

4.2.2 Toll-Free Service (TFS) (L.34.1.4.6, M.2.1.2)

Qwest's TFS delivers a full featured service offering that reaches Agencies' installations and their constituents around the globe.

Qwest has a long history of providing leading-edge voice and toll-free applications to the Federal Government. [REDACTED]

[REDACTED] When combined, these components provide a highly reliable and flexible infrastructure for the delivery of quality TFS.

Figure 4.2.2-1 provides an easy reference to correlate narrative requirements to our proposal response.

Figure 4.2.2-1. Table of TFS Narrative Requirements

Req ID	RFP Section	Proposal Response
30229	C.2.2.3.1.4 (1)	4.2.2.3.1
30240	C.2.2.3.1.4 (9)	4.2.2.3.1
30248	C.2.2.3.2.1 (1)	4.2.2.3.2
30253	C.2.2.3.2.1 (2)	4.2.2.3.2
30275	C.2.2.3.2.1 (8)	4.2.2.3.2
30277	C.2.2.3.2.1 (8)	4.2.2.3.2
30279	C.2.2.3.2.1 (9)	4.2.2.3.2
30316	C.2.2.3.2.1 (14)(9)	4.2.2.3.2
30325	C.2.2.3.2.1 (16)	4.2.2.3.2
30326	C.2.2.3.2.1 (16)	4.2.2.3.2
30345	C.2.2.3.2.1 (16)(3)	4.2.2.3.2
30349	C.2.2.3.2.1 (16)	4.2.2.3.2
30353	C.2.2.3.2.1 (16)(3)	4.2.2.3.2
30354	C.2.2.3.2.1 (16)(4)	4.2.2.3.2
30365	C.2.2.3.2.1 (22)	4.2.2.3.2
30393	C.2.2.3.2.2	4.2.2.3.2
30403	C.2.2.3.2.2	4.2.2.3.2

4.2.2.1 Reserved (L.34.1.4.1 (a))

4.2.2.2 Reserved (L.34.1.4.1(b))

4.2.2.3 Satisfaction of TFS Requirements (L.34.1.4.1 (c))

Qwest's TFS provides inbound toll-free calling, call routing capabilities, and enhanced features. Qwest TFS allows customers to originate toll-free

calls domestically (CONUS and OCONUS), and non-domestically. International TFS (ITFS) is provided by Qwest using established relationships with international carriers, providing country-specific toll-free origination numbers. Similarly, Qwest's Universal International Freephone Number (UIFN) allows customers to originate toll-free calls from outside of the domestic U.S. However, with UIFN, the client receives a single international toll-free number and customers in each participating country use that number for call origination. Portability of 8XX numbers and vanity numbers is supported.

Our network-based IVR includes a speech recognition solution for both inbound and outbound applications [REDACTED] It works as a stand-alone application or integrates with Web, CTI platforms and database information. This network-based IVR provides the reliability and scalability of a network-based solution with the control and flexibility of a premises-based implementation. [REDACTED]

The network-based IVR provides the required speech recognition support for English and Spanish, and exceeds requirements by providing support for Canadian French. Our network-based IVR and routing tools allow for customized network announcements, specified recordings to disconnect a call after it has played, and voice prompts. The network provides appropriate announcements, depending on the network conditions specified.

Dialed Number Identification Service (DNIS) and Automatic Number Identification (ANI) are fully supported by TFS for call routing and call identification. [REDACTED]

[REDACTED]

Qwest understands and complies with industry, national and international standards, including those issued by Internet Engineering Task Force (IETF), International Telecommunications Union (ITU) and American National Standards Institute (ANSI). Qwest's network is built on standards-based technologies, enables a building block approach, and supports the access methods the Government requires.

Qwest complies with the required technical capabilities, features, and interfaces of the RFP, as referenced in the stipulated J tables and elsewhere in this response.

4.2.2.3.1 Satisfaction of TFS Capability Requirements (L.34.1.4.3(a), C.2.2.3.1.4)

Figure 4.2.2-2 provides detail on Qwest's TFS capabilities and how these capabilities meet the Networx requirements. Qwest fully complies with all mandatory stipulated and narrative capabilities requirements for TFS. The text in Figure 4.2.2-2 provides the technical description required per L.34.1.4.3(a) and does not limit or caveat Qwest's compliance in any way.

Figure 4.2.2-2. Qwest Toll-Free Service Capabilities

ID	Capability	[REDACTED]
1	Responsible Organization	[REDACTED]

ID	Capability	
2	Toll-Free Number Portability	[Redacted]
3	Presently-Assigned and Vanity Numbers	[Redacted]
4	Universal International Toll-Free [Optional]	[Redacted]

ID	Capability	
5	Terminations at Single or Multiple Locations	[Redacted]
6	Defaults During Network Congestion	[Redacted]
7	Network Intercept Generic Announcements	[Redacted]
8	Network Intercept Customized Announcements	[Redacted]
9	English and Spanish Announcements	[Redacted]

ID	Capability	
10	Message for Disconnected Numbers	
11	Dialed Number Identification Service (DNIS)	
12	Identify and Provide ANI	

**Responsible Organization for Toll Free Numbers
(Req_ID 30229, C.2.2.3.1.4(1))**

Qwest provides TFS as the Responsible Organizations (RespOrg) in conjunction with the National Service Management System (SMS/800). As a RespOrg, Qwest will reserve and route toll-free numbers for Agencies. Those Agencies become the sole owner of those toll-free numbers.

Toll-free numbers can be transferred to and from other RespOrgs, which is known as porting. Porting of toll-free numbers is accomplished by submitting a Letter of Authorization (LOA) to the SMS/800.

As a RespOrg, Qwest manages toll-free network requirements with the following responsibilities:

Reserving and administering toll-free numbers

Routing areas of origination via the SMS/800 and terminating via the Qwest network

Provisioning switched and dedicated services that include a wide range of enhanced features

English and Spanish Announcements (Req_ID 30240, C.2.2.3.1.4(9))

Qwest’s QWCC platform can support a number of languages including English and Spanish in the playing of announcements required for TFS calls. Agencies can create their own announcements scripts in English or Spanish for recording by Qwest personnel or upload their own announcement voice files. Qwest also has extensive partnerships with professional voice recording studios that will enable Agencies to create English and Spanish announcements. However if an Agency would like a customized announcement created, Qwest has resources to implement announcements in English and Spanish via the QWCC platform.

4.2.2.3.2 Satisfaction of TFS Feature Requirements (L.34.1.4.3(a), C.2.2.3.2)

Figure 4.2.2-3 provides detail on Qwest’s stipulated TFS features and how these features meet the Networkx requirements. IDs shown map to IDs in Section C.2.2.3.2.1. Qwest fully complies with all mandatory stipulated and narrative feature requirements for TFS. The text in Figure 4.2.2-3 provides the technical description required per L.34.1.4.3(a) and does not limit or caveat Qwest’s compliance in any way.

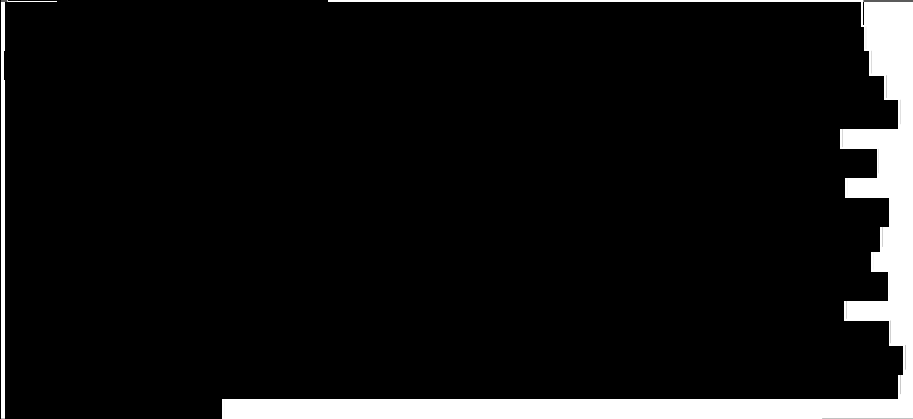

Figure 4.2.2-3. Qwest Toll-Free Service Features

ID	Feature	
1	Agency based routing database	

ID	Feature	
2	Alternate Routing	[Redacted]
3	ANI	[Redacted]
4	ANI Based Routing	[Redacted]
5	Announced Connect	[Redacted]
6	Announcements	[Redacted]
7	Call Prompter	[Redacted]

ID	Feature	
11	Day of Week Routing	[Redacted]
12	Day of Year Routing	[Redacted]
13	In Route Announcement	[Redacted]
14	Interactive Voice Response	[Redacted]
15	Make Busy	[Redacted]

ID	Feature	
16	Network Call Distributor	[Redacted]
17	Network Queuing (Optional)	[Redacted]
18	NPA/NNX Routing	[Redacted]
19	Office Locator Database Service	[Redacted]
20	Operator Connect Bridging	[Redacted]
21	Percentage Call Allocation	[Redacted]

ID	Feature	
23	Routing Control	
24	Service Assurance Routing	
25	Speech Recognition	

ID	Feature	
26	Tailored Call Coverage	[Redacted]
27	Time of Day Routing	[Redacted]

Figure 4.2.2-4 provides detail on Qwest's TFS features reports and how these reports meet the Networkx requirements. ID numbers shown map to IDs in Section C.2.2.3.2.1.

Figure 4.2.2-4. Qwest Toll-Free Service Features-Reports

ID	Feature	
28	Call Status Report- Toll Free Service	[Redacted]

ID	Feature	
		[Redacted]
29	Call Status Report Alternate Routing	[Redacted]
30	Call Status Report Announcement	[Redacted]
31	Call Status Report Call Prompter	[Redacted]
32	Call Status Report IVR	[Redacted]

ID	Feature	
33	Caller Information Report	<p>[Redacted]</p> <p>[Redacted]</p> <p>[Redacted]</p> <p>[Redacted]</p> <p>[Redacted]</p> <p>[Redacted]</p> <p>[Redacted]</p> <p>[Redacted]</p> <p>[Redacted]</p> <p>[Redacted]</p>
34	Caller Profile Report	<p>[Redacted]</p> <p>[Redacted]</p> <p>[Redacted]</p> <p>[Redacted]</p> <p>[Redacted]</p> <p>[Redacted]</p> <p>[Redacted]</p> <p>[Redacted]</p> <p>[Redacted]</p> <p>[Redacted]</p>
35	Call Redirection Report [Optional]	<p>[Redacted]</p>

The sections below address all feature narratives as required by Section J.9.

Agency Based Routing Database (also known as Host Connect) (Req_ID 30248, C.2.2.3.2.1(1))

[Redacted]

[Redacted] It

works as a stand-alone application or integrates with Web, CTI platforms, and database information. Qwest's network-based IVR provides the reliability and scalability of a network-based solution with the control and flexibility of a premises-based implementation. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Alternate Routing (also known as "Cascade" routing) (Req_ID 30253, C.2.2.3.2.1(2))

Qwest's Busy Ring No Answer (BRNA) routes toll-free calls to a new location when the previous location is either "Busy" or in a "No Answer" condition. BRNA will route on these conditions based on predefined timing criteria (either through defaults or Agency requested timing criteria). [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Call Redirection (Req_ID 30275, C.2.2.3.2.1(8))

Call redirection is a network-based enhanced routing service that allows an Agency (called party) to forward their TFS calls (calling party) to any Public Switched Telephone Network (PSTN) number or other toll-free number during the same call. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Call Redirection (Req_ID 30277, C.2.2.3.2.1(8))

Qwest has the technical capability to provide unlimited abbreviated dial codes; however, Qwest recommends that Agencies use no more than 1,000 codes for the practicality of dialing an abbreviated code versus a typical PSTN number.

Computer Telephony Integration (Req_ID 30279, C.2.2.3.2.1(9))

Qwest's network-based IVR will work as a stand-alone application or integrate with Web platforms, CTI platforms, or database information. A Qwest project engineer will be assigned to all orders to help manage Agency requirements for an efficient and timely service implementation.

[REDACTED]

[REDACTED]

Interactive Voice Response (IVR) (Req_ID 30316, C.2.2.3.2.1(14)(9))

Qwest's network-based IVR infrastructure is a comprehensive offering that includes an enterprise-level platform and all the tools, services, and partnerships necessary to meet the requirements of a sophisticated IVR application. Qwest's IVR recording options capture and retain the call voice files and caller information (DTMF data) and stores them in a database where Agencies can obtain access to all this information. Upon Agency request, Qwest will provide this data for any or all transactions in standard and custom-built reports. [REDACTED]

[REDACTED]

Network Call Distributor – Polling for Real-Time ACD Status (Req_ID 30325 C.2.2.3.2.1(16))

Qwest's Intelligent Pre-Route (IPR) product provides call distribution directly from the Qwest TFS Voice network to the Agency location, group, or agent best able to handle the call. Call distribution information for IPR-destined calls is provided to the Qwest TFS Voice network in response to a routing information query. [REDACTED]

[REDACTED]

[REDACTED]

Network Call Distributor – Call Routing Processor Uses Real-Time Operating Status (Req_ID 30326, C.2.2.3.2.1(16))

[REDACTED]

This information is constantly updated allowing the most accurate routing decisions to be applied to the inbound call.

Network Call Distributor – Call Routing Logic/Algorithms Based Upon Least Cost (Req_ID 30345, C.2.2.3.2.1(16)(3))

Qwest's IPR can be configured to route based upon least cost as determined by the subscribing Agency's Call Center managers.

Network Call Distributor – Call Routing Processor GUI (Req_ID 30349, C.2.2.3.2.1(16))

Qwest allows the Agency to manage and control the Qwest IPR operating environment. Customers are allowed access to the hosted application through a graphical interface tool to view reports and administer call flows. [REDACTED]

Network Call Distributor – Agency-Provided and Contractor-Based (Optional) (Req_ID 30353, C.2.2.3.2.1(16)(3))

[REDACTED]

[REDACTED]

**Network Call Distributor – Additional Reporting or Monitoring Options
(Req_ID 30354, C.2.2.3.2.1(16)(4))**

Qwest will provide all reporting and monitoring capabilities available to our commercial customers from the Network Call Distributor (NCD) as part of our TFS offer to the Government.

[REDACTED]

[REDACTED]

[REDACTED]

Real Time Reporting (Req_ID 30365, C.2.2.3.2.1(22))

Qwest's TFS Real Time Reporting will be available to Agencies [REDACTED]
[REDACTED] Agencies will be able to monitor and report on
summary and detail TFS call data on a near real-time basis. [REDACTED]
[REDACTED]

Reports Available by Electronic Means (Req_ID 30393, C.2.2.3.2.2)

TFS Reports will be available [REDACTED]
Agencies will be able to generate detailed and/or summary reports. Reports
can be pulled on a pre-scheduled basis or as needed. [REDACTED]
[REDACTED]

[REDACTED] Qwest's TFS reporting allows Agencies to download and export
data into spreadsheets, databases, and other applications.

**Commercially Available Historical or Real Time Reports (Req_ID 30403,
C.2.2.3.2.2)**

Qwest will make available to Agencies all TFS reporting capabilities
that are commercially available [REDACTED]



4.2.2.3.3 Satisfaction of TFS Interface Requirements (L.34.1.4.3(d), C.2.2.3.3)

Qwest provides the standards-based TFS service interfaces requested by the Government. Dedicated and switched (non-dedicated) access services are available for analog, digital, PRI, and T-1 interfaces, using the Qwest fiber backbone and state-of-the-art switches. **Figure 4.2.2-5** demonstrates that Qwest meets the interface requirements specified in C.2.2.3.3.2. Qwest fully complies with all mandatory stipulated and narrative interface requirements for TFS. The text in Figure 4.2.2-5 provides the technical description required per L.34.1.4.3(d) and does not limit or caveat Qwest’s compliance in any way.

Figure 4.2.2-5. Summary of Qwest TFS Service Interfaces

UNI Type	Interface Type and Standard	Payload Data Rate or Bandwidth	
1	Analog Line: Two-Wire (Std: Telcordia SR TSV-02275)	4 kHz Bandwidth	
2	Analog Line: Four- Wire (Std: Telcordia SR-TS V-02275)	4 kHz Bandwidth	
3	Analog Trunk: Two- Wire (Std: Telcordia SR-TS V-002275)	4 kHz Bandwidth	
4	Analog Trunk: Four- Wire (Std: Telcordia SR-TSV-002275)	4 kHz Bandwidth	
5	Digital Trunk: T-1 TSV-002275 and ANSI T-1.102/1 07/403)	(Std: Telcordia SR Signaling Up to 1.536 Mbps	
6	Digital Trunk: ISDN PRI T Reference Point (Std: ANSI T-1.607 and 610)	Up to 1.536 Mbps	
7	Digital: T-3 Channelized (Std: Telcordia GR-499 CORE)	Up to 43.008 Mbps	
8 (Non-Domestic)	Digital Trunk: E-1 Channelized (Std: ITU-TSS G.702)	Up to 1.92 Mbps	
9 (Optional)	Optical: SONET OC-1 (Std: ANSI T-1.105 and 106)	49.536 Mbps	

UNI Type	Interface Type and Standard	Payload Data Rate or Bandwidth	
10 (Non-Domestic) (Optional)	Digital: E3 Channelized (Std: ITU-TSS G.702)	Up to 30.72 Mbps	
11	Digital Line: ISDN BRI S and T Reference Point (Std: ANSI T-1.607 and 610)	Up to 128 kbps (2x64 kbps)	

4.2.2.4 TFS Quality of Service (L.34.1.4.6 (d))

[Redacted content]

Figure 4.2.2-6. Qwest’s Compliance with Government TFS Performance Metrics

Key Performance Indicator (KPI)	Service Level	Performance Standard (Threshold)	Acceptable Quality Level (AQL)	
Availability (POP-to-POP)	Routine	99.95%	≥ 99.95%	
Availability (POP-to-terminating SDP)	Routine	99.5%	≥ 99.5%	
	Critical [Optional]	99.95%	≥ 99.95%	
Grade of Service (Call Blockage)	Routine	0.07	≥ 0.07	
	Critical [Optional]	0.01	≤ 0.01	
Time To Restore	Without Dispatch	4 hours	≤ 4 hours	
	With Dispatch	8 hours	≤ 8 hours	

Qwest KPI definitions for TFS comply with the Networkx RFP definitions as follows:

Availability: Qwest measures the switch network availability at the card level and reports availability to five decimal places nationwide, regionally, and by individual switch by day, week, month, quarter, and year

[Redacted text block]

4.2.2.5 TFS Performance Improvements (L.34.1.4.6 (e))

[Redacted text block]

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[REDACTED]

4.2.2.6 Experience with TFS Delivery (L.34.1.4.6 (f))

Qwest provides long distance services and broadband data, as well as global voice and video communications. Qwest sells its products and services

**4.2.2.7 Characteristics and Performance of Access Arrangements
(L.34.1.4.6 (g))**

To provide access services, Qwest has a broad variety of agreements with local carriers to ensure flexibility, quality, and reliability. Qwest has strict quality standards for how we connect with other carriers to maintain this high level of performance. Section 3.2.1 of this Technical Volume provides additional information regarding our approach to access arrangements to include wireline access arrangements.

**4.2.2.8 Approach for Monitoring and Measuring TFS KPIs and AQLs
(L.34.1.4.6 (h))**

[Redacted content]

[Redacted content]

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4.2.2.9 TFS Support of Time-Sensitive Traffic (L.34.1.4.6 (i))

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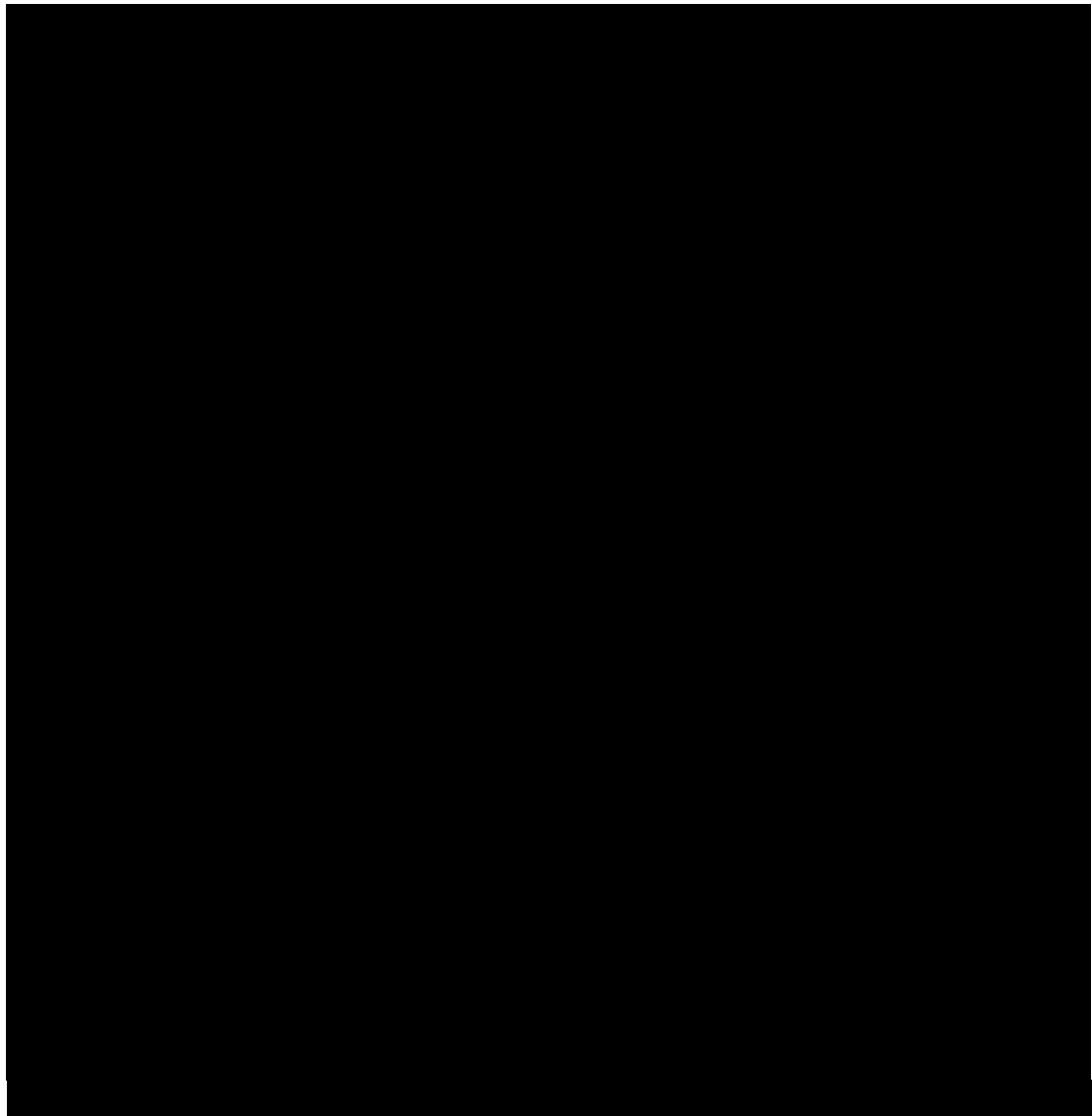
[REDACTED]

Section 3.2.4 provides further elaboration on our approach to supporting time sensitive traffic.

Section 4.1.1.1.4 provides details of Qwest's synchronization network architecture that supports time-sensitive traffic.

4.2.2.10 TFS Support for Integrated Access (L.34.1.4.6 (j))

[REDACTED]



[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[REDACTED]

4.2.2.11 Infrastructure Enhancements and Emerging Services (L.34.1.4.6 (k))

Qwest has mature processes that enable us to envision, research, evaluate, engineer, deploy, and operate new or emerging services including TFS enhancements. Driven initially by the Chief Technology Office, Qwest evaluates new products and technologies for incorporation into the Qwest network, in partnership with Qwest Product Management.

[Redacted text block]

[Redacted text block]

[Redacted text block]

4.2.2.12 Approach for Network Convergence (L.34.1.4.6 (l))

[Redacted text block]

[Redacted text block]

[Redacted text block]

4.2.2.13 IP-PSTN Interoperability (L.34.1.4.6 (m))

Qwest is a proven provider for both voice and data/IP services and has long been a leader in IP network technology. [Redacted text block]

[Redacted text block]

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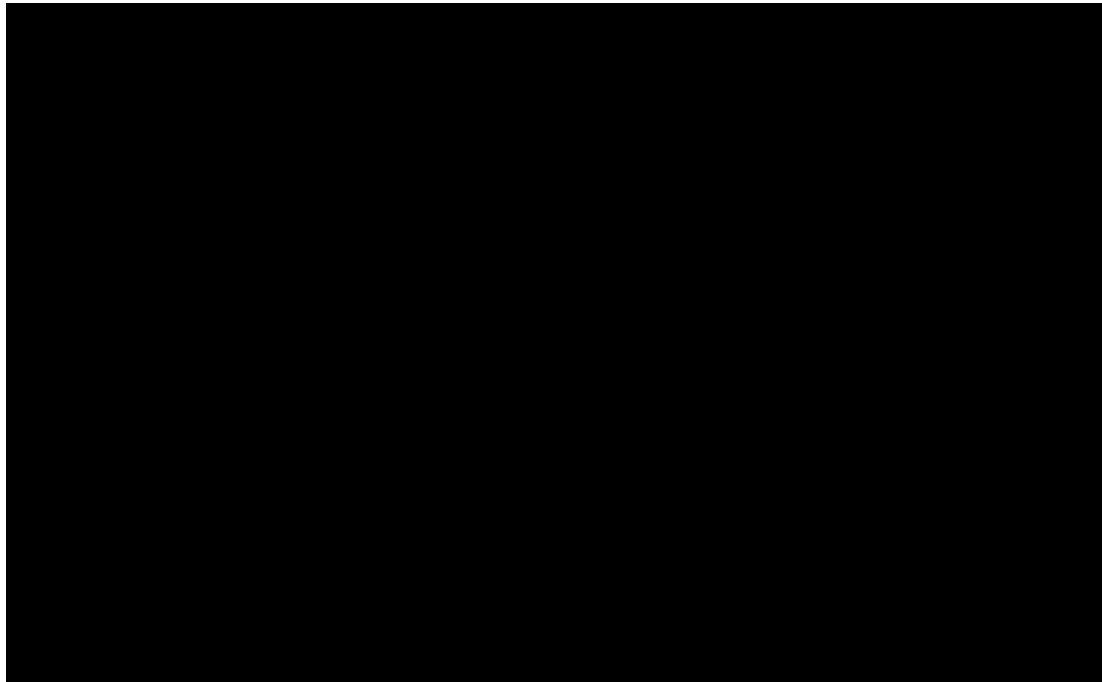
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4.2.2.14 Approach for IPv4 to IPv6 Migration (L.34.1.4.6 (n))

[Redacted text block]





4.2.2.15 Satisfaction of NS/EP Requirements (L.34.1.4.6 (o))

Qwest uses a structured multi-layered approach to supporting National Security and Emergency Preparedness (NS/EP) that is designed to address each required function. Qwest has organizationally and strategically integrated risk management and security to encompass information technology and physical security. Our priorities are to protect our customers from the physical layer up through the entire OSI stack including all facets of cyber security.

Our approach ensures that Qwest complies with and provides priority for the Government's telecommunications requirements for NS/EP survivability, interoperability, and operational effectiveness during an emergency threat, whether caused by natural hazards, manmade disasters, infrastructure failures, or cyber events. [REDACTED]



[REDACTED]

[REDACTED]

Specifically, in accordance with RFP Section C.5.2.2.1, *NS/EP Basic Functional Requirements Matrix for Networx Services*, Qwest supports the following basic functional requirements for TFS.

Enhanced Priority Treatment (C.5.2.1(1)) - TFS supporting NS/EP missions are provided preferential treatment over all other traffic.

Secure Networks (C.5.2.1(2)) - TFS supporting NS/EP missions have protection against corruption of, or unauthorized access to, traffic and control, including expanded encryption techniques and user authentication, as appropriate.

Non-Traceability (C.5.2.1(3)) - TFS users are able to use NS/EP services without risk of usage being traced (that is, without risk of user or location being identified).

Restorability (C.5.2.1(4)) - Should a service disruption occur, TFS supporting NS/EP missions are capable of being re-provisioned, repaired, or restored to required service levels on a priority basis.

International Connectivity (C.5.2.1(5)) - TFS will provide access to, and egress from, international carriers.

Interoperability (C.5.2.1(6)) - According to RFP Section C.5.2.2.1, this requirement is not applicable to TFS.

Mobility (C.5.2.1(7)) - The TFS infrastructure supports transportable, re-deployable, or fully mobile voice and data communications (i.e., Personal Communications Service, cellular, satellite, high frequency radio).

Nationwide Coverage (C.5.2.1(8)) - TFS is readily available to support the national security leadership and inter- and intra- Agency emergency operations, wherever they are located.

Survivability/Endurability (C.5.2.1(9)) - TFS is robust to support surviving users under a broad range of circumstances, from the widespread damage of a natural or man-made disaster up to and including nuclear war.

Voice Band Service (C.5.2.1(10)) – According to RFP Section C.5.2.2.1, this requirement is not applicable to TFS.

Broadband Service (C.5.2.1(11)) – According to RFP Section C.5.2.2.1, this requirement is not applicable to TFS.

Scaleable Bandwidth (C.5.2.1(12)) – According to RFP Section C.5.2.2.1, this requirement is not applicable to TFS.

Affordability (C.5.2.1(13)) - TFS leverages network capabilities to minimize cost (for example, use of existing infrastructure, commercial off-the-shelf technologies, and services).

Reliability/Availability (C.5.2.1(14)) – Toll Free Services perform consistently and precisely according to their design requirements and specifications and are usable with high confidence.

Details of how Qwest supports all 14 basic functional requirements listed in RFP Section C.5.2.2.1 are provided in Section 3.5.1, *Approach to Satisfy NS/EP Functional Requirements*, in this Technical Volume.

4.2.2.16 Support for Signaling and Command Links (L.34.1.4.6 (p))

[Redacted content]

[REDACTED]

4.2.2.17 Service Assurance in the National Capital Region (L.34.1.4.6 (q))

As discussed in Section 3.2, *Approach to Ensure Service Quality and Reliability*, Qwest provides network services in the National Capital Region (NCR) with a robust network architecture designed and engineered to ensure service continuity in the event of significant facility failures or catastrophic impact. Qwest will continue to engineer critical services to meet each Agency's requirements to eliminate potential single points of failure or overload conditions that may affect their network service performance.

[REDACTED]

[REDACTED] Qwest also provides functionality that enables Government Emergency Telecommunications Service priority calling mechanisms. Qwest will provide full NS/EP Functional Requirements Implementation Plan (FRIP) documentation upon contract award when requested to proceed with plan delivery. Qwest will update plans, including Part B addressing our strategy for supporting Agency NCR requirements, in accordance with RFP Section C.7.16.

Qwest understands the Government's requirement to assure performance of network services in and around the NCR. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] Using Qwest diverse access infrastructure, this affords the maximum protection for an Agency in the event of the loss of a switch or transport system failure. In Section 3.2.3, *Congestion Flow Strategies, Control, and Redundancy*, Qwest demonstrates how network planning

examines all failure modes and determines network capacity and switch or router redundancy placement to ensure performance during failures.

[REDACTED] shows the logical configuration of the major transport facilities as well as the services provided at each POP.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Qwest will address the strategy, technical systems, and administration, management, and operation requirements for the NCR in part B of our NS/EP FRIP (a draft appears as Appendix 2 to this Technical Volume).

4.2.2.18 Approach for Satisfying Section 508 Requirements (L.34.1.4.6 (r))

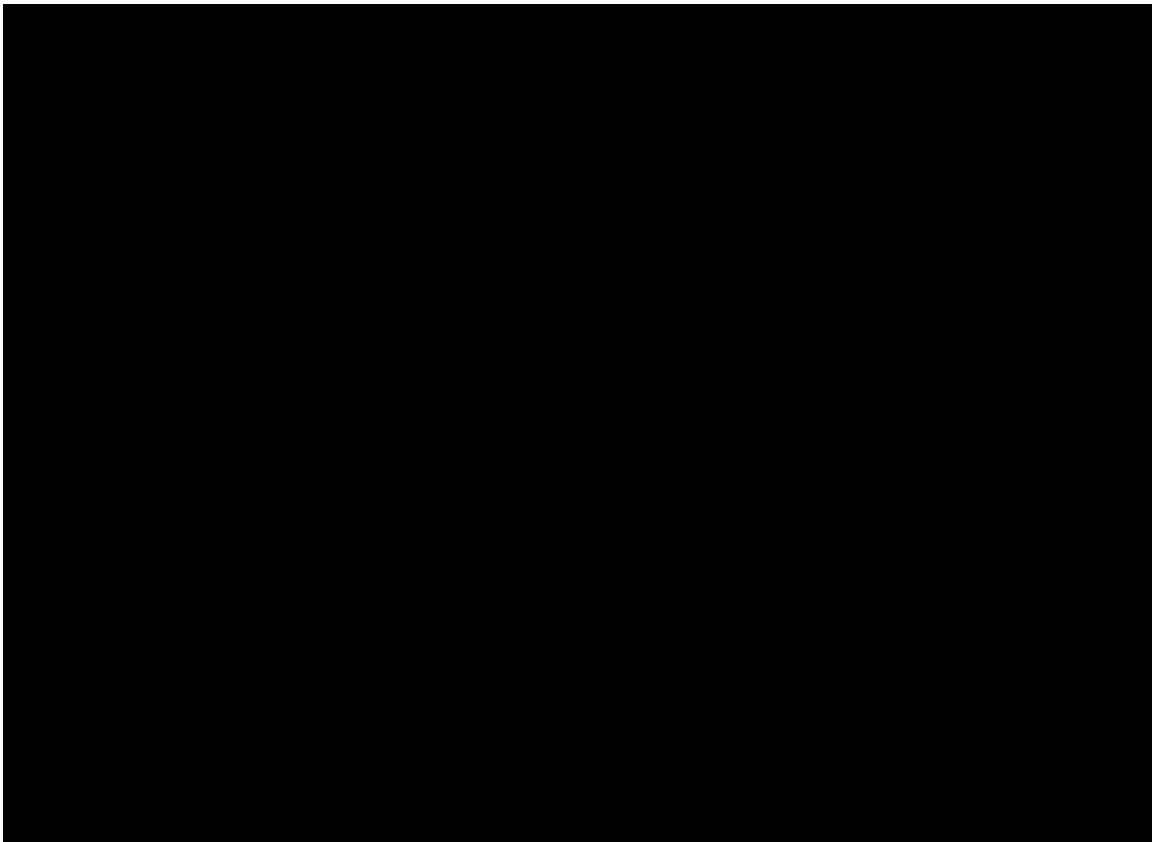
Qwest's approach to meeting Section 508 criteria includes a range of activities to ensure that all Agencies are able to access all services offered through the Network contract vehicle.

Qwest achieves compliance by performing the same rigorous testing and evaluation processes that all products and services go through before they are made available to the public. To ensure products and services are 508 compliant, Qwest continues tests and evaluations with industry and specific Assistive Technology (AT) vendors to assess interoperability with Text Telephone (TTY) and AT devices.

Qwest has enlisted a toll-free number for 24x7x365 access, 1-866-GSA-NETWorx (1-866-472-6389), that will provide Agencies with direct access to our Customer Support Office, which will also be 508 compliant, enabling access by email, fax, TTY, telecommunications display devices, text messaging, or other methods as required. Qwest customer service support will be accessible around the clock for all Agency users, wherever they may be located. [REDACTED]

[REDACTED]

As part of Qwest's Network deliverables, [REDACTED] lists the voluntary product accessibility templates (VPATs) developed for each offered product and service applicable for Network services as required. The VPATs, including the relevant provisions of Subparts B, C, and D listed below in Figure 4.2.2-12, are included in the Technical Volume Appendices.



1194.21 Software Applications and Operating Systems

1194.22 Web-Based Internet Information and Applications

1194.23 Telecommunications Products

1194.31 Functional Performance Criteria

1194.41 Information, Documentation, and Support

The following steps describe Qwest's approach for maintaining compliance with Section 508. Our approach for 508 compliance starts at lifecycle initiation and flows through transition, testing, and operations.

Step 1 – Discovery and Scoping

Step 2 – Publish Design Guidelines

Step 3 – Ensure Future Releases are Compliant

More information about how Qwest will maintain 508 compliance is located in Section 3.5.4, *Approach for Meeting Section 508 Provisions*, of this Technical Volume.

4.2.2.19 TFS Impact on Network Architecture (L.34.1.4.6 (s))

[Redacted content]

4.2.2.20 Optimizing the Engineering of TFS (L.34.1.4.6 (t))

Qwest continually undertakes activities designed to keep our products, services, and network operating capabilities equal to or better than targeted performance levels. [Redacted content]

[Redacted content]

By managing customer traffic patterns and engineering backbone capacity proactively, Qwest provides a high level of service performance.

[REDACTED]

In addition to ensuring that all recommended solutions meet or exceed requirements, the Qwest systems engineers are responsible for:

[Redacted text block]

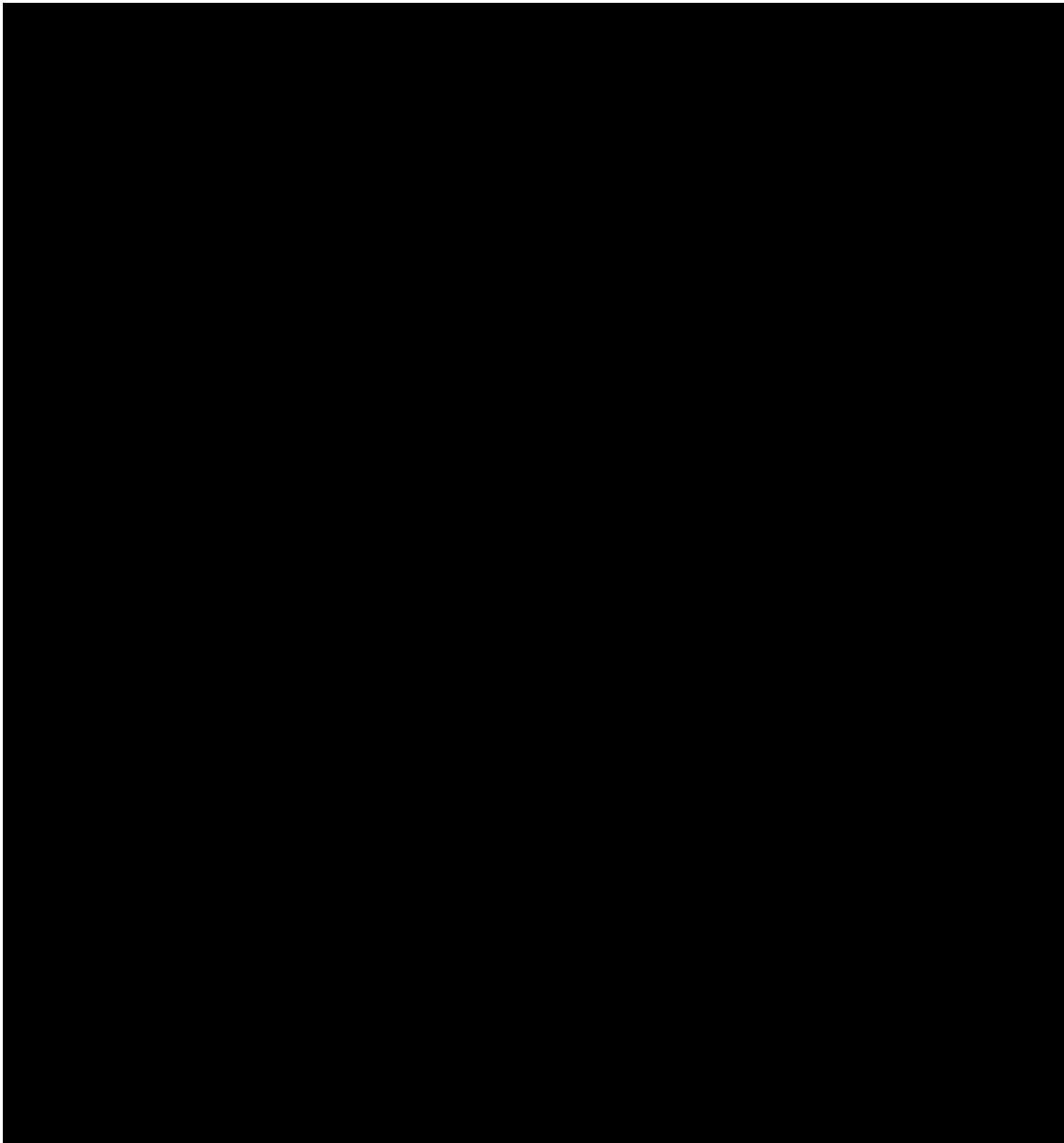
4.2.2.21 Vision for Service Internetworking (L.34.1.4.6 (u))

[Redacted text block]

[Redacted text block]

[Large redacted text block]

[Redacted content]



4.2.2.22 Support for Government TFS Traffic (L.34.1.4.6 (v))

[Redacted text block consisting of four horizontal black bars]

[REDACTED]

Qwest continually monitors the TFS voice network traffic patterns to support capacity management. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]