Covered Entity. Contractor shall provide copies of that Protected Health Information within five (5) business days after receipt of request from Covered Entity.
- 2.7 Amendment of Protected Health Information. Contractor shall, to the extent Covered Entity determines that any Protected Health Information constitutes a "designated record set" as defined by 45 C.F.R. § 164.501, make any amendments to Protected Health Information that are requested by Covered Entity. Contractor shall make such amendment within ten (10) business days after receipt of request from Covered Entity in order for Covered Entity to meet the requirements under 45 C.F.R. § 164.526.
- 2.8 Accounting of Disclosures. Contractor agrees to maintain documentation of the information required to provide an accounting of Disclosures of Protected Health Information in accordance with 45 C.F.R. § 164.528, and to make this information available to Covered Entity upon Covered Entity's request, in order to allow Covered Entity to respond to an Individual's request for accounting of disclosures. However, Contractor is not required to provide an accounting of Disclosures that are necessary to perform its Services if such Disclosures are for either payment or health care operations purposes, or both. Additionally, such accounting is limited to disclosures that were made in the six (6) years prior to the request (not including disclosures that were made prior to the compliance date of the Privacy Rule, April 14, 2003) and shall be provided for as long as Contractor maintains the Protected Health Information.

Any accounting provided by Contractor under this Section 2.8 shall include: (a) the date of the Disclosure; (b) the name, and address if known, of the entity or person who received the Protected Health Information; (c) a brief description of the Protected Health Information disclosed; and (d) a brief statement of the purpose of the Disclosure. For each Disclosure that could require an accounting under this Sub-section 2.8, Contractor shall document the information specified in (a) through (d), above, and shall securely maintain the information for six (6) years from the date of the Disclosure. Contractor shall provide to Covered Entity, within ten (10) business days after receipt of request from Covered Entity, information collected in accordance with this Sub-section 2.8 to permit Covered Entity to respond to a request by an Individual for an accounting of disclosures of Protected Health Information in accordance with 45 C.F.R. § 164.528.

3.0 OBLIGATION OF COVERED ENTITY

3.1 Obligation of Covered Entity. Covered Entity shall notify Contractor of any current or future restrictions or limitations on the use of Protected Health Information that would affect Contractor's performance of the Services, and Contractor shall thereafter restrict or limit its own uses and disclosures accordingly.

4.0 TERM AND TERMINATION

4.1 Term. The term of this Paragraph shall be the same as the term of this Agreement. Contractor's obligations under Sections 2.1 (as modified by Section 4.2), 2.3, 2.4, 2.5, 2.6, 2.7, 2.8, 4.3 and 5.2 shall survive the termination or expiration of this Agreement.

4.2 Termination for Cause. In addition to and notwithstanding the termination provisions set forth in this Agreement, upon Covered Entity's knowledge of a material breach by Contractor, Covered Entity shall either:

- (a) Provide an opportunity for Contractor to cure the breach or end the violation, and terminate this Agreement if Contractor does not cure the breach or end the violation within the time specified by Covered Entity; or
- (b) Immediately terminate this Agreement if Contractor has breached a material term of this Paragraph and cure is not possible; or
- (c) If neither termination or cure are feasible, Covered Entity shall report the violation to the Secretary of the federal Department of Health and Human Services.

4.3 Disposition of Protected Health Information Upon Termination or Expiration

- (a) Except as provided in paragraph (b) of this section, upon termination for any reason or expiration of this Agreement, Contractor shall return or destroy all Protected Health Information received from Covered Entity, or created or received by Contractor on behalf of Covered Entity. This provision shall apply to Protected Health Information that is in the possession of subcontractors or agents of Contractor. Contractor shall retain no copies of the Protected Health Information.
- (b) In the event that Contractor determines that returning or destroying the Protected Health Information is infeasible, Contractor shall provide to Covered Entity notification of the conditions that make it infeasible. If return or destruction is infeasible, Contractor shall extend the protections of this Agreement to such Protected Health Information and limit further Uses and Disclosures of such Protected Health Information to those purposes that make the return or destruction infeasible, for so long as Contractor maintains such Protected Health Information.

5.0 MISCELLANEOUS

5.1 No Third Party Beneficiaries. Nothing in this Paragraph shall confer upon any person other than the parties and their respective successors or assigns, any rights, remedies, obligations, or liabilities whatsoever.

- 5.2 Use of Subcontractors and Agents. Contractor shall require each of its agents and subcontractors that receive Protected Health Information from Contractor, or create Protected Health Information for Contractor, on behalf of Covered Entity, to execute a written agreement obligating the agent or subcontractor to comply with all the terms of this Agreement.
- 5.3 Relationship to Agreement Provisions. In the event that a provision of this Paragraph is contrary to any other provision of this Agreement, the provision of this Paragraph shall control. Otherwise, this Paragraph shall be construed under, and in accordance, with the terms of the Agreement.
- 5.4 Regulatory References. A reference in this Paragraph to a section in the Privacy or Security Regulations means the section as in effect or as amended.
- 5.5 Interpretation. Any ambiguity in this Paragraph shall be resolved in favor of a meaning that permits Covered Entity to comply with the Privacy and Security Regulations.
- 5.6 Amendment. The parties agree to take such action as is necessary to amend this Paragraph from time to time as is necessary for Covered Entity to comply with the requirements of the Privacy and Security Regulations.

Effective: 4/30/05

CONTRACTOR'S LIST OF AFFILIATES

- Pacific Bell Telephone Company, d/b/a AT&T California
- Pacific Bell Information Services, d/b/a AT&T Messaging
- AT&T Corp
- AT&T Mobility LLC (AT&T Mobility) for AT&T Mobile SolutionsSM
- AT&T DataComm, Inc., d/b/a AT&T DataComm
- AT&T DataComm is a dba for Pacific Bell Telephone Company in California

SAMPLE CHANGE NOTICE

CHANGE NOTICE NO. XX PURSUANT TO
COUNTY OF LOS ANGELES AND SBC GLOBAL SERVICES, INC. dba AT&T GLOBAL SERVICES
TELECOMMUNICATIONS CARRIER SERVICES AGREEMENT

This Change Notice No. XX to the County of Los Angeles Telecommunications Carrier Services Agreement between Pacific Bell Telephone Company dba AT&T California and County of Los Angeles is between SBC Global Services, Inc. dba AT&T Global Services ("AT&T") and County of Los Angeles ("County").

WHEREAS, AT&T and County entered into the Agreement #72699 dated May 3, 2000 (the "Agreement"); and

WHEREAS, the parties desire to make certain additions and changes to the Agreement;

NOW, THEREFORE, the parties, intending to be legally bound, mutually agree that the Agreement is hereby modified as follows:

- 1. [Description of Service and Locations of Service ("Serving Arrangement")]
2. The term of the Serving Arrangement is XX months from [define starting point]. In the event the term length of this Serving Arrangement extends beyond the term length stated for Agreement #72699, County and Contractor agree that this Serving Arrangement shall continue for the full monthly term set forth above, and that the provisions of Agreement #72699 shall continue to specifically apply to and govern this Serving Arrangement (notwithstanding the more general expiration or termination of Agreement #72699). This Change Notice is limited solely and exclusively to the Serving Arrangement described above and is not to be used or interpreted by either Party as extending the application of Agreement #72699 to any other service or serving arrangement.
3. [Description of Pricing]

This Change Notice is incorporated by reference and is subject to the terms and conditions of the Agreement.

This Change Notice is effective upon execution by both parties and shall remain in full force and effect for the term of the Agreement. Except as modified by this Change Notice, all of the terms and conditions of the Agreement shall remain in full force and effect.

Pursuant to CPUC General Order 96-A, this Change Notice shall be filed, to the extent required by law, with the CPUC and shall at all times be subject to such changes or modifications as the CPUC may from time to time direct in the exercise of its jurisdiction.

IN WITNESS WHEREOF, the parties hereto have caused this Change Notice to be executed by their respective duly authorized representatives.

CONTRACTOR: SBC GLOBAL SERVICES, INC. dba AT&T GLOBAL SERVICES

AUTHORIZED BY COUNTY OF LOS ANGELES

By: _____

By: _____

Print Name: _____

Print Name: _____

Title: _____

Title: _____

Date Signed: _____

Date Signed: _____