

### 5.3 AUDIO CONFERENCING SERVICES (ACS)

***Qwest's ACS provides a fast and flexible way to meet and immediately exchange information among a virtually unlimited number of people domestically and globally.***

Qwest's ACS has one of the most extensive lists of teleconferencing features available today in the commercial and Government marketplaces. For example, users will be able to choose operator assistance or automated ACS service. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

### **5.3.1 Technical Approach to Audio Conferencing Service Delivery (L.34.1.5.1)**

Qwest's ACS uses the latest conferencing technology, incorporating a multi-server, distributed architecture hosted in several data centers worldwide. This conferencing technology is integrated with a worldwide telecommunications network that carries the ACS traffic. This conferencing technology and worldwide network, as depicted in Figure 5.3-1, is the infrastructure that enables Qwest to effectively meet the features, service, and technical requirements of the Agencies.

#### **5.3.1.1 Approach to Audio Conferencing Service Delivery (L.34.1.5.1(a))**

Qwest's ACS is [REDACTED]

[REDACTED]

[REDACTED] This network interoperates with all the transport modes cited in the Network RFP: Government-specified locations, Public Switched Telecommunications Network (PSTN), Voice over Internet Protocol (VoIP), Asynchronous Transfer Mode (ATM) and Frame Relay (FR). No special customer hardware or interface is required to access our network. We provide a 24x7x365 help desk staffed with reservationists and provide a human interface to the Agency.

#### **5.3.1.2 Benefits of Audio Conferencing Services Technical Approach (L.34.1.5.1(b))**

Qwest's ACS incorporates [REDACTED]

[REDACTED]

[REDACTED] providing for both redundancy and scalability of service. Our ACS requires no special end-user equipment, only access to the PSTN. To support the Secured Audio Conference feature,

Qwest's ACS platform [REDACTED]  
 [REDACTED]

Qwest's ACS is available 24x7x365. Qwest's ACS offers audio conference schedulers with various reservation methods: User Controlled, including Pre-Set Conference (Basic/Reservationless Service) and Meet-Me Conference (Reservation Service), and Attendant-Assisted Conference. With Pre-Set Conference, Agencies can conference on a moment's notice without a reservation. Through use of Web-based control tools, a Pre-Set Conference can be configured to make automatic outbound calls to a pre-designated list. With Meet-Me or Attendant-Assisted Conference, reservations can be placed by phone or through the Qwest Control Network Portal. Servers that handle Internet reservations are protected by Secure Sockets Layer (SSL)-certified encryption. This means that ACS servers send encrypted data (data in code) so that only qualified Agencies can decipher call reservation information.

Key features and benefits of Qwest's ACS are highlighted in **Figure 5.3.1-1**.

**Figure 5.3.1-1 Features and Benefits of Qwest's ACS**

Features	Benefits	[REDACTED]
Dedicated customer service	Ensures successful conference call implementation and anticipated implementation dates.	[REDACTED]
24x7x365 help desk availability	Immediate help with features or issues.	[REDACTED]
No commitment to number of lines or length of call required	Begin teleconferences at any time to any number of participants, and continue until business is completed.	[REDACTED]

Features	Benefits	[REDACTED]
Lock/Unlock Conference	Conference hosts can “Lock” the conference call using a simple touch-tone prompt. This prevents others from being able to dial in. When a conference is “Locked,” the Participant Waiting Room is automatically activated and the conference host will be signaled by a series of three “beeps” indicating that someone is waiting to join the conference call.	[REDACTED]

Qwest’s approach to meeting the objectives of the Federal Enterprise Architecture (FEA) is described in **Figure 5.3.1-2**, and is fully compliant.

**Figure 5.3.1-2 Qwest ACS is in Full Compliance with the FEA objectives**

FEA Objectives	[REDACTED]
Improve Utilization of Government Information Resources to Focus on Core Agency Mission and Service Delivery to Citizens by Using the FEA	[REDACTED]
Enhance Cost Savings and Cost Avoidance Through a Mature FEA Government-Wide	[REDACTED]
Increase Cross-Agency and Inter-Government Collaboration	[REDACTED]

**5.3.1.3 Solutions to Audio Conferencing Service Problems (L.34.1.5.1(d))**

**Figure 5.3.1-3** identifies potential problems that may be encountered in meeting ACS service requirements and provides Qwest’s solution for each problem identified.

**Figure 5.3.1-3 Qwest Solutions to Potential ACS Problems**

Problem	
Unauthorized access to a conference	[REDACTED]
Conference calls that extend past scheduled time	[REDACTED]
Sufficient capacity to accommodate new callers	[REDACTED]
Fraudulent use of Reservationless Conferencing	[REDACTED]

**5.3.2 Satisfaction of Audio Conferencing Service Performance Requirements (L.34.1.5.2)**

Qwest’s ACS meets Request for Proposal (RFP)-stated performance specifications. Our service implements proven monitoring and measurement systems, procedures and evaluation methods. We meet the GSA requirements for availability, time to restore and operator assistance response delay.

**5.3.2.1 Audio Conferencing Services Quality of Service (L.34.1.5.2(a))**

Qwest’s Quality of Service is inclusive of availability, time to restore and Operator assistance response delay. Qwest’s network has full redundancy into bridge ports, which are monitored 24x7x365 to ensure network availability of [REDACTED]. Qwest measures availability consistent with the standard availability formula in the RFP. [REDACTED]



[REDACTED] **Figure 5.3.2-1** compares the Key Performance Indicators (KPIs) cited in the RFP with Qwest’s service standards.

**Figure 5.3.2-1 Qwest exceeds Networkx KPIs.**

KPI	Service Level	Performance Threshold	Acceptable Quality Level (AQL)	[REDACTED]
Availability	Routine	99.5%	≥ 99.5%	[REDACTED]
Time to Restore	With Dispatch	8 hours	≤ 8 hours	[REDACTED]
	Without Dispatch	4 hours	≤ 4 hours	[REDACTED]
GOS (Operator Assistance Response Delay)	Routine	54 seconds	≤ 54 seconds	[REDACTED]

**5.3.2.2 Approach for Monitoring and Measuring Audio Conferencing Services (L.34.1.5.2(b))**

Network availability is currently measured by call center monitoring systems with automated tools including [REDACTED]



These tools allow Qwest to monitor and measure Networkx KPI and AQL compliance.

### **5.3.2.3 Verification of Audio Conferencing Services (L.34.1.5.2(c))**

Service technicians validate the systems' health with daily checklists of board failures and telephony alarms, as well as overall system performance. Our Network Operations Centers (NOCs) monitor all ACS network accesses 24x7x365; if a network T-1 or DS-3 connection is interrupted, an alarm triggers a page alert in the NOC, requiring immediate resolution.

### **5.3.2.4 Audio Conferencing Services Performance Level Improvements (L.34.1.5.2(d))**

Qwest currently meets the Government's ACS AQLs. We have achieved [REDACTED]. Our Grade of Service operator average response time has been [REDACTED]. [REDACTED] Qwest will meet the time to restore levels of 8 hours for dispatch and 4 hours without dispatch.

### **5.3.2.5 Additional Audio Conferencing Services Performance Metrics (L.34.1.5.2(e))**

[REDACTED]

## **5.3.3 Satisfaction of Audio Conferencing Service Specifications (L.34.1.5.3)**

Qwest satisfies ACS requirements with a combination of robust conferencing infrastructure, network access, and dedicated manned conferencing centers. Qwest's ACS is compatible with virtually any telecommunications network; all that is required is access to PSTN.

### **5.3.3.1 Satisfaction of Audio Conferencing Service Requirements (L.34.1.5.3(a))**

Qwest owns and operates a worldwide telecommunications network over which ACS is carried. Our ACS customer service and technical help desk specialized support services offer first-class ACS for Agencies. Both use

a variety of metrics to constantly adjust the levels of human and electronic resources to ensure the Agency always receives the highest quality service and the most up-to-date selection of features.

**5.3.3.1.1 Satisfaction of ACS Capabilities Requirements (L.34.1.5.3(a), C.2.8.2.1.4)**

Qwest meets all the Networx capabilities as shown in **Figure 5.3.3-1**. Qwest fully complies with all mandatory stipulated and narrative features, capabilities, and interface requirements for ACS. The content in the following table is intended to provide the technical description required per L.34.1.5.3(a) and does not limit or caveat Qwest’s compliance in any way.

**Figure 5.3.3-1. Approach to Delivering ACS Capabilities**

Name of Capability	[REDACTED]	[REDACTED]
Reservation System	[REDACTED]	[REDACTED]

Name of Capability	[REDACTED]	[REDACTED]
	[REDACTED]	
Service Intervals	[REDACTED]	[REDACTED]
Automatic port expansion	[REDACTED]	[REDACTED]

Name of Capability	[REDACTED]	[REDACTED]
Announce late participant	[REDACTED]	[REDACTED]
Conference tones	[REDACTED]	[REDACTED]
Music on hold	[REDACTED]	[REDACTED]
Self mute	[REDACTED]	[REDACTED]
Guaranteed duration of dial-in call	[REDACTED]	[REDACTED]

Name of Capability	[REDACTED]	[REDACTED]
Listen only broadcast mode	[REDACTED]	[REDACTED]
Participant count	[REDACTED]	[REDACTED]
Roll Call	[REDACTED]	[REDACTED]
Service availability	[REDACTED]	[REDACTED]
Attendant-assistance	[REDACTED]	[REDACTED]

Qwest offers Agencies a variety of audio conferencing options:

- Meet-Me Conference** – This option provides a convenient low-cost variation of Toll-Free Attendant-Assisted service. Participants use a passcode rather than an operator to connect to the conference at a pre-determined time. Operator assistance is available by dialing \*0. Agencies

can pre-subscribe to a dial access number and authorization code that can be reused. This service can be accessed via direct dial or toll-free.

- **Pre-Set Conference** – A flexible and cost-effective conferencing solution that is secure and easy to use. This automated service gives total control and allows meetings anytime, anywhere. Dial the same access number every time without having to schedule in advance. By using a Qwest personalized meeting room number and PIN, audio conferencing meetings can be hosted on demand. This service can be accessed via direct dial or toll-free.
- **Attendant-Assisted Conference** – Participants access the conference call by dialing into a pre-assigned toll-free number. Operators greet each participant and ask for the name of the host and the Agency before granting access. If desired, participants can be put on hold until the host is ready to begin the call. This service can be accessed via direct dial or toll-free.

**5.3.3.1.2 Satisfaction of ACS Feature Requirements (L.34.1.5.3(a), C.2.8.2.2)**

Qwest’s technical approach to meeting the Networkx features requirements is shown in **Figure 5.3.3-2**. Qwest fully complies with all mandatory stipulated and narrative features, capabilities, and interface requirements for ACS. The text in the following table is intended to provide the technical description required per L.34.1.5.3(a) and does not limit or caveat Qwest’s compliance in any way.

**Figure 5.3.3-2. Qwest’s Technical Approach to ACS Features**

ID #	Name of Feature	Description	[REDACTED]
1	Audio Recording of Call	The contractor shall allow recording of the conference call into storage media (for example, disc) or cassette	[REDACTED]

ID #	Name of Feature	Description	[REDACTED]
		tape) for later replay.	[REDACTED]
2	Access Controlled Call	The contractor shall allow the conference leader to prevent the operator from monitoring the call as well as additional/late participants from joining the call.	[REDACTED]
3	Language Translation	The contractor shall provide language translation to English from other languages (e.g., Spanish) for transcription of a pre-recorded audio conference.	[REDACTED]
4	Moderator	The contractor shall provide	[REDACTED]

ID #	Name of Feature	Description	[REDACTED]
	Led Questions and Answers	conference moderator led questions and answers only.	[REDACTED]
5	Participant List Report	The contractor shall provide a report of all participants in the conference.	[REDACTED]
6	Password Screening	The contractor shall screen password for joining a conference to authorized participants only.	[REDACTED]
7	Replay of Pre-recorded Audio Conference	The contractor shall allow, under password protection, replaying of prerecorded audio conference at a later time and shall allow remote control of the recording with keypad access to functions like pause, rewind, and fast-forward.	[REDACTED]

ID #	Name of Feature	Description	[REDACTED]
			[REDACTED]
8	Transcription of Pre-recorded Audio Call	The contractor shall provide transcription of prerecorded audio call.	[REDACTED]
9	Temporary Blocking of Ports	The contractor shall allow temporarily blocking audio conference ports in order to remove a sub-set of participants/Agencies from the conference.	[REDACTED]
10	Secured Audio Conference	The contractor shall support voice conferencing capability for sensitive voice conferences with end-user encryption to support discussions of a sensitive-but-unclassified nature between multiple locations with protection from unauthorized interception (i.e., eavesdropping). (Note. Government furnished encryption unit at the Service Delivery Point will be based on commercially available encryption devices (Standard: NIST DES/AES). The contractor must synchronize encryption key	[REDACTED]

ID #	Name of Feature	Description	[REDACTED]
		of similar encryption unit(s) of the audio conference bridge before each conference.)	

**5.3.3.1.3 Satisfaction of ACS Interface Requirements (L.34.1.5.3(a))**

Qwest is fully compliant with the interface requirements as specified in VS, VoPTS, IPTelS, FRS (VoFR), ATMS (VoATM), and CPCS.

**5.3.3.2 Proposed Enhancements for Audio Conferencing Services (L.34.1.5.3(b))**

[REDACTED]

[REDACTED]

[REDACTED]

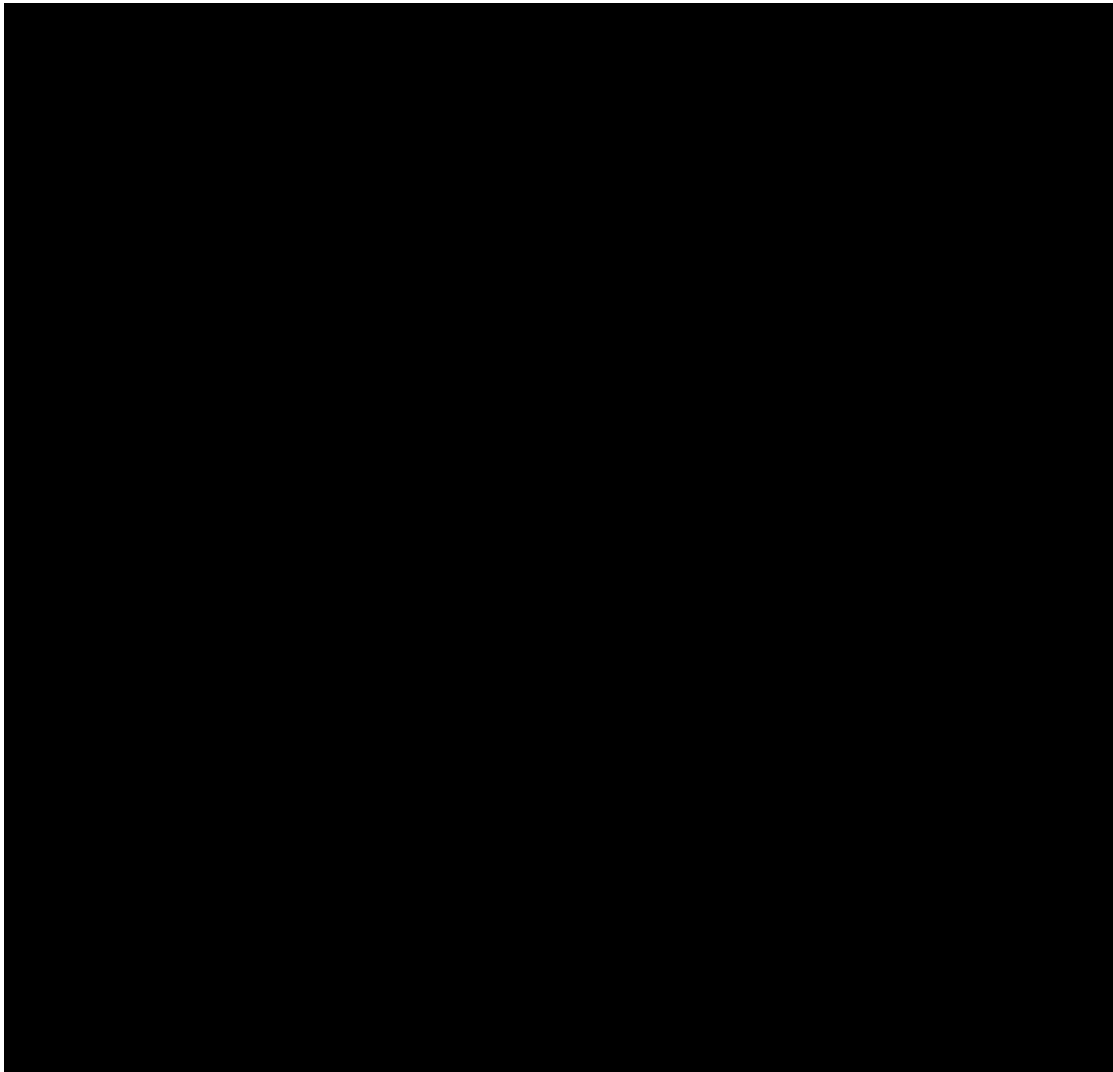
ID #	Name of Feature	Description
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

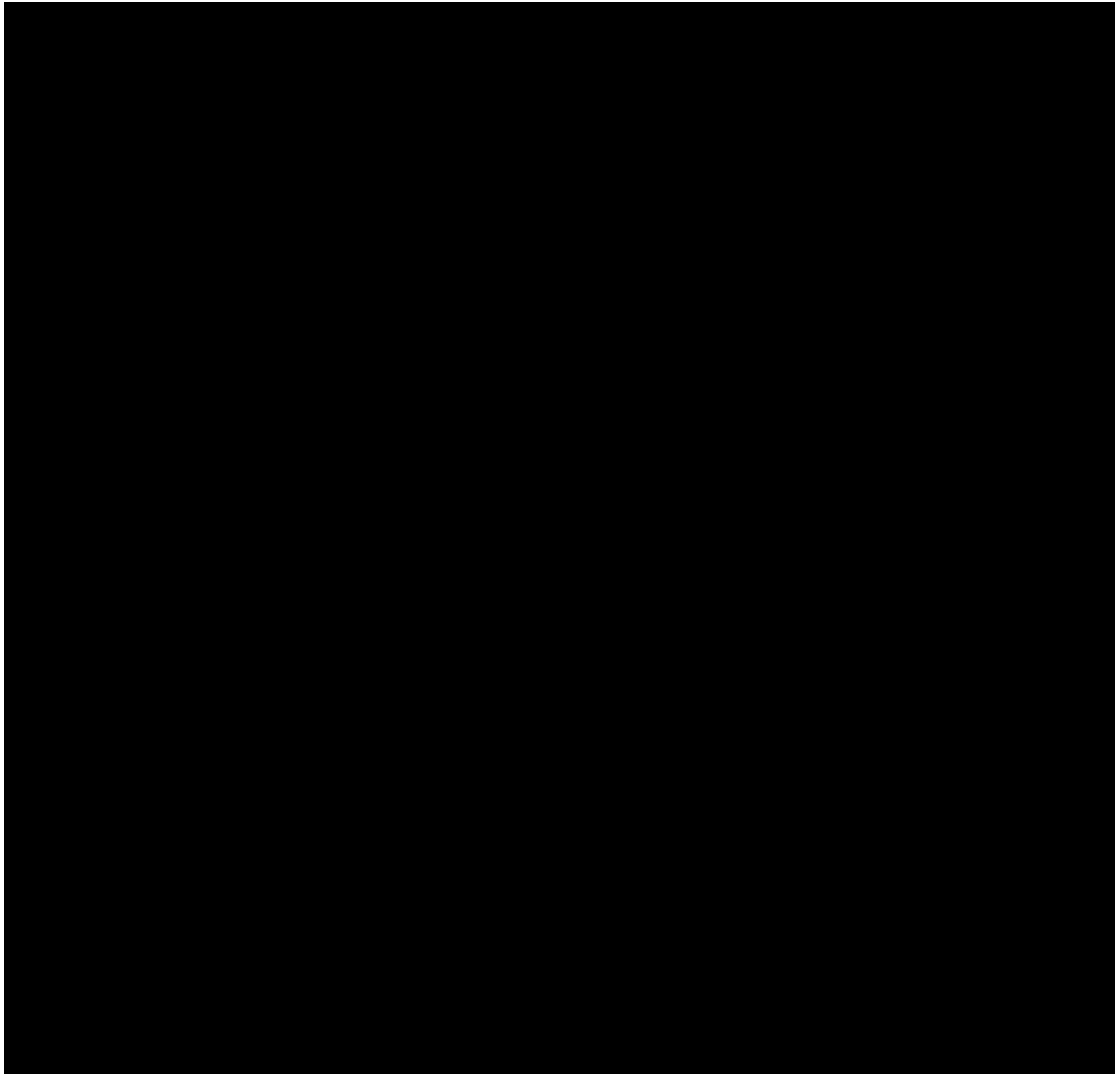
[REDACTED]



**5.3.3.4 Experience with Audio Conferencing Service Delivery**  
**(L.34.1.5.3(d))**

No modifications to Qwest's ACS network are required to meet the Network technical requirements and the Network ACS traffic forecast. [REDACTED]

[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED] Qwest's ACS



experience and our ability to satisfy the technical requirements and traffic forecast of Networkx with our current ACS network will provide Agencies with immediate, universal ACS coverage.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

















