



Instant communication boosts efficiency and productivity in the field.

Keep pace with the speed of business with next-generation Push-to-talk technology.





## What's inside.

This white paper will help you understand next-generation Push-to-talk technology and how it can benefit your business. It will help you address many operational challenges your business may encounter, including:

- A workforce that operates in multiple locations
- The need to instantly connect to your team
- High costs of managing and maintaining multiple devices
- Lack of insight and control over spending
- Employees distributed in remote areas with limited coverage

## Table of contents.

Instant connectivity is critical in the field.....	3
The evolution of Push-to-talk.....	4
Key features of next-generation Push-to-talk.....	5
What are the business benefits of using next-generation Push-to-talk technology?.....	6
Questions and answers.....	7
The next generation of Push-to-talk is at Bell.....	8

# Instant connectivity is critical in the field.



“ On a construction site, a worker can hear a message broadcast from a speaker on his/her phone without needing to put down tools or remove gloves to answer a standard phone call. ”

Push-to-talk (PTT) service is a walkie-talkie-like system that uses mobile networks to enable voice communications for a more reliable, secure connection with wider coverage. With one touch of a button, mobilized workers can communicate with individuals or their entire team instantly, without the need to set up a conference call or even dial a number. It has proven to be an invaluable communication tool in construction, transportation, manufacturing and other industries that depend on mobility solutions that allow them to communicate and coordinate instantly to avoid delays.

The instant nature of voice communication through PTT boosts efficiency on the worksite. On a construction site, a worker can hear a message broadcast from a speaker on his/her phone without needing to put down tools or remove gloves to answer a standard phone call. A transportation company dispatcher can communicate location and delivery instructions to drivers without delay through PTT – much faster than it would take most drivers to answer a ringing phone. Without the frustration of missed calls and voicemails, a workforce connected over PTT will save hundreds of hours every month, translating into increased productivity and greater savings.

New advances in technology are making PTT even better. With the introduction of faster 4G LTE network speeds, telecommunications companies like Sprint have decommissioned walkie-talkie-like services that run on virtually obsolete networks such as the iDEN network.<sup>1</sup> These older solutions are plagued by limited coverage and slower data speeds that also make simultaneous PTT calling and checking email or browsing impossible. For example, if a field worker gets lost, talking with a dispatcher while also searching for directions online at the same time would not be possible.

Next-generation PTT service features faster data transfer speeds with larger network coverage than iDEN. Backed by a more advanced network, users are able to send and receive PTT messages while browsing the web and sending emails. Furthermore, next-generation PTT allows users to see if their contacts are online or too busy to talk. Contact management is more efficient with the ability to manage and update contact lists on the phones for an entire organization over the air through a centralized online platform. Plus, users of next-generation PTT enjoy the benefits of using PTT on a variety of devices, including superphones, smartphones and rugged devices built to serve the most demanding business environments.

# The evolution of Push-to-talk.

PTT technology over radio systems has been around since the mid-1930s. In 1987, the first 2-way communication over cellular was developed. In recent years, smartphones have become an essential tool for businesses, but traditional iDEN PTT services have not been able to support the demand for mobile solutions that offer web capabilities over data. For instance, workers on a construction site often need to snap photos and send high-resolution pictures to their head office. Sending large files over iDEN networks is slow and hinders productivity.

With the emergence of technological advancements in mobile networks and handset devices, a new generation of PTT services that run over 4G networks was launched, bringing with it new capabilities to make instant communication even more productive. It has strengthened the connection between office workers and field workers, allowing operations managers in the office to communicate over PTT through their smartphones, while workers in the field are supplied with more rugged mobile phones.

The next generation of PTT is the result of several developments:



#### The growing popularity of more powerful devices.

In recent years, there has been tremendous growth in the adoption of smartphones, superphones and tablets. Basic phones have not been able to keep pace with the demands of today's business. Research conducted by IDC Canada revealed that 55% of Canadians owned a smartphone in 2012, with that number expected to grow to 84% by the end of 2016.<sup>2</sup> In response to this trend, a few mobile carriers in North America have made significant investments to provide PTT services on devices that feature dual-core processors, super-fast speeds and large, high-definition screens, while also supporting email and business applications. PTT is no longer restricted to older basic phones with limited functionalities.



#### The expansion of mobile networks.

The introduction of new 4G and LTE networks allowed carriers to support voice quality and call set-up speeds that are far superior to the PTT solutions of the past. PTT services that run on these networks are capable of providing faster call set-up times, capitalizing on the range and speed of the network. With the growth of LTE Advanced, PTT will benefit from an even faster and more powerful network, allowing for more coverage with roaming available throughout North America.



#### The integration of PTT and mobile applications.

Business applications that once were supported by other devices are rapidly moving to the mobile phone. For example, GPS and fleet management systems were once managed by separate machines, but are now available through smartphone applications. According to forecasts by Frost & Sullivan, there will be 300,000 mobile application users within the mobile workforce segment of the Canadian population by 2016.<sup>3</sup> Mobile applications enable businesses to access a vast array of tools that help enhance productivity and facilitate everyday tasks, such as logging in hours, filling out forms and keeping track of projects. As a result of this growing trend, new PTT-capable devices have been designed to support key business applications.



#### The shutdown of the iDEN network.

When Sprint announced their plans to shut down the iDEN network<sup>4</sup>, North American carriers sought to replace their outdated PTT services with an enhanced version offering faster connection speeds.

# Key features of next-generation Push-to-talk.

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Next-generation PTT technology offers the security and reliability, speed, coverage and features that are vital to keep business connected.

- ✓ **Speed** – Current PTT technology allows for instant connectivity to the team, quicker message exchanges and the capability to access essential mobile applications.
- ✓ **Simplicity** – PTT features are easy to understand, access and use.
- ✓ **Cloud-based contact management** – Organizations can manage and maintain PTT contact lists for all of their users through a Web-based platform. The online management tool can be used to add external contacts including vendors and suppliers. When a new employee joins the team, he/she can be added to the team contact list easily. With older iDEN PTT services, contact lists have to be updated manually on each individual device – which is time-consuming and inefficient.
- ✓ **Multitasking** – Mobile devices on next-generation PTT allow users to make PTT calls and check emails simultaneously.
- ✓ **Quick and efficient voice communication** – On average, PTT calls last less than a minute in talk time, allowing users to get work done more quickly.
- ✓ **Group calls** – Users have the ability to connect multiple people into a PTT session with the push of a button. Similar to conference calls, PTT group calls give users the ability to engage in one-to-many conversations, without the inefficiencies of scheduling calls, reserving conference bridges and waiting for participants to join.
- ✓ **Wi-Fi calls** – PTT communications can be made securely over Wi-Fi to help keep mobility costs manageable.
- ✓ **Presence status** – Users are able to see if contacts on their PTT call list are available, busy or offline.
- ✓ **Connectivity to any user on next-generation PTT** – Users can connect with any contact outside of their organization that is on the same PTT network, or PTT calls can be restricted to contacts within the company only.
- ✓ **Device selection** – New PTT technology is compatible with some of the latest smartphones and rugged handsets. Users can select a device that supports their needs, whether they are office or field employees.

# What are the business benefits of using next-generation Push-to-talk technology?



## Lower cost of ownership.

Organizations are reducing operational costs by adopting equipment that serves as both a mobile phone and a Push-to-talk handset, eliminating the need to maintain and manage multiple devices. The latest rugged PTT phones are more durable and don't need to be replaced often. Additionally, PTT-enabled superphones and smartphones allow you to do a lot more on the go. Superphones work hard, giving you computer-like multitasking abilities and richer, smoother graphics – so you don't always have to lug around a laptop with you to a job site.

## Fixed corporate wireless costs.

With next generation PTT, calls are routed over mobile data packages. PTT is charged as a flat fee subscription service with unlimited domestic minutes, allowing for cost certainty. Employees can make Canada-wide PTT calls worry-free.

## Better coverage.

Next-generation PTT services function on the latest wireless technologies. Established carriers offer robust network coverage that can help you stay connected to your team in remote areas.

## Increased productivity.

Office and field employees are more productive when they are able to connect instantly with PTT. A project manager, an administrator or a foreman can easily communicate an important update to all employees without placing individual calls. For example, if a job needs to be completed that same day, management can communicate with the entire team instantly to ask them to work extended hours and offer overtime pay. Managers can set up multiple PTT calling lists, allowing them to communicate with selected sets of employees without interrupting others for whom the message is not relevant.

# Questions and answers.

When considering your PTT options and service providers, you might want answers to these questions:

## 1 Which phones are enabled with Push-to-talk?

Different carriers have different phones that are compatible with their Push-to-talk services. Review the line-up of Push-to-talk phones that are available when selecting a provider. You need to ensure that your PTT provider offers a full range of devices to meet your needs – from rugged basic phones to smartphones and superphones.

## 2 Where will my Push-to-talk service work?

You can connect directly with other wireless Push-to-talk subscribers while you are in the coverage area provided by your carrier. Roaming capabilities are also available in the U.S., enabling you to stay in touch with your team even when they are doing business across the border. Note: Additional fees may apply with Push-to-talk roaming.

## 3 Can I manage my PTT contacts online?

Next-generation PTT services allow you to manage contacts on your device and push updates instantly over the air to other phones that share the same contact list through an online cloud environment.

## 4 There are many free over-the-top (OTT) applications available in different mobile app stores. Why should I subscribe to a managed Push-to-talk service?

Push-to-talk service from a wireless carrier runs over a dedicated network and does not transfer communications over the public Internet, thus offering better security, reliability and performance. OTT applications whose conversations ride over the Internet are less secure and can be impacted by Internet congestion resulting in longer call set-up times and delayed voice conversations.

## 5 Can I see the availability status of my employees?

The next generation of PTT service allows users to set their status as “Available” or “Do not disturb” or log out of the service. “Current presence” automatically displays your status to others so that they know whether you can be reached. PTT services running on older technologies do not offer this capability.

## 6 Will I be charged airtime for my Push-to-talk calls?

Push-to-talk service includes unlimited Canadian one-to-one and group Push-to-talk calls for a monthly access fee. Some wireless carriers offer unlimited Canada/U.S. PTT plans as an add-on to your plan. Some carriers also offer PTT only plans with voice calls blocked.

## 7 Do I need to have a special Push-to-talk phone number?

No, you don't need a special Push-to-talk phone number. You only need one wireless mobile telephone number for both voice calls and Push-to-talk calls for each mobile phone.

# Connect instantly with powerful Push-to-talk service from Bell.

With Push-to-talk from Bell, you can connect instantly at the push of a button on Canada's largest LTE network.<sup>5</sup> Combining one-touch voice communication with blazing-fast data speeds, Bell Push-to-talk features coverage that reaches over 31 million Canadians, while also providing extensive coverage in the United States. Bell was the first North American carrier to bring Push-to-talk technology to the Canadian market. We offer Canada's largest selection of rugged devices, and a great selection of industry-leading smartphones.

For more information about Push-to-talk services and how we can help, contact your Bell Business Expert or call **1 855 272-0776**.

Visit a Bell store for a Push-to-talk demo (selected locations only).

"PTT is a better communication tool, because anyone using the system can identify who on their profile is active and who is not available. I can also review and report on contact dates and times for clarification of a task or job."

Brad Achtenberg,  
Director of Maintenance  
Humber River Hospital

"Managers and supervisors are now getting more work done because of the speed that they're able to download documents right in the field."

Ryan Smith,  
Director of Operations  
PVS Contractors

"Bell's support team was vital to the transition. They really helped to make sure it was smooth and that we didn't have any downtime. Communication is effective and, most importantly, reliable."

Danielle Bywater,  
Senior Equipment Administrator  
Graham

**Bell** push-to-talk  
just got  
better

Current as of October 29, 2015. Available in Saskatchewan, Québec, Alberta, British Columbia, Ontario, New Brunswick, Newfoundland, Nova Scotia and Prince Edward Island (excludes Manitoba) with compatible devices within network coverage areas available from Bell Mobility; see [bell.ca/coverage](http://bell.ca/coverage). Long distance and roaming charges (including foreign taxes) may apply outside your local area. Data charges apply if you do not subscribe to a data plan; fees may apply for applications, features, content and roaming when outside your local area. If you end your services early, a fee will apply; see your Service Agreement for details. Subject to change without notice. Taxes extra. Other conditions apply. **(1)** Computerworld online article, published May 29, 2012 ([http://www.computerworld.com/s/article/9227557/Sprint\\_to\\_shut\\_down\\_Nextel\\_iDEN\\_network\\_next\\_year](http://www.computerworld.com/s/article/9227557/Sprint_to_shut_down_Nextel_iDEN_network_next_year)). **(2)** Research reported in IDC Canada Mobile Phone Install Base, 2Q12. **(3)** Forecasts published in internal reports provided by Forrester Research. **(4)** Sprint news release, published May 29, 2012 ([http://newsroom.sprint.com/article\\_display.cfm?article\\_id=2296](http://newsroom.sprint.com/article_display.cfm?article_id=2296)). **(5)** Based on total square kms of coverage on the shared LTE network available from Bell vs. Rogers' LTE network. See [bell.ca/LTE](http://bell.ca/LTE) for details. All trade-marks and/or registered trademarks are the property of their respective mark owners and are used with their permission.