Request for Proposals (RFP)
RFP 17-022
Telephone System / Data Network Replacement
Pre-Proposal Meeting

June 20, 2016 – 9:00 A.M.
Calvin C. Goode Building, 10th Floor, Room 10 East

City of Phoenix
Finance Department
Agenda

Introductions
Procurement Officer – Andria Williams
Unified Communications Manager - Ian Trollope
Project Manager – Mark Haskin

Written Q&A Process
RFP Basics
Evaluation Criteria
Attachments
Statement of Work
Technical Requirements
Solicitation Transparency Policy
Questions
Written Q&A Process

Written questions only

- Some questions may be answered verbally today
- All questions shall be held until the end of the presentation; exception Statement of Work
- Written answers **supersede** verbal answers
- All questions and answers will be published on web via addendum

Submit written questions by **July 8, 2016**

- 12:00 p.m. local Arizona time
- Email: Andria.Williams@phoenix.gov

Q&A addendums available

- [https://www.phoenix.gov/solicitations](https://www.phoenix.gov/solicitations)
Mandatory Pre-Proposal Conference

- Proposers **MUST** have one representative attend in person.
- Attendees via web or conference bridge **MUST** send an email to Procurement Officer – Andria.Williams@phoenix.gov confirming attendance immediately following pre-proposal conference.
Addenda

- Any changes to the plans, drawings and specifications will be in the form of an addendum, available at https://www.phoenix.gov/solicitations. The Offeror shall acknowledge receipt of any/all addendum by signing and returning the document with the proposal submittal.
- No electronic notification will be sent to vendors when addenda is issued.
Proposal Due Date
August 5, 2016
2:00 P.M.
Local Arizona Time

LATE PROPOSALS WILL BE REJECTED
RFP Basics
Proposer Instructions

Proposal Packet

- 1 original and 1 copy
- 15 USB flash drives organized in following order:
  - Folder 1: Section VI, Submittal Forms
  - Folder 2: Section IV, Paragraph 4.1, Network Upgrade Response Form
  - Folder 3: Section IV, Paragraph 4.2, Unified Communications and Contact Center Response Form
- 5 USB flash drives organized in following order:
  - Folder 1: Section VI, Submittal Forms
  - Folder 2: Section IV, Paragraph 4.1, Network Upgrade Response Form
  - Folder 3: Section IV, Paragraph 4.2, Unified Communications and Contact Center Response Form
  - Folder 4: Pricing for Section V, Paragraph 5.1, Network Upgrade
  - Folder 5: Pricing for Section V, Paragraph 5.2, Unified Communications and Contact Center
## Evaluation Criteria

<table>
<thead>
<tr>
<th>Category</th>
<th>Possible Points</th>
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<tr>
<td>Pricing</td>
<td>0-300 Points</td>
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<tr>
<td>Technical Capabilities</td>
<td>0-250 Points</td>
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<tr>
<td>Method of Approach</td>
<td>0-150 Points</td>
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<tr>
<td>Business Requirements</td>
<td>0-100 Points</td>
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<tr>
<td>Vendor Qualifications and Experience</td>
<td>0-150 Points</td>
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<tr>
<td>Total Possible Points</td>
<td>1000 points</td>
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Attachments

- Attachment 1 – Network Overview
- Attachment 2 – Core Network Overview
- Attachment 3 – CDWM Overview
- Attachment 4 – 22nd Avenue Campus Overview
- Attachment 5 – Core Internet Overview
- Attachment 6 – LTE Overview
- Attachment 7 – Data Network Site List
- Attachment 8 – Voice Network Overview
- Attachment 9 – Sky Harbor Voice Overview
- Attachment 10 – Voice Site List
- Attachment 11 – Cisco IP Telephony Sites
- Attachment 12 – Voice Station Counts
- Attachment 13 – Response Form
- Attachment 14 – Pricing Submittal Form
- Attachment 15 – Data Network Pricing Detail
- Attachment 16 – Unified Communications and Call Center Pricing Detail
- Attachment 17 – Combined Award Pricing Detail
- Attachment 18 – Form of Letter of Credit
- Attachment 19 – Aviation Supplemental Terms
- Attachment 20 – Solicitation Disclosure Form
Statement of Work

Ian Trollope
Unified Communications Manager
Goals and Desired Outcomes

• Upgrade Enterprise Business Network to support new Unified Communications and Contact Center systems
• Collapse and consolidate networks across the City into one homogenous network
• Turnkey solution with minimal downtime
• Responses must be
  • Engineering and Technical
  • No Marketing Language
Statement of Work – Network Upgrade

Current Data Network Environment

• Primarily Cisco equipment
• Core – Distribution – Access layers model
• Use of Hot Standby Router Protocol (HSRP) for redundancy
• Use of Enhanced Interior Gateway Routing Protocol for multi-path routing and failover
• Most equipment is End of Life and does not support Power over Ethernet
• Use of Solarwinds Orion to manage and monitor the network
Statement of Work – Network Upgrade

Enterprise Data Center Networks

• Located in Information Technology Operations Center (ITOC) and collocation space in IO Data Center (IO)
• Supported by pairs of Nexus 7018 switches in each data center
• Cisco ONS used to provide Dense Wave Division Multiplexing between ITOC and IO

Replacement of the equipment that comprises the City’s Enterprise Data Center networks is out of scope of this RFP.
Other Department Data Centers Managed by ITS

- Phoenix Public Library
- Phoenix Public Transit
- Phoenix Convention Center

Replacement of the equipment that comprises Department Data Center networks is out of scope of this RFP.
Statement of Work – Network Upgrade

Enterprise Business Network

• Provides network connectivity to end users throughout the City
• Path to reach Enterprise Data Centers

• Most of City’s network traffic is Client – Server based
• Employees access systems in Data Centers or Cloud systems via the Internet

Replacement of the City’s Enterprise Business Network is in scope of this RFP.
Statement of Work – Network Upgrade

Enterprise Business Network Connectivity

Metropolitan Area Network (MAN) – connected via City owned Dark Fiber
Wire Area Network (WAN) – connected by Metro Ethernet carrier
  • Century Link – MOE
  • Integra – ELAN
Fourth Generation LTE Connectivity (4GLTE) – very small sites or backup to WAN sites
  • GRE tunnels over Internet with host routers in IO and ITOC
Statement of Work – Network Upgrade
Statement of Work – Network Upgrade

Enterprise Business Network Core

Core Switches

- 6509-E’s installed in ITOC and PCC
- Connect Border switches to MAN/WAN switches

Border Switches

- 6509-E’s installed at ITOC and IO
- Provide pathway to Enterprise Data Center network

MAN/WAN Switches

- 6509-E’s installed at ITOC and PCC
- Aggregation for sites connected via City Fiber and via Metro Ethernet
- Metro Ethernet services connect via ME3600-X’s
Statement of Work – Network Upgrade

Core Internet Overview
Statement of Work – Network Upgrade

Distribution Layer

- Connects Core to Access Layer
- Generally Cisco 6500 or 4500 switches with various redundant supervisor and power supplies and various line card configurations
- Coarse Wave Division Multiplexing
  - Connected into MAN/WAN – provides network connectivity for several Water Treatment Plants and 22nd Ave Campus
Statement of Work – Network Upgrade

CWDM Overview
Statement of Work – Network Upgrade

22nd Ave Campus Overview
Statement of Work – Network Upgrade

Access Layer

- Provides network connectivity for End User devices
- Various models Cisco equipment (stackable and chassis)
- Limited POE except in VOIP sites
Department Networks Supported by ITS

Phoenix Public Library
- Current project to upgrade WiFi with e-rate Funding
- Out of Scope

Public Transit
- Connections to external agencies

Phoenix Convention Center
- Utilizes Juniper and Brocade/Foundry equipment

Phoenix Municipal Courts
- Access Layer support by ITS
- Municipal Courts manages firewalls for CJIS
Statement of Work – Network Upgrade

Department Networks Not Currently Supported by ITS

Aviation Department
- Sky Harbor, Deer Valley and Goodyear Airports
- Business Network – In Scope
- Aviation Network – Out of Scope

Phoenix Police Department
- Headquarters, Crime Laboratory, several Precincts and neighborhood stations
- Currently maintain firewalls and enable encryption for CJIS

Phoenix Fire Department
- Fire Operations, Emergency Management Center and many Fire Stations
- Alarm rooms Out of Scope

Streets Transportation Department
- Wireless mesh that supports traffic cameras
- Out of Scope

Water Services Department
- Process Control Network – Out of Scope
- CWDM – lambda for Enterprise Business Network
Statement of Work – Network Upgrade

Site Types

Open RFP
Statement of Work – Network Upgrade

Out of Scope Elements

Open RFP
Statement of Work – Network Upgrade

Network Upgrade

- Turnkey Solution
- Consolidate
- Routing Protocols
  - Alternative solutions to EIGRP welcome
  - Zero or minimal operational impact
  - All professional services must be included
    - New equipment
    - Existing City equipment
Statement of Work – Network Upgrade

Network Segmentation and Virtualization

- Virtual circuits
- Logical segmentation of traffic
- Virtual routing and forwarding tables (VRF)
- Multipath routing
- Quality of Service (QoS) and prioritization of traffic
- Load sharing across redundant paths
- Fast convergence
- Inspection of and control of network traffic between virtual networks
Statement of Work – Network Upgrade

Additional Requirements

Compatibility with MAN and WAN Carriers

- City owned Dark Fiber
- Century Link Metropolitan Optical Ethernet (MOE)
- Integra E-LAN
- Verizon 4GLTE

Solar Winds Orion

4GLTE

- WAN backup for VOIP sites
- Primary connectivity for Micro Branch Sites
- Replace host routers in IO and ITOC

Architecture for all Sites Listed in Attachment 7
Statement of Work – Network Upgrade

Network Equipment Requirements

• Common Requirements
• Core Switch Requirements
  • DWDM Optics
• Distribution Switch Requirements
• Access Switch Requirements
• Access Switch Preference
• Ruggedized Switches Requirements
• Branch Office Routers Requirements
• 4GLTE Host Routers Requirements

Open RFP
Statement of Work – Network Upgrade

Network Equipment Requirements

Ten Gigabit Options

- Option 1 – Core to Distribution Layer
- Option 2 – Core to Access Layer

Optics

- Assume SR for in-building connections on MM Fiber
- Assume LR for intra-building connection on SM Fiber
- CWDM – remain one (1) gigabit
Network Equipment Requirements

UPS
- Provide backup power for brownouts (5 minutes or less)
- Interface with Solar Winds Orion

Power over Long Reach Ethernet (PoLRE)
- Connected devices beyond 0m on voice grade copper
- Support POE

Ethernet over Copper Extenders
- Connect facilities only connected by copper cable
- Support at least 50 Mbps from at least 00 ft
Network Equipment Requirements

Enterprise Business Network Firewalls
- Support Inter-VRF Communications
- Packet inspection and control between VRF’s
- Redundant
- Include IDS/IPS

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Minimum Specifications</th>
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<tbody>
<tr>
<td>Firewall Throughput for Stateful Inspection</td>
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<td>Concurrent Firewall Connections</td>
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<td>Connections per Second</td>
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<td>/0/00 Interfaces</td>
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<tr>
<td>Gbps Interfaces</td>
<td>4</td>
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<tr>
<td>High Availability</td>
<td>Active/Active or Active/Standby</td>
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<td>Redundant Power</td>
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</table>
Statement of Work – Network Upgrade

Warranty and Maintenance
- Five (5) years
- Co-terminate
- Access to Trouble Ticketing and Reporting

<table>
<thead>
<tr>
<th>Equipment Type</th>
<th>Maintenance Support</th>
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<tbody>
<tr>
<td>Core switches and firewalls</td>
<td>7x24x4</td>
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<td>Distribution switches</td>
<td>8x5xNBD</td>
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<tr>
<td>Access Layer and Branch Office Routers</td>
<td>spare</td>
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<tr>
<td>UPS</td>
<td>8x5xNBD</td>
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<tr>
<td>Third Party Products</td>
<td>8x5xNBD</td>
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</tbody>
</table>

Professional Services
Statement of Work – Network Upgrade

Training

• On-site Instructor Led
• Up to eight (8) students
• Administer equipment proposed
• Knowledge Transfer
• Substitute Learning Credits
Statement of Work – Network Upgrade

Project Management
Expected duration of 24 months
Provide a Project Manager

- Maintain Project Plan/Schedule
- Detailed cutover plan
- Track dependencies
- Risk Management
- Communications
- Change Control process
- Project status reporting
- Planning and Status meetings
Statement of Work – Network Upgrade

Network Implementation

- Design
- Pilot
- Site Assessments
- Pre-installation storage, staging, and testing
- Production implementation
- Site Acceptance
- VOIP Readiness Assessment
- Deliverables
- Final Acceptance
- City Resources
- Proposer Resources
- Assumptions
Supplemental Equipment And Services Discount

- The Proposer must provide a price schedule offering discounts off Manufacturer’s Suggested Retail Price (MSRP) or National List Price (NLP) for all products and services that may be provided on an as needed basis. Discounts shall apply to products and services purchased for five (5) years.
Statement of Work – Telephone Upgrade

Goals and Desired Outcomes

• Replace existing Phone Systems and Contact Centers
• Unified Communications
  • Physical and soft telephony endpoints
  • Voicemail / Unified Messaging
  • Mobile device support
  • Enhanced 911 (E911) Automatic Location Identification
  • Integration with Office 365 and hosted Exchange
  • Integration with Microsoft Skype for Business
  • Overhead paging
  • Call Detail Reporting (CDR)
• Install upon new network
• Migrate to SIP trunks for PSTN connectivity
• Responses must be
  • Engineering and Technical
  • No Marketing Language
Statement of Work – Telephone Upgrade

Existing Environment

• Aastra/Ericsson PBX
  • City System
  • Aviation System
  • Call Centre Manager

• Water Services Department Customer Services
  • Avaya PBX and Contact Center
  • Convergys IVR
  • Verint Call Recording

• Cisco Unified Communications Manager
• AVST Voice Mail
• Key Systems
• RAD Circuit Emulation
Statement of Work – Telephone Upgrade

Existing Environment

- Overhead Paging
- E911 – Xtend 911
- Call Accounting
- Web and Audio Conferencing – AT&T Connect
Statement of Work – Telephone Upgrade

Aastra/Ericsson City Overview
Statement of Work – Telephone Upgrade

Aastra/Ericsson Aviation Overview
Statement of Work – Telephone Upgrade

Cisco VOIP Overview
Out of Scope Elements

- Replacing The City of Phoenix Public Safety Answering Point (PSAP) phone systems.
- Removal of Ericsson/Aastra PBX common equipment and key systems.
- Re-cabling of City facilities.
General System Design

Proposals must be based upon the concept of Unified Communications

“Enables and integrates the components for multi-media communications, conferencing including web, audio and video; collaboration tools to web chat, file share and document share plus a common experience between the desktop and mobile client.”
Statement of Work – Telephone Upgrade

System Architecture Requirements

- Single telecommunications database
- Maintenance without downtime
- Self diagnosing component failures
- Leverage COTS hardware
- Leverage City’s Active Directory
- Core equipment located at IO and ITOC
- Utilize 4GLTE for backup to WAN failure
- Adjunct systems designed for redundancy
- SIP – redundant Session Border Controllers
- Automated backup
- Maintain 4-digit and 5-digit functionality
System Administration
- Tool to manage and administer the proposed system
- Integrated management where possible
- Perform MAC and run diagnostics
- Accessible via City network
- Support pre-programming and scheduling of tasks
- Include a mechanism to monitor, measure, and troubleshoot call quality and performance
Statement of Work – Telephone Upgrade

Hardware and Software
GA for at least a year
FCS not met, beta, under development not acceptable
No End of Sale, End of Life or End of Support
Support for five (5) years
Compatible with Enterprise Business Network
Provide documentation
Include hardware with software only solutions
  - City’s VM Ware environment out of scope
Aastra/Ericsson Integration

- Integration with Aastra/Ericsson must be supported throughout the implementation until it can be removed from production.
- Integration via ISDN/PRI
  - Support Caller ID
Statement of Work – Telephone Upgrade

Dial Tone/SIP Trunks

- Assist City with migration from PRI to SIP
- City will order SIP trunks
- Migration Strategy
  - DID’s will initially route through Aastra/Ericsson
  - SIP Trunks installed on new platform for any new DID’s
  - When approximately 50% of users migrated – convert all DID’s to SIP Trunks
  - DID’s will then route from new UC system to Aastra/Ericsson
- Redundant SBC’s in each Data Center
- Accept ANI from carrier and pass to telephone sets
- Inbound Caller ID and control of Outbound Caller ID
- City will disconnect OPX, PRI and other legacy circuits
- ANI must be available to peripheral devices
Overhead Paging

- Integrate with existing paging systems via FXO
- For new locations, provide option for paging directly from UC system using IP and POE technology
Call Detail Reporting (CDR) / Inventory Management Tool

- Must provide Call Detail Reports, Traffic / Network Analysis, System Usage Reports, and Long Distance Authorization Codes reports.
- Browser based
- Role based access
- Support scheduling of reports with email notification
- Support existing 5-digit authorization codes
Number and Location Information for E911

• Advanced E911 capabilities
• Info maintained in database that updates to PSAP
• Zone based system of 2,200 zones
• Callbacks from PSAP directed to 911 caller
• Notify designated groups when 911 is dialed

Upgrades or changes to City’s PSAP’s are out of scope
Telephony Features
Support full range of features resident in current state of the art UC systems.
Include but not limited to:

- Hold
- Call announcement through set speaker
- Park
- Call Pickup
- Distinctive Rings
- Day/night modes
- Call History
- Speed Dial
- Internal and External Call forwarding
- Extension Mobility or Hot-desking
- Selected forwarding based on the calling ANI, calendar status or time of day
Telephony Features (continued)

• Allow user to answer multiple calls to single extension
• Single phone set with multiple extensions
• Single extension appearing on two or more phones
Telephone Set Requirements

- Must support switch port for PC
- VOIP sets compatible with 802.3af POE
- Utilize display for all phone set buttons (paperless)
- Intercom capability to page through sets
- Built-in headset jack
- User able to make basic programming changes via browser
Statement of Work – Telephone Upgrade

Telephone Set Requirements - Set Types

- **Type-1**: Standard Multi-Line Instrument with color display, equipped with an internal 2-port /0/00 switch to connect a PC, capacity for a minimum of two extension lines, and a hands-free full-duplex speakerphone.

- **Type-2**: Larger Multi-Line Instrument with color display, equipped with an internal 2-port /0/00 switch to connect a PC, capacity for a minimum of five (5) extension lines or shared telephone lines plus a hands-free full-duplex speaker phone.

- **Type-3**: Wall mountable smaller IP Instrument with small display for use in common areas such as break rooms or lobbies. These units should not be equipped with an internal data switch or have the ability to disable the port intended for the PC.

- **Type-4**: Wired base conference phone – Full duplex IP conference phones with optional microphones that are suited for large rooms.

- **Type-5**: Wireless base conference phone - Full duplex IP conference phones with optional microphones that are suited for large rooms with wireless base units.
## Telephone Set Requirements - Licensing

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<thead>
<tr>
<th>Quantity</th>
<th>Description</th>
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<tbody>
<tr>
<td>12,000</td>
<td>Suite licenses that support ability to use multiple licenses as the standard for all users (reducing the need for license management tasks)</td>
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<tr>
<td>5,500</td>
<td>Licenses for analog extensions</td>
</tr>
<tr>
<td>1,725</td>
<td>Soft Client / Softphone only users – Integrated with Skype for Business</td>
</tr>
<tr>
<td>8,625</td>
<td>Type-1: IP telephone set with two line buttons or larger</td>
</tr>
<tr>
<td>1,650</td>
<td>Type-2: IP telephone sets with five line buttons or larger</td>
</tr>
<tr>
<td>1,150</td>
<td>Type-3: Wall mountable smaller IP telephone set</td>
</tr>
<tr>
<td>490</td>
<td>Type-4: Wired base IP conference phone</td>
</tr>
<tr>
<td>85</td>
<td>Type-5: Wireless base IP conference phone</td>
</tr>
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</table>
Soft Client Integration to Skype for Business

- City uses Skype for Business in the Office 365 Government Cloud
- Soft client must integrate with Skype for Business to invoke telephonic calls
- Must be able to use Skype for Business as fully functional soft phone using USB or wireless headset without need for dedicated phone set
- Provide the capability to initiate a call from the Skype for Business application / soft client and switch to a telephone handset
- User presence status exchanged both ways
Statement of Work – Telephone Upgrade

Mobility

- Extend features to mobile employees
- Mobile client for iOS, Android and Windows
- Integration between mobile clients and desk phones
  - Forward calls to mobile devices
  - Return to system voicemail
- Make calls from mobile device without need for VPN client
- Access an Office 365 Exchange Online calendar and make a decision to forward to mobile or voicemail.
- Provide selected forwarding based on the calling ANI, calendar status or time of day
- Provide handoff between desk phone and mobile phone and vice versa for active calls in progress
- Provide presence to indicate mobile status.
Statement of Work – Telephone Upgrade

Conferencing

• Ad-hoc conferencing for minimum of six (6) per call
• Meet-me conferencing for a minimum of six (6) simultaneous parties on one call.
• Ability to integrate with Skype for Business for web conferencing
• Provide integration to the Exchange Online calendar.
• Provide a feature for iOS, Android and Windows devices that allows a mobile user to join a conference with a single click within the calendar invite / appointment.
Music On-Hold

- Provide music on-hold for UC and Contact Center systems
- Different messages for different lines of business concurrently
- Support multiple sources of music and multiple file formats including .wav, .mp3 and .wma.
Statement of Work – Telephone Upgrade

Voice Mail/Unified Messaging

- Full range of features and functions resident in current state of the art Voice Messaging systems.
- Integration with Office 365 Exchange 2016 Online for unified messaging
- Transfer calls directly to mailbox by bypassing phone set
- For zero-out transfers the voice mail system must be able to identify the original mailbox on the display of the destination telephone set.
- The ability to access and activate multiple pre-recorded greetings, ideally with options to activate based on calendar look-up.
Voice Mail/Unified Messaging (continued)

- Ability to change outgoing messages remotely.
- The ability to access messages through Microsoft Outlook, OWA, or a web portal.
- Ability for users to administer mailboxes through a web application.
- Allow callers to connect to their intended party via “locate”, similar to the feature provided with the AVST Personal Assistant.
- Voice mail system must provide the options to translate from voice to text or text to voice without the use of a cloud service provider (on-prem only).
- The ability to notify users they have a message by out calling.
Voice Mail/Unified Messaging (continued)

- Per City policy, voice messages cannot be stored on the Exchange server. Voice messages must be stored on separate message store controlled by the messaging platform.

<table>
<thead>
<tr>
<th>Voicemail Quantities</th>
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<tbody>
<tr>
<td>Mailboxes</td>
<td>10000</td>
</tr>
<tr>
<td>Call Processors (auto attendant menus)</td>
<td>1100</td>
</tr>
<tr>
<td>Ports</td>
<td>200</td>
</tr>
<tr>
<td>Average Mailbox size</td>
<td>5.5Mb</td>
</tr>
</tbody>
</table>
Auto-Attendant

- Auto Attendant functionality must be included
- The proposal for a new system must include any requirements and or costs to migrate 1,100 existing auto–attendants now residing in the current AVST Call Xpress system.
- The City is interested in solutions that could reuse or import the existing menus and recordings, eliminating the need to re-record announcements.
Backup and Restore

• Must provide an automated process for creation of backup of system configuration and user database information.
• Retrieval from the backup must be easily initiated and automatically completed once the restore process is activated.
• If the system or a component does not utilize its own backup/restore system, the system must be compatible with the City’s Standard backup application, Commvault.
Statement of Work – Telephone Upgrade

Contact Center – System Architecture

- Single database running on dispersed, survivable hardware implemented across all sites
- Routine maintenance without downtime
- Self diagnosing
- Leverage COTS hardware
- Installed in IO and ITOC
- Survive loss of critical component or network outage
- Screen pop for Water Services
- Integrate with Convergys IVR
- Integrated components
- On-site and remote agents single contact center
- Extend common resources to remote agents
- Access alternate route leveraging City data network
Statement of Work – Telephone Upgrade

System Administration
• Tool to manage and administer the proposed system
• Integrated management where possible
• Perform MAC and run diagnostics
• Accessible via City network
• Support pre-programming and scheduling of tasks
• Include a mechanism to monitor, measure, and troubleshoot call quality and performance
Statement of Work – Telephone Upgrade

Hardware and Software

- GA for at least a year
- FCS not met, beta, under development not acceptable
- No End of Sale, End of Life or End of Support
- Support for five (5) years
- Compatible with Enterprise Business Network
- Provide documentation
- Include hardware with software only solutions
  - City’s VM Ware environment out of scope
Routing of Calls

- The system must have flexible rules-based routing easily customized by the City to meet multiple specific department needs.
- The system must be capable of skills-based routing.
- Remote agents must have the same suite of tools that is available to on-site agents.
- Callers must be able to leave a message if offered the option while in queue.
- Callers must be able to request a call back call and retain their position in the queue.
- Callers must be able to request a scheduled call back call to a specific number while in queue.
Multi-Media

City does not intend to route multi-media communications during implementation but requires the following capabilities:

- The ability to route emails, faxes, texts (Short Message Service) sent to a department mailbox and distribute to an agent pool using integrated queuing and routing rules.
- Provide the ability to initiate a chat session from the website that is queued and routed as a skill to an agent.
Agent Tools

- The Agent desktop must be web-based and be customizable for the group.
- The display must provide real-time individual and group statistics, queue status and threshold alerts.
- Agents must be provided a drop-down window with descriptions in addition to one-hand “hot keys” rather than numeric codes for transaction or wrap-up codes.
- The system must support user configurable dashboards for displaying user-defined information to call center staff and others (e.g., number of agents logged in, average wait time, abandoned percentage and time to abandon, etc.).
- Set up of these dashboards must be such that workstations/video walls can auto-login upon startup.
- Dashboards must be available over the data network for authorized users and include the ability to embed the dashboard in web pages (web parts or widgets).
Statement of Work – Telephone Upgrade

Supervisor Tools

• The Supervisor desktop must be web-based and provide real-time individual and group statistics, queue status and threshold alerts.
• Supervisors must have the ability to automatically log agents out under user defined conditions.
• Announcements must be easy to change, allow for pre-recording of scripts and be administrable by supervisors rather than requiring IT involvement.
Reports

- System must provide “cradle-to-grave” reporting
- Reports must provide a real-time and historical view.
- Reports must include access to all raw data for 15 months.
- Standard and historical reports must be available for 24 months, or longer if archived by the City
Statement of Work – Telephone Upgrade

Reports, must have at a minimum:

- Number of calls in queue
- Length in queue
- Average speed of answer
- Abandoned and “zero out” calls and time of abandonment
- Peak traffic (by time of day, day of month, etc.)
- Statistical report summaries in 15-minute increments
- Calls transferred to an agent
- Calls transferred to voice mail
- Calls transferred in versus direct dialed, and the originating number
- Calls transferred out and to what number
Reports, must have at a minimum (continued)

- Calls by transaction, busy, and idle codes
- Incoming route identification
- Calls offered/handled/abandoned
- Average hold time
- Average delay
- Not ready time
- After work/not ready time
- Talk time
- Average calls per hour
- Calls and time on outbound calls
- PSTN trunk usage statistics
- Reports must be easy to customize by non-technical City staff.
Interactive Voice Response Requirements

• The City currently supports two IVR platforms; the Proposer must integrate the Convergys IVR to its proposed solution and provide a new IVR solution to replace the AVST UCConnect IVR.
Interactive Voice Response Requirements
Convergys IVR Integration
• Integrate via two (2) SIP connections
• 48 ports for primary server in ITOC data center
• 48 ports for redundant server in IO data center
• Oracle database backend
Interactive Voice Response Requirements
New IVR for PDD
• Redundant solution
• 24 SIP ports each data center
• Oracle database backend
Interactive Voice Response General Requirements

- Voice Recognition
- Natural language speech recognition.
- Multiple languages
- Text to speech responses
- Library editing must allow both interactive and bulk loads.
- Screen pop from SQL/ODBC
- Integrate with core telephony and call center for reports
- Text to speech with other operations
- Custom workflows
- Distribute to multiple workflows
- Easy to administer
Interactive Voice Response General Requirements (continued)

- Load call information individually or in batch
- Collect ANI for routing
- Support queued call back (if not in native call center).
- Support opt-in surveys
- Outbound automated calling
- Provide Application Programming Interfaces (API's)
- Support existing
- Development and Test system
Call Recording / Quality Monitoring Requirements

Call Recording Sub-System Design

• The proposed solution must be a single system that provides a full suite of quality monitoring and call recording functions that can be customized for the contact center and designated individuals and groups outside of the contact center.
• IP Based
• Record onsite, remote and teleworks
• Encryption for all recordings
• Support analog ports
Call Recording / Quality Monitoring Requirements

Call Recording Capabilities

• Mix of scheduled recording, total call recording, and record on demand.
• Buffering
• Easy record on demand
• Synchronized screen capture
• Synchronized playback in Supervisor tool
• Retrieve calls by user defined parameters such as:
  ▪ Agent
  ▪ Time of day/day of week
  ▪ Queue
Call Recording / Quality Monitoring Requirements

Call Recording Capabilities (continued)

• **The system must be capable of automatically pausing recording when the agent is entering credit card information to comply with the PCI DSS.**

• The system must provide embedded controls for access to call recording play back within the Supervisor tool
Backup and Restore

• UC subsystems must provide an automated process for creation of backup of system configuration and user database information.
• Retrieval from the backup must be easily initiated and automatically completed once the restore process is activated.
• If the system or a component does not utilize its own backup/restore system, the system must be compatible with the City’s Standard backup application, Commvault.
**Contact Center Licensing Requirements**

<table>
<thead>
<tr>
<th>Contact Center Quantities</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Agents – Single Media (calls)</td>
<td>700</td>
</tr>
<tr>
<td>Agents – Multi-media (up to 3 types)</td>
<td>100</td>
</tr>
<tr>
<td>Skills</td>
<td>100</td>
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<tr>
<td>Supervisors</td>
<td>75</td>
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<tr>
<td>Call Recording Agent Licenses - Full</td>
<td>200</td>
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<tr>
<td>Call Recording Agent Licenses – On-demand</td>
<td>500</td>
</tr>
<tr>
<td>Call Recording Supervisor Licenses</td>
<td>40</td>
</tr>
</tbody>
</table>
Warranty and Maintenance

• Five (5) years
• Coterminous

• Core Unified Communications - 7x24x4
• Voicemail - 7x24x4
• Contact Center - 7x24x4
• Contact Center Recording - 7x24x4
• IVR - 7x24x4
• E911 - 7x24x4
• Call Detail Recording - 8X5XNBD
• IP Paging Systems - 8X5XNBD
• Telephones – Manf Warranty + Sparing
• Software Assurance - included
• Third Party Products - 8X5XNBD
• Consultative or Professional Services – Provide cost per hour
Training

General Requirements

- Trainers must be certified on the proposed equipment with at least one year of field training experience.
- Instructor led training for end user classes must be conducted on live system equipment at each City site or designated remote sites with the Proposer responsible for providing and setting up phones for training.
- The Proposer shall provide remote computer based training videos and material for basic users, including Quick Reference Guides and access to online resources in addition to the instructor led training.
Statement of Work – Telephone Upgrade

Training Types
• Administrator Training
• Department Coordinator Training
• Employee On-site Training
• Contact Center Agent Training
• Contact Center Supervisor Training
• Contact Center Call Recording Training
Statement of Work – Telephone Upgrade

Project Management

Expected duration of 24 months

Provide a Project Manager

- Maintain Project Plan/Schedule
- Detailed cutover plan
- Track dependencies
- Risk Management
- Communications
- Change Control process
- Project status reporting
- Planning and Status meetings
Statement of Work – Telephone Upgrade

Network Implementation

- Design
- VOIP Readiness Assessment
- Pilot
- Data Gathering
- Pre-installation storage, staging, and testing
- Production implementation
- Site Acceptance
- Deliverables
- Final Acceptance
- City Resources
- Proposer Resources
- Assumptions
Managed Services For Unified Communications & Contact Center

• The Proposer must include a Managed Services option covering the five (5) years following City acceptance for all hardware and software proposed for the Unified Communications and Contact Center system.

• Managed Services must include proactive service monitoring of products and adjuncts including the server hardware and operating systems.
Statement of Work – Telephone Upgrade

Managed Services Activities

• Perform routine and preventative maintenance and management of the Unified Communications and Contact Center System from 7 AM to 7 PM Monday through Friday (local Phoenix, AZ time) during regular City business days, excluding City holidays

• Dedicated on-site support to maintain and manage the Contact Center technology during regular City business days, excluding City holidays

• Perform emergency maintenance on the system 7x24x365

• Perform all system administration and programming including telephony endpoints, voicemail boxes, auto-attendants, and contact center systems
Managed Services Activities (continued)

- Dispatch field technicians for routine or emergency maintenance, as required, on core telephony and contact center components
- Perform Move, Add, Change, and Deletions (MACD)
- Run and provide reports on the telephony and contact center systems as requested by the City on a periodic or ad-hoc basis
- Act as an agent for the City to coordinate orders, provisioning, installation, troubleshooting, and repair tickets associated with the City’s carrier services
- Coordinate with City technical personnel regarding network issues that affect the telephony or call center systems
- Perform Incident, Problem, Change and Event Management
Managed Services Activities (continued)

- Track and manage Incidents and Problems to resolution
- Perform software upgrades to include upgrades, updates, and patches for the proposed system
- Adhere to the City’s Change Management procedures
- Use SSL VPN for any activities requiring remote access
Statement of Work – Telephone Upgrade

Service Level Agreement (SLA)

- Escalation procedures
- The Proposers trouble ticket system must interface with the City’s IT Service Management System, Remedyforce, which is based on the Salesforce.com platform
- Definition of Major and Minor Alarms
- Response time to alarms, including on-site when required (one hour maximum required)
- Time to Repair commitment(s) – critical issues must be within 2 hours
- MACD service request response time commitments
- Monitoring for carrier local loop
- Monitoring for any on-premises equipment supplied by the hosted vendor
Statement of Work – Telephone Upgrade

Service Level Agreement (SLA)

• Uptime reporting
• Security protection of City data
• Annual equipment inspection
• System management tasks such as capacity planning
• Ability to put a hold on any scheduled maintenance activities
• Ability to roll back to previous versions if an upgrade or configuration change introduces a bug or operational problem
• Receipt of system generated electronic notifications upon receipt of a customer impacting alarm on a 7x24x365 basis.
Qualifications

- The Proposer must ensure all technicians installing, servicing, and/or maintaining the proposed systems possess a current manufacturer’s certification prior to contract award.
- The Proposer must provide proof of its manufacturer’s certifications and/or licenses to provide warranted maintenance, as well as proof of each technician’s maintenance certification(s) for each system to be serviced, prior to contract award.
Qualifications

• The Proposer will provide all tools and vehicles needed to perform the required work.

• All installation, service and repairs shall include a warranty period of one (1) year from the date of acceptance by the City regardless of the equipment manufacturer. The warranty shall include all materials, labor, and travel time.

• The Proposer will ensure they have adequate, permanent, full-time staff located in the Phoenix metropolitan area to perform the required services as well as customer service relations, supervisory control, dispatch, project coordination, quotation, logistics, and billing reconciliation functions within thirty (30) days of contract execution.

• The Proposer must have an established, reliable, responsive supply chain for the procurement of both major and minor parts, and components for all systems installed, maintained and repaired.
Supplemental Equipment And Services Discount

- The Proposer must provide a price schedule offering discounts off Manufacturer’s Suggested Retail Price (MSRP) or National List Price (NLP) for all products and services that may be provided on an as needed basis. Discounts shall apply to products and services purchased for five (5) years.
Solicitation Transparency Policy
Phoenix City Code, Chapter 43, Section 43-36

- Commencing on the date and time a solicitation is published, potential or actual Proposers or respondents (including their representatives) shall only discuss matters associated with the solicitation with the Mayor, any members of City Council, the City Manager, any Deputy City Manager, or any department director directly associated with the solicitation (including in each case their assigned staff, except for the designated procurement officer) at a public meeting, posted under Arizona Statutes, until the resulting contract(s) are awarded to all offers or responses are rejected and the solicitation is cancelled without any announcement by the Procurement Officer of the City’s intent to reissue the same or similar solicitation. As long as the solicitation is not discussed, Proposers may continue to conduct business with the City and discuss business that is unrelated to the solicitation with the City staff who is not involved in the selection process.

- PROPOSERS THAT VIOLATE THIS POLICY SHALL BE DISQUALIFIED. All questions must be directed, in writing, to the Procurement Officer.
Questions

- No questions will be accepted via the chat feature
- All questions must be clearly stated
- In-person attendees will ask questions first followed by teleconference attendees
- All persons must state their name and the company they are representing before asking any questions
- In-person attendees are required to walk up to the conference phone prior to asking any questions