Appendix 2

Part A
National Security and Emergency Preparedness (NS/EP) Functional Requirements Implementation Plan (FRIP)

Part B
Assured Service in the National Capital Region

DRAFT

December 13, 2006

Revision XX

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REVISION HISTORY

Revision Number	Revision Date	Revision Description	Revised by

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PART A: NATIONAL SECURITY AND EMERGENCY PREPAREDNESS (NS/EP) FUNCTIONAL REQUIREMENTS IMPLEMENTATION PLAN (FRIP)

[redacted]

This document outlines technical and administrative, operational, and management functional requirements for Networx services. The document covers the plans and procedures Qwest uses to respond to the communications needs of the U.S. Government for NS/EP as stated in Executive Order 12472, as well as directives from the Department of Homeland Security (DHS) and various other procedures, policies, and standards developed to ensure critical Government and industry needs are met when an actual or potential emergency threatens the security or socio-economic structure of the U.S.

A1.0 NS/EP MANAGEMENT

A1.1 NS/EP INTERFACE WITH THE CONTRACTOR

Building on well established processes, Qwest will provide the expertise and continued commitment to the NS/EP requirements for Networx as it has been doing for the U.S. Government since January 1984.

[redacted]

[redacted]

A2.0 BASIC FUNCTIONAL REQUIREMENTS FOR NETWORX

Qwest supports the Telecommunications requirements for NS/EP that are based on a set of telecommunications policies and procedures established by the National Communications System (NCS) in accordance with Executive Order 12472, developed to ensure critical Government and industry needs are met when an actual or potential emergency threatens the security or socio-economic capabilities of the U.S.

As shown in ***Figure A2-1***, Qwest supports the following 14 basic functional requirements for NS/EP telecommunications and IT services, as identified by the NCS and the Office of Science and Technology Policy (OSTP) for NS/EP telecommunications services.

Figure A2-1. Functional Requirements. *Qwest supports 14 basic functional requirements for NS/EP.*

Approach to Satisfy NS/EP Functional Requirements (L.34.1.3.5 (a))		
NS/EP Functional Requirements		**Qwest Approach**
1. Enhanced Priority Treatment	Voice and data services supporting NS/EP missions have priority over other traffic	[redacted]

Approach to Satisfy NS/EP Functional Requirements (L.34.1.3.5 (a)		
NS/EP Functional Requirements		**Qwest Approach**
2. Secure Networks	Networks must have protection against corruption of, or unauthorized access to, traffic and control, including expanded encryption techniques and user authentication, as appropriate.	[redacted]
3. Non-Traceability	Selected users must be able to use NS/EP services without risk of usage being traced (i.e. without risk of user or location being identified).	[redacted]
4. Restorability	Should a service disruption occur, voice and data services must be capable of being reprovisioned, repaired, or restored to required service levels on a priority basis.	[redacted]
5. International Connectivity	Voice and data services must provide access to, and egress from, international carriers.	[redacted]
6. Interoperability	Voice and data services must interconnect and interoperate with other Government or private facilities, systems, and networks which will be identified after contract award.	[redacted]
7. Mobility	Voice and data infrastructure to support transportable, redeployable, or fully mobile voice and data communications—i.e. Personal Communications Service (PCS), cellular, satellite, high frequency (HF) radio.	[redacted]

Approach to Satisfy NS/EP Functional Requirements (L.34.1.3.5 (a)		
NS/EP Functional Requirements		**Qwest Approach**
8. Nationwide Coverage	Voice and data services must be readily available to support the national security leadership and inter- and intra-Agency emergency operations, wherever they are located.	[redacted]
9. Survivability / Endurability	Voice and data services must be 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.	[redacted]
10. Voice Band Service	Voice band service must be provided in support of presidential communications.	[redacted]
11. Broadband Service	Broadband service must be provided in support of NS/EP missions (e.g. voice, imaging, Web access, multimedia).	[redacted]
12. Scaleable Bandwidth	NS/EP users must be able to manage the capacity of the communications services to support variable bandwidth requirements.	[redacted]
13. Affordability	The service must leverage network capabilities to minimize cost (e.g., use of existing infrastructure, commercial off-the-shelf (COTS) technologies, and services).	[redacted]
14. Reliability/ Availability	Services must perform consistently and precisely according to their design requirements and specifications, and must be usable with high confidence.	[redacted]

A3.0 QWEST RELATIONSHIP WITH THE NCS NS/EP PROGRAMS

Qwest services have Wireless Priority Service (WPS) and Government Emergency Telecommunications Service (GETS) as integral components of NS/EP programs.

A3.1 GOVERNMENT EMERGENCY TELECOMMUNICATIONS SERVICE (GETS)

GETS provides NS/EP users with a dependable and flexible switched voice and voice-band data communications service for use during periods of emergency or crisis. GETS uses existing features and services of the Public Switched Telephone Network (PSTN) with selected NS/EP augmentations and enhancements. The benefit of the GETS architecture allows the service to evolve and capitalize on the changing and improving technological capabilities in the PSTN, thus remaining responsive to NS/EP users.

A3.1.1 GETS Program Administration

GETS is a service sponsored by the Office of the Manager, National Communications System (OMNCS), to meet NS/EP requirements for the use of public, defense, or Federal telephone networks by Federal, state, and local government and other authorized users.

Developed in response to White House tasking, GETS provides emergency access and specialized processing in local and long-distance telephone networks. GETS access is provided through a simple dialing plan and Personal Identification Number (PIN). GETS traffic receives priority treatment over normal traffic through:

- Controls such as trunk queuing, trunk sub-grouping, or trunk reservation

- Exemption from restrictive network management controls that are used to reduce network congestion
- High probability of completion (HPC) capability to provide:
  - NS/EP identification
  - Priority signaling

These features enhance the capability of NS/EP calls to be completed in congested networks. GETS does not pre-empt public traffic nor are there levels of precedence in GETS. [redacted]

A3.1.2 Wireless Priority Service

Wireless Priority Service (WPS) provides priority call processing on wireless networks to authorized persons approved by the National Communications Service (NCS). [redacted]

[redacted]

From an infrastructure standpoint, the addition of our MVNO provider's CDMA wireless technology will allow increased capacity over other wireless technologies and minimizes capacity issues. Additionally, our Network Operations Control Center proactively monitors our network to identify potential capacity issues and solve them as quickly as possible. Our MVNO provider's General Disaster Recovery Plan provides a rigid, market-specific process to minimize downtime in the case of a natural or man-made disaster.

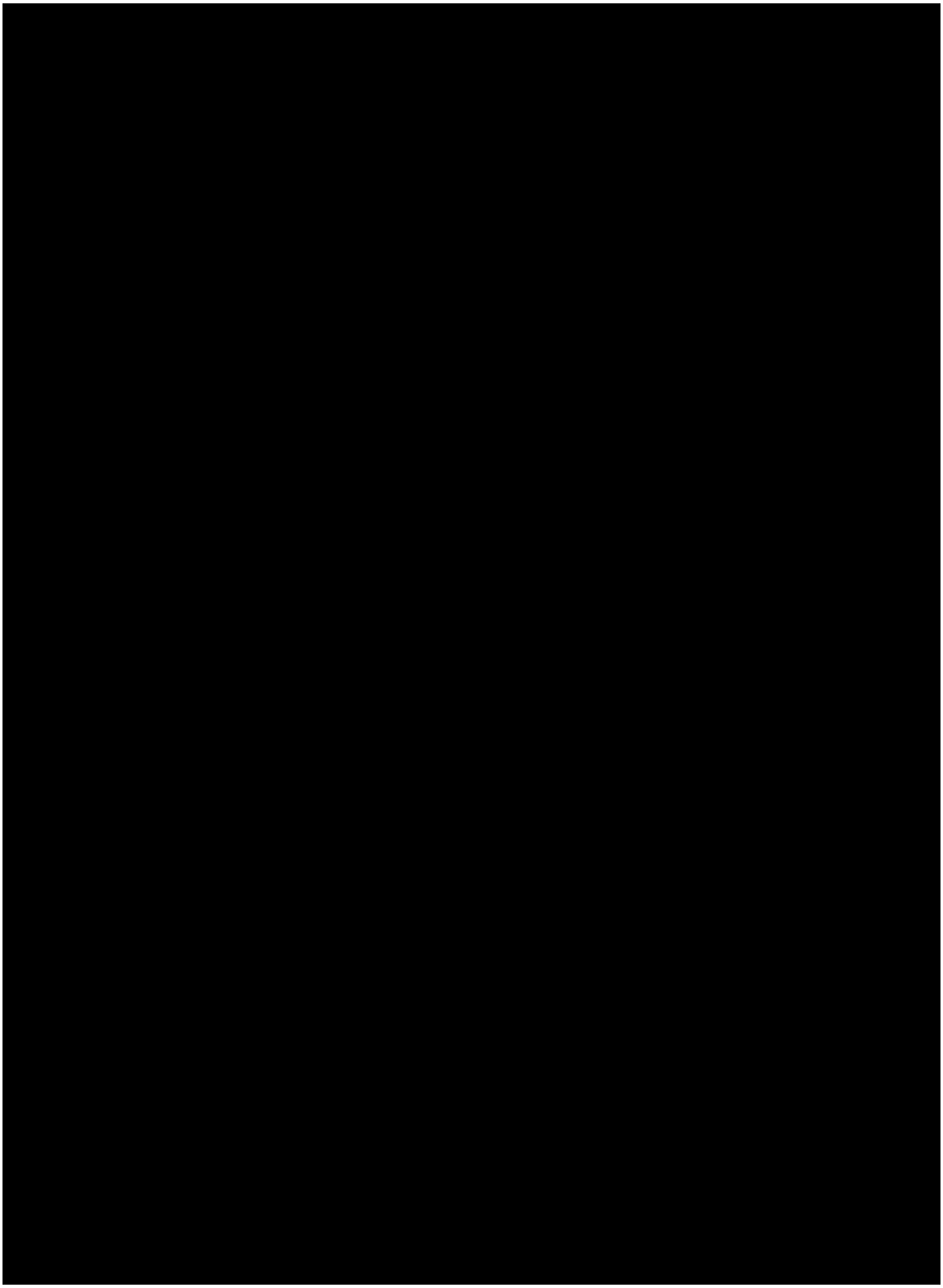
A4.0 TELECOMMUNICATION SERVICE PRIORITY (TSP)

TSP is a Federal Communications Commission (FCC)-mandated program used to identify and prioritize telecommunication services that support NS/EP missions. The rules and requirements of the TSP program are binding upon all regulated telecommunications service providers; Qwest fully adheres to those requirements.

A4.1 PROVISIONING OF TSP CIRCUITS

Qwest has significant experience provisioning qualified TSP circuits for the Government. [redacted]

Qwest provides priority provisioning (Emergency and Essential) as well as priority restoration [redacted]



TSP Provisioning Services. This process covers the activities undertaken to properly provision service orders with TSP assignments containing provisioning priority.

Emergency Provisioning

- Emergency NS/EP. Telecommunications services in the Emergency NS/EP category are those new services so critical as to be required to be provisioned at the earliest possible time, without regard to the costs of obtaining them.

Essential Provisioning

- Satisfies a requirement for a new service that must be installed by a specific date that cannot be met using normal business procedures.

A4.2 TSP ORDER MANAGEMENT/RESTORATION

Restoration of Critical TSP Services – This process covers the activities undertaken to properly restore service orders with TSP assignments containing restoration priority. The restoration of these services follow many of the normal steps of service restoration in that trouble tickets are created, Qwest Support Center manages the restoration, and Agencies are provided updates. The key difference for TSP restoration is that Qwest restores TSP circuits before any other services. In cases where multiple circuits are down, services with TSP assignments are restored first and in the order of the TSP restoration priority.

Qwest complies with all applicable requirements of NCS Directive (NCSD) 3-1, TSP System for NS/EP and NCS Manual 3-1-1, "Service User Manual for the TSP System." This process covers all activities undertaken to manage:

- Service order installation of services with TSP provisioning priority
- Service order installation of services with TSP restoration priority
- Restoral of services with TSP restoration priority

In meeting those requirements, Qwest's primary objectives of its Management and Restoration process are to:

- Initiate service of orders with TSP provisioning priority within the designated time period
- Ensure all subcontractors meet the applicable TSP requirements
- Accurately capture and maintain the TSP information by circuit

- Properly restore services with TSP restoration priorities before services without TSP restoration priorities
- Properly restore services with TSP restoration priorities in order of their priority
- Ensure all required communications to NCS and Agencies occur in a timely and accurate fashion

In provisioning circuits on a TSP basis, Qwest's CPO will coordinate closely with the Government PMO and ensure that the Task Order (TO) instructions are followed and service requirements are met. Qwest's TSP Coordinator will review the status of all TSP service orders with the Qwest CPO.

A4.3 PROVISIONING OF NS/EP SERVICES

The Federal Government, through the NCS, requires that a centralized organization provide NS/EP coordination. Qwest has a corporate NS/EP organization in place to meet this requirement.

Qwest has significant experience provisioning circuits for the Government that are considered "NS/EP." GSA and the Agencies will be given access to the secure Qwest Control Networx Portal to facilitate the ordering of NS/EP telecommunications transport services.

For order processing and provisioning of NS/EP services, Qwest uses a similar service ordering and provisioning process, as described in Section 4.1 of this document, with appropriate NS/EP notations.

In provisioning circuits on an "NS/EP" basis, Qwest's NS/EP Liaison Officer will coordinate closely with an Agency and ensure that the TO instructions are followed and service requirements are met.

A4.4 RELOCATIONS AND RE-PROVISIONING

Agency users may sometimes need to relocate and re-provision certain services and equipment between rooms or buildings. GSA and the Agencies will be given access to the Qwest Control Networx Portal to facilitate the ordering of telecommunication transport service relocations and re-provisioning, or they can contact the Qwest Customer Service Office.

[redacted]

Qwest's NS/EP Liaison Officer will work with the Agency to determine specific details of relocations and re-provisioning to include any site surveys required.

A4.5 Protection of SS7 and Satellite Command Link (As Applicable)

[redacted]

[redacted]

A5.0 SHARED RESOURCES (SHARES) HIGH FREQUENCY RADIO PROGRAM

Qwest is a participant in the SHAred RESources (SHARES) High Frequency Radio Program cooperating with the NCC in providing the Federal emergency response community. SHARES provides a single, inter-agency emergency message handling system for the transmission of NS/EP information. It brings together existing high frequency radio resources of Federal and federally-affiliated organizations when normal communications are destroyed or unavailable.

SHARES is available on a 24-hour basis to provide an emergency communications link. Certain conditions must exist, however, to use SHARES. These conditions include:

- The information must support NS/EP requirements
- The information must be communicated to a Federal entity and be of critical importance to the Federal Government, the entity's mission, and/or involve the preservation of life and property
- The primary means of communications must be inoperative or unavailable for use
- The processing of SHARES message traffic must not interfere with the mission of the SHARES participants
- SHARES participation is open to all Federal departments and Agencies and their designated affiliates on a voluntary, non-interfering basis

BA6.0 PROTECTION OF CLASSIFIED AND SENSITIVE INFORMATION

Qwest may be granted access to certain classified and sensitive materials required for the planning, management and operation of NS/EP in support of Networx services. This information may be in various forms including hard copy and softcopy. To ensure the protection of classified and sensitive information, [redacted]

Qwest has experienced Facility Security Officers (FSOs) who will support Qwest's Networx Security Manager to ensure compliance with applicable industrial security regulations in accordance with the National Industrial Security Program Operating Manual (NISPOM) for safeguarding classified information. In addition, [redacted]

[redacted]

Qwest will follow best commercial practices to protect the Networx computer systems with regard to NS/EP related information. The sensitive systems include, but are not limited to, databases for classified information, critical user's locations, identifications, authorization codes and call records, customer profiles, and computer systems that control, or can control, network services.

Qwest will protect Sensitive But Unclassified (SBU) with the same level of protection as "For Official Use Only" as defined by industrial security regulations.

PART B: ASSURED SERVICE IN THE NATIONAL CAPITAL REGION (L.34.1.3.5 (C))

[redacted] Qwest is [redacted] fully compliant and has an active National Security and Emergency Preparedness (NS/EP) plan. Qwest has been providing Telecommunications Service Priority (TSP) services locally and nationally for over five years with an excellent track record of meeting our customer's critical and emergency requirements. Qwest also provides services to enable the Government Emergency Telecommunications Systems (GETS) priority calling mechanisms. Finally, Qwest supports the National Communication Systems (NSC) with full-time staff located at the NCS. This enables Qwest to provide full coordination with the Government's and our nation's requirements in times of emergency.

Qwest will update and provide full NS/EP FRIP documentation, as required, upon Notice to Proceed by the Government.

B.1 QWEST NATIONAL CAPITAL REGION ARCHITECTURE

Qwest understands the Government's requirement to assure performance of network services in and around the National Capital Region. To meet this important requirement, Qwest has established POP diversity in the National Capital Region. [redacted] Each of these gateways provides complete redundancy to access Qwest nationwide and international network capabilities and regional voice and data services. In addition, [redacted]

[redacted]

[redacted]

[redacted]

Qwest's Internet backbone is extremely well connected to other Internet Service Providers (ISPs). Qwest peers with the largest ISPs at seven private peering locations geographically distributed through the United States, and the loss of a single peering point has virtually no effect on our ability to provide high-quality access to the Internet. [redacted] As with other data services, critical customers can diversely dual-home their connections to Qwest's Internet services and have resiliency from National Capital Regional POP failures.