

FirstNet[®] Push-to-Talk

Powered by 3GPP Mission-Critical Technology



Reliable communication is critical for first responders and those who support them. You need to collaborate with your team and other agencies for an effective response. In a fast-changing situation, you need quick access to information so you can make informed decisions. FirstNet Push-to-Talk (PTT) is the communications tool you need to help you meet these critical needs.

Mission-Critical Standards

We've built FirstNet PTT based on the public safety standards set by the Third Generation Partnership Project (3GPP). This is the body responsible for LTE and 5G global standards. In addition to voice services, FirstNet PTT's rich, future capabilities will give you access to the timely and relevant information you need for enhanced situational awareness.

PTT Service on FirstNet

First Responders on FirstNet already receive First Priority™, which provides QoS, priority and preemption that exceed anything previously available to public safety. But with FirstNet PTT, we've given public safety PTT users the highest priority on the network¹. So, in addition to getting priority and preemption on non-PTT calls, PTT calling will receive

the highest level of priority¹ for dependable, high performance group communications.

And FirstNet PTT is built right into the core of the FirstNet network. With PTT servers in six data centers across the country, your calls will be routed through the nearest node. This provides lower latency and faster access. We've designed this service and the data centers for redundancy during an outage. Engineered to the key performance indicators defined by the global standard, FirstNet PTT delivers low latency and high availability, resulting in superior calling performance.

In addition, FirstNet PTT provides:

- 1-to-1 calling
- Group calling
- Presence, so you can see who is online
- Up to 1,000 users per talkgroup (subject to network capacity)
- Ability to declare an emergency and preempt other PTT calls
- Text messaging to groups or individuals
- Supervisory override, allowing a selected user to speak at any time
- Mutual aid capabilities, so you can request aid from another agency on the service

¹ Preempts all traffic other than mandated emergency calling.

FIRSTNET PTT BENEFITS

- High reliability and performance
- Expand where you can work
- Expand who you can work with
- Seamlessly communicate between FirstNet PTT & LMR users (*when available*)
- Free up LMR capacity and extend coverage at a lower cost (*when available*)
- Enhanced situational awareness

Expand where you work and who you work with

Nationwide coverage: The FirstNet wireless network will reach 99% of Americans. So you can operate beyond your existing Land Mobile Radio (LMR) footprint.

Automated Mutual Aid: For help during day-to-day operations, planned events, or emergency incidents, you can send requests for resources to another agency that uses the Solution. Once you receive approval, you can see the other agency's resources in your admin tool. Then you can include them in your talkgroups to help during mutual aid efforts.

LMR to LTE interoperability (When Available): Your FirstNet PTT users can communicate seamlessly with users on your LMR network. This will help you improve productivity, free up LMR capacity and extend your operational reach at a lower cost.

Devices, apps and accessories

Initially available embedded on the Samsung XCover FieldPro device, FirstNet PTT plans to offer a broad selection of FirstNet Ready™ 4G LTE devices that support nearly every user type. This includes smartphones, feature phones, and ultra-rugged devices. Plus, the selection will include accessories for diverse workplaces and use cases.

And a number of manufacturers are committed to developing handsets with:

- Dedicated buttons for PTT calling or declaring an emergency
- Ruggedized hardware
- Embedded PTT clients that are integrated into the device's operating system

Depending on the manufacturer, handsets will prioritize PTT traffic on the device and its access to the network. This helps deliver superior calling performance.

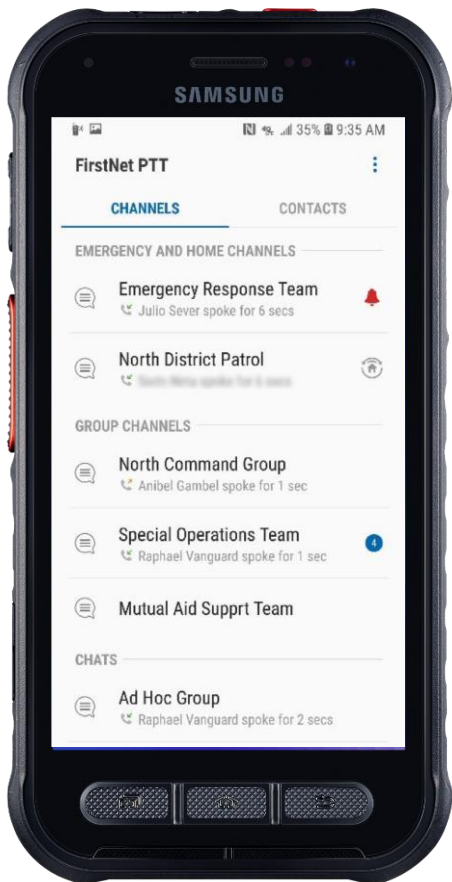
For devices without embedded PTT software, users can download the FirstNet PTT app for Android OS and (when available) for iOS. And team members who do not need a push-to-talk centric device can use supported smartphones to communicate with emergency personnel.

All devices that support FirstNet PTT are tested and certified through the FirstNet Device Approval Process. So you can buy with peace of mind. You can see the supported devices at firstnet.com/devices.



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FirstNet PTT Channels Tab

Beyond Voice

FirstNet PTT opens the door to a future of choice and innovation. With features built on the Mission Critical standards, you'll get access to capabilities that deliver flexibility, enhanced resources and greater situational awareness.

Moreover, we're working to expand the offer to include:

- Emergency alerts – team notification when help is needed.
- API access – the ability to integrate with smart cities and other IoT devices
- Wi-Fi calling - PTT calling over Wi-Fi networks
- Direct Mode, which supports:
 - Off-network communications
 - Group and 1:1 calling
 - Relay capability that connects to users not on the network
- Dispatch application, for more effective resource management
- User checks, to monitor signal and battery strength
- Ambient listening, so you can hear what is happening in the areas around the device of a team member
- Situational awareness, for a holistic view of an incident received via voice, images and data, including
 - Location, so you can see nearby responders or utilities
 - Data, to send text and voice messages, pictures, PDFs and video clips
 - Video, to send and receive near real-time streaming video with users in your group, either 1:1 or from external sources

USE CASE 1

The Challenge

An LMR network deployed several years ago by an agency is nearing capacity due to the growth in users.

The Solution

Use LMR capacity for first responders and move those who support them to FirstNet PTT. Implement LMR to LTE interoperability to maintain seamless communication.

The Benefit

Extend the life of the LMR network asset by freeing up LMR capacity with LTE-based PTT.

As the standards evolve, FirstNet PTT will evolve with them.

LMR to LTE Interoperability (When Available)

Public safety entities can:

- Establish interoperability between LTE PTT users and existing LMR users
- Communicate with team members and personnel traveling outside the agency's LMR footprint.
- Free up capacity on an LMR network nearing its limits

To set up LMR-LTE interoperability with a Radio over IP Gateway (RoIP), you'll need to connect the gateway with a donor two-way radio, cabling and secured backhaul to the FirstNet PTT service. For backhaul connectivity to the FirstNet PTT platform you can use:

- Your Internet connection with an embedded VPN or
- Wireless data using an AT&T dedicated APN to access the FirstNet Core

Separate charges for backhaul apply.

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Managing Your Service

Your administrator can manage existing users and FirstNet PTT usage through FirstNet Central. Administrators can create talk groups and contacts and push them to devices in near real-time. This helps to eliminate the need to physically configure individual devices.

Administrators can request Mutual Aid from other agencies and manage their users as simply as they manage their own, using the PTT Administration Tool.

And agencies that need help setting up FirstNet PTT can request the PTT Customer Administration Set Up and Training (CAST) service at no extra cost*. PTT CAST provides online, orientation courses on the PTT Admin Tool.

Security

FirstNet PTT is a highly secure 3GPP MCPTT compliant solution designed to meet the needs of first responders. The FirstNet network applies standard 128-bit LTE wireless encryption. In addition, FirstNet PTT applies Advanced Encryption Standard (AES)-256-bit encryption to voice, data and video.

Pricing

All prices exclude applicable taxes, fees, and surcharges. All fees paid are non-refundable.

USE CASE 2

The Challenge

A fast-moving wildfire threatens residents, homes, livestock and businesses as it approaches a large urban area. The local fire department needs to coordinate emergency response with neighboring fire departments, police, EMS and national guard to notify or evacuate impacted areas.

The Solution

With FirstNet PTT, the fire department dynamically sends mutual aid requests to other emergency response agencies that are also on the FirstNet PTT platform. Once approved, resources from these partner agencies are added to mutual talkgroups that allow immediate inter-agency communication.

The Benefit

Easy interoperability on the FirstNet PTT platform with other agencies allows tight coordination for an effective response and helps keep the community safe.

Plan	Description	Price
FirstNet PTT Subscription ¹	Monthly recurring charge for unlimited ² use by each subscribed PTT user	\$10/per subscription/month

(1) Requires an existing qualified FirstNet wireless rate plan. Not eligible for contract-based discounts.

(2) "Unlimited" refers to usage of FirstNet Push-to-Talk on AT&T's U.S. domestic wireless data network footprint (including supported domestic roaming partners). Such FirstNet PTT usage does not count as part of the usage or data allowance under FirstNet Wireless voice or data plans. Certain devices cannot use FirstNet PTT while roaming.

FirstNet PTT, powered by 3GPP Mission Critical technology, gives you high performance, high availability PTT calling on a nationwide LTE network. Rich future capabilities will provide you relevant information so you can make informed decisions and help keep your community safe. **For more information, contact your FirstNet Solutions Consultant or visit www.firstnet.com/push-to-talk.**

*Limited time offer; may be withdrawn at any time

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Important Information

General - FirstNet Push-to-Talk (PTT), as described in this product brief (the "Solution") is available only to eligible customers with a qualified agreement ("Qualified Agreement"). The Solution is subject to (a) the terms and conditions found at www.firstnet.com/push-to-talk/blue/eula ("Additional Product Terms"), (b) the Qualified Agreement; and (c) applicable Sales Information. For government customers, any Additional Product Terms not allowable under applicable law will not apply, and the Qualified Agreement will control in the event of any material conflict between the Qualified Agreement and the Additional Product Terms. The Solution is available to FirstNet Public Safety Entities, their Agency Paid Users and their Subscriber Paid Users with a qualified FirstNet rate plan and a FirstNet PTT subscription. The Solution may not be available for purchase in all sales channels or in all areas and may not be accessible at all times. Additional hardware, software, service and/or network connections may be required to access the Solution. Availability, accessibility, security, delivery, speed, timeliness, accuracy, and reliability are not guaranteed by AT&T.

Requirements – The Solution requires LTE wireless connectivity on the AT&T cellular network and the use of a supported wireless device. The FirstNet PTT client may already be installed on a supported wireless device. If not and when available, use of the Solution on supported feature phones, smartphones and tablet devices requires download and installation of the FirstNet PTT client software onto such devices. Management of the service via the Administration Tool requires the use of a supported browser on a suitable computing device. Use of the Solution requires a subscription to FirstNet PTT and a qualified FirstNet rate plan. Data service/plan requirements vary by device category. Subscribers must have a FirstNet SIM card to use the PTT Solution, unless an exception has been granted. Subscribers who do not use a FirstNet SIM card will have limited or no access to the capabilities of the Solution.

Customers that wish to use the LMR to LTE interoperability capabilities of the Solution (when available) are required to purchase additional third-party equipment to complete the connections, which may include Radio over IP gateway equipment and software licenses and secured IP connectivity between the Customer's location(s) and AT&T data centers, which may include wired Internet or wireless data connectivity.

Technical - PTT is not compatible with traditional circuit-switched voice calls or certain other FirstNet wireless services, including, without limitation, voice mail/Visual Voice Mail, AT&T Address Book, and Wireless Priority Service.

Wireless data coverage is not available in some areas. Wireless data coverage is subject to transmission limitations and terrain, system, capacity and other limitations. FirstNet PTT service is not available in areas served by certain Small Cell sites. Discuss potential impacts with your FirstNet specialist. Usage of the Solution on AT&T domestic roaming partners is dependent on the roaming partner having connectivity to the FirstNet Core.

When operating on such roaming partners' networks, subscribed devices will indicate the service provider as AT&T or FirstNet. Certain devices cannot use FirstNet PTT while roaming on these partners' networks. When roaming with domestic or international roaming partners that do not display AT&T or FirstNet as the service provider, FirstNet PTT service will not function. The Solution may not work if a User attempts to access it via a custom Access Point Name (APN), and it will not work if accessed through a firewall or a VPN or from a network that does not meet the specified network access criteria.

The PTT application must be installed on a FirstNet certified device, and the device must be activated and turned on in order to originate and or receive PTT calls. Use of non-certified devices is not fully supported. A list of certified devices is available at www.firstnet.com/devices, which is subject to change. Not all service features and functionality are available on all certified devices. Other software on a User's device may impair the PTT Solution's performance. The Solution is not compatible with devices provisioned through the Control Center platforms. See a FirstNet representative for details.

Usage - Data service/plan requirements vary by device category. Data usage incurred by FirstNet subscribers within AT&T's U.S. domestic wireless data network footprint (including supported domestic roaming partners) in connection with the Solution will not be charged against the Customer's associated data plan. All other data usage will be charged at AT&T's scheduled rates.

Customer and its Users must accept the Additional Product Terms prior to installation and/or use of the Solution's software. Customer must accept the Additional Product Terms as the party liable for each Agency Paid and Subscriber Paid User and agrees that such Users will comply with the obligations under those terms. Customer is responsible for providing each Agency Paid User of a subscribed mobile device with a copy of the Additional Product Terms. The Customer and its Agency Paid Users are individually and jointly liable thereunder. Unless otherwise prohibited, this offer is subject to change, and may be modified, terminated, or discontinued at any time without notice.

Data Privacy - Customer must comply with all applicable privacy, consumer data protection laws, marketing and data best practices, and all laws that apply to collecting, accessing, storing, processing, using, disclosing and securing user data, including any obligations to notify and obtain consents of Users regarding any Customer or AT&T access to Users' personal information. Use of the Mutual Aid request feature gives Customers the ability to see the identity of other Solution Users and, if approved by the other customer, its users. Similarly, the identity of Customer will be visible to other customers, and Customer may make available the identity of its Users.

AT&T may use and distribute information regarding the use of the Solution both internally and to its pertinent suppliers to provide the Solution, in order to improve its product performance or to develop new products. Use of the Solution constitutes consent to AT&T's limited use and distribution of Customers' Solution information. The collection and use of such information is governed by the FirstNet Privacy Policy found at: <https://www.firstnet.com/privacy-policy>.