

**Request for Proposal for Digital Telephone System  
& Voice Processing System**



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## A message from Tom Houston

We decided to provide this survey because every financial institution has to purchase a new phone system from time to time and we wanted to give you a starting point for evaluating vendors. We know what a challenge it is to compare vendors and select the right one.

Please visit our website [www.thouston.com](http://www.thouston.com) frequently because we frequently publish free documents, such as this one, and other technology related resources.

### Are You Ready for **Remote Deposit Capture?**



**Customer Contract  
Risk Assessment  
Underwriting Guidelines  
Application  
Board Policy  
Customer and Bank Procedures**



**Customer Presentation  
Pricing Examples  
Relationship Officer Training  
Sales Success Stories  
Marketing Samples  
Compensation Package Examples**



**Unlimited Attendance  
New Epoch in Check Image and Item  
Processing  
System Configurations  
Critical Law, Agreement & Procedures  
Fraud, Risk & Controls  
Cost, Benefits & Sales Strategies  
Project Planning**



**Customer Contract  
Risk Assessment  
Application  
Board Policy  
Special Procedures  
Marketing Examples**

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Call Ramona or myself if you have any questions, need documents for your financial institution or assistance with any projects. We will be glad to discuss any technology projects and either we can provide the resources you need or we will direct you to other companies we know and trust.

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Tom Houston  
Phone: 281-756-0409

## **I. Introduction**

The YOUR INSTITUTION is soliciting bids from reputable manufacturers and distributors of PBX and Key/Hybrid systems and Voice Processing equipment. The selected vendor will be our primary source for the following:

- PBX and Key/hybrid system hardware and software and voice processing equipment to be used at the main office and 4 branches. Feature requirements are detailed in Section IV & V and configuration requirements are detailed in section VI.
- Installation and configuration services for this equipment.
- Training of users and administrators.
- Maintenance of purchased and installed equipment and software.
- Upgrades to the installed systems as necessary.

Please note that the term “PBX” or “Key” system is used throughout this RFP for brevity purposes only, and not to specify or categorize the system as anything other than a business telephone system. The actual operational requirements include both key and PBX functionality performing as a true hybrid system.

## **II. RFP Instructions**

### **A. Completing the RFP**

Each question requires a written response. If you would like to attach documentation to support your answers, please do so. However, the summary answers should reflect the actual status.

Name one person to be the coordinator for your RFP response and for any clarification activities which might be necessary. Include the following information:

Contact Name  
Company  
Title  
Address  
Phone  
Fax  
E-mail

The RFP asks questions about functionality, approach, and pricing. Any clarifications may be requested via e-mail to YOUR CONTACT at [contact@yourinstitution.com](mailto:contact@yourinstitution.com) or by regular mail to addressee below.

Only Digital Telephone and Voice Processing systems in production will be considered. Telephone or voice processing systems under development, in planning, or in beta test will not be considered. However, vendors can include additional information about future developments or plans under separate attachment.

Quoted prices and discounts should be guaranteed for at least 60 days from the response date.

### **B. Format, Due Date**

Proposals are due **no later than February 6, 2009, 4:30 P.M., CST.**

1. One copy of the proposal must be printed in Microsoft® Word format, bound, tabbed and mailed to the below address.
2. One copy of the proposal must be emailed to the address below.

Late responses will not be considered. Submit responses to:

**John Doe**  
**Communications Analyst**  
**YOUR FINANCIAL INSTITUTION**  
**P.O. Box 1234**  
**YOUR TOWN, TX 77123**  
**Phone: 281-123-4567**  
**Email Address for Submission:**  
[contact@yourinstitution.com](mailto:contact@yourinstitution.com)

## **II. RFP Instructions**

### **B. Format, Due Date (cont)**

All submitted proposals will be considered the property of the YOUR INSTITUTION.

All proposals should include copies of product descriptions for the proposed equipment.

### **C. Contract**

The proposal should include a contract for all proposed equipment and services. If the vendor does not wish to submit an actual contract with the proposal, due to different alternatives proposed and pending choices from those alternatives, a sample contract should be submitted with the proposal.

### **D. Confidentiality**

All material submitted by the YOUR INSTITUTION must be treated as confidential and cannot be used for any other purpose than to respond to this RFP. Information submitted by any vendor will be considered confidential to the YOUR INSTITUTION and will not be used for any other purpose than evaluating vendor responses.

### **E. Selection Process**

A number of factors will influence the YOUR INSTITUTION'S decision in selecting the product and the vendor providing it. In addition to cost, proposals will be evaluated on the basis of the following factors:

1. Functionality of standard equipment and features to meet our specific needs
2. Availability of additional optional capabilities to add as needed
3. System growth and expansion
4. Ease of use
5. Ease of System administration
6. Product quality, reliability, and warranty plan

Please note that the YOUR INSTITUTION will select the vendor based upon the best overall solution and value, and is not obligated to select the lowest price bidder.

### **F. Disclaimer**

This RFP does not commit the YOUR INSTITUTION to any specific course of action. The YOUR INSTITUTION reserves the right not to select any vendor nor purchase any goods and services resulting from this RFP.

### **G. Submit "Best and Final Offer"**

The bank will only receive one proposal from each vendor, which must be the company's best and final offer. You may call the financial institution as often as needed before your proposal is submitted. Once the proposal is received there will not be changes allowed in price due to clarification.

### **III. Vendor Background**

#### **A. Company Information**

1. List your company's legal name, address, and telephone number. Include parent company information if applicable.
2. How long has your company been in business?
3. How long has your company or division been providing business telephone systems and related equipment?
4. Indicate whether your company is the manufacturer or the distributor of the proposed equipment. If your company is a distributor of the product, describe the terms of your agreement with the manufacturer, the manufacturer's level of support, and what contingencies they have in place should your company fail to continue to support the product for any reason.
5. If your company is a distributor of the product, how long has your company been distributing the specific products being proposed?
  - a. Business telephone system?
  - b. Voice processing system?
6. Are there any lawsuits against your company?

Please explain and attach a summary or explanation of the proceedings.

## **IV. Business Telephone System Product Requirements**

### **A. General Requirements**

1. Use the product requirement information listed in this document to provide detailed pricing for the proposed digital business telephone system configuration specified in section VII.
2. Please provide product descriptions and brochures for the proposed digital business telephone system, voice processing system, telephone sets, attendant consoles, and other related equipment.
3. Describe any special environmental considerations with regards to installation of hardware, such as power requirements, minimum and maximum acceptable temperature and humidity ranges, heat dissipation, wall mounting or floor space requirements, etc.
4. The proposed system must be both UL approved and FCC registered. Please list the types of FCC registration available with the system.

### **B. System Requirements**

#### **1. System Capacities**

The proposed system must be able to accommodate at least 99 CO lines or 150 stations in universal port configurations. List these capacities of the proposed system.

#### **2. North American Transmission Standards**

The proposed system must have complete compliance with the North American Numbering Plan standards. Describe the attributes of the proposed system as it relates to this.

#### **3. Multiple FCC Registration**

Our organization utilizes various types of trunk services. As a result, the proposed business telephone system must be capable of being classified or tariffed as a Key system, Hybrid system, or PBX system. List the types of FCC registration available with the proposed system.

#### **4. DTMF and Dial Pulse Compatible**

The proposed system must support both dial pulse (rotary) and DTMF transmission. Can the station user switch from one mode to the other by pressing a button? Can the station send continuous DTMF tone by pressing and holding a button on the dial pad?

#### **5. Hearing Aid Compatible**

All proposed station equipment must comply with rules adopted by the Federal Communications Commission in May of 1992. These rules specify that all telephones in workplaces of 20 employees or more must be hearing aid compatible. Describe the attributes of the proposed system and telephone sets as it relates to this.

## **6. Manufacturer's Support**

All hardware and software must be the current offering provided by the manufacturer, and that which receives the highest level of support available from the manufacturer. State whether the proposed system is the latest available version of both hardware and software and if not, explain what is being proposed and why.

## **7. Mean Time Between Failures**

What are the manufacturer's stated "Mean Time Between Failure" statistics for the digital business telephone system and telephone sets being proposed? Explain the methodology for how these statistics are calculated. Explain any design factors that promote product reliability.

## **C. System Architecture**

### **1. Stored Program Control**

Describe the attributes of the proposed system as it relates to this.

### **2. System Processor**

Describe in detail the type processor your system employs. Is the processor that operates a 50 port configuration the same processor and software that runs a 200 port configuration or a 500 port configuration? Is the processor expandable in the event an application might require more processing capability or support more capacity in the future? Is it upgradeable to support ongoing future versions of software?

### **3. Modular Design and Expansion**

The proposed system must be modular in design, with little or no loss of equipment utility resulting from physical or software expansion. Physical capacity must be expandable by the simple addition of shelves, cabinets, and network and station interfaces. Expansion cabinets must be able to be located apart from the base cabinet in a distributed configuration. Indicate the maximum distance expansion cabinets can be from the base and how they are connected. Describe the attributes of the proposed system as it relates to modular design and expansion.

### **4. Card Slot Flexibility**

The proposed system must have a universal "backplane" enabling either station or trunk/network interfaces to be inserted into the card slots. This type universal port design provides flexibility in configuring CO line and station combinations. Describe the attributes of the proposed system as it relates to this.

### **5. Switch Matrix**

Describe the proposed system's switch matrix. Indicate whether the system employs an internal digital transmission technique including Pulse Code Modulation, Time Division Multiplexing, etc. Is the system completely non-blocking?

## **6. System Memory Backup**

Describe the proposed system's main memory backup. How long is memory retained during power loss or storage? What is the advantage of the proposed system's memory backup scheme? What system programming and customer database information is stored?

## **7. Software Configuration**

What features does the standard software provide? Is the software expandable by application? List the applications that require additional software and list additional hardware components required to support them. What is the program language of the operating software?

## **D. System Power**

### **1. Power Consumption**

What AC voltage is required to run the system? What amp circuit is required? Does it require a dedicated circuit? Provide the estimated maximum power consumption of the telephone system.

### **2. Power Surge Protection**

Is the proposed telephone platform equipped with a regulated power supply that provides a line filtering capability which would prevent damage to the system as a result of a power surge due to lightning or other voltage spikes? What other safeguards are built into the proposed system to protect against power surges? Does the system require external power surge protectors?

### **3. System Battery Backup**

Describe the type of battery backup your company would recommend to power the proposed system for 2 hours at peak traffic load during an AC power outage. What type of batteries is required? Does the system immediately switch over from AC to battery power, or does the system have to be restarted? What occurs to the calls in progress during a loss of AC power? How long will the battery hold the system up before a complete shut down occurs? How long does the restart process take after a complete loss of power and system shut down?

## **E. System Administration**

### **1. Maintenance Administration**

Describe how maintenance administration is accomplished both by the service technician and the system administrator. Can live system programming be done? Can both programming and trouble shooting be performed remotely? Is password protection available for security access to the remote administration interface, and if so, how many access levels are available? Does the proposed system allow for programming from a designated telephone or is programming exclusively performed at a maintenance administration terminal? Describe the programming interface for the proposed system and what attributes make it user-friendly.

### **2. System Fault Finding and Diagnostics**

Describe the system's diagnostic capabilities. Can system faults be detected, alerted, logged, and traced? How are fault alarms alerted and to whom?

## **F. System Interfaces**

### **1. Analog CO Line/Trunk Interface**

Can the proposed system support both ground start and loop start lines? Can both be supported from the same interface card? Are both DTMF and dial pulse modes supported? Is the proposed system QSIG compatible?

### **2. Digital Trunk T1 Interface**

Can the proposed system support T1 interface? Can the T1 digital interfaces support both Extended Super Framing (ESF) and B8ZS framing? Will the T1 interface provide both Automatic Number Identification (ANI) and Dialed Number Identification Service (DNIS)? How many T1 interfaces and trunks will the system support in relation to the maximum trunk capacity?

### **3. Digital Trunk ISDN Primary Rate Interface**

Can the proposed system support ISDN Primary Rate Interface? Can the PRI digital interface provide the features of Call-by-Call Service Selection, Non Facility Associated Signaling, and Calling Number Services? How many PRI interfaces and trunks will the system support in relation to the maximum trunk capacity?

### **4. Digital Trunk ISDN Basic Rate Interface**

Can the proposed system support ISDN Basic Rate Interface? Can the BRI digital interface support both station-side and trunk-side connections? Can the BRI interface support both S/T (4-wire) and U (2wire) connections? Can the BRI support Calling Number Services?

### **5. DID Interface**

Does the proposed system support Direct Inward Dialing? How does it work? Does the DID interface support both incoming and outgoing calls? Are DID trunks available on an analog interface as well as the proposed system's digital T1 interface? What additional system equipment is required?

### **6. E&M Tie Lines**

Can the proposed system support E&M Tie line connection to other telephone systems? Can the E&M interface accommodate both 2 wire and 4 wire transmission? Are both type I and type II signaling supported? Are both wink start and immediate start functions supported? Are Tie lines available on an analog interface as well as the proposed system's digital T1 interface? What additional system equipment is required for tie line operation?

### **7. Digital Station Interface**

How many cable pairs are required to run the digital telephone set? Do additional options require additional pairs? How far can a digital station be placed from the CPU?

### **8. Analog Station Interface**

Is the analog station interface a card with its own time slot address, or is it a digital port converter? Should the client wish to run modems through the proposed system, what speeds will the proposed system support?

## **9. Off-premises Station Interface**

Does the proposed system support off-premises stations? How many off-premises stations are supported? Are off-premises digital telephones supported? Can off-premises telephones be supported via an IP network?

### **G. Computer Telephony Integration (CTI)**

Both desktop CTI applications and system-wide CTI applications must be supported on the proposed telephone system. Desktop CTI would typically be TAPI applications running on individual PCs. System-wide CTI applications would typically be CSTA applications running on a PC server connected to the telephone system, that all user PCs access through the LAN.

#### **1. Desktop CTI**

Describe desktop CTI capabilities available with the proposed telephone system. Discuss the proposed system's compliance with the Microsoft TAPI standards. Elaborate on the hardware interfaces and software necessary to run a computer application with the proposed telephone system. Indicate what PC based software the proposed system presently supports.

#### **2. System-wide CTI**

Describe system-wide CTI capabilities available with the proposed telephone system. Discuss the proposed system's compliance with the CSTA standards. Elaborate on the hardware required to interface the CTI server to the telephone system. Is a software developer's kit available for third party custom development?

### **H. Voice Over Internet Protocol (VoIP)**

#### **1. VoIP Functionality and Applications**

Does the digital telephone system support simultaneous voice and data transmission over the same IP network? Does the VoIP capability support toll bypass applications? What other VoIP applications are supported?

#### **2. VoIP Hardware Requirements**

What additional equipment is required for the digital telephone system to support VoIP? Is it part of the base telephone system or an add-on feature? Is the proposed digital telephone system field upgradeable to the VoIP capabilities at a later date if not originally installed with the system?

### **I. System Features**

#### **1. Account Codes**

Describe the use of account codes on a voluntary, forced, and forced & verified basis for the proposed system. Indicate the maximum number of digits and the minimum number of digits. Where in the dialing sequence is the code input? Discuss account codes as they relate to SMDR or call accounting.

#### **2. Automatic Call Distribution (ACD)**

Provide a brief overview of ACD capabilities. Discuss ACD's functional routing capabilities and historical reporting capabilities. Indicate whether there are different ACD software offerings available, and what differentiates one offering from another.

### **3. Automatic Off-hook Line Selection**

Can stations automatically select a specific line, line group, or directory number when the handset is lifted or the speaker button is depressed? Is it programmable by station?

### **4. Automatic Station Relocation**

Can a station be relocated within the proposed system by simply physically moving the station from one modular jack to another and without reprogramming? Specify which features and characteristics are retained and lost in the move. Can the system administrator lock/unlock this feature to control its use?

### **5. Automatic Number Identification (ANI)**

Does the proposed system support Automatic Number Identification, to display the caller's telephone number on the telephone LCD? Will it send the ANI digits to an attached computer or voice mail system? What type of ANI format is supported (Sprint, MCI, AT&T, etc.)? What types of CO lines or trunks are required for ANI? Can ANI digits be received simultaneously with Dialed Number Identification Service (DNIS) called number digits? Does the system capture call history for both abandoned (unanswered) and answered calls for later viewing or speed dialing? What additional equipment is required to support these ANI capabilities?

### **6. Caller ID**

Can the proposed system interface with Caller ID offered from the local operating company? Does Caller ID display the name, number, or both? Is Caller ID supported on both analog and digital lines? Does the system capture call history for both abandoned (unanswered) and answered calls for later viewing or speed dialing? If a second call rings while on the first call, can the Caller ID display the second call information? Describe the hardware and software requirements to add Caller ID to the proposed system. If appropriate, specify the number and type of trunks or lines the unit covers.

### **7. Dialed Number Identification Service (DNIS)**

Does the proposed system support DNIS? Are DNIS digits passed through the system as calls are transferred or forwarded? Is DNIS routing sensitive to day/night modes? Can DNIS route calls outside the system? Can DNIS digits be received simultaneously with ANI digits? What additional equipment is required to support DNIS?

### **8. Background Music and Music On Hold**

What type of music interface is provided or available with the proposed system? Is additional equipment required? Are there separate interfaces for background music and music on hold? How many music source interfaces are supported on the proposed system? Can individual stations turn on/off background music playing over telephone set speakers? Can they turn it on/off over external page speakers? Do they have volume control?

### **9. Barge-in**

Does the proposed station have the capability of monitoring another station engaged in a telephone conversation? Is the barge-in tone detected? By both parties? Describe how barge-in would be controlled by class of service. Can the barge-in tone be activated or deactivated?

### **10. Busy Override Tone**

Can a station that calls a busy station, override a busy signal with a tone burst, indicating a call is waiting?

### **11. Busy Station Transfer Ringing**

Can a busy station optionally provide ringing to an incoming or transferred call when the station is busy on an existing call? The desire is to use this feature in lieu of camp-on at some stations, and the concern is to not send a busy tone and transfer the call back to the auto attendant or voice mail from which it just came.

### **12. Call Duration Display**

Does the LCD display of the proposed telephone display the amount of time the call has been in progress? Is it updated on a real-time basis on the display? Can call duration display be turned on/off while on a call?

### **13. Call Forward**

Describe the call forward options available from the station. Include the options of All Calls, Busy, No Answer, Busy No Answer, Fixed, System-wide default, etc. Can calls be forwarded externally? Can the call forward external destination be changed remotely by the user? Can call forward be overridden?

### **14. Call Pickup**

Can a station pickup calls ringing at other stations? Can a station pickup calls ringing at other stations when the station number is unknown? How many station pickup groups are available? How many CO line pickup groups are available? Is a station capable of picking up calls from hold, park, and the paging system?

### **15. Call Transfer Options**

Can calls be transferred either immediately, without waiting for the destination party to answer, or after announcing the call to the answering party? Will a transferred call recall to the transferring station if the destination does not answer within a programmable amount of time?

### **16. Camp-on (Station)**

Does the station user have the ability to send transferred calls to a busy or idle station? If the recipient's telephone is busy can the station user be sent a ringing tone or camp-on tone? Can the frequency that the camp-on tone is heard be programmed? Can calls to either idle or busy stations recall after a preprogrammed number of seconds?

### **17. CO Line Identification**

Can individual CO lines be assigned an alphanumeric identifier that displays at the station where the call is ringing? How many characters long can the identifier be? How does this work in conjunction with displaying ANI or DNIS information?

### **18. CO Line/Trunk Groups**

How many CO line or trunk groups are supported on the proposed system? How are they accessed?

### **19. Conference**

How many internal and external parties can be on a conference? How many simultaneous

conferences can occur? Is amplified conference available to compensate for network volume loss during multi-external party conference calls? Can voice mail be included in a conference call to play messages for another party? Can a conference call be split between two outside callers to speak to them separately, and switch between them? Does proposed system support video conferencing?

## **20. Trunk-to-Trunk Connections**

Does the proposed system support trunk-to-trunk connections that are left joined from a conference? How does this work? How many such connections can be simultaneously supported on the system? How does the system compensate from volume loss over the public network between the two connected parties? Can standard analog telephones and voice mail/auto attendant ports also set up trunk-to-trunk conferences?

## **21. Centrex Features**

Is the proposed system capable of being used behind Centrex? Can it repeat Centrex ringing cadences received from outside lines when it rings to stations on the system? Is flexible station numbering, up to 4-digits, available for Centrex extension numbering? Can station buttons be programmed to store and send flash, pause, and the appropriate Centrex feature access code to the central office through the touch of one button?

## **22. Delayed Ringing**

Describe the delayed ring assignments that can be programmed into the system.

## **23. Direct Inward System Access (DISA)**

Indicate whether the proposed system provides DISA. Specify the maximum number of digits that can be used to password protect DISA. Can the DISA port be turned off in software?

## **24. Disconnect Supervision**

What type of disconnect supervision does the proposed system provide, if a holding caller hangs up? What type of calls does it work with? Is it programmable by CO line? What additional software or equipment is required to use this capability?

## **25. Distinctive Ringing**

Can station ringing be different for incoming line calls and internal calls? State the number of different station ring settings available with the system. Is the ring setting programmable by the user or system administrator or both?

## **26. Do Not Disturb**

Discuss the proposed stations use of Do Not Disturb. How are intercom calls treated versus external calls from an inbound and outbound perspective? Is there any additional messaging that can accompany a Do Not Disturb message that intercom callers might see in their display?

## **27. Do Not Disturb Override**

Can Do Not Disturb be overridden? Does class of service or some other method determine which stations have the do-not-disturb override abilities?

## **28. Door Phones**

Does the proposed system interface with door phones? Are the door phones proprietary? How do they interface with the system? Does connection of door phones decrease CO line or station port capacity? Describe the features available from the door phone.

## **29. Door Lock Control**

Does the proposed system interface with electronic door lock devices to provide remote unlock functions? Can a button be programmed on a telephone to remotely unlock the door at the press of a single button? How many door locks can be controlled? Does the connection of door lock controls decrease CO line or station port capacity? What additional system equipment is required for this capability?

## **30. DSS Buttons with Busy Lamp Field**

Are buttons available on the proposed station that give direct station auto dialing to other stations within the system? Do DSS buttons have an LED that can indicate station busy/idle status? How many buttons on a station can be programmed for "DSS/BLF"?

## **31. Flexible Button Assignment**

Discuss how features are assigned to programmable buttons at the station. Can most, if not all, features be assigned under feature buttons? Which features cannot be assigned under a feature button? Can individual station users program their own feature buttons on their telephone?

## **32. Feature Sequence Buttons**

Does the proposed system allow telephone set buttons to be programmed to perform a sequence of operations like a "macro key" on a computer? What type of features, numbers, digit length, etc. can be programmed on these buttons? Are they user programmable?

## **33. Flexible Intercom Directory Number Assignments**

Can intercom directory numbers be flexibly assigned as any numbers? Discuss how intercom directory number assignments are made. What are the available digit lengths? Can the intercom directory number assignment match a DID assignment and voice mailbox assignment?

## **34. Flexible Line Ringing Assignments**

Can CO lines be programmed to ring any station or group of stations? Describe the programming parameters of a line ringing assignment.

## **35. Hands-free Intercom**

Is a station user able to answer an intercom call without lifting the handset? Can each station be programmed uniquely to use this feature?

### **36. Headset Compatible**

Are the proposed telephone sets capable of connecting a headset? What additional equipment or interface is required?

### **37. Hold Options**

Can a station be programmed to either automatically place an existing call on hold or release the existing call when a button is pressed to answer another incoming call? Is it programmable by station? Can a station put a call on exclusive hold so it can only be picked up by that station or another station using directed call pickup? Will a holding call recall the station after a programmable amount of time?

### **38. LED Indicators**

Describe all the different LED indications available from the proposed telephones. Describe the flash rates and colors used for In Use, Incoming Call, On-Hold, Camp-On, and Busy Station Ringing, etc. conditions.

### **39. LCD Alphanumeric Messaging**

Is the proposed station capable of displaying messages on the LCD of another internal calling telephone? How many messages are available by station? Can the station user customize the messages?

### **40. LCD Feature Prompting**

Does the station's LCD provide instructions to the user during feature operation? Can the user press "soft" keys to make selections during feature operation? Describe how this procedure works.

### **41. Least Cost Routing (LCR)**

Does the proposed system provide full least cost routing that includes individual route plans, time schedules, and station LCR classes? How many route plans, time schedules, and station LCR classes are available? Describe the internal procedures that take place in the routing of calls. Does LCR conform to all current North American Numbering Plan requirements? Does LCR require any additional software or equipment?

### **42. Message Waiting**

Can a message waiting light be set on both digital electronic and standard analog stations on the proposed system? How does the station user retrieve a message? How many messages can each station store? Can a digital station also display message waiting on the LCD? If a message waiting light cannot be set on a standard analog telephone, is stutter dial tone supported?

### **43. Microphone Control**

- a. Can the proposed digital telephone's microphone be turned off/on by the press of a button?
- b. Is a microphone sensitivity control available to compensate for different room noise levels?
- c. What control does the system have for clipping? (This This is where the local voice and background noise cause the microphone to switch back and forth causing the real speakers voice to be chopped by stealing the active mike circuit.)

#### **44. Multiple Directory Number Call Coverage**

Describe how multiple appearing directory numbers and flexible ringing patterns can be used for call coverage and group answering applications.

#### **45. Networking of Multiple Systems**

The proposed telephone system must be capable of networking multiple systems together to work as one large system using QSIG call control for interoperability. This must include the capability to share a centralized voice mail system between all locations, answer incoming calls for all locations at the main location, and dial between locations using a coordinated dialing plan. Describe how these needs will be met with the proposed telephone system, and what additional software and hardware components are required.

#### **46. Night Service**

Indicate the number of day and night modes available. State the differences between day and night ringing and answering. Indicate which stations can place the system in the night mode and which stations can answer night calls. Can different trunk groups be placed into night service at different times? Can night ringing occur over the paging speakers? Can system switching between day and night modes be programmed for automatic activation by time of day and day of week?

#### **47. Off-hook Call Announce**

Describe how off-hook call announce is initiated and received from the station. Does the announcement come through the handset or the speaker on the telephone? Does each station user have a choice of the speaker or handset method? How is control provided over the use of off-hook voice announced? Is additional equipment required to send or receive off-hook call announcements? Can this feature be programmed by station?

#### **48. On-hook Dialing with Hot Dial Pad**

Is the station user able to dial and monitor an external number before having to lift the handset? Is this feature available on all digital telephone models or only on speakerphones? Do the proposed digital telephones have a hot dial pad, meaning that it is not necessary for the station user to press an intercom or outside line button first to begin on-hook dialing?

#### **49. Paging - Internal**

Indicate whether the proposed system offers paging through the telephone sets. Can the ability to receive a page be programmed by individual telephone? How many internal page zones are available?

#### **50. Paging - External**

State whether the proposed system offers overhead paging through speakers. Can overhead paging be accomplished by each individual station using their telephone? How many external page zones are available? What additional equipment is required for these paging capabilities?

#### **51. Pooled Line Button Access**

Can a group of lines be grouped under a single button? Is there any limit to the number of lines that can be grouped under a button? How many line groups are available?

**52. Private CO Lines**

Can the proposed telephones support private lines, so that they only ring and can only be answered by that telephone?

**53. Privacy/Non-Privacy**

Can the proposed system be set as either private or non-private? Can CO line buttons be either private or non-private on an individual station basis? Can privacy/non-privacy be changed at a station by pressing a button or dialing a code on a call-by-call basis?

**54. Release/Answer Button**

Can a call be disconnected by pressing a Release button? Can it also be programmed to release the current call and answer the next at the press of one button?

**55. Redial Capabilities**

Can the proposed station store a specified number dialed in memory and offer the station user the opportunity to redial the number by pressing a key? Can the station store the last number dialed in memory and offer the station user the opportunity to redial the number by pressing a key? Does the proposed system afford the station user the ability to automatically redial busy outside telephone numbers at preprogrammed intervals? Does this auto busy redial feature work through Least Cost Routing?

**56. Ringing Line Preference**

Can a station be programmed to answer the ringing line by simply depressing the speaker button or lifting the handset? Is it programmable by station?

**57. Station Hunting**

Describe the different types of station hunting available with the proposed system. Can a station be in more than one hunt group simultaneously? How many hunt groups can be defined within the proposed system? Can data calls hunt?

**58. Station Message Detail Recording (SMDR)**

Can the proposed system output SMDR data on all calls made and received to a printer or call accounting application? What information does the SMDR output contain? What additional system equipment is required for printer connection or call accounting interface?

**59. Station Speed Dial**

How many station speed dial numbers does the proposed system provide per station? How many characters per speed dial bin? Can speed dial bins be logically linked to one another? How is the station speed dial accessed, by code, by button, or by LCD directory? If an LCD internal directory is available, describe its operation.

**60. System Speed Dial**

How many system speed dial numbers does the proposed system provide? How many characters per speed dial bin? Can speed dial bins be logically linked to one another? How are the system speed dials accessed, by code, by button, or by LCD directory? If an LCD internal directory is available, describe its operation.

### **61. Station Queuing**

Can an internal caller to a busy station in the proposed system set queuing to automatically call when the busy station becomes idle? How is this set?

### **62. Trunk Queuing**

Can an internal caller trying to access a busy CO line or line group set queuing? How does this work?

### **63. Toll Restriction**

Describe all the toll restriction alternatives available with the proposed system. How many levels are available? Does the system conform to current North American Numbering Plan requirements?

### **64. Toll Restriction Override**

Can toll restriction be overridden by entering an authorization code? By speed dial? By through dialing, in which a non-restriction station can connect a toll restricted station?

### **65. Outgoing Call Restriction**

Can selected stations on the proposed system be restricted from making any outgoing calls? Is flexibly programmable by station and by CO line?

### **66. Volume Control**

Are individual station volume settings available for the handset, speaker, and ringing? How does the station user adjust these volume settings?

### **67. Voice or Tone Calling Option**

Can the proposed system be programmed for either ringing or voice signaling when an internal station calls another? Can individual station users switch between methods?

### **68. Voice Mail Integration**

Describe the voice mail integration features supported from the telephone system. Describe the hardware or software interfaces required.

## **J. Attendant Console Features**

### **1. Answer Button with Priority**

Can an answer button be used to automatically answer the next call ringing regardless of what line or other button it is ringing in on? How does the proposed attendant console or system determine which call is next if multiple calls are ringing? Is it just first come first served, or is this programmable by the user to give priority to certain types of calls? Does this function also apply to recalls or transferred calls?

### **2. Incoming Call Identification and Selective Answering**

Does the proposed attendant console identify the type of call ringing? Can the operator override the answer button priority to selectively answer a certain call? How is this accomplished?

### **3. Call Transfer Operation**

The operator needs a fast and efficient method of transferring calls as their primary function. Describe the methods available for transferring calls with the proposed attendant console.

#### **4. Auto Dialing**

The operator needs the ability to auto dial both internal stations and external telephone numbers. Can the proposed attendant console provide this capability? Does the console's dialing directory have a search capability by name, partial name, or initial?

#### **5. Busy Lamp Field (BLF) Display**

Does the proposed attendant console display station status to indicate if stations are busy on a call? Does it display the station directory number, name, or both?

#### **6. Direct Station Selection (DSS)**

Can the proposed attendant console call a station directory number simply by pressing a DSS button? Can these DSS buttons be used to transfer calls to these stations? How does this work?

#### **7. Directory Display and Dialing**

Does the proposed attendant console display a directory of station users? Can the directory display names, numbers, or both? Can the directory display be used for DSS calling and call transferring as well as display BLF status? How does this work?

#### **8. Emergency Calls**

Station users need a way to get through to the operator immediately even if the operator is busy on an existing call. Does the proposed attendant console provide a way for station users to place emergency calls to the operator? How the operator is notified that the call is an emergency call?

#### **9. Emergency Page**

Can the proposed attendant console provide a fast and efficient method to page all stations and/or over external paging speakers? How is this done?

#### **10. Feature On-Line Help**

Does the proposed attendant console provide on-line user instructions and help information? How is it accessed?

#### **11. Headset Operation**

Can a headset be plugged into the proposed attendant console? Does it require any additional or optional interfaces?

#### **12. Hold Button and Display Functions**

When the operator puts calls on hold on the proposed attendant console, how are holding calls displayed? Can one be distinguished from another to know who they are holding for? Is a timer available to show how long they have been holding? Will held calls recall and ring after they have been on hold for a programmable amount of time?

#### **13. Incoming Attendant Call Statistics**

Can the proposed attendant console or system collect statistics on incoming calls to the operator? What statistics are collected and for what period of time?

#### **14. Maintenance & Administration from Console**

Can routine maintenance and administration functions be performed from the proposed attendant console? What functions can be performed? If system faults occur, can alarms sound or display at the attendant console?

**15. Override**

The operator often needs to reach station users even if they are busy on a call or in Do Not Disturb (DND) mode. Does the proposed attendant console enable the operator to override DND or busy status when calling a station?

**16. Transfer Direct to Voice Mail**

If the operator knows the requested station user is not available, they need to transfer the call directly to the requested party’s mailbox rather than to the station because it may not be properly forwarded to voice mail. Does the proposed attendant console have the ability to transfer the call directly to an individual mailbox? How does this work?

**17. Volume Control**

Does the proposed attendant console provide independent controls for handset/headset volume and ringing volume? Can the volume be increase while active on a call?

**K. Station Equipment**

**1. Telephones, consoles, and accessories**

List the different type digital and analog telephones available with the proposed system. Identify which telephones offer a speakerphone capability and which telephones offer a display. Include DSS consoles, data interface units, and other accessories that can be used in conjunction with these telephones. Also describe attendant consoles available for answer position use with the proposed system.

**2. Wireless telephone equipment**

Describe wireless telephone equipment that can be used with the proposed system.

**L. Telephone System Feature Summary Chart**

The chart that follows summarizes feature availability of the digital business telephone system. Answer with a check mark signifying feature availability as Standard (Std), Optional (Opt.), or Not Available (N/A). The column to the far right is provided for comments if needed.

System Features:	Standard	Optional	Not Available	Comments:
Account Codes - Voluntary				
Account Codes - Forced				
Account Codes - Verified				
Automatic Call Distribution (ACD)				
ACD Multiple Group Agent Login				
ACD Priority Queuing				
ACD Skills-based Routing				
Automatic Number Identification (ANI)				
Automatic Off-hook Line Selection				
Automatic Recall (Hold, Transfer)				
Automatic Station Relocation				

System Features:	Standard	Optional	Not Available	Comments:
Background Music Interface				
Background. Music/MOH Separate Interfaces				
Background Music Through Telephones				
Battery Backup - System				
Battery Backup - Memory				
Barge-in Override				
Busy Override Tone				
Busy Station Transfer/Ringing				
Call Duration Display				
Call Forward - All Calls				
Call Forward – Busy				
Call Forward - No Answer				
Call Forward - Busy/No Answer				
Call Forward - Fixed				
Call Forward - External & Remote Change				
Call Forward - System-wide Default				
Call Forward Override				
Call Pickup - Directed Station				
Call Pickup - Station Group				
Call Pickup - Ringing CO Line				
Call Pickup - Ringing CO Group				
Call Pickup - Holding/Parked				
Call Transfer Immediate				
Call Transfer with Announcement				
Call Transfer with Camp-on				
Call Transfer Recall				
Call Waiting with Camp-On Tone				
Caller ID				
Caller ID History				
Centrex/PBX Feature Buttons				
Centrex Ringing Repeat				
Class of Service – Station				
Class of Service – Traveling				

System Features:	Standard	Optional	Not Available	Comments:
CO Line Identification				
CO Line/Trunk Groups				
CTI Desktop TAPI Support				
CTI System-wide CSTA Link				
Conference				
Conference – Amplified				
Conference Split				
Continuous DTMF Signal Tone				
Delayed Ringing				
Dialed Number ID Service (DNIS)				
Direct Inward Dialing (DID)				
Direct Inward System Access (DISA)				
Disconnect Supervision				
Distinctive CO/Intercom Ringing				
Distinctive Station Ringing				
Do Not Disturb				
Do Not Disturb Override				
Door Lock Control				
Door Phone Interface				
DSS/BLF Buttons				
DTMF/DP Mode Change Button				
DTMF and Dial Pulse Compatible				
DTMF Continuous Tone				
E & M Tie Lines				
Flash Button				
Feature Sequence Buttons				
Flexible Button Assignment by User				
Flexible Station Numbering				
Flexible Port Assignment				
Flexible Line Ringing Assignment				
Ground Start Lines				
Handset Volume Control				
Headset Compatible				
Hearing Aid Compatible				

System Features:	Standard	Optional	Not Available	Comments:
Hold – Automatic				
Hold – Exclusive				
Hold – Recall				
ISDN Basic Rate Interface				
ISDN Primary Rate Interface				
Least Cost Routing				
Live System Programming				
LED Two-Color Indicators				
LED Flash Rates By Condition				
LED Line in Use (I-Use) Indication				
LED Line on Hold (I-Hold) Indication				
LCD Alphanumeric System Messages				
LCD Alphanumeric Personal Messages				
LCD Absence Messaging				
LCD Busy Station Messaging				
LCD Feature Prompting with Soft Keys				
Message Waiting - Digital Sets				
Message Waiting - 2500 Sets				
Message Stutter Dial Tone - 2500 Sets				
Microphone Control Button				
Microphone Sensitivity Control				
Modular Expansion System Design				
Multiple Directory Numbers				
Multiple FCC Registration (KF,MF,PF)				
Networking of Multiple Systems				
Network Coordinated Numbering				
Network Centralized Attendant Service				
Network Centralized Voice Mail				
Network QSIG Call Control				
Night Service Scheduled Auto Activation				
Night Ringing Call Pickup				
Night Ring Over External Page				
Night Ring Over External Page Zones				
Non-blocking Architecture & Dialing				

System Features:	Standard	Optional	Not Available	Comments:
Off Premises Analog Extensions (OPX)				
Off Premises Digital Extensions				
Off-Hook Call Announce - Speaker				
Off-Hook Call Announce - Handset				
On-hook Dialing with Hot Dial Pad				
Outgoing Call Restriction				
Paging - Internal Telephone Groups				
Paging - Internal Telephone Speakers				
Paging - External Interface				
Paging - External Zones				
Pooled Line Keys				
Power Failure Transfer				
Privacy/Non Privacy Option				
Privacy Button				
Privacy Release Button				
Private CO Lines				
PC Programming & Upload/Download				
Redial - Last Number Dialed				
Redial - Automatic Busy Redial				
Release Key				
Release/Answer Key				
Remote Maintenance/Administration				
Ringling Line Preference				
Speakerphone				
Speed Dial Buttons				
Speed Dial Directory Dialing on LCD				
Station Hunting - Voice Calls				
Station Hunting - Data Calls				
Station Message Detail Recording (SMDR)				
Station Queuing				
Station Speed Dialing				
System Speed Dialing				
System Fault Finding & Diagnostics				
Telephone Set Upward Compatibility				

System Features:	Standard	Optional	Not Available	Comments:
Through Dialing				
Toll Restriction				
Toll Restriction Override Codes				
Toll Restriction Speed Dial Override				
Trunk Queuing				
Trunk-to-Trunk Connections				
T1 Interface				
Voice Mail Integration - In Band DTMF				
Voice Mail Integration - SMDI				
Voice Mail Conference				
Voice Mail LCD Feature Display/Prompts				
Voice or Tone Calling Options				
Voice Over Internet Protocol (VoIP)				
Volume Control – Handset				
Volume Control – Ringing				
Volume Control – Speaker				
Wireless Telephone Interface				
<b>Attendant Console Features:</b>				
Answer Button with Priority				
Auto Dialing - Internal Stations				
Auto Dialing - Outgoing Speed Dial				
Busy Lamp Field Display				
Call Transfer				
Caller ID/ANI Display				
Direct Station Selection				
Directory Display and Dialing				
Emergency Call				
Emergency Page				
Feature Help On-line				
Headset Compatible				
Hold Button and Display				
Hold Timer Display				
Hold/Park and Page Combined				
Incoming Call Identification				

System Features:	Standard	Optional	Not Available	Comments:
Incoming Attendant Call Statistics				
Maint./Admin. from Attendant Console				
Message Waiting				
Night Transfer				
Override				
Release Button				
System Fault Alarm Indication				
System Speed Dial Access				
Transfer Direct to Voice Mail Box				
Volume Control				

## V. Voice Processing Product Requirements

This section presents questions regarding the voice processing requirements of the YOUR INSTITUTION. Refer to configuration requirements in Section VI. The pricing should be presented in Section VII.

### A. General Requirements

#### 1. System Environmental Requirements

Indicate the environmental requirements of the proposed platform (operating temperatures, relative humidity, power considerations, grounding requirements, etc.)

#### 2. System Registration

The proposed system must be both UL approved and FCC registered.

### B. System Requirements

#### 1. System Integration

The proposed voice processing system must provide extensive integration with the proposed telephone system. Which major PBX systems (including your own) do you integrate with? Describe the level and types of integration. Does the proposed voice processing system provide dual integration?

#### 2. System Expansion

The proposed voice processing system must be expandable for future growth. Describe the expansion path of the system. Describe how expansion is packaged (i.e. by ports, mailboxes, disk storage, growth from smaller models to larger models, etc.).

#### 3. System Capacities

The proposed system must be able to accommodate the following minimum capacities:

Capacity Criteria	Minimum Capacity
Number of ports	12
Number of mailboxes	250
Length of message	99 seconds
Amount of message storage	250 hours

### C. System Architecture

#### 1. System Internal Components

Describe in detail the processor type and other internal components your system employs.

## **2. System Flexibility**

Indicate whether the analog ports serving as the interface can be dynamically allocated to different concurrent applications or must applications be assigned dedicated ports. Additionally, indicate whether different applications can reside on the same hard drive or are different drives required to run different applications.

## **3. Redundancy**

Describe disk and storage redundancy functionality.

## **4. System Hard Drive Efficiency**

Does the proposed system compress long pauses in recorded messages to efficiently utilize space on the hard drive?

## **D. System Administration**

### **1. Security Features**

Describe the security features of the voice processing system.

- Minimum/maximum password length? Who controls the length?
- Can they be viewed by the system administrator?
- Can passwords be reset? By who?
- Can they be locked after a certain number of invalid attempts?

### **2. Internal Maintenance**

Describe the system's internal maintenance operations.

- Can the system be set to automatically purge messages on a system wide basis after a designated amount of time? What is the range of time that can be set? Does the system automatically purge heard, unheard, or both types of messages?
- How are message indicators activated/deactivated? Are ports dedicated for this function? Shared?

### **3. System Volume Control**

What measures can be taken to adjust the gain affecting the audio input and output?

### **4. System Alarms & Notifications**

Describe what sort of notifications can be generated for the system administrator.

## **E. Features**

### **1. Audiotex (Information Only Mailboxes)**

Does the proposed system have mailboxes designed only to dispense information without the option for the caller to reply to the message? Will the system automatically disconnect the caller after the information has been delivered? Could the caller be transferred to another mailbox/extension at the conclusion of the message? Are the mailboxes capable of being password protected? How many mailboxes can be created to dispense information? Is the message length programmable?

## **2. Automated Attendant**

The voice mail system is required to have automated attendant as part of its platform. Will the automated attendant offer supervised and unsupervised transfers, which could be automatically changed by time of day, day of week, and holidays? If a caller, using the automated attendant, finds they are going into voice mail, what must they do to call another extension or return to the operator?

## **3. Broadcast Messages**

Does the system administrator have the ability to create and deliver system wide messages? Does the individual subscriber have that same capability? Can that be controlled through class of service?

## **4. Called Identification**

Does the proposed system offer the capability of announcing the called party prior to connecting a call?

## **5. Call Screening**

Describe the call screening capabilities of the proposed system.

## **6. Directory**

Indicate whether the proposed system offers a directory of all extension/mailboxes within the system? How and when can the directory be accessed? How are the names logged into the directory? Does the system do a numeric to alpha translation seeking to narrow the choices? Describe the procedure undertaken by the system to look for a match.

## **7. Distribution Lists**

Indicate whether the proposed system offers group distribution lists. How many system-wide lists can be created? How many group distribution lists can be created by an individual subscriber from their mailbox? Is there any limit to the number of mailboxes that can be included in either distribution list? Can a mailbox be in any number of different group distribution lists both personal and system wide? How are changes such as the addition and deletion of mailboxes performed?

## **8. Do Not Disturb**

Does the proposed system provide do-not-disturb feature capabilities? Describe.

## **9. Forwarding Messages**

Does the proposed system enable the subscriber to forward a message with or without comments to another subscriber or group of subscribers? Will the system provide verification of the party sent the copy of the message? Can the message be re-forwarded by other subscribers upon their receipt? How many times can that message be re-forwarded? Will all the introductory remarks attached to the message be retained?

## **10. Greetings**

How many different greetings are available with the proposed voice mail? Can the greetings be affected by time of day, day of week, holiday, and emergency? Can the greetings change automatically or must they be manually activated? Are the greetings programmed by the mailbox user or the system administrator? Can the mailbox subscriber create an extended absence greeting to be heard by callers calling the subscriber's mailbox? Additionally, can callers hearing the extended absence greeting be blocked from leaving a message or automatically transferred to another extension?

## **11. Group Partitions—Call Blocking**

Discuss whether the system can be partitioned into groups of subscribers. Can class of service deny access when one group attempts to message another group? How many partitioned groups can be established within the system?

## **12. Guest Mailboxes**

Describe the use of guest mailboxes (guest ID) on the proposed system. Is there a limit to the number of guest mailboxes a system subscriber might have tied to their mailbox? What sort of functionality does the subscriber of the guest mailbox enjoy? Can the system administrator control subscriber's use of guest mailboxes through class of service?

## **13. LCD Feature Prompting with Soft Key Operation**

Does the proposed system support LCD feature prompting display of voice mail features? Is soft key functionality provided to facilitate easy operating of these visual control features? Does LCD operating replace or supplement voice prompts?

## **14. Message Delivery Options**

Does the proposed system offer the delivery of messages at a preprogrammed time in the future? How far into the future can the message be delivered? Can the message be canceled? Can the future delivery be used with external parties to the voice mail system, in addition to other Mailboxes within the system? Is there confirmation back to the sender of the message that the message was sent and received? Can a message be marked as “private?”

## **15. Message Notification**

Will the proposed system offer the user the ability to differentiate between regular, urgent, private, fax, etc.? Indicate how many different options and priorities of messages a subscriber might receive.

## **16. Message Playback Controls**

Can the subscriber skip messages, pause during messages, speed up or down during messages? Can the subscriber skip a predetermined number of seconds ahead or behind? Can the subscriber replay or cancel the review of messages? Can the volume of the message be adjusted during review?

### **17. Message Playback Options**

Are saved messages separated from new messages enabling the subscriber to not be burdened by listening to both? How are pending messages handled, for those that have been partially listened to? Will urgent messages be sent to the head of the message queue to ensure expeditious treatment by the subscriber?

### **18. Message Purging**

Describe the system's procedure for purging messages. When does purging occur?

### **19. Message Reply**

Will the proposed system enable the subscriber to reply to a message sent within the system by simply depressing a single digit, thus eliminating the need to input the message originator's mailbox number? Does the message have all the same delivery options that a newly created message has, i.e., urgent and confidential?

### **20. Message Copy / Message Delete**

Describe the message copying feature capabilities of the proposed system.

### **21. Message Date and Time**

Does the proposed voice processing system play the time and date of messages?

### **22. Message Length Control**

Can the system administrator control the length of incoming messages in an effort to manage hard disk space usage?

### **23. Message Notification**

Describe the proposed system's message notification capabilities. Can a user have more than one type of message notification?

### **24. Message Retrieval Control**

What order are messages played when retrieving messages from a user mailbox? Can this be changed?

### **25. Message Waiting Indication**

Indicate whether message waiting lights and or stutter dial tone work with the proposed system's integration. Describe the process as the voice mail tries to communicate to the telephone system and ultimately the station user that a message has been left. Is there a delay or is the message delivered immediately?

### **26. Multiple System Languages**

What languages does the proposed voice mail system offer? Can different languages run concurrent? How many? Describe how a caller might move from one language to another. Is there a choice between male and female voices for the provided prompts?

### **27. Networking (AMIS)**

Describe the networking capabilities of the proposed voice processing system to link multiple voice processing systems. Does it use the Audio Messaging Interchange Specification (AMIS) networking method? If not, what?

## **28. Port Monitoring**

Indicate whether your system can monitor a port and differentiate between "busy" and "no answer" conditions and change the greeting appropriately. Will the system differentiate between internal and external callers and give them different alternatives? Can the proposed system monitor a busy extension and place the caller into a queue and inform the caller of the busy status of the extension? Could the system then give the holding caller the option to continue hold, leave a message, or dial another party's extension number?

## **29. Receiving Messages/Message Review**

Will the proposed system notify the mailbox user of the total number of messages to be heard upon the request for the password? How will the system treat messages that have been listened to but not acted upon?

## **30. Recording Telephone Calls in Voice Mailbox**

Can the proposed system record telephone calls in voice mail and store them as messages in a voice mailbox? Does the user have start/stop controls? Can the recorded calls be listened to and processed as any other voice message? Does the record feature also work on conference calls?

## **31. Remote Administration**

Describe the remote administration capabilities of the proposed system.

## **32. Reports**

Discuss your system's ability to provide reports. Discuss what reports could be used for securing the voice mail system. Can reports be stored and printed on demand?

## **33. Shared Extensions**

Can multiple mailboxes support a single shared extension? If so, how is this accomplished?

## **34. Single Digit Call Processing**

Is there the capability of single digit dialing to specified groups or departments? Can multiple menu layers be accessed by single digit selections? How many menu layers are offered?

## **35. System Backup**

Describe system backup procedures available with the proposed voice processing system.

## **36. Voice Forms**

Does the proposed system give the caller the ability to listen to questions and reply to each question individually? Can the responses be separated from the questions to be delivered in an edited format for the administrator to later retrieve? Will the system automatically disconnect the caller after the information has been received? Could the caller be transferred to another mailbox/extension at the conclusion of the form? Are the mailboxes capable of being password protected?

## **37. Programmable Pause**

Does the system allow the programming of the length of pause in a recording before a disconnect takes place?

## **F. Interactive Voice Response (IVR)**

1. Describe the IVR capabilities of the proposed voice processing system.
2. Does the IVR application run on the same hardware platform as the voice mail and fax application? Can all three of these applications run concurrent on the same hardware platform?
3. Does the proposed system provide a programming capability through which custom voice prompt and response entries can be created?
4. Do the IVR programmed responses reside on the proposed system or an external mainframe or data server? Can these IVR responses reside on either? If so, how is the proposed system linked to the external system where the response database resides?
5. Can programmed IVR responses be combined with variable responses? For example, “Would you like to speak to a customer service representative?” The number 6 and the date are provided by the database, while the phrases “your order for” and “Would you like to speak to a customer service representative?” would be recordings that the system administrator makes.
6. Do you provide complete custom IVR application development services? What is provided and how does the program work?

## **G. Facsimile Services**

### **1. Fax Platform and Overview**

Describe the architecture of the fax platform. Can all the fax applications run concurrently? Does the fax platform run on top of the voice mail platform?

### **2. Fax Messaging Hardware**

Discuss the hardware required to implement fax messaging. What baud rates can the fax modems support?

### **3. Memory**

What considerations must be given to memory if fax is implemented? Is a RAM upgrade required, and at what stage?

### **4. Hard Drive**

Discuss the involvement of the hard drive. Is the hard drive the same storage site for voice messages as for fax messages? Where on the hard drive are the faxes stored relative to the voice messages. Are there any redundant storage capabilities for fax on the proposed system?

## **5. Fax Messaging Features**

When using fax mail, can the user send a message to another subscriber? Can a user receive messages from other subscribers which would have "header" information indicating who sent it (if it came from within the system), when it was received, and how many pages were in the transmission? Could the messages be forwarded or copied to other users with an annotated voice comments? Could "class of service" restrictions be placed by fax mailbox on the forwarding or copying of messages?

## **6. Fax Reply/Editing/Delivery**

Can a reply to a fax message be a simple one or two keystroke procedure when forwarded from another internal user? Will the proposed system have the same editing features as voice mail enabling the user to skip, save, or delete messages? Will the system have the same delivery options as voice mail, enabling the user to tag the messages urgent, confidential or even for future delivery?

## **7. Fax on Demand**

Does the proposed system offer the Fax on Demand feature capability? Describe how callers wishing to receive a fax would go about making that request on the proposed system.

## **8. Fax Tone Detect**

Does the proposed system offer Fax Tone Detect capabilities? Describe how this feature works.

## **H. Automatic Speech Recognition**

1. Describe the Automatic Speech Recognition (ASR) capabilities of the proposed voice processing system.
2. Does the ASR application run on the same hardware platform as the voice mail and other applications? Can all of these applications run concurrent on the same hardware platform?
3. What considerations must be given to memory or additional processing power if ASR is implemented? Is a RAM upgrade required, and if so, at what stage? What other additional hardware, if any, does ASR require?

## **I. Text-to-Speech**

1. Describe the Text-to-Speech (TTS) capabilities of the proposed voice processing system.
2. Does the TTS application run on the same hardware platform as the voice mail and other applications? Can all of these applications run concurrent on the same hardware platform?
3. What considerations must be given to memory or additional processing power if TTS is implemented? Is a RAM upgrade required, and if so, at what stage? What other additional hardware, if any, does TTS require?

## **J. Unified Messaging**

1. Describe the Unified Messaging (UM) capabilities of the proposed voice processing system.

2. Does Unified Messaging on the proposed voice processing system support Microsoft Outlook integration? Does it support other email servers? Does it support Internet Protocol Integration?
3. Does the UM application run on the same hardware platform as the voice mail and other applications? Can all of these applications run concurrent on the same hardware platform?
4. What considerations must be given to memory or additional processing power if UM is implemented? Is a RAM upgrade required, and if so, at what stage? What other additional hardware, if any, does UM require?

**K. Call Center Features**

1. Does proposed system interface into a Customer Relationship System?
2. If K1 is “yes,” how many systems are fully operational in banks?

**L. Feature Summary Chart**

The chart that follows summarizes feature availability of the voice processing system. Answer with a check mark signifying feature availability as Standard (Std), Optional (Opt.), or Not Available (N/A). The column to the far right is provided for comments if needed.

Voice Processing System Features:	Standard	Optional	Not Available	Comments:
Audiotex				
Automated Attendant				
Automatic Gain Control				
Automatic Speech Recognition				
Busy Greeting				
Busy Greeting Length Control				
Called Identification				
Caller Confirmation prior to Transferring				
Call Queuing				
Call Screening				
Call Transfer				
Directory				
Disk Redundancy				
Disk Space Notification				
Distribution Lists				
Do Not Disturb				
Fax Messaging				
Fax Messaging - Immediate Retrieve				
Fax Messaging - Send Retrieve				
Fax on Demand / Fax Back				

Voice Processing System Features:	Standard	Optional	Not Available	Comments:
Fax Tone Detection				
Future Delivery				
Greeting - Company				
Greeting Length Control				
Greeting - Personal				
Greeting - Port Selectable				
Group Partitions - Call Blocking				
Guest Users				
Guest Users Limit				
Integration - Dual				
Integration - Inband				
Integration - SMDI/RS-232				
Interactive Voice Response				
LCD Feature Prompting with Soft Keys				
Message and Prompt Speed Control				
Message Copy				
Message Copy w/Delete				
Message Date & Time by Request				
Message Date & Time Control				
Message Delete - Continuous				
Message Forwarding				
Message Length Control				
Message Pause During Playback				
Message Playback - Continuous				
Message Playback Control				
Message Purging				
Message Receipt Verification				
Message Reply				
Message Retrieval Control				
Message Undelete				
Message Volume Control				
Messages - New & Saved				
Messages - Private				
Messages - Urgent				

Voice Processing System Features:	Standard	Optional	Not Available	Comments:
Messaging - Voice				
Multiple System Languages				
Name & Extension Control				
Networking (AMIS)				
Notification - Message				
Notification - Urgent Messages				
Notification - Disk Space				
Programmable Dial Actions				
Real Time Screen Information				
Record to Voice Mailbox				
Relay Paging				
Remote Administration				
Reports				
Ring Duration				
Shared Extensions				
Single-Digit Menus				
System Backup				
Text-to-Speech				
Token Programming				
Plug and Play				
Unified Messaging				
Universal Ports				
User ID Option Locks				
User ID Security Code				
User ID - Variable/Fixed Length				
Voice Forms				

## **VI. System Requirements**

### **A. Required Capacities of Proposed Digital Business**

#### **PROPOSE A DIGITAL BUSINESS TELEPHONE SYSTEM CONFIGURATION TO REPLACE THE FOLLOWING SYSTEMS:**

##### **Main Office**

Currently have a Meridian/Northern Telecom Phone System in place with Meridian Phones.

12 Incoming lines from AT&T

40 DID numbers with about half of them being used

70 Black Meridian Standard Button/Display Phones

1 Receptionist Console Phone

##### **Remote Office #1**

Currently has a fairly new Siemens Highpath 3550 Phone System.

3 Siemens phones but needs to expand to 12

Currently has a very tedious sequence just to get to voicemail

Has 4 incoming lines from AT&T

##### **McLewis Office**

Has no phone system

Just using straight analog lines coming into SBC Telecom Phones

2 incoming lines from AT&T (definitely need more 2+?)

##### **Mauriceville Office**

Fairly old Merlin II Phone System in place.

Using 20 Merlin phones

Using 6 lines from AT&T

Long distance charges apply when calling Newton

##### **Newton Office**

Currently has a small Meridian Phone System in place.

Using 3 lines right now through AT&T

Using 6 Meridian Standard Button/No Display Phones

Phones just have assigned buttons to each lines, no extensions

Need at least one more phone, growth to 8

### **B. Additional Requirements**

- . Message waiting lamps on all telephones
- . System administration hardware and software
- . ACD software and hardware. Include capability for reports.
- . LCR software
- . Battery backup, 2 hours minimum.

## **VII. Pricing**

### **A. Equipment & Installation**

Provide a full equipment and software listing with component pricing. If applicable, attach a copy of an Auto-Quote. Break out pre-cutover and post-cutover pricing. Break out installation costs as required.

### **B. Leasing**

Provide leasing costs for 3 and 5 year terms. Do not include maintenance costs. Please provide 10% buyout at lease end.

### **C. Training**

End user training will be required. Final pricing should include pre- and post-cutover training costs.

Is Technical training available from the manufacturer?

## **VIII. Installation Service and Maintenance**

1. Please attach a cut-over plan for your proposed system.
  - a. What is the plan for testing all critical components of your system?
  - b. What is the back-out plan in the event of a system failure after the initial installation?
2. Explain the installation, warranty coverage and time period of the warranty.
3. After the warranty period, what does the vendor offer in regard to service arrangements?