3.4 DISASTER RECOVERY (L.34.2.3.4, M.3.9, comp_req_id 806)

Three key objectives that GSA has as part of the award of the Networx contract are to ensure service continuity, high-quality service, and operations support. Qwest has shown that we can provide this support not only as part of our daily operations, but also in the event of regional or national emergencies. This is through effective preparation and mature, comprehensive recovery procedures in place, tested, and ready to perform.

3.4.1 Understanding of the Requirement

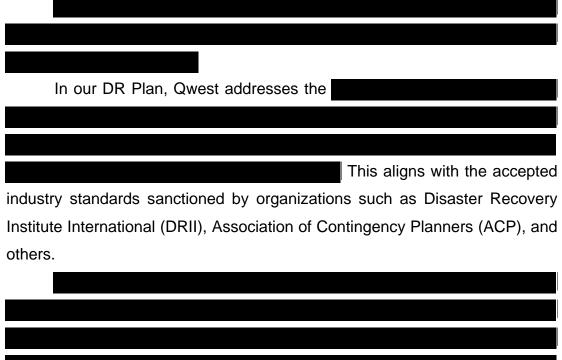
We recognize that our ability to quickly respond and recover to ensure business continuity is vital to GSA and the Agencies. Qwest is pleased to provide a Disaster Recovery (DR) approach and plan that incorporates our Spirit of Service[™] and addresses the Networx contract requirements specified in RFP. Qwest's Spirit of Service[™] is not just a company motto; it is the heart of our Disaster Preparedness (DP) program.

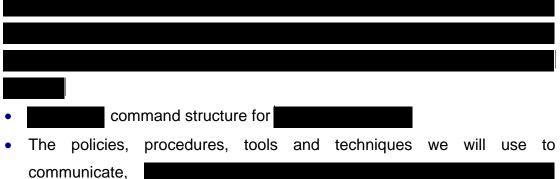
Our many years of experience in disaster recovery is of real value when it comes to our customers and the services we provide. Hurricane Katrina is a recent example where Qwest proactively mobilized Emergency Response Teams (ERT) and began monitoring the storm's progression, identifying potential risks, and readying sub-teams. Geographic Information Systems (GIS) maps were created overlaying Hurricane Katrina's projected path over Qwest's facilities in order to pinpoint our "at-risk" sites.



exercises were completed for all applicable rings in order to test and verify automatic reroute capabilities. Where feasible, linear (non-ring switched) traffic was rerouted around the area.

As a result of Qwest's network architecture and proactive mitigating efforts, and despite the fact that one of our sites was totally destroyed as a result of flooding, we successfully switched all SONET-protected traffic. None of these customers lost service.







- Our back up strategies for services affecting facilities, operational support systems and data, and key service components
- Our overall strategy for service restoration including prioritization and partial or full restoration
- The manner in which we ensure that domestic and non-domestic suppliers or partners for which Networx service offering depends on having in place adequate and viable disaster recovery plans and strategies.
- How our network management system design ensures continuity of operations
- How we ensure that the disaster recovery plan is effective and that its operation is in a state of readiness to address disasters. This includes conducting annual preparedness drills for disaster recovery

3.4.1.1 Responses to Narrative Requirements Table

Section 3.4.1.1, General Narrative Requirements, identify RFP requirements and associated proposal response locations.

Comp_ RFP		RFP Requirement	Proposal
req id	Section		Response
806	C.3.3.3.2.1	(2) The contractor's Disaster Recovery Plan shall describe in detail how the contractor shall satisfy the disaster recovery requirements as identified in Section C.3.3.3, Disaster Recovery and all subsections.	Section 3.4 Appendix 3
802	C.3.3.3.2.1	(7) The contractor shall address in the Disaster Recovery Plan its disaster recovery command structure for managing disaster and how it will communicate, interface and coordinate internally and with the Government, suppliers, partners, and other Networx stakeholders as appropriate. Communication requirements from the contractor's network control center(s) to National Communication System (NCS) locations or other critical Government locations during an emergency will be defined by the Government after contract award.	Section 3.4.2.3. Appendix 3
801	C.3.3.3.2.1	(8) The contractor shall address in the Disaster Recovery Plan its overall strategy for service restoration including prioritization and partial or full restoration as appropriate.	Section 3.4.2.2.2 Appendix 3
798	C.3.3.3.2.1	(9) The contractor shall address in the Disaster Recovery Plan as appropriate back up strategies for services affecting facilities, operational support systems and data, and key service components.	Section 3.4.2.2.2 Appendix 3 Appendix 6

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Responses to Disaster Recover	y General Narrative Requirements



Comp_	RFP	RFP Requirement	Proposal
req id	Section		Response
797	C.3.3.3.2.1	(10) The contractor shall address in the Disaster Recovery Plan how	Section 3.4.2.4
		it ensures that domestic and non-domestic suppliers or partners for which Networx service offering depends on have in place adequate	Appendix 3
		and viable disaster recovery plans and strategies.	
793	C.3.3.3.2.2	(5) The contractor's network management system design shall	Section
		provide features that will make real-time network monitoring resistant	3.4.2.2.2
		to failure and avoid the possibility of a single point of failure	Section 3.4.3.1
		impacting the entire network management function.	
778	C.3.3.3.2.2	(3) The contractor shall include and discuss as part of its Disaster	Section 3.4.2.4
		Recovery Plan how it will ensure that its disaster recovery plan is	Appendix 3
		effective and that its operation is in a state of readiness to address disasters.	
776		(4) The contractor shall conduct annual preparedness drills for	Section 3.4.2.4
		disaster recovery, document the results of such drills, and report to	Section
		the PMO in annual updates to the Disaster Recovery Plan the	3.4.3.4.3
		actions the contractor will take or has taken to address any	Appendix 3
		shortcoming.	

3.4.2 Disaster Recovery Management (L.34.2.3.4, M.3.9 (b))

Qwest has been using sound and proven business continuity/disaster recovery (BC/DR) processes for a number of years which serve to ensure that the Networx customers will experience minimal to nonexistent interruptions to their services. Qwest is committed to the success of the Government emergency response efforts and is structured to support GSA and the Networx Program Management Office (PMO) to assist in meeting

and data services communication needs before,

during, and after a disaster-related event.

3.4.2.1 Organization

With years of experience and a solid background supporting disaster preparedness and business continuity planning, Qwest has and will continue to provide the Government with a superior level of service surrounding disaster recovery activities. Qwest's Disaster Recovery Plan, Appendix 3, addresses the command structure for managing disasters and how Qwest communicates, interfaces and coordinates internally as well as with the Government Emergency Agencies and Government customers, suppliers,



and partners.
Qwest will assign a different individua
Networx Disaster Recovery Liaison Officer will be part of the
Qwest Contractors Program Office (CPO) and report to Qwest's CPO
Director, Ms. Roxane Rucker.
3.4.2.2 Resources
3.4.2.2.1 Human Resources
Qwest has full-time disaster recovery professionals, all
of whom are
In partnership with Qwest's
Networx DR Liaison Officer and the Qwest CPO, the DR team will work with
the GSA Networx PMO and Agencies utilizing Networx services, to maintain
a DR Plan that ensures, in the event of a disaster, that the Agencies will
receive quick response, communication, and restoration of the Networx
infrastructure. As shown in the second second
The Risk Management Organization within Qwest is comprised of
several critical departments, including but not limited to:
This integrated Risk Management approach
highlights our leading edge thinking in the area of managing risk and
positions us to efficiently, effectively, and successfully respond to major
events. (Qwest) shows key positions within Qwest's Disaster
Preparedness Organization.

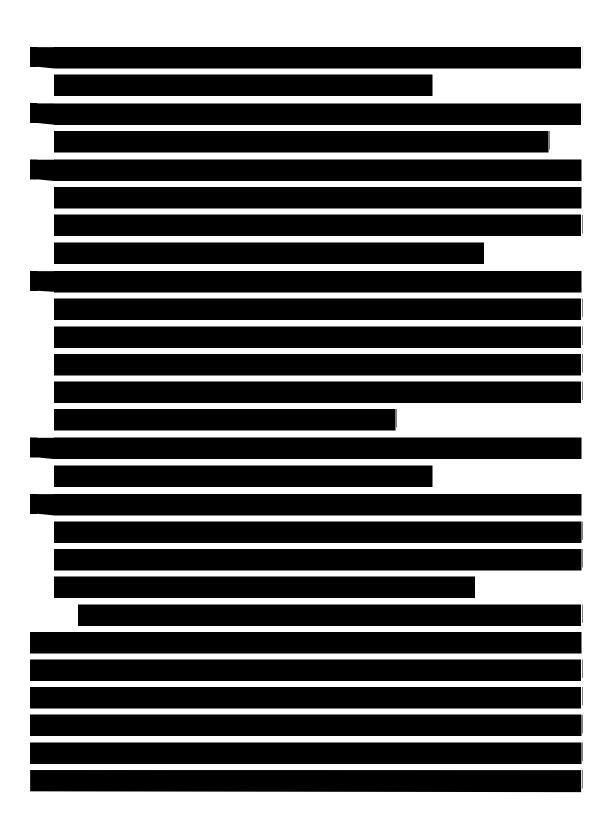




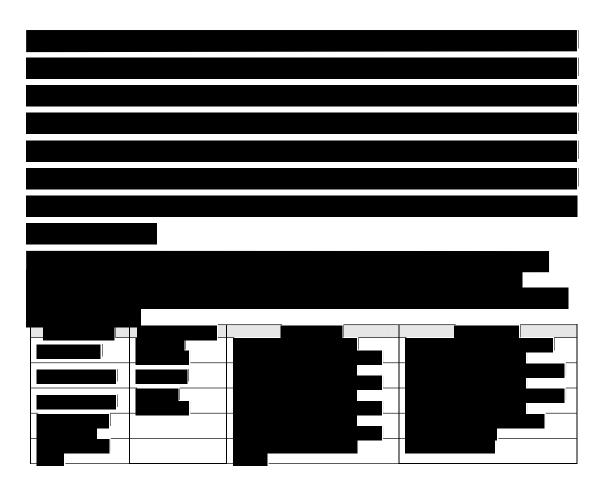


Supplemental resource	
of Qwest's Disast	er
Preparedness program	in
support of customer nee	s
include:	
Best-in-Class Disast	er
Recovery Management	-





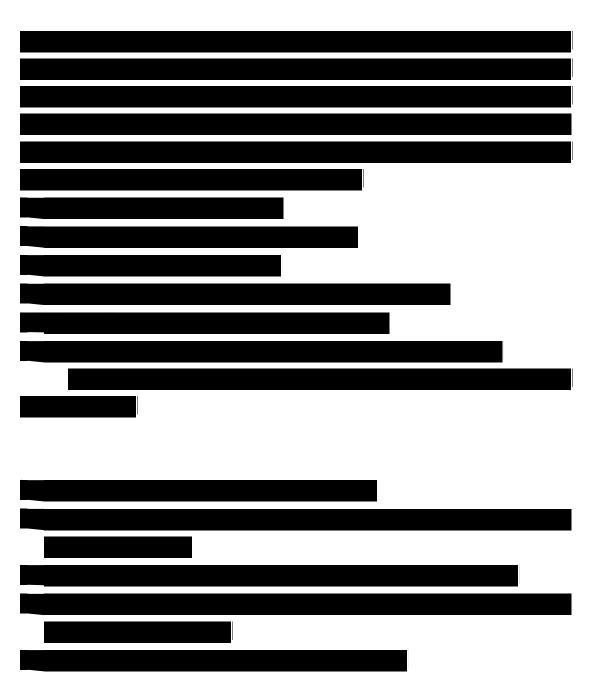




3.4.2.2.2 Network Resources (comp_req_id 801, 798, 793)

Qwest's Disaster Recovery and Business Continuity process has a proven track record as a mature and sustainable program that is effective and will meet the needs and requirement of the Networx contract. As one of the world's largest network providers, Qwest has the operational network resources to reroute Networx traffic, data, voice, and video services on demand. In the event of a network outage that may affect Networx products and services, Qwest has the operational network resources to allow the affected Agencies (organization) to operate at full data capacity or, depending upon the severity of the damage, at reduced capacity until full restoration of services.





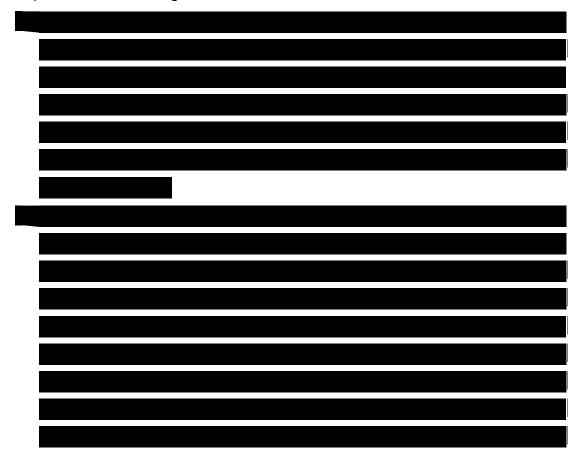
All critical facilities such as data centers, cyber centers, customer call centers, and network operation/management centers have redundancy built into their design. Specifically, our design provides features that will make realtime network monitoring resistant to failure and avoid the possibility of a



single point of failure impacting the entire network management function. On a local level this includes redundancy for power, network, and functions, which are incorporated into business continuity or disaster recovery plans. All personnel involved are trained on the execution of failover procedures and processes in the event of a disruption.

All critical system data and files are pre-identified and backed up daily and weekly, according to content and risk, with copies sent to authorized offsite vendors or to secondary Qwest sites in a secured environment. All critical hardcopy information and documentation is required to be duplicated and stored offsite as a matter of policy.

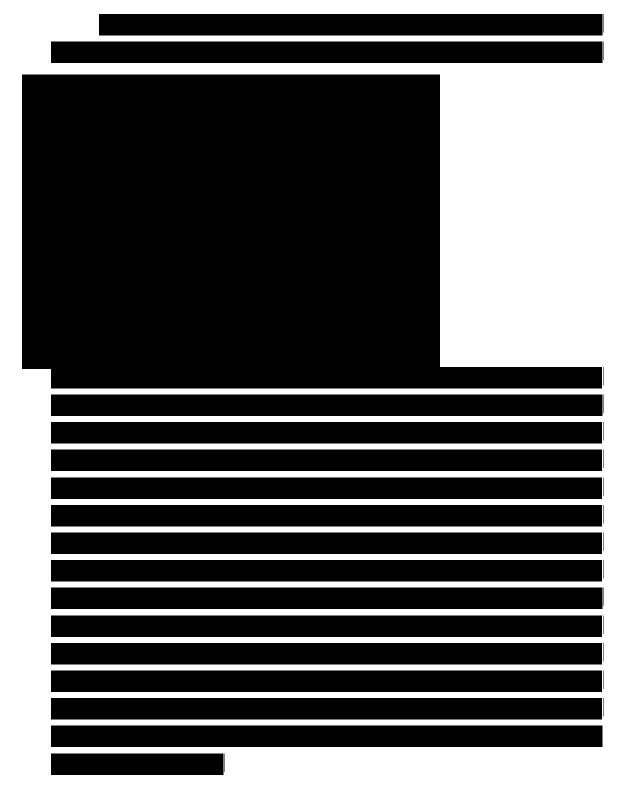
Should a disaster occur and any specific part of this network architecture is impacted, the following would occur:









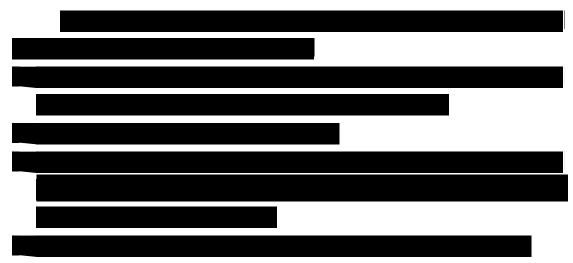




The has responded to events in the **constant**, mitigating the impact of disasters and emergencies to our customers. All teams are staffed with trained team members along with the resources ready to respond to any type of adverse event. Through Qwest's ERT processes, these teams utilize the resources available to the Company through our procurement and critical vendor partnerships. For example, having

In addition, the built in redundancy in the design of the network provides Qwest's customers with a high level of resiliency. Qwest also uses its Network Reliability Operation Centers (NROC) and Network Operations Centers (NOC) to monitor the network 24x7x365. Qwest leverages both the Network design and the Emergency Response processes to quickly identify issues and take proactive measures to either mitigate or resolve an adverse issue before it can escalate to a crisis.

The following examples are provided to illustrate how Qwest's organizational structure will fully cover any and all events regardless of size or location:

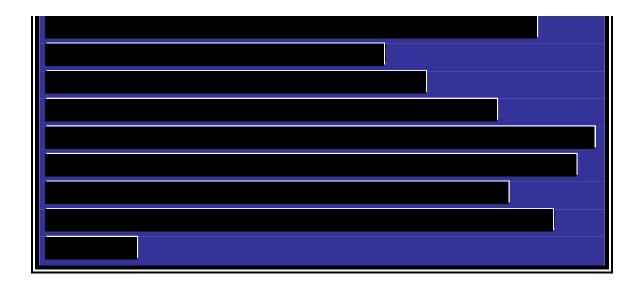


Hurricane Katrina









3.4.2.3 Strategies (comp_req_id 802)

The Networx PMO will be supported by a team of disaster preparedness professionals in the development and implementation of plans to address crisis situations that mitigate or reduce the potential adverse effects of an event, whether it is an anticipated event like a hurricane or a sudden adverse event like a terrorist or criminal act.

Qwest's appointed Disaster Recovery Liaison Officer, working with the Qwest CPO, has the responsibility to maintain BC/DR plans and ensure that Networx Agencies are integrated into Qwest's Disaster Preparedness and Recovery process, which include the elements listed in Section 3.4.2.6.

Qwest utilizes a modified Incident Command System (ICS) and strategy.

When a disaster occurs where the outage impacts numerous customers, Qwest mobilizes one or more of our

These teams convene within minutes and are prepared to do damage assessments to identify Qwest and

customer impacts, invoke disaster recovery and/or business continuity plans along with other necessary resources, determine length of outage, and communicate status to internal clients and external customers until problems and/or outages have been resolved.

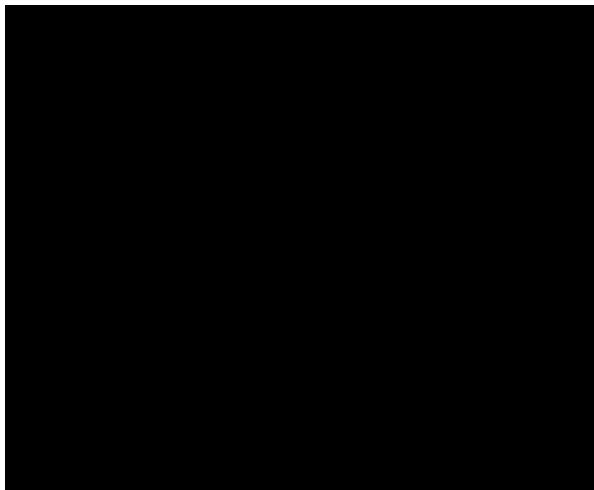
3.4.2.3.1 Disaster Recovery Communications

Qwest's approach to communications during an emergency or disaster centers around the Corporate ERT **Constitution** Information regarding a real or potential disaster, coming from an internal or external source, is communicated to a 24x7x365 DR Hotline. Management is notified and activates the Corporate ERT, and regional ERTs as appropriate, based on the nature of the event. An executive crisis team will be activated and will interact with the Corporate ERT to provide leadership as necessary. Corporate ERT will manage the event and communicate with regional ERTs, business units, and Qwest Networx customers using conference bridges and other tools (available to the corporation) as identified in Section 3.4.2.7, Operational Tools and Systems.









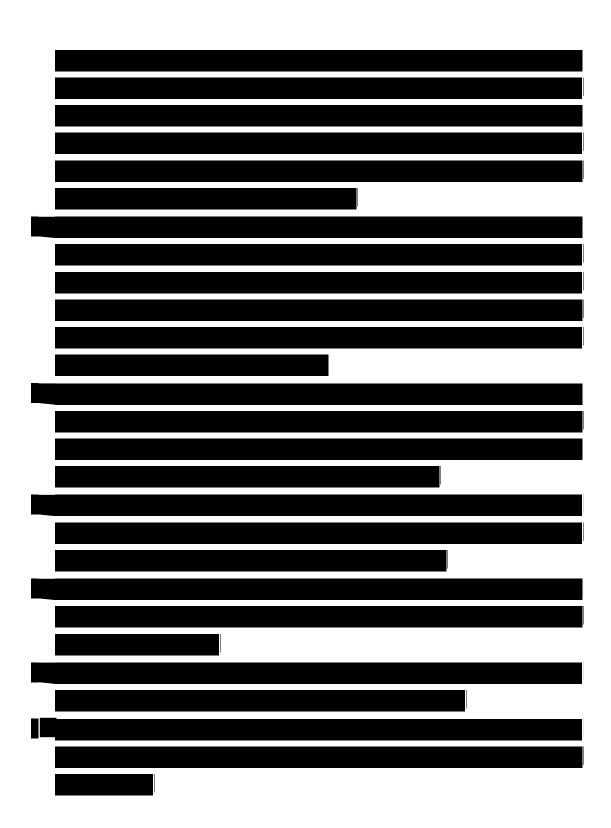
3.4.2.3.2 Government Emergency Management Agency Communications



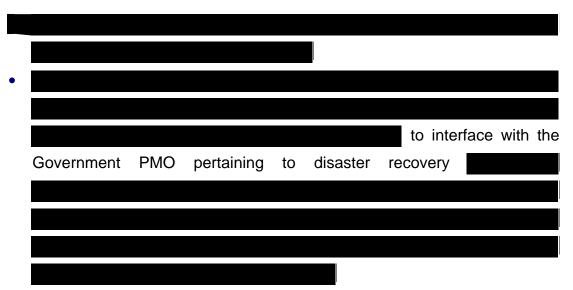
3.4.2.3.3 Customer Communications

Communications with the Agencies and other Networx stakeholders during an emergency situation occurs in several ways:









3.4.2.4 Practices (comp_req_id 797, 778, 776)

Through required annual testing of our BC/DR plans by our Emergency Response Teams and the successes that have been demonstrated during real events, (that) Qwest has proven repeatedly that our disaster recovery best business practices to safeguard (our customers) Qwest customers, Qwest assets, and Qwest Infrastructure are sound. (Refer to Section 3.4.3.1 for examples of real events). From our position on the Network Reliability and Interoperability Council (NRIC), Qwest has also contributed to and implemented NRIC best practices which have proven time and again to provide a reliable, secure, and safe environment for Government and Industry to perform E-commerce, voice, video, and electronic data transfer.

All Qwest Business Units identified as having critical functions are required to develop and test a business continuity and/or

disaster recovery plan every year. Information and lessons learned are tracked using the **Sector** tool. Gaps are identified and must be resolved within 60 days as part of Qwest's due diligence on behalf of our customers to include Networx. Scorecards are



kept of overall performance metrics. These scorecards are provided to the Qwest Executive Team, the Business Unit Vice Presidents, and ERT members so they know if and where improvements are needed and can track to ensure that improvements are made. The plans are updated as needed to reflect the changing requirements of the Business Units and Qwest's customers. Qwest's Disaster Recovery Plan details the reports that are generated and how they are used to track each event and determine process improvement if warranted.

Qwest tests all BC/DR plans as part of our ongoing mandated company compliance program. Qwest's Disaster Preparedness program uses industry standards and best practices with all suppliers and partners, both domestic and abroad, and requires comprehensive business continuity and/or disaster recovery plans for all of the supported critical functions and services they provide. These BC/DR requirements are enforced by including them in third party and vendor contracts administered through the company's procurement organization.

All critical vendors and partners are required to have a business continuity plan to address events that could impact their ability to provide products or services to Qwest. Specifically, the Qwest Disaster Recovery Plan shows how we ensure that domestic and non-domestic suppliers or partners for which Networx service offering depends on have in place adequate and viable disaster recovery plans and strategies. A critical vendor or partner is defined as one who provides Qwest information, services, hardware, software or products which are essential in recovering and/or maintaining Qwest's critical functions which have been impacted by an adverse event.

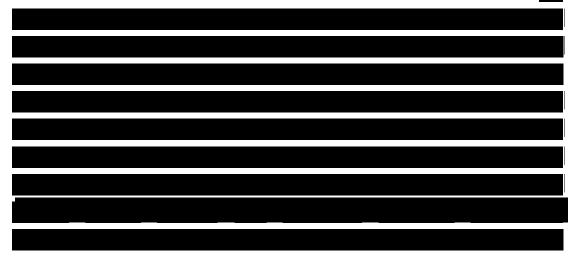
Additionally, all of Qwest's business continuity plans are tested on an annual basis to meet corporate compliance, which includes



the verification of critical vendors and partners' strategies, plans and ability to provide goods and/or services are adequate and viable.

Qwest has current disaster recovery plans that are tested annually and maintained throughout the year to meet corporate compliance standards

Business continuity managers from all Qwest business units interface on an ongoing basis with the Corporate Disaster Preparedness organization in testing and updating of their plans. This ensures that the plans meet standards and are reviewed whenever there is a change that could impact the plan (e.g., reorganizations, movement of key personnel, technology, or procedural changes). Additionally, testing progress is monitored and reported on the Qwest Disaster Preparedness Scorecard, which is distributed to senior management on a **sector of the sector of the**

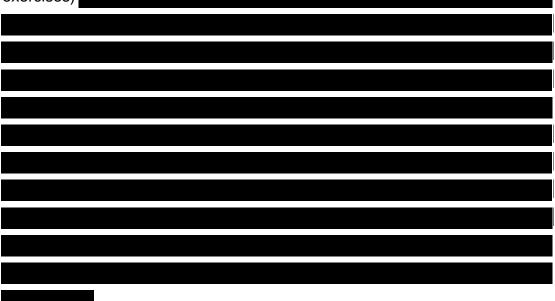




These exercises are designed to ensure that Qwest remains in a state of readiness and that, at a moment's notice, all emergency responders know their roles and responsibilities and the protocols, available resources, and communication processes, ensuring employee safety and the expeditious, prioritized restoration of affected critical functions.

are required to be tested and updated annually to meet corporate compliance. Included in this test is a process where if any part of the plan fails to meet an objective it is identified as an action item with a formal process for closure, which includes executive leadership review. All plan compliance results will be provided to the (customers) GSA PMO for review on a regular basis, and included in updates to the Disaster Recovery Plan.

Currently a multitude of drills are conducted annually for each business unit (via ERT exercises and scheduled BC/DR plan testing). These tests (or exercises)





3.4.2.5 Policies

Qwest plans for the management of crisis situations to help avoid or reduce the potential adverse effects of a disaster or event. Qwest Policy defines the framework for our Disaster Preparedness program. As part of our integrated Risk Management approach, other

3.4.2.6 Processes and Procedures

It is the responsibility of the Disaster Preparedness Organization to work with each of our business units identified as supporting critical functions, including the Qwest CPO, to evaluate the emergency response processes and procedures, disaster recovery plans and business continuity plans and, to ensure the business units implement plans that include the following elements:

 A communication process component for customers, employees and supervisors



- Procedures and processes for implementation and ongoing maintenance, commensurate with risk
- A process for interactions between business units and customers, as defined by specific product and service needs.
- An educational/training process including initial coverage and required follow-up
- Identification of a crisis coordinator
- A process for the business unit to evaluate the effectiveness of its plan on a periodic basis
- Coordination with specific Qwest fire/life safety, evacuation, security plans
- Appropriate recovery time frames and processes for the criticality of the process involved

3.4.2.7 Operational Tools and Systems

Qwest uses a variety of tools and systems to manage and plan for disasters.

3.4.2.7.1 Emergency Notification Tool

All Qwest Emergency Response Team members, Corporate Disaster Preparedness Organization and Business Unit Continuity Managers are required to have a paging communication device registered in Qwest's employee contact management tool called "Mobile Village" for immediate notification and mobilization. Specific response guidelines are in place and are regularly tested.

3.4.2.7.2

216

is well known

in business continuity for both the Government and private sector and is currently being used for building, managing, and tracking all Qwest business continuity and disaster recovery plans. This tool is also being used for



company-mandated governance and compliance requirements, for example, in tracking annual testing and documenting BC/DR test results.

3.4.2.7.3 Business Impact Analysis Tool

Qwest (uses the

current industry standard tool for) is using for identifying, quantifying, and prioritizing all critical business functions and processes. This includes both stand alone processes within each company business unit or cross functional processes across multiple business units.

3.4.2.7.4 Geographic Information System (GIS)

Geo-codes and maps are printed and made available to respective business units detailing all facilities and places of network presence for quick visualization prior to potential risks of disaster impacts (such as hurricanes). Mapping capability is also provided for ERT exercises and BC/DR planning and testing.

3.4.2.7.5 (replaced with Communication Devices)

All Qwest ERT members, Corporate Disaster Preparedness staff, and business unit Business Continuity Managers are mandated to have at least one communication device for immediate notification and mobilization.

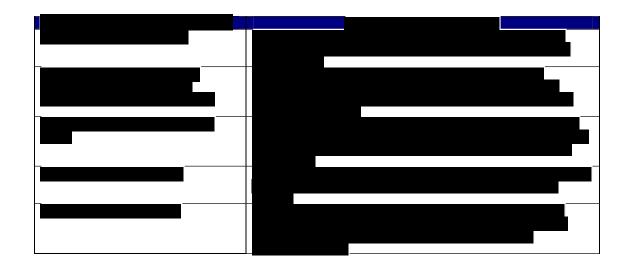
3.4.2.7.6

These phones are provided to business unit leaders and key response team individuals as an additional means of alternate communication for geographically dispersed Emergency Operations Centers (EOC), Emergency Response Team leaders, and critical network supporting members.

3.4.2.8 Reports







Our reports are utilized by Qwest Senior Management and are incorporated into **EXECUTE** by the Business Continuity Managers for the ERTs to evaluate the ongoing process and fill gaps that may be identified after an event and to ensure compliance

3.4.3 Disaster Recovery Capability (L34.2.3.4; M.3.9(a))

3.4.3.1 Continuity of Services (L.34.2.3.4(a), comp_req_id 793)

Qwest has strong focus and proven experience on planning for continuity and recovery of operations and services. Contingency planning means monitoring for any day-to-day outages as well as being prepared for long-term continuity or disaster scenarios.



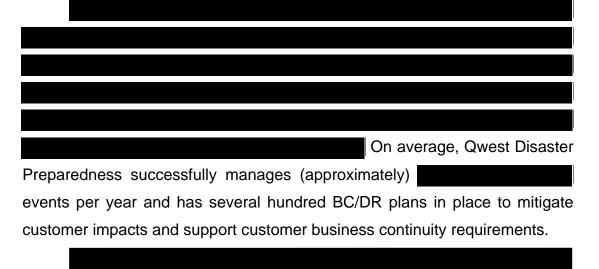
All critical system data and files are pre-identified and backed up

according to content and risk, with copies sent to authorized off-site vendors and/or secondary Qwest sites for retention in a secure environment. All critical are also

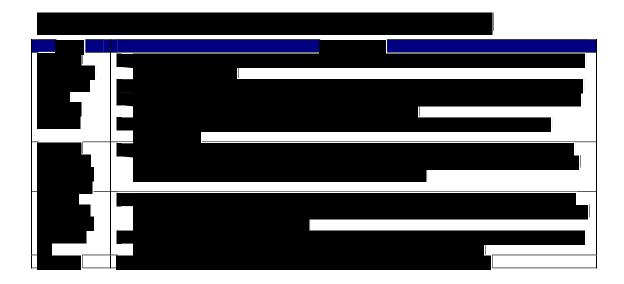


required to be duplicated and stored off site in accordance with company policy.

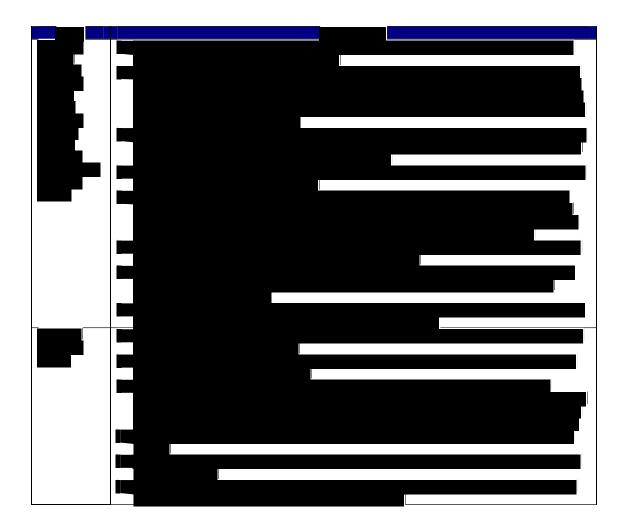
The BC/DR Planning element of Qwest's Disaster Preparedness Program ensures all critical functions have plans in place to minimize the impact of a disaster. Critical functions include those that directly impact customer services, generate revenue, enable Qwest to meet legal/regulatory obligations or provide essential support functions. All personnel involved in BC planning are trained in the execution of these procedures and failover processes in the event of a disruption.











During the course of these and all adverse events, Qwest recognized that keeping the customer informed was a priority and ensured timely communications was provided.

3.4.3.2 Minimizing Impact of Networx-Related Disasters (L.34.2.3.4(b))

To minimize the impact of service-related disasters on Networx, Qwest will use the following tiered approach that's used today to manage major events or disasters:

• Operations Centers for all network, data, cyber, and wireless services are responsible for implementing established tactical restoration plans and



	leading tactical response activities.
•	that are geographically dispersed and prepared to
	respond quickly to any type of disaster or event that affects Qwest's
	customers, facilities and services.
•	
	is activated in the event of an OCONUS disaster
	impacting Qwest services or facilities, when a requires
	additional corporate support, or in the event that a disaster is
	geographically widespread and requires strategic direction and resource
	allocation.
•	that
	will support ERTs as necessary with strategic direction and corporate
	resource allocation.
•	
	rapidly respond to Hazmat emergency events that impact
	network or other critical business services.
3.4	1.3.3 Viability of Disaster Recovery Plan (L.34.2.3.4(c))

Qwest recognizes the importance of keeping disaster recovery plans current to ensure that they will be effective when needed. Compliance standards require that all plans be updated and tested at a minimum annually. In addition, each year all business units or clients are required to meet with their assigned BC/DR Planner to identify any requirements based upon changes in the organization, risks or new technologies.

These BC/DR plans are not static. They are "living documents," updated to introduce new technologies and services. Dependent upon the maturity of the plan, tests may be checklists, tabletops, or simulations. Identified gaps are documented and tracked to resolution.

Qwest also uses , the current industry standard tool for Disaster Recovery. (that assist in)

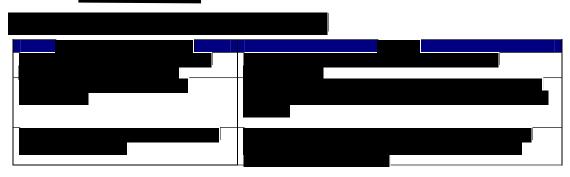
- Identifying critical business processes
- Assigning upstream supplier dependencies from a dynamic list of processes
- Assigning known downstream customer processes as dependencies
- Record process owners recovery time objectives (RTO)
- Review the processes from the enterprise perspective and assign an RTO
- Recommend the type of recovery plan each business unit requires to meet the RTO
- Highlight Risk areas



- Report to Business Unit executives what risks were found and alternatives
 for mitigating
- 3.4.3.4 Maintaining Current Standards and Practices (L.34.2.3.4(d))

3.4.3.4.1 Corporate Mandates

Qwest is adamant about our commitment to customers and reinforces regularly the ongoing commitment to effective disaster recovery. This is reflected in our corporate mandates associated with planning and response standards









3.4.3.4.3 Annual Drills (comp_req_id 776)

As discussed in Section 3.4.2.4, annual drills are conducted for each





Business Unit, including ERT exercises and scheduled BC/DR plan testing. As disaster recovery drills are developed, the level of maturity and comprehensiveness increases. For example, drills may start out focusing on a single function and eventually evolve to be an integrated multifunctional drill with many business units involved to ensure seamless interfaces between organizations.

All of Qwest's ERTs

are comprised of leadership and subject matter experts from all business units that operate or support Qwest operations in each respective geographical area. ERTs are activated following events that have a major impact on Qwest services, employees, or assets, and for which a crossfunctional, integrated response is required.

Operations Centers which provide 24x7x365 monitoring for all network, data, cyber, and wireless services are responsible for implementing established tactical restoration plans and leading tactical response activities.

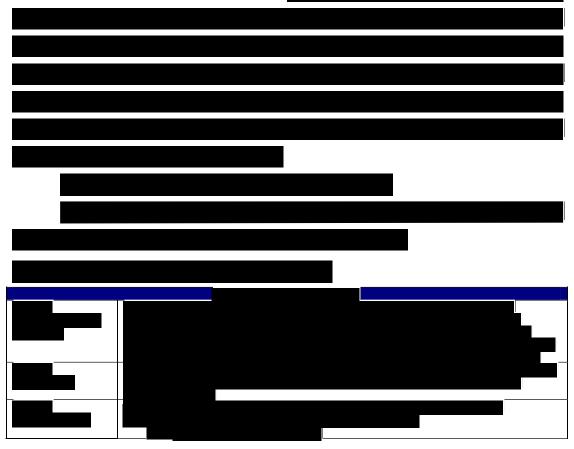




These Centers monitor network functionality and initiate appropriate network controls in the event of an abnormal network condition.

Impacted business units are responsible for implementing established business continuity and disaster recovery plans and activities, which are coordinated and prioritized via ERT leadership.

In addition to the detailed ERT agenda/check-list and the graphic showing Qwest's Emergency Response Team Structure, Qwest also follows a structured and methodical approach in its **Example 1**. All Disaster Recovery plans are required to be tested at a minimum annually. These tests (or exercises) range from







3.4.4 Disaster Recovery Summary

We recognize that our ability to quickly respond and recover to ensure business continuity is vital to GSA and the Agencies. Qwest is pleased to provide a Disaster Recovery (DR) approach and plan that incorporates our Spirit of Service[™] and addresses the Networx contract requirements (of the contract) as evident in Section 3.4 and Qwest's Disaster Recovery Plan. Our many years of experience in disaster recovery are of real value when it comes to our customers and the services we provide.