FirstNet Solution

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Innovative Public-Private Partnership

FirstNet

Customer experience

20MHz Spectrum

$180B in total AT&T Network Assets

Technology & Innovation

AT&T

Program management

Public safety

Secured Network

Telecom Expertise

Creating an infrastructure dedicated to public safety

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Delivering on what public safety asked for

- Public safety always gets priority
- Highly secure network to meet public safety’s data requirements
- Controlled access by public safety agencies for their users
- Exclusive, well-vetted content
- Coverage where public safety operates
- Enhanced user experience
- Same or lower cost
FIRSTNET SOLUTION OVERVIEW

**COVERAGE**
- Reaches over 99% of US population
- 40,000 Wi-Fi hotspots
- Satellite and deployable coverage 99%+

**IN-BUILDING SOLUTIONS**
- Access to more than 6,000 existing AT&T in-building assets including stadiums and transportation facilities

**DEPLOYABLES**
- Hundreds of AT&T units for daily network maintenance
- 72 deployables for FirstNet customer requests

**SERVICE PLANS & PROCUREMENT**
- Competitive and compelling rate plans
- Purchase through a variety of contract vehicles
FIRSTNET SOLUTION OVERVIEW

DEVICES & BYOD
- Any AT&T LTE device can be a FirstNet device
- Wide choices, aggressive pricing

BASIC & FUTURE SERVICES
- Includes voice, data and messaging features of commercial networks
- Future roadmap for Mission Critical services

PRIORITY & PREEMPTION
- Priority and Preemption on Band 14 + existing AT&T LTE bands
- Multiple priority levels within agencies

CYBERSECURITY
- Security Operations Center for FirstNet
- Uses AT&T's global cybersecurity assets
FIRSTNET SOLUTION OVERVIEW

ICAM
- Single Sign-On capability across all FirstNet applications plus agency applications

FIRSTNET APP STORE
- Shows only security audited apps from trusted vendors
- Can integrate with agency MDM/MAM

LOCAL CONTROL
- One stop web tool for managing user rate plans, priority levels, PTT groups, ICAM authorizations and more

PUBLIC SAFETY HOME PAGE
- Unprecedented visibility into network status and more
Foster innovation and interoperability in public safety mobile apps

APIs for FirstNet specific features

First-party options for key services like PTT, mobile VPN, messaging, LBS and more

Or bring your own apps

Public safety solution specialists to educate agencies on how to maximize their use of FirstNet services

Dedicated 24 x 7 x 365 FirstNet mobility customer care
USER TYPES – DEFINING PRIORITY LEVELS

Primary Users
- Fire
- Law Enforcement
- Rescue / EMS
- Emergency Management

Extended Primary Users
- Hospitals
- Utilities
- Transportation
- Public Works

Volunteer Users
- Volunteers for a primary agency, but maintains service responsibility
- Volunteer Fire Fighter
- Auxiliary Police
WHAT IS QPP, AND WHY DOES PUBLIC SAFETY NEED IT?

QPP: Quality of Service (QoS) – Priority - Preemption

- **Quality of Service (QoS):** establishes min/max service quality parameters
- **Priority:** Gives users preferred access to network resources
- **Preemption:** Terminates or relocates lower priority users to provide primary users with access
NORMAL OPERATIONS

ROUTE 14

QPP PARKWAY

PRIORİTY LANE

PRIMARY

EXTENDED PRIMARY

COMMERCİAL

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CRISIS WORSENS

QPP PARKWAY

ROUTE 14

PRIMARY

PRIMARY

EXTENDED PRIMARY
Coverage and Expansion Plans

129 NSB’s planned and funded for general network expansion
38 Connect America First Sites
70 FirstNet Sites

237 Total NSB’s throughout Florida before 2021

This represents a 43% increase in the number of cell sites initially proposed.
# FirstNet World-Class Device Ecosystem

<table>
<thead>
<tr>
<th>Smartphones</th>
<th>Feature Phone</th>
<th>Tablets</th>
<th>Data Only</th>
<th>Wearables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apple iPhone (iOS)</td>
<td>Sonim XP5 (rugged)</td>
<td>Apple iPad</td>
<td>Netgear Unite Hotspot (rugged)</td>
<td>Apple Watch</td>
</tr>
<tr>
<td>Samsung (Android)</td>
<td>Kyocera Dura (rugged)</td>
<td>Samsung Galaxy</td>
<td>ZTE USB Aircards</td>
<td>LG Watch</td>
</tr>
<tr>
<td>LG (Android)</td>
<td>LG X Venture (rugged)</td>
<td>LG G Pad</td>
<td>ZTE Hotspot</td>
<td>Samsung Gear</td>
</tr>
<tr>
<td>Kyocera Duraforce (Android rugged)</td>
<td></td>
<td>Microsoft Surface</td>
<td>AT&amp;T Home Base (router)</td>
<td></td>
</tr>
</tbody>
</table>
# Specialty Devices Certified to Meet Unique Needs of Public Safety

<table>
<thead>
<tr>
<th>TRUNK MOUNTED MODEM</th>
<th>IoT CONNECTIVITY</th>
<th>RUGGEDIZED TABLETS &amp; LAPTOPS</th>
<th>PTT DEVICES &amp; ACCESSORIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cradlepoint IBR1100 (Band 14 Class)</td>
<td>Cisco 819 4G LTE M2M Router</td>
<td>Panasonic Toughbook CF-53</td>
<td>Sonim XP7</td>
</tr>
</tbody>
</table>

- **Enables connectivity to a wide variety of connected devices**
- **Connects and enables smart devices**
- **Highly Secure in-vehicle access to critical applications and services**
- **Efficient wireless connectivity to existing LMR Radio systems**
Extended Coverage
EPTT available nationwide on AT&T 3G/4G/LTE and Wi-Fi networks

Data Apps
Access AT&T data apps and LMR EPTT on the same device that a user already uses

Expanded Capacity
Give EPTT to new users that don’t have to carry radios while maintaining full communication

Lower Cost
Extend, expand and enhance LMR network without cost to add frequencies, sites, radios

Shared Responsibility
AT&T has end-to-end responsibility for EPTT users/service

Admin Tools
Automated tools for user administration and software updates
LOCAL CONTROL / DEVICE MANAGEMENT

- Ability to monitor the Network in real time, including site locations and service level conditions
- Provides real time Situational Awareness
- Ability to create trouble tickets directly from the “Local Control” portal
- Ability to enable and disable agency owned devices locally
- Secure site with required login credentials
AT&T NETWORK DISASTER RECOVERY PROGRAM

✓ No Cost to Public Safety for approved incident response
✓ Staffed and Available 24/7 – full time dedicated personnel
✓ Existing expertise with documented processes

✓ $600M Investment
✓ 300+ Vehicles

Full - SatCOLT
Mid - SatCOLT
Mini - SatCOLT
DEPLOYABLE ASSETS AVAILABLE TO PUBLIC SAFETY

- **Existing Assets**

  - 120+ LTE Deployables

- **Dedicated Public Safety Assets**

  - 72 FirstNet dedicated SatCOLTs

- **Florida Assets**

  - 3 FirstNet SatCOLTs

*Potential to Use Your Own Entity Assets*
## THE FIRSTNET DIFFERENCE

### COMMITMENT
- Unique, purpose-made solutions, solely for public safety community
  - 25-year contract
  - $40B investment into FirstNet network by AT&T
  - A single nationwide, interoperable, broadband network with priority and preemption 24/7
  - Expected to create 10K U.S. jobs over the next 2 years

### ACCOUNTABILITY
- AT&T is bound by contract to deliver unique services for public safety’s dedicated use
  - Stiff penalties if AT&T fails to meet its commitment
  - Unprecedented transparency into the network performance at the local level

### SECURITY
- Dedicated core with end-to-end LTE network encryption
  - U.S. based FirstNet security operations center and dedicated 24x7x365 support
  - A dedicated team of experts who monitor the network and keep your vital apps, devices and connections secure

### INNOVATION
- Open, inclusive ecosystem to serve as the backbone of public safety communications
  - Contractually mandated roadmap includes:
    - Mission critical push-to-talk
    - Voice, data, text, and video
    - Broadcast technology and z-Axis location based services

### AGILITY
- 72 FirstNet dedicated deployables
  - Only company to receive the Private Sector Preparedness Program Certification from DHS

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