Statement of Work

1.0 Scope. This Statement of Work (SOW) requires a Contractor to provide local exchange access services, analog and digital access transport services, and an inter/intra-Local Access Transport Area (LATA) interconnect functions. The Contractor shall provide all transmission facilities, equipment, materials, maintenance, test equipment, and design needed to perform and provide local access and transport services to designated demarcation point and destinations specified in Appendix 10. Access to the local exchange shall include operator assistance, directory assistance, and emergency E911 services. These services shall be limited to official Government services and shall not include any unofficial services such as residential or business services for non-Government entities or contractors.

2.0 Documents. The documents referenced in this SOW are intended to be commercial and industrial references for the purpose of developing a baseline of performance and some measure of quality for the local exchange access, data and transport services and functions. The contractor must obtain and follow all the latest revision(s) and/or addition(s) to the referenced documents and/or all other applicable regulations.

2.1 Competitive IntraLATA Technologies, Interface, and Services Reference Manuals. Copies of the documents listed under Paragraph 2.1 and supplemental paragraphs may be purchased from Ericsson at the following website https://telecom-info.njdepot.ericsson.net/site-cgi/ido/docs2.pl?ID=&page=home .

2.1.1 Functional Requirements (Common Sections)

SR-3065 LSSGR Guide
GR-505 Call Processing
GR-1364 Switch Processing Time GRs, Section 5.6
GR-506 Signaling for Analog Interfaces
GR-606 Common Channel Signaling
GR-317 Switching System GRs for Call Control Using ISDN User Part (ISDNUP)
GR-507 Transmission
GR-508 Automatic Message Accounting (AMA)
GR-2932 Database Functionalities
GR-478 Measurements and Data Generation
GR-2963 OTGR Sec 2.2 Network Element Configuration Mgmt - Software Mgmt
GR-510 System Interfaces
GR-782 SONET Digital Switch Trunk Interface Criteria
GR-518 Synchronization
GR-511 Service Standards
GR-512 Reliability
GR-513 Power
GR-63 NEBS Requirements: Physical Protection
GR-1089 Electromagnetic Compatibility and Electrical Safety - Generic Criteria for Network Telecommunications Equipment
GR-477 Network Traffic Management
GR-517 Traffic Capacity and Environment
GR-815 GRs for Network Element/Network System (NE/Ns) Security
GR-454 Generic Requirements for Supplier-Provided Documentation
GR-839 Generic Requirements for Supplier-Provided Training
GR-840 Supplier Support Generic Requirements
GR-540 Tandem Supplement

2.1.2 Residence and Business Customer Features (FSD 00 and 01 Series)

GR-520 Features Common to Residence and Business Customers I
GR-219 CLASS Feature: Distinctive Ringing/Call Waiting
GR-560 Individual Line

GR-561 Two-Party Line
GR-562 Manual Line Features
GR-563 Denied Termination
GR-564 Code Restriction and Diversion
GR-565 Voice/Data Protection
GR-218 CLASS Feature: Selective Call Rejection
GR-568 Series Completion
GR-569 Multiline Hunt Service
GR-31 CLASS Feature: Calling Number Delivery
GR-216 CLASS Feature: Customer Originated Trace
GR-391 CLASS Feature: Calling Identity Delivery Blocking Features
GR-567 CLASS Feature: Anonymous Call Rejection
GR-1188 CLASS Feature: Calling Name Delivery Generic Requirements
GR-575 CLASS Feature: Calling Identity Delivery on Call Waiting
GR-570 Speed Calling
GR-571 Call Waiting
GR-572 Cancel Call Waiting
GR-573 Business Group Call Waiting
GR-416 CLASS Feature: Call Waiting Deluxe
GR-1517 CLASS Feature: Outside Calling Area Alerting
GR-574 Business Group Automatic Callback
GR-215 CLASS Feature: Automatic Callback
GR-2948 Prompted Automatic Callback
GR-227 CLASS Feature: Automatic Recall
GR-577 Three-Way Calling
GR-578 Usage-Sensitive Three-Way Calling
GR-579 Add-On Transfer and Conference Calling Features
GR-580 Call Forwarding Variable
GR-581 Remote Call Forwarding
GR-217 CLASS Feature: Selective Call Forwarding
GR-586 Call Forwarding Subfeatures
GR-588 Customer Premises Message Registers
GR-1401 Visual Message Waiting Indicator Generic Requirements
GR-1512 Call Screening
GR-3006 Class Feature: Audible Voice Identity Delivery
GR-1520 Ring Control
GR-2913 Generic Requirements for Call Park
GR-590 Call Pickup Features

2.1.3 Private Facility Features (FSD 02 Series)

GR-600 Private Facility Access
GR-601 Outward Wide Area Telecommunications Service
GR-602 Customer Control
GR-603 Outgoing Facility Group Queuing
GR-604 Automatic Flexible Routing
GR-605 Auth. Codes for AFR & Account Codes for Basic Business Group & AFR
GR-610 Message Detail Recording (MDR)
GR-615 GRs for Message Detail Recording (MDR) Access Interfaces
GR-621 Traffic Data Provision Features
GR-32 CLASS Feature: Bulk Calling Line Identification

2.1.4 Customer Access Interfaces (FSD 04 and 05 Series)

GR-524 Attendant & Customer Switching System Features & Customer Interface
GR-30 Voiceband Data Transmission Interface

GR-1273 ADSI SPCS/Server Generic Requirements
GR-1193 GRs for a Dedicated Data Link Interface bet.an End Office SPCS and CPE
GR-283 Simplified Message Desk Interface (SMDI)

2.1.5 Public Telecommunications Features (FSD 10 Series)

GR-528 Public Telecommunications Service

2.1.6 Public Safety Features (FSD 15 Series)

GR-529 Public Safety
GR-2931 High Probability of Completion Network Capability
GR-2973 Lawful Access Feature: Switching Generic Requirements

2.1.7 Loop Capabilities (FSD 20-02 Series)

GR-666 Universal Pair Gain Systems
GR-672 Bridge Services on an IDLC System

2.1.8 Tone and Announcement Systems (FSD 20-06 Series)

GR-674 Special Information Tones
GR-675 Expanded Announcement System

2.1.9 Reverting Call Service (FSD 20-10 Series)

GR-677 Reverting Service

2.1.10 Nail-Up Circuits (FSD 20-16 Series)

GR-679 Nail-Up of Non-Switched Circuits on a Local Switch

2.1.11 Local Exchange Access Interfaces (FSD 20-24 Series)

GR-690 Exchange Access Interconnection
GR-691 Facility/Service Selective Dialing Switching and Signaling Requirements
GR-692 Exchange Access Operator Services System Signaling
GR-693 Presubscription Indication
GR-695 Integrated Multiple Access Switched Services
GR-697 Feature Group A
GR-698 Feature Group B

2.1.12 Interoffice Features (FSD 25 Series)

GR-1083 Generic Requirements for Exchange Access AMA
GR-1504 Generic Requirements for Wireless Service Provider AMA
GR-394 Switching System GRs for ICI Using The ISDN User Part (ISDNUP)
GR-531 Interoffice

2.1.13 Call Processing Features (FSD 30 Series)

GR-532 Call Processing Features
GR-220 CLASS Feature: Screening List Editing
GR-1436 CLASS Feature: Visual Screening List Editing
GR-1251 CLASS Feature: Numbering Plan Area Split Management

GR-2857 RTPFR: Generic Requirements for the Signaling System 7 (SS7) Release to Pivot (RTP) Phase I Network Capability
GR-2970 Service Provider Identification Capability Specification

2.1.14 Database Services (FSD 31 Series)

GR-533 Database Services - Service Switching Points

2.1.15 Data Services (FSD 32 Series)

GR-534 Public Switched Digital Service

2.1.16 Test Arrangements (FSD 40 Series)

GR-536 Trunk, Line, and Special Service Circuit Test

2.1.17 Administration Features (FSD 45 Series)

GR-730 Provisioning-Driven Memory Administration (PDMA)
GR-738 Local Point-to-Point Data Collection
TR-740 Stored Program Control System/Operations System (SPCS/OS) - Network Data Collection Operations System (NDC OS) Interface
GR-741 Network Administration Center (NAC) Input/Output (I/O) Channel
GR-745 Service Specific Call Gapping
TR-746 Stored Program Control System/Operations System (SPCS/OS) - Network Traffic Management Operations System (NTM OS) Interface via a Network Data Collection Operations System (NDC OS)
GR-747 An Alternative Implementation of an SPCS to NTM OS Interface via an NDC OS

2.1.18 Other LSSGR References.

TR-NWT-000682	Automatic Number Identification (ANI) and Operator Number Identification (ONI) FSD 20-20-000
TR-TSY-000685	Flexible ANI Information Digit Assignment FSD 20-20-0100
GR-853	ISDN Call Forwarding
TR-TSY-000854	ISDN Call Pickup
TR-TSY-000855	ISDN Automatic Callback
TR-TSY-000859	ISDN Multiline Hunt Group
TR-TSY-00060	ISDN Calling Number Identification (CNI) Services
GR-1188	ISDN Call Name Delivery
TR-NWT-00119	ISDN Automatic Recall
GR-1242	ISDN Selective Call Rejection
GR-1326	ISDN Calling Name Identification
TR-NWT-001187	ISDN Calling Number Identification Services for PRI
GR-1367-CORE	ISDN Calling Name Identification for PRI
TR-NWT-000335	Voice Grade Special Access Service Transmission Parameter Limits and Interface Combinations offers by LEC to Customer
GR-303	Integrated Digital Loop Carrier Generic Requirements, Objectives, and Interface
GR-268	ISDN Access Call Control Switching And Signaling Requirements
TA-TSY-000041	Characterization of Subscriber Loop for Voice and ISDN Services
TR-NWT-000393	Generic Requirements for ISDN Basic Access Digital Subscriber Lines
TR-NWT-000397	ISDN Basic Access Transport System Requirement
TR-TSY-000752	ISDN Primary Rate Access Transport System
GR-253	Synchronous Optical Network (SONET) Transport Systems:

	Common Generic Criteria
GR-496	SONET Add-Drop Multiplex Equipment
GR-2842	ATM Service Access Multiplexer Generic Requirements
TR-TSY-000009	Asynchronous Digital Multiplexes, Requirements and Objectives

2.1.19 Other Reference Manuals.

ANSI T1X1.590-113, Synchronous Optical Network (SONET): Operations, Administration, Maintenance, and Provisioning.

ANSI T1.105-1991, Digital Hierarchy - Optical Interface Rates and Format Specifications.

ANSI T1.P64-199x and T1P1.3/92-002R2, Digital Processing of Video Signals - Video Coder/Decoder for Audiovisual Services at 56 to 1536 Kbps, T1/LB-255, T1Y1/90-077.

BELLCORE TR-TSY-000020, General requirements for Optical Fiber and Optical Fiber Cable, Issue 9.

BELLCORE GR-2845-CORE, Issue 1, Generic Requirements for ATM Network and Element Management Layers.

BELLCORE GR-1111-CORE, Issue 1, B-ISDN Access Signaling Generic Requirements.
BELLCORE GR-1113-CORE, Issue 1, ATM and ATM Adapter Layer (AAL) Protocols.
BELLCORE GR-1118-CORE, Issue 1, Broadband Interswitching System Interface Generic Requirements.
BELLCORE TR-NWT-001112, Broadband ISDN User to Network Interface and Network Node Interface Physical Layer Generic Criteria.

2.1.20 Safety and Health Standards. The OSHA documents may be obtained from the Superintendent of Documents, US Government Printing Office, Washington DC, 20402. ANSI and NFPA documents may be obtained from the National Fire Protection Association, Batterymarch Park, Quincy, MA 02269.

OSHA CFR 29 Part 1910	Occupational Safety and Health Standards
OSHA CFR 29 Part 1910.120	Hazardous Waste Operation & Emergency Response
OSHA CFR 29 Part 1910.146	Confined Spaces
OSHA CFR 29 Part 1910.268	Telecommunication
OSHA CFR 29 Part 1910.1001	Asbestos, Tremolite, Anthophyllite and Actinolite (Labor)
OSHA CFR 29 Part 1910.1200	Hazard Communication
OSHA CFR 29 Part 1926, Subpart P (650,651 & 652	Excavation
OSHA CFR 29 Part 1926.58	Asbestos, Tremolite, Anthopyllite, & Actinolite (Construction)
ANSI C2	National Electric Safety Code (NESC)
NFPA 70	National Electrical Code (NEC)

EPA CFR Parts 261, 262, & 263	Hazardous Waste Generation & Transportation
EPA Clean Air Act	
National Environmental Protection Act, Title 40	Code of Federal Regulations Parts 1500 -1508
DODI 5000-2, Part 6	System Safety, Health Hazards & Environment Impact

3.0 Requirements.

a. Appendix 10 identifies all services required, including characteristics, quantities and locations.

b. The Contracting Officer's Representative (COR) is responsible for monitoring and accepting all services identified in Appendix 10. The Contractor shall coordinate with the COR before installing, removing or changing equipment.

c. The Government will provide rack space and electrical power for the installation of the Contractor's transmission equipment. This rack space will be limited to two relay racks, 19 to 23 inches wide by 7 to 9 feet tall, if ceiling height permits at the designated demarcation. If additional rack space is required to support future Government requirements, the Contractor shall coordinate with the COR to determine if space is available.

d. The Contractor's equipment shall be upgradeable or expandable to support changes in service requirements. To meet expansion requirements, the Contractor's equipment shall be modularly expandable or reducible to permit growth or to migrate to higher or lower order services without requiring forklift upgrades.

3.1 Local Commercial Communications Services.

3.1.1 Installation and Cutover. The Contractor shall provide the Contracting Officer (KO) with an installation and cutover plan on the first day of the cut-over performance period (CLIN 0001). The Contractor shall not commence on-site installation and cutover until the Contractor receives notice that the Government has accepted the service installation and cutover plan. Installation and cutover shall be completed no later than 120 calendar days after Government acceptance of the cut-over plan. ***The Contractor will be responsible for issuing disconnect orders to the incumbent provider after successful activation and testing of each circuit***.

3.1.2 Commercial Subscriber Lines & Exchange Access Trunks. Local exchange access, as applicable shall include commercial subscriber lines and off premise extensions, CENTREX, exchange access trunks and transport services.

3.1.2.1 Commercial Subscriber Lines. The Contractor shall provide subscriber lines as specified in Appendix 10. Local exchange access, as applicable, shall include commercial subscriber lines and foreign exchange lines.

3.1.2.2 Commercial Subscriber Line Basic Services. Basic services of a line, as a minimum, shall include the following:

- dial tone
- direct inward dialing
- direct outward dialing
- Dual Tone Multi-Frequency (DTMF) capability for local exchange and long distance access
- equal access
- call blocking for Numbering Area Plan (NPA) 900 and NPA 976
- Block Operator Assistance (0+ & 00+)
- E911/911 services in all cases and 311 services where available

- non-published directory number
- service disconnect with referral service of at least three (3) months after a customer's number has been changed or disconnected
- block Directory Assistance Call Completion (DACC) and Directory Assistance.
- block third-party billing
- block 10-10 dialing
- block Collect Calls
- block Automatic Call Return Feature

3.1.2.3 Commercial Subscriber Line Additional Features. The Contractor shall make available to commercial subscribers additional line features as specified in Appendix 10. An additional feature may be an individual feature or a group of features.

3.1.2.4 CENTREX Features. CENTREX Basic Feature Package (CBFP) shall be as specified in Appendix 10. Minimum Centrex backups must be maintained for emergency E911 services to Defense Emergency Services (DES).

3.1.2.5 Subscriber Line Relocation. The Government will perform subscriber line relocation unless otherwise specified in the SOW. The Contractor shall perform database updates for address changes for emergency E911 service purposes when required by the SOW.

3.1.2.6 Exchange Access Trunks. The Contractor shall provide local exchange access service circuits for local trunks as specified in Appendix 10.

3.1.2.7 Exchange Access Trunks Basic Services. Basic services of an (local or foreign exchange) access trunk, as a minimum, shall include the following, as applicable:

- direct inward dialing
- direct outward dialing
- two-way dialing
- channelization of digital trunks (as specified by work order)
- trunk busy tones
- DTMF MF 2/6 and dial pulse address signaling
- access services
- block DACC
- trunk and/or trunk group establishment
- automatic trunk member selection (sequential, linear, most idle, etc.)
- automatic trunk group alternate route selection
- block third-party billing
- Access to 1-800 calling
- Access to Government Emergency Telephone System (GETS)
- Caller ID

3.1.3 Transport Services. The Contractor shall provide local exchange transport channel services as specified in Appendix 10. Local transport channel services include transport channel termination and transmission support, as applicable, for analog lines, ISDN lines, alarm circuits, data circuits up to 64 Kbps or aggregate N x 64 Kbps, Primary Rate ISDN, Broadband-ISDN, High Capacity Data Subscriber Line (HDSL), Digital Signal level 1 (DS-1), DS-3, Optical Carrier Signal level 1 (OC-1), OC-3, and may be expanded to OC-12, and OC-48.

3.1.4 Circuit Termination. Circuit termination at the Government installation includes the Main Distribution Frame (MDF) for analog signals and metallic cable pairs, DSX-1 patch and cross connect panel for T-1 circuits, DSX-3 for electrical T-3 circuits, fiber optic patch and cross connect panels for optical interface equipment such as the optical carrier or SONET systems, optical multiplexer equipment, and Cat 3/5 RJ-45 jack fields. Other wall-

mounted, punch-down, terminal blocks are used for isolation and termination of Contractor metallic facilities. The Contractor shall ensure that all circuits are clearly tagged in a permanent manner with the circuit identification number or telephone number assigned to the circuit, and the work order number.

3.1.4.1 Analog and Low Data Rates. The Contractor shall terminate the analog and lower rate data circuits to the Contractor's terminal blocks. The Government shall provide space for installation of Contractor's blocks. All outside plant copper cables entering the demarcation location must be electrically protected (grounded, terminated on protector modules, etc.).

3.1.4.2 High Data Rates. The Contractor shall properly terminate digital circuits to the Contractor provided DSX-1, DSX-3, or fiber optic patch panel.

3.1.4.3 Circuit Testing. The Contractor shall test circuits after installation and provide test results to the COR in writing. The Contractor shall document the circuit characteristics in the Customer Service Records.

3.1.5 Local Exchange Access and Service Areas. The Contractor shall provide local services for both subscriber lines and trunks within the local calling areas. The local access service areas shall, as a minimum, include the areas/zones coverage as currently defined by the local service provider(s) and/or the applicable State Public Utilities Commission (PUC). The local and foreign exchange access service areas shall be, as a minimum, bounded by geographic city areas/zones and/or surrounding areas. The access areas shall not be limited by prefixes that may change. The local service areas/zones/boundaries shall not be reduced. If the contractor determines that the local/foreign exchange access service areas are different than defined, the Contractor shall coordinate with the COR and the KO for approval. When the Contractor provides services to a Government installation, the LATA boundary shall not be limited or restricted to a Contractor's service area. Connection to intra-LATA exchange areas and with inter-LATA exchange carriers is an essential part of the local exchange access.

3.1.5.1 Long-Distance Access/Service. The contractor shall designate the primary interchange carrier (PIC) for all long-distance in accordance with the Letter of Agency (LOA) issued by the Contracting Officer as either NETWORX or the current long-distance provider for the Department of Defense as determined by DISA.

3.1.6 Number Portability. The Contractor shall provide number portability for commercial subscriber lines and local exchange direct-in-dial (DID) directory numbers. The consistent use of the same prefix exchange and directory numbers provides the Government installation with its commercial identity. The Contractor shall provide an additional block of DID directory numbers within the existing assigned NXX prefix exchanges to the installation until exhausted. The Government installation is also serviced by other Government switched networks, FTS 2001 and the Defense Switched Network (DSN). These networks provide DID trunks and are directly dependent on the mutually assigned DID numbers to terminate into stations on the installation. Local exchange number portability and DID number growth is a critical factor in the ability of a Government installation to support its personnel and its missions. The Contractor shall comply with the Federal Communications Commission (FCC) and the State Public Utility Commission (PUC) mandates for number portability.

3.1.7 Demarcation. The Government will designate the demarcation point (location) for Contractor equipment installation and termination of transport facilities. The typical location of the primary demarcation point is the Government Dial Central Office (DCO).

3.1.7.1 Circuit Extension. The Government may extend a service or circuit beyond the established demarcation to a Government termination point. When local exchange access requirements indicate the Contractor requires circuit extension, the Contractor shall provide circuit extension through circuit termination and/or Contractor owned/leased transport cable.

3.1.7.2 Government Cable. When Government cable is available, the Contractor shall provide circuit termination for a circuit extension. Circuit termination shall include transmission equipment, termination hardware, and circuit conditioning equipment required to extend a circuit to a user location.

3.1.7.3 Contractor Owned/Leased Transport Cable. When Government cable is not available, the Contractor shall provide the circuit transport.

3.1.8 Contractor Equipment and Cable Installation. The Contractor shall provide and install all transmission equipment and cables to provide services to the demarcations. The Contractor shall coordinate with the COR for equipment and cable installation. The Contractor shall install equipment and cables in accordance with all applicable safety codes. The Contractor shall be responsible for wiring and connecting to Government power connection points, ground master connection points, and termination frames for terminal blocks.

3.1.9 Restoration of Service and Maintenance. The Contractor shall provide a point of contact (POC) for the Government to report all service outages. The POC shall be available 24 hours a day, 7 days per week. The Government will classify outages as either "Catastrophic," "Emergency," "Serious," or "Routine," depending on the impact on Government services. The COR will notify the Contractor of the classification when reporting the outage. The Contractor shall respond to and correct service outages within the time limits specified. If the Contractor determines the restoration time frames cannot be met, the Contractor shall immediately notify the COR. The Contractor shall respond to the Government within one (1) hour of notification.

3.1.9.1 Catastrophic Outage. Restore service within four (4) hours from the time the Contractor responds to the Government's notification.

3.1.9.2 Emergency Outage. Restore service within eight (8) hours from the time the Contractor responds to the Government's notification.

3.1.9.3 Serious Outage. Restore service within twenty-four (24) hours from the time the Contractor responds to the Government's notification.

3.1.9.4 Routine Outage. Restore service within two (2) calendar days from the time the Contractor responds to the Government's notification.

3.1.10 Diversity/Diverse Routing. The Contractor shall provide diversity for local communications services as required in the Appendix 10. Diversity is primarily considered to be designed redundant paths, rings, etc., along with the electronic systems in the path that permit transport channels to reach their destination demarcation point in the local exchange without interruption in the event of the failure of one path.

3.1.11 Operator Assistance. The Contractor shall provide operator assistance for local exchange and access services, including, as a minimum but not limited to, subscriber line verification, barge-in, call extension, and assistance with other exchange access functions.

3.1.13 E911/311 Services. The Contractor shall provide access to enhanced 911 services, if available, through the local emergency services organization, to include transmission of all 911 and E911 ANI/ALI information to the applicable PSAP. The contractor shall update the Master Street Address Guide (MSAG) with updates provided periodically by the Government. All outgoing city trunks must provide Automatic Number Identification (ANI) of the caller to the local city enhanced 911 network in the proper format to enable Automatic Location Identification (ALI) to be properly retrieved by the primary and back-up enhanced 911 Public Safety Answering Points (PSAPs). Emergency service assistance shall be provided for the hearing impaired. The Contractor shall provide access to 911 or enhanced 911 services, where available, through the local city or county emergency services organization

3.2 Future Services. The Contractor shall provide future services as required by Appendix 10. After acceptance of a contract modification, the Contractor shall complete the installation or disconnection of services within the time frames defined below.

3.2.1 Emergency Services. The time frame is one calendar day.

3.2.2 Priority Services. The time frame is five calendar days.

3.2.3 Routine Services. The time frame is 10 calendar days.

3.2.4 Traffic Analysis. The Contractor shall perform traffic measurement and traffic analysis as required.

3.3 Customer and Communications Service Records. The Contractor shall be responsible for creating and updating the local service records. The local service records shall include customer service records and communications service records and shall be provided to the COR and/or the Contracting Officer upon request. The Contractor shall update Customer and Communications service records not later than 10 working days after a service has been activated or deactivated.

3.4 Contract Management.

3.4.1 Meetings. The Contractor's project manager shall be available Monday to Friday, between 7:00 a.m. to 5:00 p.m. local time, to meet the COR on-site for technical interchange discussions. The Contractor's project manager shall have full authority to effect service changes requested by the Government.

3.4.2 Support. The Contractor shall assist the COR with testing and implementation of a new service circuit or expansion to existing circuits. The Contractor shall cooperate with the COR or other vendors that may be interconnecting with other related services. When expansion services entail Contractor support that requires additional equipment or testing to activate a circuit, the Contractor shall develop the installation and activation plans with the COR.

3.4.3 Point-of-Contact. The Contractor shall provide a 24-hour point-of-contact telephone number for the notification of telephone/circuit outages and services prior to service cutover.

3.5 Regulations and Policies. The Contractor shall follow all base regulations and policies regarding security, safety, and environmental, and federal, state and local regulations, as applicable.

3.5.1 Safety Training and Education. The Contractor must have a safety and health plan for the employees that complies with all applicable Federal, State, local and Army requirements.

3.5.2 Safety and Health. The Contractor shall meet with civil engineering, safety and bioenvironmental personnel before beginning work surveys in areas that may contain asbestos and/or other hazardous materials or may result in hazardous wastes. The Contractor shall follow Army procedures as outlined by personnel in these offices, including procedures for disposal of residue hazardous materials and empty hazardous materials containers.

3.5.3 Hazardous Material Reporting on Federal Installations. The Contractor is required to provide Material Safety Data Sheets (MSDS) on each hazardous material/compound that will be used in performing this contract. The Contractor will provide the MSDS to the federal facilities Environmental Management Office for approval before using any hazardous materials (paints, solvents, cleaners, encapsulating compounds, etc.). Hazardous materials are not permitted on any federal facility until the local Environmental Management Office has approved their use. There are no exceptions to this requirement, and the Contractor shall ensure compliance whether the Contractor or a subcontractor performs the work.

3.5.4 Ozone Depletion. No ozone-depleting chemicals or compounds shall be used during the performance of work.

3.5.5 Work Clearance Request. The Contractor shall obtain clearance from the Directorate of Engineering and Housing (DEH) or the Department of Public Works (DPW) before trenching, digging, or modifying a facility. The Contractor shall ensure that all the following requirements are met. All open trenches and open holes must be properly protected by use of barricades and warning signs. Trenches, pits, and holes that employees have to enter must be protected from excavated materials or equipment that could fall or roll into the excavated area. Therefore, all excavated materials and equipment must be a minimum of two feet from the edge of the trench, pit, or hole. Shoring will not be required for trenches, pits and holes less than 5 feet deep. Exceptions will depend on the type of soil and the amount of rain in the area (Ref OSHA 1926 Appendix A to Subpart P, Soil Classification). Employee protection for working in a trench, pit, or hole can also be accomplished by sloping and/or benching (Ref OSHA 1926.652 for configurations). Excavations that are next to sidewalks and roadways shall be guarded by barricades with flashing lights. Excavations that go under sidewalks shall be guarded with handrails on both sides and supported to keep from collapsing. Excavations under roadways shall have support structures installed to support

the roadway. Support structures will be approved by DEH or DPW, as applicable. All excavated areas shall be back filled and/or restored to the original condition when the work has been completed. Confined spaces entry (i.e., entering manholes, tunnels, and unvented vaults) shall be coordinated with the local safety and health offices prior to entry. Confined spaces atmospheric testing shall be accomplished by testing oxygen levels, toxic levels, and combustible levels consistent with local base procedures for entering and working in confined spaces. If work is being performed in a confined space, then forced air ventilation is required. Under no circumstances shall the Contractor handle, transport, or dispose of hazardous waste materials. This is solely the facility owner's responsibility.

3.5.6 Accident/Incident Reporting and Investigation. The Contractor shall record and report to the COR all available facts relating to each instance of accidental damage to Government property or injury to either Contractor or Government personnel. The Contractor shall secure the accident scene and/or wreckage until released by the COR or contracting officer. The Contractor shall cooperate fully with any investigation and assist the investigators in any way necessary.

3.5.7 Section 508 Compliance. Services within the Statement of Work are exempt under FAR 39.204(d).

APPENDIX 10

REQUIRED SERVICES AT CUTOVER

10.0 Local services required are initial installation and cutover service requirements for the Government under the scope of this contract. The Contractor shall provide the following baseline of local commercial communications services for the Tooele Army Depot, UT at cutover. Centurylink is currently providing the local exchange access services. The Tooele Army Depot switching system is a Nortel SL-1, Meridian Option 81 with software version 25.30. The primary long distance carrier serving the Tooele AD is NETWORX under the DISA contract.

10.1 Direct-In-Dial (DID) Numbers

NPA-NXX-XXXX	DID Numbers
435-833-2000 through 4999	3,000
435-833-5000 through 5999	1,000
435-833-6000 through 6099	100
Total	**4,100**

10.2. Commercial Subscriber Lines (CSL)

#	NPA-NXX-XXXX	Type	Features	Demarcation
1	435-843-5471	Voice, loop start	Flat Rate	Desert Chemical Depot, Building 5010, Lat: 40°19'06.5"N, Long: 112°18'35.5"W
2	435-843-8670	Voice, loop start	Flat Rate	BLDG S10, West Headquarters Loop, Tooele AD, UT
3	435-843-8495	Voice, loop start	Flat Rate	BLDG 10, supports TEAD Fire Department, Building 8

10.3 Local Exchange Digital (ISDN PRI) Trunks. All B-Channels 2-way.

Circuit ID	D-Channel	B-Channel	Demarcation
101A T1ZF TOOLUTMADCO TOOLUTO1H01	1	23, Wink Start signaling, DTMF, W4, AMI, DG2	BLDG S10, West Headquarters Loop, Tooele AD, UT
102A T1ZF TOOLUTMADCO TOOLUTO1H01	1	23, Wink Start signaling, DTMF, W4, AMI, DG2	BLDG S10, West Headquarters Loop, Tooele AD, UT

10.4 Foreign Exchange (FX) Trunks. Not Applicable

10.5 Transport Channels. Not Applicable

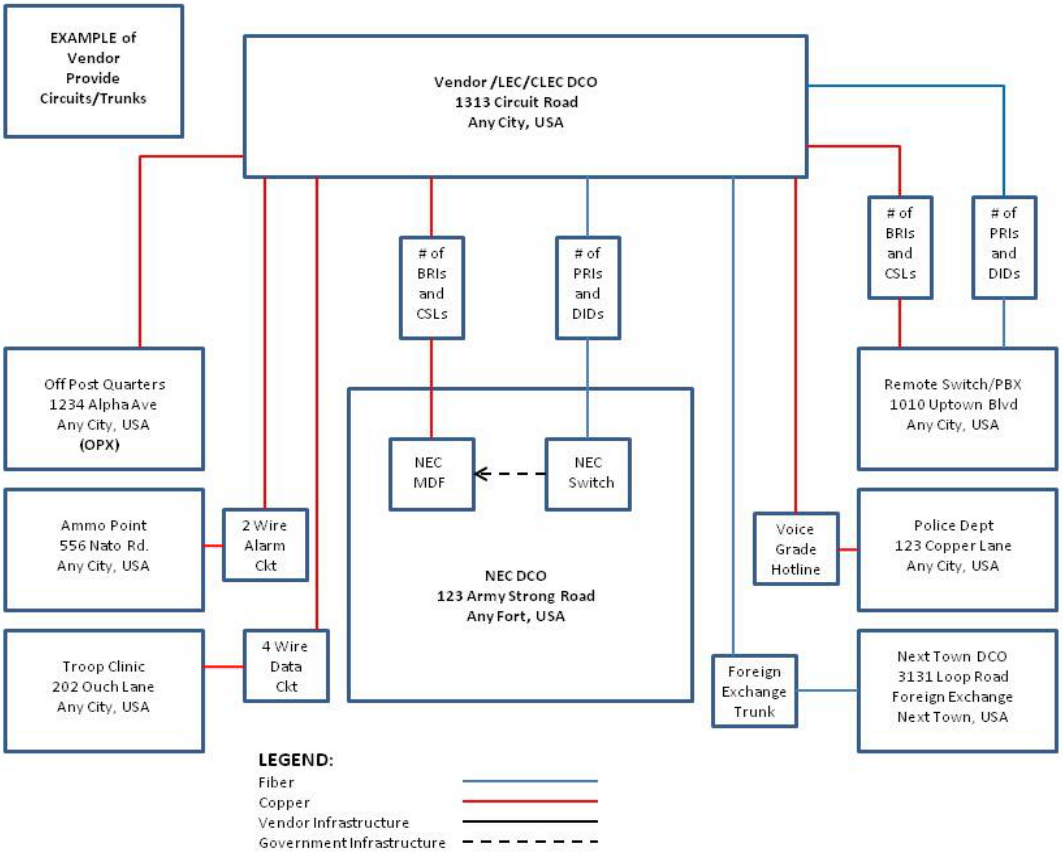
10.6 Data/Voice Point-to-Point Circuits.

#	Circuit ID/Name	Type	Rate (Mbp	A Location	Z Location
1	TBD	Ethernet	100	BLDG S10, West Headquarters Loop, Tooele AD, UT Lat/Long 40.503787, -112.347566	Tooele Army Depot South Area, Bldg 5010, Lat: 40°19'06.5"N, Long: 112°18'35.5"W
2	TBD	Ethernet	100	BLDG S10, West Headquarters Loop, Tooele AD, UT Lat/Long 40.503787, -112.347566	Tooele Army Depot South Area, Bldg 5010, Lat: 40°19'06.5"N, Long: 112°18'35.5"W
3	69.UGVV.000353 69.UGVV.000354	4 wire Analog leased line.		TAD-North: Bldg S10, 345 Lodestone Way, Tooele Army Depot, UT 84074	Wasatch Restoration Center (PacifiCorp) 3133 W 900 S, Salt Lake City, UT 84104

10.7 Diversity: Not applicable.

Appendix 20

Example Diagram of Network Connectivity.



APPENDIX 30

DEFINITIONS

This Appendix provides the basic definitions and service functions of local communications services under the scope of this contract. The Government requires the Contractor to abide by the performance level and functionality of the local exchange, access, and transport services defined by standard network levels for lines, trunks, and other circuits terminated to the site.

Availability. The amount of time transport services (e.g., trunks and lines) are available to users. The transport service could be a trunk, a point-to-point circuit, a high capacity transmission path, a packet switch, frame relay circuit, or cell transport system.

Customer Service Record. A written/printed document which provides the Government a record of detailed information for local communications circuits being provided by the Contractor.

Cutover. Physical activation of the initial or subsequent local communications service requirements as specified in the contract.

Demarcation. The location where the Contractor's responsibility ends and the Government's responsibility begins. A position or location intended to provide a physical termination of a transmission facility. The demarcation typically is designated to be a patch and cross connect panel (e.g., DSX, fiber patch panel, Cat 3/5 panel) or a terminal block (e.g., split 66 type connector block, 110 type terminal block, distribution wire wrap terminal block). The demarcation serves to designate the responsibility limit for a transmission system or circuit beyond which maintenance or activation becomes the responsibility of another service or transmission carrier. Typical demarcations are as follows:

- Analog DS-0 - Terminal block on wall mounted block or distribution frame.
- DS-1 - DSX cross connect panel.
- Category 3/5 - RJ-45 jack panels.
- DS-3 - Coax cross connect panel.
- OC-1, OC-3, OC-12, … - Fiber optic patch panel.

Dial Central Office. The facility where the switching system for phone calls is performed. The telephone exchange on a Government installation regardless of the size of the switching system. These switching systems are Private Automatic Branch Exchanges **(**PABXs) including AT&T System 75, G1, G3, 85, G2, Nortel Meridian SL-1, SL-100, NEC 1200, 2400, Mitel 2000, etc. with various line and trunk sizes and configurations. Some of these PABXs function as end offices, or are capable of sophisticated routing and trunking when properly equipped.

Diversity (Diverse Routing). A transmission facility path which provides alternate or backup routing and physically separated transmission paths from the primary path.

Downtime. The total time that communications service is unavailable to the customer due to equipment failure or interruption of service.

Features. Provides, as a minimum but not limited to, the following common optional features for a subscriber line:

- **Access Restrictions**. Limits a user's access to the exchange network, private network, and certain services and features.

- **Autodial**. Allows users to dial a number by pressing a single key.

- **Automatic Call Back/Camp On**. A station user may be able to camp-on the call when reaching a busy condition. Automatic call back will notify the originating station when that busy circuit becomes available. At a moment that both stations are idle, the switch will call the originating station. After the originating station answers, the switch will call the distant end station.

- **Automatic Call Distribution (ACD)**. ACD is used when a large volume of incoming calls are answered by a group of ACD assigned telephones. Incoming calls are distributed equally, on a first-in, first-out basis, among ACD agents within an ACD group.

- **Collect Call, Blocking**. Incoming calls (to a commercial subscriber line or an exchange access trunk handled with operator assistance) from a caller desiring to bill long distance charges against the called parties directory number. This service is requested to be blocked at the local exchange (regional) operator or exchange switching features to prevent billing at the called party directory number.

- **Call Forward**. Allows incoming calls to be automatically forwarded to another station number. Call forward shall be able to forward all calls, when busy, or when no answer.

- **Call Forward All Calls.** Automatically forwards incoming calls to another station. Outgoing calls can still be placed from the telephone when call forward is active.

- **Call Forward Busy**. When the number is busy, automatically routes incoming calls to another station number.

- **Call Forward No Answer**. Automatically forwards unanswered calls (within a specified number of rings) to another station.

- **Call Hold**. Enables a station to set the call into a holding condition completely freezing that station to place a call, receive a call, and/or use other services.

- **Call Park**. Allows a party to place a call in a parked state (similar to hold), where it can be retrieved from any station by dialing a retrieval code.

- **Call Pickup**. Allows a party to pick up another station's ringing telephone within a call pickup group or in another call pickup group.

- **Call Transfer**. Allows a station user to transfer an incoming call to another directory number.

- **Call Waiting**. A busy station user receives a call waiting tone when an incoming call is encountered. A station user may then place the existing caller on hold, then alternate between callers or abandon one of the calls.

- **Caller ID/Name and Number Display**. Displays the calling/called name and directory number, which is associated with its directory number, on the station's LCD.

- **Dial Intercom**. Allows an arrangement station into separate Dial Intercom Groups. An intercom can be activated by entering a digit code or pressing an intercom button.

- **Hunting**. Allows calls encountering a busy directory number to automatically route to an idle directory number in a prearranged rotary, circular or linear hunting group.

- **Last Number Redial**. Allows the last number dialed by a user to be automatically stored. The stored number can be redialed by pressing a single key.

- **Remote Call Forwarding**. Allows a station user to program call forward from a remote telephone.

- **Speed calling**. Allows a station user to place calls by entering the speed call digit code or pressing the programmed speed call button of a previously designated electronic group list for frequently dialed numbers.

- **Third Number Billing, Blocking**. Billing long distance charges against a third party directory number (different from the called parties directory number). Blocking prevents a caller from using the "third party" directory number from being used for billing.

- **Three Way Calling**. Allows a station user to conference with two other stations.

- **Toll Restriction**. Restricts the station user from placing long distance calls.

- **Voice Mail**. Allows an incoming call to be automatically forwarded to the users' voice mail box at a Contractor's message center when there is no answer. The user is given a burst of warning/ringing tones or some source of messaging/greeting for message waiting indication when off-hook. The voice mail feature shall be able to allow a station user access to a user's voice mail box for retrieving, changing, deleting, or editing the messages. A voice mail feature should be able to store up to either 20 or 30 messages simultaneously.

Future Services. The local commercial communications services that satisfy the Government's additional requirements in the future. The COR will classify service requirements as emergency, priority or routine services.

- **Emergency Services**. An important service that significantly affects the mission of a Very Important Person (VIP), a unit, or an organization.

- **Priority Services**. An essential service that affects the mission of a user, a unit, or an organization.

- **Routine Services**. With the exception of the emergency and priority services listed above, any other service can be considered as a routine service.

Holiday. Federal holidays as defined by the Office of Personnel Management (OPM).

Main Distribution Frame (MDF). The main distribution frame provides the demarcations for a copper-based cable pair via protected module connector blocks. A MDF is a wiring arrangement which cross-connects an electrical signal circuit coming from outside on vertical side and the internal circuit on the horizontal side. A MDF may also carry protective devices as well as function as a central testing point.

Maintenance Test. This test provides a measure of quality check on the connecting facilities. Tests typically include net loss, bit error rate, echo return loss, supervision signaling, etc.

Monthly Recurring Charge (RC). The monthly charge of a service item.

Non-Recurring Costs (NRC). A one time charge by the Contractor to activate a specific service.

Official Telephone Line. A telephone line serving directly from the Government-owned PABX.

APPENDIX 40

ACRONYMS

CLIN - Contract Line Item Number
COR - Contracting Officer's Representative
DCO - Dial Central Office
DSN - Defense Switch Network
GFE - Government-Furnished Equipment
KO - Contracting officer
MRC - Recurring Charges
NRC - Non-Recurring Charges
SLIN - Sub Line Item Number
SOW - Statement of Work