



2.3.4 Disaster Recovery [L.34.2.3.4]

Networx customers receive the most reliable and survivable telecommunications services, from the world's most experienced and effective Disaster Recovery organization and infrastructure. AT&T has a long tradition of efficiently and quickly providing and restoring service to the Government in times of disaster.

To anticipate, plan for and effectively respond to natural and man-made disasters, the Government is supported by AT&T's industry leading disaster recovery capabilities and management expertise, augmented by our exceptional people, proven processes and advanced technologies. In the event of a disaster, the Government can be confident disaster recovery is built into AT&T's day-to-day operations and is an integral element in the management of our services. Agencies can operate effectively should natural events or man-made attacks occur. Information on the extent and readiness of our disaster recovery proficiency is addressed as follows:

- Discussion of AT&T's disaster recovery capabilities and management approach (provided in the following text and in Appendix D)
- The industry-leading quality of AT&T's Disaster Recovery plan (Appendix D)
- History of our actual disaster recovery experience (Appendix D).

Table 2.3.4-1 summarizes the benefits of AT&T's approach to theGovernment in terms of disaster capabilities and management.

FEATURES	BENEFITS
Well-defined DR procedures, including roles and responsibilities, coupled with a well-equipped and well-trained organization that has been tested and proven in the field, such as when restoring services after 9/11 and Hurricane Katrina.	Effective execution of tasks and rapid staging and installation when disaster occurs, minimizing time to restore services.
Fleet of over 100 trailers, strategically located across the country and mounted with special equipment configured to expedite service restoration.	Self contained organizational units that focus on service recovery to minimize the time to restore services.





FEATURES	BENEFITS
Specially designed equipment, tools and systems such as RTNR (Real-Time Network Routing),	Provides expedited restoration of services by automatically re-routing traffic, at various protocol layers, around failed or overloaded network elements.
Total DR planning and preparedness that includes wireline, wireless, domestic and non-domestic service coverage	Integrated planning and coordination to provide total coverage of potential disaster locations.
Redundant Network Operations Centers (NOCs) and alternate routing built into network facilities (e.g. multiple SONET ring transmission).	Automatic backup for network management, monitoring and transmission for Networx services.

 Table 2.3.4-1: Features and Benefits of Incomparable Disaster Recovery. Agencies can trust the AT&T team for continuity of service through preparedness planning.

2.3.4.1 The Disaster Recovery Plan [L.34.2.3.4, C.3.3.3.2.1]

The offeror shall provide a Disaster Recovery Plan that addresses how the offeror proposes to meet Government disaster recovery requirements specified in Section C.3.3.3, Disaster Recovery. The offeror shall structure the Disaster Recovery Plan according to requirements specified in Section C.3.3.3.4.1.1, Disaster Recovery Plan. The offeror shall describe in the Disaster Recovery Plan its disaster recovery organization, resources, strategies, practices, policies, processes, procedures, tools, systems, reports and any other relevant capabilities to provide the Government with a high degree of confidence that the offeror has sound, effective, and adequate management, technical, and operational capabilities that meet Government disaster recovery requirements. 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 sub-sections. [C.3.3.2.1]

Agencies receive the best service continuity

in the marketplace through an executable

Disaster Recovery Plan (Appendix D), based

on AT&T's corporate Network Disaster

Recovery (NDR) Program. This program

establishes clear lines of authority, sets

standards for all required processes and

tools, manages disaster drills and prioritizes

work efforts. Our goal is to offer Agencies

service continuity under crisis circumstances.

Our key program objectives include:

- Maintaining continuity of critical operations
- Minimizing the duration of a serious disruption to operations
- Establishing emergency management controls
- Providing coordination for recovery.





At the heart of disaster recovery planning is AT&T's Network Disaster Recovery (NDR) organization. This organization is responsible for all Disaster Recovery (DR) planning and preparedness and for restoring the functionality of central offices and network elements within the AT&T network, maintaining vital business operations for our customers. This organization sets the standards for all disaster recovery operations to follow and execute, thus maximizing continuity for customers. Networx services and requirements are fully supported by AT&T's NDR organization under the direction of the

NDR provides continuity of operations and recovery capabilities used to plan, establish, maintain, and augment the infrastructures, technologies, and processes required for crisis-mode operations during a disaster or threat. These crucial operations include:

- Recovery of critical network services
- Normalization of operations to the fullest capability
- Establishment of emergency communications and network access
- Support of disaster management strategies to maintain customer connectivity
- Support of humanitarian relief communications associated with natural and man-made disasters.

Even before NDR resources are called upon, Government customers have network services with built-in survivability, providing and maintaining reliable operations. These services are supported by redundant and alternate facilities deployed within the network (including our operations centers), effectively eliminating any single point of failure that might render the network inoperable. This is established through the **Exercise Constitution**, as illustrated in **Figure 2.3.4.1-1**.







An effective disaster recovery operation includes a set of policies, procedures, standards, and tools to demonstrate a sound business continuity capability. A comprehensive set of disaster recovery policies and procedures are maintained for Networx operational

survivability in the event of a natural or man-made disaster. The Networx Disaster Recovery Plan in Appendix D addresses the Government's Networx Disaster Recovery requirements and provides a complete description of our management, technical, and operational capabilities. The plan describes in detail how AT&T's NDR program satisfies the disaster recovery elements identified in Section C.3.3.3, Disaster Recovery, and all sub-sections.

AT&T will issue a revised plan within 30 calendar days of Notice to Proceed and annually thereafter for the duration of the contract.

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. [C.3.3.3.2.1]

The Government benefits from a command structure providing clear communication and accountability. The

reports directly into the AT&T NDR organization and

via matrix to the Networx Program Director. works closely with the

Contractor's Program Organization (CPO) to incorporate disaster recovery into

all program plans and operations. In the main interface with the

GSA Program Management Office (PMO) for all Networx DR activities,





providing the government with a single point of contact for communication and coordination. He is alternate to **sector and as** AT&T's dedicated representative to the National Communication System (NCS) locations and/or other critical Government locations during an emergency. Additionally, he interfaces and coordinates the activities of AT&T's NDR organization, subcontractor team members and other stakeholders.

The

fault detection for the AT&T network. The factor is focused on end-to-end service performance and network management. The focuses on technology-specific surveillance and fault management. Together, this approach offers the Agencies a full suite of DR. All incident management command and control is directed by for the focuse or is responsible for coordinating incident response across organizations, expediting service restoration, and maintaining adequate and thorough communication, both internally and externally. This includes responding to alarm conditions and performance threshold monitoring and alerting of network outages. There are specific teams providing problem resolution and service restoration, all under the direction of the formation. Further details are provided in the Disaster Recovery Plan (Appendix D).

Service Restoration

The contractor shall address in the Disaster Recovery Plan its overall strategy for service restoration including prioritization and partial or full restoration as appropriate. [C.3.3.3.2.1] 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. [C.3.3.3.2.1]

A disaster is defined as a catastrophic event in which a central office building or other major facility, or information systems and network equipment contained within, is completely destroyed or rendered useless by any type of





natural or man-made disaster. To continue their critical missions, Government customers need to have restoration as quickly as possible.

AT&T NDR's recovery strategy has three primary goals:

- Route non-involved telecommunications traffic around an affected area
- Provide the affected area communications to the rest of the world
- Restore communications service back to normal as quickly as possible through restoration and repair.

The recovery process is initiated by directive from leadership, partners, and customers; a natural or man-made crisis; and/or a threat to the AT&T Global Network. The process is complete after the network resumes normal operations and returned to the stand-by mode.

directs the restoration efforts, including prioritizing the order of work to be performed at a network component level. AT&T has restoration capabilities using prioritization algorithms. One example is **sectoration**, a restoration capability used to automatically reroute transport capacity in the event of a service disruption. Every T1 circuit is assigned a score based on type of service (TSP, signaling, private line, message trunks). The scores are summed for all of the T1 circuits within the higher order circuit (T3), providing a score for the T3. The T3s with the highest prioritization score are automatically restored first by **sectoration**. With **sector**, Agencies can be confident their service will be correctly prioritized for restoration.

The Disaster Recovery Plan includes more information on our restoration capabilities, including partial restoration, and on our back-up strategies for services affecting facilities, operational support systems and data, and key service components.





Subcontractors

The contractor shall address in the Disaster Recovery Plan how it ensures 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. [C.3.3.3.2.1]

AT&T, as lead in the Networx program, is responsible for the coordination of subcontractor service delivery, both domestic and non-domestic. AT&T has reviewed the disaster recovery plans and strategies of our subcontractors as part of the partner selection process, and verified their plans to be acceptable. AT&T will continue to monitor our partners and our own DR practices, plans and strategies with annual tests and evaluations, reporting our results to the Government throughout the life of the program. The Disaster Recovery Plan (Appendix D) contains a full elaboration of partner capabilities, how they develop and test new techniques and equipment, and their state of preparedness to react successfully to disasters.

is able to deploy a mobile cell site, or consisting of base station radios, on-board power generation, a tower structure, and antennas, to replace or augment wireless services at a location where service has been lost or requires enhancement. Following Hurricane Katrina (September 2005), was able to:

- Restore 75 percent of overall service by 9/8/05 in the areas hit by Hurricane Katrina
- Fully restore service by 9/8/05 in Mobile, Alabama, Jackson and Meridian, Mississippi, and in Hammond and Houma, Louisiana
- Restore 50 percent of service in New Orleans, LA by 9/8/05.

has in place protective design

features, such as:

- Span and protection ring switching with automatic rerouting
- Redundant and meshed core service networks





• Deployment of redundant power in all POPs





 Redundant switching and power equipment in all POPs and diverse routing of customer circuits.

disaster recovery capabilities also include:

- Hot site re-direction to a customer's disaster recovery center
- Private line fan-out service
- Service level back-up options utilizing a different product or platform
- Ad-hoc conferencing services.

for disasters to terrestrial services. The only requirement is a direct line-of-site

, AT&T's mobile satellite service provider,

delivers its services

to the sky.

. In the

unlikely event one of these satellite constellations, or the fixed satellite

services, is out of commission, service reverts to an alternate for voice or data services.

2.3.4.2 Disaster Recovery Capabilities [L.34.2.3.4]

The offeror shall describe its disaster recovery capabilities and approach to provide the Government a high degree of confidence that the offeror will be a strong partner that understands the challenges that the Government faces in: (a) Ensuring continuity of Government operations and services, and the integral role of Networx services in such operations

(b) Minimizing the impact that Networx services related disasters will have on Government operations and services (c) Maintaining the viability of the Disaster Recovery Plan given the length of the Networx contracts and the changes that will take place in the service environment

(d) Ensuring that Networx disaster recovery capabilities are maintained up to current standards and practices

The Government's critical missions are protected through a detailed DR

approach provided by the industry leader in disaster planning, avoidance,

response and recovery. Figure 2.3.4.2-1 depicts the first element of our DR

approach, to provide capabilities and features within our networks and

organizations to minimize potential for service failure. AT&T's NDR

organization is actually one of three pillars supporting continual delivery of

network services, and interacts constantly with network management and





security management to offer the best continuity of services insurance to the GSA and Agencies.



The NDR organization has been chartered to develop and maintain necessary processes for recovery of functionality at critical locations. Since 1992, NDR has grown its trademark inventory of trailerized equipment elements to over units, providing pre-planned recovery for over units, network offices and a diverse team of approximately people throughout AT&T to plan and execute recovery using a patented process.

The primary role of the NDR organization is to restore the functionality of a central office, network element or work center in the AT&T network completely destroyed or rendered useless by a natural or manmade disaster. Such restorations exceed the normal capabilities of the network operational process and usually require long-term deployment of specialized equipment and resources. The goal is to restore functionality within **m** hours of being activated.





Continuity of Government Operations and Services: During a disaster, citizens turn to the Government for assistance; therefore, it is critical Government operations and services remain fully functional without interruption. AT&T has

provided Disaster Recovery support to the Government for decades. Agencies, especially those on the frontline during a disaster such as the Federal Emergency Management Agency (FEMA), turn to AT&T in times of crisis. Agencies know the mission of AT&T's Network Disaster Recovery (NDR) Team is to do everything humanly and

Emergency Crews Back In Action As AT&T Restores Communications

In the immediate aftermath [of hurricane Katrina], AT&T rolled a specially equipped van into Mandeville, La., on the north side of Lake Pontchartrain, to provide satellite telephone service for the state police there, said Bob Desiato, a manager of AT&T's Network Disaster Recovery Group. The van, which has a satellite dish mounted on the roof, connected telephones inside the police facility to the satellite link and restored telephone service. The AT&T satellite connection also provides Internet service, Desiato said. Another AT&T van is providing similar service to the Federal Emergency Management Agency in southwest Louisiana, he said, and the company sent more vehicles after those initial deployments. "After the floods, the phones lost service and the state lost service to state police, to their emergency operations centers," Desiato said. "The first priority was to get them back online."

--Federal Computer Week, online

technically possible to restore AT&T communications to an affected area. AT&T's industry-leading DR capabilities allow Networx Agencies to continue to deliver services to their customers in spite of network or communicationsservice affecting events. Past successful AT&T DR efforts are included in the Networx Disaster Recovery Plan (Appendix D). Examples are :

 Hurricane Katrina (September 2005) – Even before the storm made landfall, the NDR team headed for the Gulf Coast. Within hours, the emergency infrastructure for police and support personnel in place. This was made possible through the dispatch of five emergency vehicles providing satellite telephony. AT&T voice, internet and data services remained intact throughout the storm.





Code Red Worm (July/August 2001) - AT&T responded to the Code Red worm in July/August 2001 by providing around-the-clock, around-the-world, coverage to support customers. More than consecutive hours of coverage and compared person hours were expended to identify and successfully implement fixes.

September 11, 2001-

Prior to the World

Trade Center disaster,

the NDR Team had

never been fully

deployed (AT&T had

never lost an entire

central office).

On September 11,

2001, AT&T activated the NDR Team for its first full-scale disaster

Figure 2.3.4.2-2:

response (**Figure 2.3.4.2-2**). The team and the recovery equipment arrived in northern New Jersey early on September 12. The recovery equipment was positioned and turned up to receive service hours later. The traffic demand on AT&T's network on September 11 far exceeded anything experienced before. AT&T completed **Completed** voice calls, surpassing the previous single-day record of **Completed** calls.

Minimize Impact on Networx Services: The Networx DR program serves to minimize the impact of a disaster on Networx services by being fully prepared to deploy our NDR capabilities at a moment's notice and maintaining a network designed to be reliable with built-in redundancies and restoration capabilities.





AT&T's plan is supported by a full complement of specialized equipment and skilled personnel, who regularly test their plans, keep current on technology, and maintain DR equipment ready to go into action 24x7. Trailer trucks loaded with telecommunications equipment are ready for dispatch if a central office is destroyed (**Figure 2.3.4.2-3**). The trucks are strategically located across the country to allow quick access to a disaster area, regardless of where it occurs. The NDR Team is a mobile group of AT&T managers, engineers, and technicians who have received special training in the physical recovery of the AT&T network.

equipment will be en route to an emergency incident within two hours of an official call-out. In the case of a forecasted disaster, such as a hurricane, they are often dispatched to

Team members and

Figure 2.3.4.2-3: AT&T's NDR Trailers on site at the World Trade Center Disaster.

strategic locations prior to the event. The specially-designed tractor-trailers, equipped with highly sophisticated equipment, generally travel by road, but in an extreme emergency can ship by rail or air.

To accomplish NDR goals, AT&T has implemented highly reliable SONET rings, Intelligent Optical Network, high-tech tools such as Real-Time Network Routing and The AT&T IXC (InterXchange Carrier) Transport network uses the **Section** system as one of its key tools to maintain network reliability. First introduced in 1992, the **Section** system instantly identifies fiber-optic cable failures on the core network and automatically begins rerouting circuits over spare capacity.





Frequently, the **system** system restores 90 to 95 percent of service within two to three minutes. In the vast majority of cases, the customer is unaware of a problem.

Viability of Plan Over the Life of the Contract: AT&T established our NDR organization in 1992. The NDR Team conducts several exercises each year at a variety of locations, from city streets to open fields. For these exercises, the entire team and the necessary equipment is dispatched as though an actual disaster has occurred and a complete recovery site is established. As described above in our disaster recovery examples, this NDR tradition of supporting AT&T during disasters will continue through the life of the Networx contract. In addition to updating the Disaster Recovery Plan annually based on Government feedback, AT&T updates all NDR equipment, practices and procedures based on the latest technology and improvement initiatives uncovered during exercises and actual disaster recovery events. This iterative approach meets current standards and practices and evolves as threats change and preventative technologies advance.

Current Standards and Practices: The NDR organization follows welldocumented standards and practices regarding the readiness of the personnel and equipment. NDR team members include highly skilled AT&T employees located across the nation who participate in disaster recovery exercises each year to retain and enhance their skills using the disaster recover equipment and processes. Team members attend classes on a regular basis to learn new technology and how to install and repair equipment. Trailers are tested every month and are upgraded with new technology to work with any AT&T network upgrades. Standards are followed for equipment maintenance, considering everything from the proper amount of air in the tires on the trucks to the latest satellite positioning information.





The NDR trucks are essentially a central office on wheels, thus all standard central office practices are followed.

Standards and practices are tested during our quarterly Disaster Recovery exercises described in Section 2.3.4.4 below, and deficiencies are immediately remedied and documented.

2.3.4.3 Fail-resistant Network Monitoring and Management [C.3.3.3.2.2]

The contractor's network management system design shall provide features that will make real-time network monitoring resistant to failure and avoid the possibility of a single point of failure impacting the entire network management function. [C.3.3.3.2.2]

Government customers are protected from network failure by the largest and most sophisticated network command and control

center of its kind in the world, the

Figure 2.3.4.3-1:		

This center, shown in Figure 2.3.4.3-1, manages

AT&T's network infrastructure.

To avoid a single point of failure impacting the entire network management function, a standby disaster recovery site for the **second** is maintained to invoke operations in a manner identical to the main site. All mission-critical **second** operational support systems have redundancy with full diversity across geographically dispersed data centers. The **second** practices a surprise operations disaster recovery exercise five times a year, where operations are recovered and operated at the standby disaster recovery site for at least one full day. During one emergency construction project, AT&T operated the **standby** of about six weeks, with no impact to





network operations or service delivery. AT&T's DR team tests the

annually to ascertain compliance with its recovery time objective. The Network

, a role staffed 24x7, leads the

. This officer coordinates the network incident response across

AT&T organizations, assessing the impact of the event in near real-time and prioritizing restoration efforts.

2.3.4.4 Ongoing Disaster Recovery Preparedness [C.3.3.3.1.1, C.3.3.3.2.4]

The contractor will work with the Government on an ongoing basis to enhance its disaster recovery preparedness and maintain readiness as it relates to Networx services. [C.3.3.3.1.1]

The contractor shall conduct annual preparedness drills for disaster recovery, document the results of such drills, and report to the PMO in annual updates to the Disaster Recovery Plan the actions the contractor will take or has taken to address any shortcoming. [C.3.3.2.4]

The contractor shall include and discuss as part of its Disaster Recovery Plan how it will ensure that its disaster recovery plan is effective and that its operation is in a state of readiness to address disasters. [C.3.3.3.2.4]

To be prepared during a disaster, Agencies must have minimal disruption in

telecommunications and data services enabling them to respond and support

the Government's missions. Disaster Recovery readiness has evolved

substantially over the years. Figure 2.3.4.4-1 shows the shift in effort from

reaction only to prevention and preparedness. This strategy leads AT&T to

offer GSA and Agencies a stronger and more resilient communications

infrastructure, and to develop better network diversity solutions and

management tools.





Figure 2.3.4.4-1: Shifting Paradigms that Achieve Zero Application Downtime.

Table 2.3.4.4-1 provides examples of AT&T's real-world readiness illustrating the DR capabilities the Government requires for a program of this complexity, scope and length.

DATE	EVENT	LOCATION	EQUIPMENT
9/2005	Hurricane Rita	Dallas, TX	Technology trailers and Emergency Communications Vehicle (ECV) to staging location in Dallas, TX.
8/2005	Hurricane Katrina	New Orleans, LA	Technology trailers, Emergency Power Generators and Emergency Communications Vehicle (ECV) to staging location in New Orleans and held in reserve. ECV used for humanitarian relief.
10/2003	Wildfires	San Diego, CA	Technology trailers and Emergency Communications Vehicle (ECV) to staging location near San Diego and held in reserve. ECV used for humanitarian relief.
9/2002	Regen Damage	Hamilton Square, NJ	Regenerator Trailer to recovery site and held in reserve.
09- 10/2001	WTC Disaster	New York, NY	Technology Trailers and ECV to recovery site in New Jersey. ECV for humanitarian relief in Manhattan.
5/2001	Tropical Storm Allison	Houston, TX	Limited trailer deployment, SMEs, and ECV (emergency communications and humanitarian relief)

 Table 2.3.4.4-1: Recent Examples of AT&T's Disaster Recovery Responses. Our tradition of restoring service during disasters continues to support Agency needs on the Networx contract.

During the entire life of the contract, AT&T partners with the GSA PMO to review DR plans, personnel and capabilities. In these reviews, the requirements of critical Networx users are considered in order to maintain service during emergencies, changes in the DR environment and enhancements to DR processes and/or technologies. The Disaster Recovery





Plan will be updated to reflect these requirements on an annual basis. More information regarding on-going enhancements is offered in Appendix D.

Annual Preparedness Drills

AT&T exercises critical DR plans several times each year. These full-scale deployment exercises, which exceed the Government's requirement of an annual preparedness drill, cover all assets, applications and network services. NDR has "exercised" its team members, equipment and processes in full-scale disaster recovery exercises held around the United States since 1993. These drills test as many of the NDR functions as possible, from the initial call-out, to equipment transportation and setup, to technology

	2005 Exercises	
First Quarter Second Quarter Third Quarter Fourth Quarter	Houston, TX Bedminster, NJ Kansas City, MO Atlanta, GA	
	2004 EXERCISES	
First Quarter Second Quarter Third Quarter Fourth Quarter	Seattle, Washington Pompano Beach, Florida Foster City, California Saint Paul, Minnesota	
	2003 EXERCISES	
Second Quarter Third Quarter Third Quarter Fourth Quarter	Chicago, Illinois Training Exercise Boston, Massachusetts Dallas, Texas	
2002 EXERCISES		
First Quarter Second Quarter Third Quarter Fourth Quarter	Training Exercise Ashburn, Virginia Training Exercise Bedminster, New Jersey	
	2001 EXERCISES	
First Quarter Second Quarter Third Quarter Fourth Quarter	Training Exercise Tampa, Florida Denver, Colorado Canceled (WTC Deployment)	
	2000 Exercises	
First Quarter Second Quarter Third Quarter Fourth Quarter	Training Exercise St. Louis, Missouri White Plains, New York Phoenix, Arizona	
1999 Exercises		
First Quarter Second Quarter Third Quarter Fourth Quarter	Training Exercise San Antonio, Texas Lodi, California Atlanta, Georgia	
	1998 EXERCISES	
First Quarter Second Quarter Third Quarter	Salt Lake City, Utah Kansas City, Missouri Arlington, Virginia	

 Table 2.3.4.4-2: DR Drills Instill Readiness.
 Held in varying locations,

 readiness is reinforced through a simulation of catastrophic events.

turn-up and testing. At these exercises, team members are given hands-on training on new technologies and the recovery equipment is operated in field





conditions. The drills are held throughout the United States, in a wide variety of weather and settings.

As listed in **Table 2.3.4.4-2**, AT&T's full-scale disaster recovery exercises were performed in various locations.

A grade is assigned upon completion of each DR exercise, based on an evaluation of its recovery preparedness utilizing AT&T's Certification and Assurance standards. The objective is for mission-critical plans to achieve a certification grade of B or better. Deficiencies are addressed and action plans developed and documented in the annual Disaster Recovery Plan updates.

2.3.4.5 Summary

GSA and the Agencies can continue to obtain the services needed to perform their missions without interruption by obtaining services from a vendor who proactively monitors and aggressively reacts to threats to Networx



infrastructure and services. To demonstrate this commitment, GSA is provided with yearly briefings on AT&T and Networx DR capabilities. These briefings inform and educate the Government on the latest issues, trends, technologies, and our updated practices pertaining to disaster recovery. AT&T's disaster recovery response infrastructure is capable of responding to a multitude of disparate events ranging from attacks in cyber space to the recent hurricanes in the southern United States. AT&T's NDR Mission is to plan, establish, maintain, and augment the infrastructures, technologies, and

processes required for crisis mode operations during a disaster or threat to:

• Minimize customer impact





- Recover critical network services both long distance and local connectivity
- Normalize operations to our fullest capabilities
- Establish emergency communications and network access
- Support humanitarian relief communication efforts.

GSA and the Agencies' communications needs will continue to be supported during disasters through the life of the Networx contract with the support of AT&T's industry-leading NDR Team, inventory of trailerized equipment, and patented recovery processes.