MOTOROLA SOLUTIONS

WAVE™

PUSH-TO-TALK

TAKE PUSH-TO-TALK (PTT) FURTHER

MOBILE

TLK 100

MOTOROLA SOLUTIONS
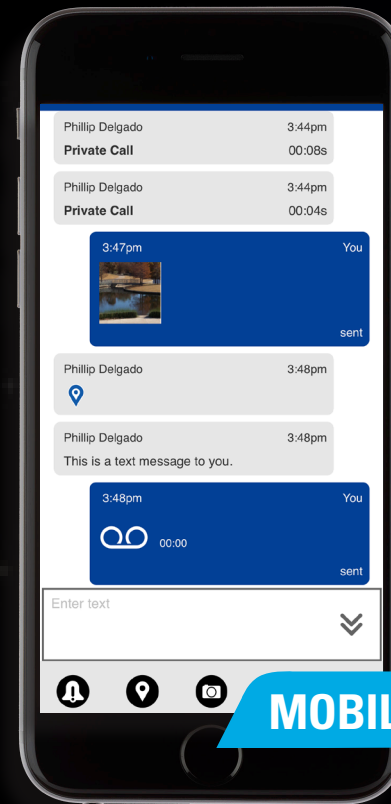
IN THIS GUIDE:

WE LIVE IN AN ALWAYS ON, INSTANTLY CONNECTED WORLD. JUST TEXT, EMAIL, IM, OR DIRECT MESSAGE TO COMMUNICATE WITH ANYONE, ANYWHERE.

However, for many enterprise users, it's simply not optimal to put their work on hold in order to communicate. Workers in highly mobile, hands-on industries such as construction, transportation, private security, field services, public safety and similar occupations, need devices that include the communication tools they want. They want instant voice communication, anywhere the job takes them, without dialing a number and waiting for a call to be routed.

Fortunately, there is a technology option that bypasses these distractions to let workers focus on the job — Push-to-Talk (PTT) technology. PTT is a one-to-many or one-to-one mobile voice communication technology that lets users talk instantly, without the dialing, routing, ringing, and answering steps of a regular phone call.

Today, Motorola Solutions continues to innovate PTT with WAVE push-to-talk applications and devices. WAVE offers the power of PTT and the ease of two-way radio communications, delivered with the vast coverage of a coast-to-coast broadband network. So, your team can be up and running quickly with nationwide push-to-talk in less than 24 hours.

Now your employees can stay connected anywhere in the United States. With a single push of a button they have direct access to colleagues using crisp, clear audio. All without the need for you to build and maintain radio infrastructure. Simply push, talk, and succeed.
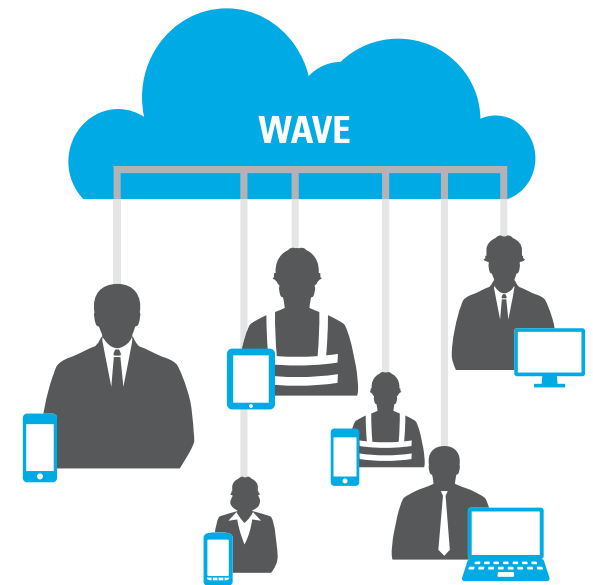
Bayonne, New Jersey police department is the first to operate a Land Mobile Radio (LMR) system

Motorola introduces the transistorized Handie-Talkie HT200 portable two-way radio, weighing 33 ounces, smaller and lighter than previous models

Motorola introduces iDEN

Sprint purchases Nextel and shuts down iDEN in the US

Motorola Solutions launches the WAVE two-way radio with nationwide PTT

1933 — **1940** — **1962** — **1975** — **1993** — **1996** — **2013** — **2014** — **2018**

Galvin Manufacturing Corporation (later renamed to Motorola) develops the Handie-Talkie portable two-way radio, which goes on to become a World War II icon

Motorola launches MX300 portable two-way radios, compatible with computer-aided radio dispatch systems

Nextel launches iDEN as a commercial 2G network in the US

Motorola acquires Twisted Pair and launches WAVE PTT app

AT THE FOREFRONT OF PTT INNOVATION

PTT has come a long way since Motorola Solutions pioneered the technology. Land Mobile Radio (LMR) was the first platform used for PTT communication and it's still widely used today. An LMR system typically consists of portable or mobile two-way radios with repeaters and base stations that transmit communication between the sender and recipient. It's usually deployed by public safety agencies and businesses for instant communications over a private network in a specific location. LMR remains popular because of its high reliability, durability, and ease of use.

In 1993, Motorola introduced iDEN, which allowed delivery of PTT over a larger nationwide area using narrowband 2G technology. In 1996, Nextel launched iDEN as a US-based commercial network. In the early 2000's, PTT-over-cellular systems were introduced, with PTT supported over 2G/2.5G cellular networks. Though the Nextel iDEN service was purchased and subsequently shut-down by Sprint in 2013, iDEN is still used in markets around the world.

In the last decade, a number of companies, Motorola Solutions included, have offered PTT via applications on smartphones or other mobile devices. These are ideal for enterprise users who need to communicate across devices. Users can use a work smartphone or use their personal device. Both the sender and receiver simply need to have the app downloaded and open at the same time.

But if a PTT application is not your style, Motorola Solutions is again leading the way with PTT delivered over the WAVE two-way radio. With the WAVE two-way radio, users gain a rugged PTT device, purpose-built for their business. They receive the high reliability, durability, and ease of use of a two-way radio, but are able to connect with colleagues anywhere, nationwide, with instant, crystal clear audio.

> ## "I could be at home, at work, or out in the field and we're all able to communicate."
>
> — Jon Rono, Group Lead,
>   Business Technology Services

WAVE BROADBAND PUSH-TO-TALK COMMUNICATIONS SERVICE

WAVE is a carrier-independent broadband Push-to-Talk (PTT) that uses the cloud to extend instantaneous private and group communication to phones, tablets and PCs. WAVE enhances team communication by combining the speed and simplicity of PTT with the ability to share details via text, photos, videos, or documents, letting everyone be part of the conversation.

Your workers can use the devices they already own; smartphones, tablets or PCs. The WAVE service is also carrier independent, so there is no need to switch devices or networks. It works on public or private LTE cellular or Wi-Fi™ networks with Internet access, which means you're not locked into a single provider.

Since WAVE is a software service that resides in the cloud you simply set up an account online, download the app from your phone's app store and start communicating. The service is compatible with standard mobile phones.

You can enable instant and secure communications with any smart device or computer. Extend your workforce communication to anywhere you have mobile broadband access on your existing devices with your existing broadband service provider.

> **"Audio quality on the TLK 100 is excellent, even near a runway."**
>
> — Jimmy Luxbache, General Manager,
>   Hertz Chicago Area Operations

WAVE TWO-WAY RADIO TLK 100: INSTANT COMMUNICATION. RAPID DEPLOYMENT. NATIONWIDE.

WAVE two-way radio provides the benefit of WAVE with a rugged two-way radio on a nationwide network. Using the TLK 100, a powerful and slim purpose-built device, WAVE two-way radio allows your employees to stay connected anywhere in the nation.

Purpose-built for rugged use across a range of often chaotic, loud, or dispersed worksites, the WAVE two-way radio is ideal for construction, private security, transportation and logistics, and field services. There's no distracting, breakable screen. No texting, applications, or email to get in the way. With single-button operations and battery life sure to outlive any smartphone, employees can get started immediately with a greatly reduced learning curve.

The WAVE two-way radio is simple to set-up and maintain. There is no need to build and manage radio network infrastructure or secure FCC and spectrum licensing requirements. Everything you need to get started is ready right out-of-the-box. Maintenance is simple, with automatic software updates and the ability to program your entire fleet over the air at once, without having to touch a single device. You can be ready to use nationwide push-to-talk in less than 24 hours.

With the WAVE two-way radio, you only pay for what you need. The device can be free, with a two-year contract. And since these radios are an affordable monthly investment, not a costly long-term expense, you can scale your service to match your business needs. Plus, you can reduce or stop your service easily, at any time, to align with your project schedules.

FEATURES

1 Easy to Use and Manage

- **Self-service talkgroups.** Manage talkgroups and update radios remotely, over the air.

- **Grows with your business.** Easily add or remove subscriptions with self-service billing to scale your fleet based on workload.

- **Communicate across platforms.** The WAVE app enables instant communication between radios and smartphones across carriers.

- **Radio integration capabilities.** Connect to MOTOTRBO™ systems you already own and expand the reach of your trunked systems to a nationwide network.

- **One button, multiple teams.** Contact multiple teams simultaneously and securely connect upwards of hundreds of devices with just one button.

2 Built for the Job

- **Powerful radio, slim design.** One streamlined device lets you communicate one-on-one or with the entire team using PTT. Hear conversations clearly in noisy environments with loud, clear audio.

- **Built tough.** Designed to perform in harsh working environments, regardless of rain, dust, extreme temperatures, or the occasional drop.

- **Location tracking.** Easily manage your workforce with GPS to increase safety, check project status, find faster routes, modify tasks, and position team members where they're needed most.

- **Wi-Fi connectivity.** Use PTT inside industrial buildings and other environments with limited cellular coverage.

- **Accessory-compatible.** Use select Motorola Solutions SL 300 radio accessories, including carrying cases, earpieces, headsets, batteries, charging stations, and more.

- **Long battery life.** Power when you need it most, with a battery that lasts 18+ hours.

- **Screenless design.** Maximize productivity. Minimize email, text, and app distractions without the worry of a cracked screen.

3 Nationwide Push-to-Talk

- **Nationwide* push-to-talk.** Communicate instantly across the country regardless of network or device. Bridge multiple job sites, without infrastructure set-up and maintenance.

- **Network speed.** Fast track productivity with a nationwide* push-to-talk network that powers the quickest push-to-talk setup and call times.

- **Coverage you can count on.** Thanks to reliable nationwide PTT networks—your device can work whenever and wherever you need.

*Coverage will vary. See user guide for details.

FEATURES

1 Instant Group Communication

- **Group and private PTT.** Instantly push-to-talk with one person, or with your entire fleet.
- **Do not disturb.** Ensure when you're off the clock your push-to-talk application is to.
- **Scan a list.** Scan an entire list and instantly add the contacts to your application.
- **Background call mode.** Eliminate unwanted background noise and improve team communications.
- **Individual contact list.** Create unique contact lists.
- **Persistent history.** See a history of your PTT conversations.
- **Personal alert.** Get alerted directly when a member of your team is trying to contact you.

2 Multimedia Messaging

- **Text a message.** Instantly send a text message to one person or to your entire fleet.
- **Send a photo.** Send photos of the job at hand and instantly communicate back in real-time.
- **Share a video.** Send videos from the jobsite and instantly communicate back in real-time.
- **Attach a file.** Send files directly to your push-to-talk group.
- **Add a location.** Send your location to your talk-group to keep them in the know of your whereabouts on the job,
- **Record and send audio.** Hear a troubling noise at the plant? Record the sound and instantly alert others in your talkgroup.

3 Mapping and Location

- **View talkgroup members on a map.** Communicate instantly across the country and access every user's location.
- **See user status.** Fast track productivity and see availability of your crew members setup and call times.
- **Share your location.** Your talkgroup can be accessed whenever and wherever you need, share your location with teams across the nation.
- **Drop and share a pinned location.** Drop your location and ensure your location is noticed on the map.
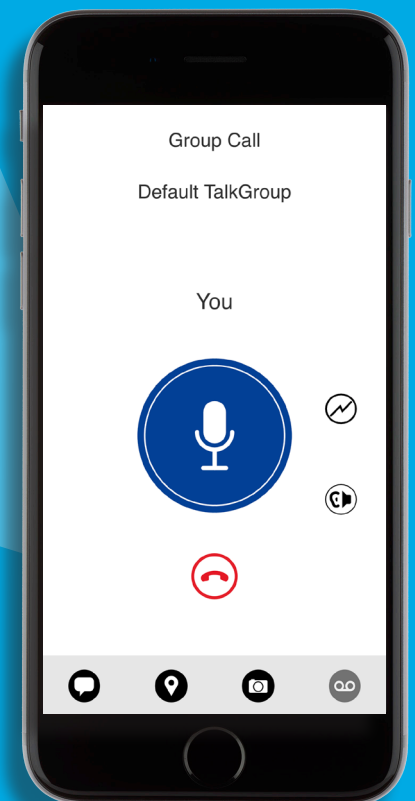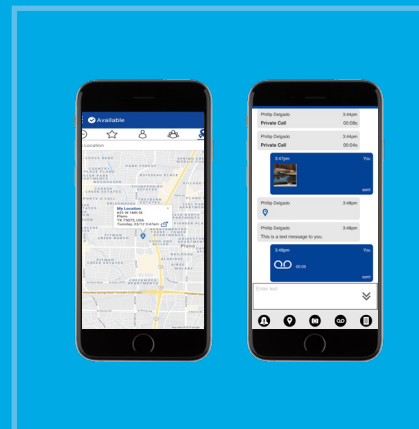
WAVE PUSH-TO-TALK: BUILT FOR YOUR BUSINESS

WAVE two-way radio is purpose-built for your business. Combining the ruggedized design and single button operation of the TLK 100 with the WAVE PTT mobile application and a nationwide network provides a powerful tool to help your business thrive.

While the WAVE PTT mobile app let's your phone turn into a PTT handset. Your business will be able to get instant communication at the touch of a button. No matter their device of choice.

For highly-mobile, labor-intense, or far-ranging businesses, a more productive, cost-effective, and safer push-to-talk solution is available. WAVE provides all of the purpose-built instant communication capabilities you need all on a dependable nationwide network.

"
Coverage is great – perfect connection with zero dead spots.

— Scott Malinowski, CBRE Workplace Experiences Coordinator

Learn more about how you can instantly connect your workgroups nationwide with WAVE from Motorola Solutions or **start a chat** to talk to a customer service representative today.

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