

DISASTER READINESS AND EMERGENCY RESPONSE

TO HELP KEEP YOU
CONNECTED WHEN YOU
NEED IT MOST



ASSURANCE WIRELESS' SUBMISSION OF DOCUMENTS
FROM DOCKET NO. TC24-002
ATTACHMENT D

T-Mobile Emergency Management is ready when disaster strikes. Customers can rely on dedicated personnel and critical resources to help maintain seamless connectivity to emergency services and loved ones.

T EMERGENCY
MANAGEMENT

OUR MISSION

AMERICA'S UNCARRIER

We are invested in safeguarding the interests of our customers, stakeholders, and employees. We maintain an Enterprise Continuity Program to provide effective, timely responses to a wide variety of disruptive events. Our program is centralized in its design and decentralized in its implementation, enabling us to maximize our full capabilities while taking advantage of our scale across multiple lines of business and locations to promote active involvement.

Reliable communications and connectivity are essential during critical events.

We understand the importance of reliable communications and connectivity during critical events. T-Mobile incorporates business continuity into our overall corporate business philosophy. Our Enterprise Business Continuity Program promotes the use of business continuity principles, guidelines, and standards by all company employees during routine business operations to assure the continuation of our mission-critical enterprise operations and services. This level of consistency across T-Mobile lines of business enhances our overall planning and business resumption efforts.

The T-Mobile Enterprise Business Continuity Program is industry-leading with proactive measures to reduce operational risks and implement recovery solutions that minimize the impact to customers and services during potential business disruptions. We maintain multiple



dedicated enterprise-wide teams to address business continuity, disaster recovery, network availability, emergency response, and customer support, ensuring our continued focus on safeguarding the interests of our customers, employees, and stakeholders in the event of an emergency or significant business disruption. These teams work in partnership to provide coordinated and effective responses to a wide variety of disruptive events.

A team of dedicated, certified, and seasoned business continuity professionals works with all lines of business to help ensure that our business continuity plans are current, comprehensive, and effective. This group supports our business continuity planning for each line of business and defines enterprise recovery tools and methodologies.

The T-Mobile Enterprise Business Continuity Program is reviewed and approved by leadership on an annual basis and is guided by the following governing principles:

- Commitment to employee and customer safety
- Commitment to preserving business operations and services
- Business continuity as a shared responsibility across all levels of management, all lines of business, and the Enterprise Continuity Team
- Continual business continuity plan assessment, improvement, flexibility, and maturity are necessary for success
- Plan development with an "all hazards" mindset and focus on a full range of natural and man-made hazards and risks that could impact employees, customers, operations, and assets in countries around the globe

Critical operations, processes, and services across the enterprise are identified along with criticality ratings, risks, gaps, and potential impacts of a service disruption. Process, criticality, and risk reviews are conducted on a regular basis.



Capable device required; coverage not available in some areas and may be impacted in emergencies. Some uses may require certain plan or feature; see T-Mobile.com. Fastest: Based on median, overall combined 5G speeds according to analysis by Ookla® of Speedtest Intelligence® data for Q2 2023. Ookla trademarks used under license and reprinted with permission.

ENTERPRISE BUSINESS CONTINUITY PLANNING FOCUSED ON THE CUSTOMER EXPERIENCE

The T-Mobile Enterprise Business Continuity Program considers the full range of natural and man-made hazards that could impact employees, customers, operations, and assets across the country. T-Mobile uses information obtained through Business Impact Analysis and the development of business continuity (risk reduction) strategies to preserve business functions that are required in the face of a disaster.

Business Impact Analysis

Through various assessments, including Business Impact Analysis (BIA), we evaluate the criticality of different aspects of each part of the business, including:

- Business processes
- Applications
- Suppliers
- Partners
- Sites
- Network elements

This evaluation determines the tolerance for disruption, ensuring minimal impact on employees, customers, operations, and assets. The results of these assessments guide our prioritization efforts, helping us make informed decisions about mitigation and planning. Critical business processes are closely matched with the criticality of their associated applications, suppliers, and dependencies. We conduct annual BIA reviews to maintain our preparedness.

Business continuity strategies and planning

- **Process and standards:** We deploy common terminology, standards, policies, methodologies, and documentation to reinforce consistency across the company.
- **Reporting:** Executive management receives a quarterly risk report inclusive of the efforts and status of the Enterprise Continuity Program.
- **Plan maintenance:** Annually, the owning team and enterprise continuity experts review each organization's plan. Key stakeholders are responsible for reviewing program documents at least annually.
- **Supplier business continuity:** T-Mobile has a Business Continuity and Disaster Recovery Plan (BC/DR) assessment process that is designed to inform us of partner plans along with the ability to request the business continuity plans used by our partners, suppliers, and vendors, as needed.
- **Accessible plans:** Our business continuity plans are housed in a centralized redundant repository that is accessible to internal stakeholders regardless of their physical location.



Primary components of the T-Mobile Business Continuity Program

- Enterprise business continuity project initiation and oversight
- Risk evaluation and controls
- Business Impact Assessment and analysis
- Business continuity and disaster recovery strategic direction
- Business continuity plan development, maintenance, and exercises
- Awareness and training programs
- Public relations and crisis response and resumption
- Coordination with external agencies
- Incident command structure integrated into each engineering team nationwide



CUSTOMER SATISFACTION DRIVES OUR PREPARATION AND RESPONSE TO DISASTER EVENTS

When T-Mobile becomes aware of an upcoming event such as a hurricane or storm, our organization acts before a disaster occurs. Highly detailed emergency operations plans have been created and implemented nationwide and technical personnel have been trained. This preparation allows us to maximize resource availability and reduce response time. Here are some examples of how we prepare and act.

BEFORE A DISASTER STRIKES: T-MOBILE PREPARATIONS

- Analyze storm conditions for anticipated landfall.
- Prepare and test back up power sources in probable areas of impact
- Ensure supportive equipment, such as portable generators, Cell-On-Wheels (COWs) and Cell-On-Light-Trucks (COLTs) on standby nationwide
- Establish a command center that will mobilize teams of technicians and engineers as conditions permit
- Engage our national vendors regarding fuel, generators, technicians, staging yards, security, accommodations, and catering, so teams can focus on the tasks at hand
- Create staging areas for incoming equipment and personnel
- Forward deploy resources in safe zones
- Coordinate with local and state officials, state offices of emergency management, DHS, FEMA, and the FCC as appropriate
- Monitor evacuation efforts and routes
- Identify opportunities to adjust wireless capacity in certain hubs/zones such as shelters, transport hubs, arenas, etc.

DURING AND FOLLOWING DISASTERS: T-MOBILE RESPONSE ACTIONS

- Deploy portable generators, COWs, satellite or microwave as needed
- Establish comprehensive strategy for network recovery dependent upon impact and immediate needs
- Coordinate with local, state, and federal officials and government organizations as appropriate
- Offer options to ensure public safety officials, emergency first responders, and others have adequate support
- Support impacted communities in various ways depending on circumstances and need, such as Wi-Fi calling and charging stations
- Deploy EVTs to respond to impacted markets
- Maintain consistent command and control calls to coordinate efforts between teams
- Deploy response personnel to the impacted area
- Establish virtual Emergency Operations Center to provide operational control for event
- After-action reviews completed for events with best practices defined and processes updated

Keeping our network reliable, resilient, and redundant

Reliable connectivity is a must for our customers. We have spent many years focused on network and operational redundancy along with hardening and improving resiliency on our infrastructure, critical sites, and operations such as network operations centers, data centers, and call centers. Network design plays a critical part in hardening our network. MSO locations significantly reduce the chance of network failure due to third-party fiber damage, equipment failures, or other potential causes of service interruptions. We continue to make significant investments in our network's redundancy, resiliency, and reliability and maintain an organized and integrated suite of disaster plans and procedures.

Our network operations centers are geographically redundant and diverse, fostering a proactive approach through regular operations rollovers. Our geo-redundant teams handle daily operations at each site and actively participate in operational rollovers between centers.

Our data centers also exhibit geo-diversity and redundancy, supporting primary and alternate systems for critical operations, tools, and systems. Our teams of experts span across engineering, facilities, network operations centers, IT teams, network support, and data centers to ensure comprehensive support and robustness.

NETWORK PREPARATION

T-Mobile plans and designs the entire network infrastructure—from local endpoints to IP backbone connecting it all—for resiliency as well as pre-staging assets to enable a rapid response.



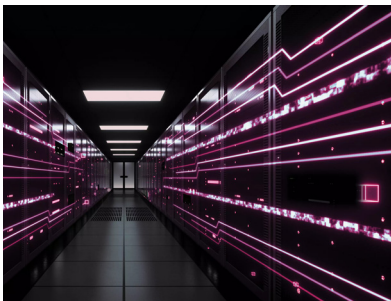
Cell site disaster planning

Cell sites are strategically equipped to accommodate backup power sources (e.g., batteries, fixed generators, portable generator connectors) to provide continuous coverage regardless of the scale of a disaster. We've also implemented a distributed architecture for interconnection redundancy utilizing dual fiber facilities at switch locations. Communications from T-Mobile cell sites are backhauled with various combinations of ethernet, copper, fiber, and microwave systems. The T-Mobile radio network provides significant overlapping coverage areas, which often allow cell sites to fully or partially compensate for a neighboring cell site.



Switch disaster planning

Site recovery plans have been developed for major switch locations. Prioritizing available options for relocation, to help ensure agility when faced with disaster recovery issues. Mobile switching centers have permanent, on-site emergency backup power for use in the event of a momentary or extended power failure. They are protected by FM-200 or Pre-Action Dry Fire Systems. They are also equipped with spare equipment inventory for all critical network elements. Switching systems are designed with geo-redundancy for continuity of operations.



IP backbone failover and recovery

The T-Mobile IP network uses multiple logical adjacencies over physically diverse paths. There are multiple diverse paths between any two nodes on the backbone. These backbone links travel over fiber that is physically diverse from other fiber paths. The IP backbone is regularly reviewed and augmented for capacity needs and can reroute traffic based on dynamic routing protocols. Thanks to the high level of diversity and fast convergence of the network, most fiber outages will go completely unnoticed by our customers. The IP backbone uses technology to take advantage of potential fiber paths during a disruption. The capacity available in the backbone helps ensure congestion-free service during normal operations and provides failover bandwidth in the event of one or more link outages. IP backbone network routers have at least two physical connections, redundant processors, and redundant power supplies (such as batteries and diesel generators) at all sites. Equipment is installed in secure T-Mobile facilities that are built to withstand natural disasters.



Network deployable assets and response vehicles

Our response fleet of vehicles is pre-staged across our operational areas to enable rapid response and includes COLTs, COWs, generators, mobile command centers, and customized communication Jeeps, to help provide satellite service in the worst conditions. Our Satellite Cell on Light Trucks (SatCOLTs) can deploy within minutes and operate in some of the toughest terrains to support our customers when they need us most. In addition, we have a full array of response vehicles such as tow vehicles, snowmobiles, airboats, and high-water vehicles that allow us to access areas hardest hit by disaster. We will never stop working to make our network the best for our customers.

HOW WE RESPOND

Response operations

T-Mobile has multiple strategies in place for emergency management and rapid response to quickly address and respond to all types and sizes of events and to support our customers across the globe. We understand the importance of reliable communications and always-on connectivity. We have a long history of moving quickly and efficiently in emergency situations to ensure our customers can stay connected when they need it the most.

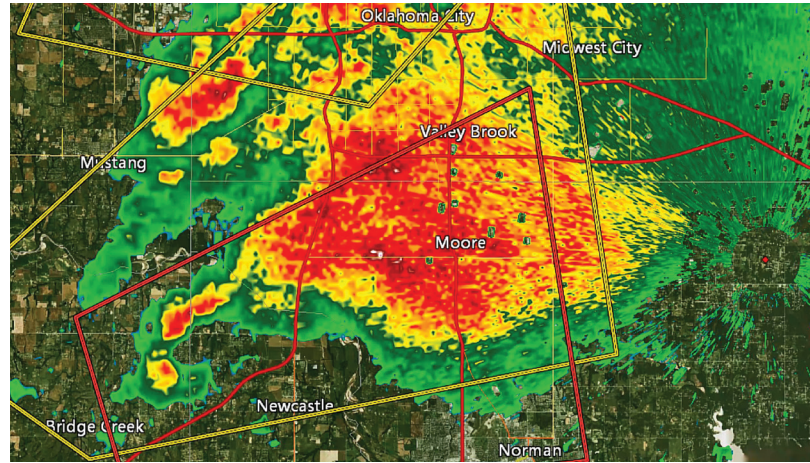
When our network team receives notification of an actual or potential situation that requires activation (such as a hurricane, earthquake, regional power outage, or another event where business as usual would not resolve the situation), a virtual T-Mobile Emergency Operations Center (EOC) is established to oversee and manage the company's response to an event from the beginning to end. This EOC performs an initial overall assessment, establishes monitoring bridges, coordinates between agencies impacted by the event, assigns tasks, gathers status information, and performs executive notifications at prescribed times.

We maintain an organized and integrated suite of disaster plans and procedures. To aid in situation assessment, response, and resource tracking, our network teams leverage tools such as:

- Hardened GPS-enabled phones
- Wireless modems
- Custom applications
- IoT solutions
- Smartphones

These multilayered investments are designed to deliver industry-leading service continuity.

When disaster strikes in one area of the country and there is a need for additional on-the-ground support, we have an **Emergency Volunteer Team** comprised of T-Mobile employees across the US who personally volunteer to go into disaster-impacted areas to help keep our customers connected.



Public safety grade preparedness and response

Strengthening emergency response plans for our public safety customers and critical infrastructure partners is a long-standing practice at T-Mobile. A component of the T-Mobile Emergency Management Team is our Emergency Response Team (ERT)—a national group with vast experience in all aspects of public safety operations and mission-based support. ERT is available 24/7, coordinating the necessary resources to help ensure reliable network services are available for public safety and first responders.

Preparedness

ERT personnel engage proactively with local, state, federal, and critical infrastructure planners. This includes collaboration with leaders from organizations such as the Department of Defense, the Federal Emergency Management Agency, the Department of Homeland Security's Critical Infrastructure Security Agency (CISA), and the Federal Communications Commission. Long before events occur, they work on:

- Policy development
- Response frameworks
- Best practices
- Training coordination
- Exercises
- Enhancing national readiness

This collaboration promotes the readiness and operational capacities of new T-Mobile as well as local, state, and federal entities, and other critical infrastructure and essential service partners.

Response

During times of crisis, T-Mobile National Emergency Management personnel who are coordinating recovery seek to remain in lockstep with emergency management, Homeland Security, and public safety officials. Through our collaboration with the National Communications Coordination Center and through state and local emergency operations centers, T-Mobile representatives can:

- Gather and share information
- Mitigate environmental and operational concerns
- Facilitate protective measures
- Enhance rapid response and recovery capabilities

Enhancing first response

Our Emergency Management and Emergency Response Team (EM/ERT) provides a full suite of first response capabilities. This includes:

- **A national cache** of handsets, hotspots, charging stations, and Wi-Fi equipment to help address surge demands on emergency management and public safety operations.
- **A national fleet of mobile deployable assets**, including SatCOLTs, portable satellite antenna systems, and other tactical communications systems provide necessary and specialized infrastructure to support government and operations.

This collaborative approach not only ensures our continuing capabilities to serve but also helps address the restoration of critical resources overall.

ERT deploys based on need and resource availability.





Sales and retail operations

We monitor the impact of events on our local stores to protect the safety of our employees and customers. Depending on the unique impacts of each natural disaster, we have offered account relief, enhanced services, free devices, and accessories to help customers and the broader community meet their communication needs. Working with local officials, our fleet of T-Mobile trucks is deployed for community support efforts at evacuation centers, shelters, distribution points, and damaged stores, providing a point of contact for supplies and information.



Community support

T-Mobile has invested over \$2.5 million to increase our fleet size and flexibility with the goal of maximizing community support. By the end of 2023, the fleet will feature over 30 different units, some with state-of-the-art technology allowing support when coverage is challenging. Most assets are equipped with technology that aggregates SIM cards and Starlink simultaneously to provide up to ½ mile Wi-Fi coverage throughout most U.S. areas. Assets also provide mobile charging solutions for a wide array of devices including phones, computers, and medical equipment.

Maintaining a dynamic approach

The T-Mobile Enterprise Continuity Program dynamically evolves to adapt to ever-changing events, technology, and disruptions and our policies and procedures will change over time from what is described in this document.