FirstNet Deployables

Unplanned events/emergency incidents requests, pre-planned event support

To facilitate public safety unplanned event/emergency incident requests and pre-planned event support, AT&T will provide deployable assets dedicated to FirstNet within the continental United States, Hawaii, Alaska, Puerto Rico, the U.S. Virgin Islands, and the Pacific Territories.

Because priority and preemption benefits are available across the AT&T Long Term Evolution (LTE) network, LTE deployables from any of AT&T's fleet of deployable resources are also able to support FirstNet Quality of Service, priority, and preemption capabilities. Deployable systems that utilize satellite backhaul may have more limited capacity as compared to terrestrial sites with microwave or fiber backhaul, though satellite-based deployable assets are able to be deployed more rapidly.

FirstNet-dedicated SatCOLT deployables

AT&T will design and engineer, build, store, maintain, and deploy 72 FirstNet Band 14 Satellite Cell on Light Trucks (SatCOLTs) and terrestrial Cell on Wheels (COWs) for Business Continuity and Disaster Recovery, to quickly address a variety of operational requirements where there is no terrestrial coverage in an emergency situation or a planned event. FirstNet SatCOLT assets will be a "lending library" that adopting FirstNet customer entities can request at no additional charge to support various scenarios – including unplanned event/emergency incident requests and planned events.

This FirstNet service includes all the underlying expenses directly associated with the 72 FirstNet deployables (i.e., fueling, staffing, backhaul charges, etc.), meaning that the FirstNet deployables will be available at no additional charge to public safety.

The FirstNet satellite deployables will use non-preemptable satellite backhaul to the FirstNet Core. This will enable AT&T to rapidly respond to time-sensitive public safety deployments without the need to establish terrestrial backhaul.

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Unplanned event/emergency incident requests

AT&T has designed the deployment of these assets for unplanned event/emergency incident requests to support up to a 14-hour Recovery Time Objective (RTO) within the continental United States, populated regions of Alaska, Oahu, and Puerto Rico. The 14-hour RTO incorporates the following activities:

- **Initial assessment** – Includes triage validation of coverage issues with Radio Access Network (RAN), etc.
- **Warehouse response to make-ready equipment/depart** – Includes drive time from resource location to warehouse, Department of Transportation permitting and pre-trip inspections, asset readiness validation, trip planning, etc.
- **Drive time to affected site** - Includes such items as weigh station compliance, planning commercial driving routes, weigh station stops, fueling, access and credentialing requirements, coordination on actual setup location, etc.
- **Time to turn-up service** – Includes locating asset with clear view of southern sky, position and leveling of asset, performing environmental power and environmental turn-up, acquiring satellite signal, turn-up of RAN equipment, 911 services and testing, drive by testing, completing satellite network connectivity, etc. Once onsite, service is generally available within 1-4 hours.

The 72 FirstNet SatCOLT and COW deployable assets are incremental to AT&T's existing Network Disaster Recovery (NDR) and Construction & Engineering (C&E) deployable assets. Based on need and availability, the NDR national fleet can also be available to public safety via mutual aid request.

AT&T deployable assets are housed at AT&T secure locations to facilitate roadworthiness and technology readiness. These units are deployed by AT&T's NDR and other AT&T technical teams which collaborate and share resources for responses. AT&T's deployable teams have extensive experience supporting both public safety and AT&T's network requirements.

Projected design enhancements to the FirstNet fleet of FirstNet deployables will result in more rapid availability. FirstNet SatCOLTs will be Band 14 enabled, and provide voice (including Voice over IP), data, location, messaging, alerting, whitelisting, and priority and preemption services. Each FirstNet SatCOLT deployable is designed to be capable of up to 25Mbps downlink and 8 Mbps uplink. AT&T will continually evaluate transmission improvement capabilities.

AT&T deployables

AT&T also brings an existing fleet of hundreds of Cell on Wheels and Cell On Light Trucks (COLTs) that utilize either terrestrial or satellite backhaul, and are capable of providing LTE and Universal Mobile Telecommunications Service. Traffic for the terrestrial assets is typically backhauled via fiber, Ethernet, and microwave connections. The Network Disaster Recovery SatCOLTs are backhauled via non- preemptable satellite backhaul. NDR SatCOLT deployables are used to maintain AT&T's network to allow it to serve all of AT&T's customers, including public safety. NDR deployables are dispatched by the AT&T internal governance team for network restoration activities.

A portion of the AT&T commercial NDR deployable assets are satellite backhaul-capable, and are planned for upgrade to include Band 14 capability. They are staged strategically at AT&T secure locations. NDR deployable units are currently dispatched both for disaster recovery and to provide additional capacity for select activities (i.e., planned events, via mutual aid requests, etc.). When deployed by AT&T to restore the network, AT&T deployables are also benefitting public safety.

Based on availability, public safety entities may request AT&T FirstNet SatCOLTs and COWs from the lending library. Generally, these deployables would respond to a public safety request at no additional charge.

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Requests from adopting public safety entities will be triaged in the following basic categories:

1. Unplanned event /incident request - Highest priority, intended to support public safety incidents where terrestrial coverage is unavailable (e.g., wildfires, search and rescue, etc.). Prioritization is reflective of asset considerations documented in many states' Tactical Interoperable Communications Plans:

- Disasters, large scale incidents, or extreme emergencies requiring mutual aid or interagency communications
- Incidents where imminent danger exists to life or property
- Incidents requiring the response of multiple entities
- Incidents involving a single agency where supplemental communications are needed for agency use
- 14-hour RTO described above applies

2. Preplanned event, drills, tests, or exercise request - Requests are approved within three business days of request. In general, preplanned events are secondary. Requests are approved within three business days of request. Even after approval, these requests can be superseded by incident coverage requests. However, when at all possible, public safety entities already using an AT&T FirstNet deployable will not be redirected to another resource. Assets deployed for training exercises/drills are subject to be redirected. Planned event examples include sporting events, concerts, and festivals.

AT&T-owned deployables will remain deployed until the AT&T deployment team restores service (if responding to a disaster outage), or until the event/mission is completed. For public safety deployments, AT&T, FirstNet, and the requesting public safety entity will work together to determine when the deployable asset can demobilize.

The 72 FirstNet SatCOLT and terrestrial deployables will be strategically positioned throughout the United States. Deployables servicing any specific incident may or may not originate within the requesting state.

Locations are selected to take advantage of secure AT&T facilities to safeguard the asset and to easily incorporate that asset into weekly/monthly roadworthy and technical maintenance routines that keep deployables operational and ready for use.

Periodically, AT&T may decide to temporarily increase the number of AT&T FirstNet deployables in a given area and/or pre-stage units based on the scale and/or risks associated with a predicted incident or event (e.g., hurricane landfall, tornado regions, public unrest, seismic area activity, etc.). Locations are not advertised to the general public due to security reasons. Locations servicing states will be shared with public safety entities that adopt FirstNet services.

FirstNet deployables value proposition

- Support public safety incidents where coverage did not previously exist and where terrestrial coverage is unavailable
- Facilitate rapid network restoration
- SatCOLT LTE deployables support Band 14 and FirstNet Quality of Service, priority, preemption capabilities, non-preemptable satellite backhaul to FirstNet Core
- 72 FirstNet assets will be a "lending library" 14-hour Recovery Time Objective; once on-site service is generally available within 1-4 hours
- Augmented as needed by AT&T terrestrial and satellite-based deployables
- If circumstances warrant, FirstNet adopting entities can also purchase new or convert existing assets into Customer Owned and Maintained (COAM) deployable units built to their specifications for deployment by the agency

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Customer owned and managed deployables

If circumstances warrant, FirstNet adopting entities can also purchase new or convert existing assets into Customer Owned and Maintained (COAM) deployable units built to their specifications for deployment by the agency. Mobile satellite service extension/disaster recovery solutions are available to purchase by public safety entities for additional communications, offering virtually 100 percent geographic coverage.

Public safety entities that own COAM deployables have unlimited use of those assets. However, when deploying COAM units, owning public safety entities need to contact AT&T to coordinate and mitigate any interference with existing terrestrial coverage. Further, to ensure COAM deployables are operational when needed, owning public safety entities will need to establish and adhere to a maintenance plan for each asset. AT&T will have standard offers for COAM management and support.

For more information go to:

FirstNet.com

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