Executive Summary

The long-awaited shutdown of the Nextel National Network is upon us, and a significant number of organizations across the nation are still considering exactly how they will replace their fleets of Nextel push-to-talk phones.

Push-to-talk capabilities have extensive applications in all manner of commercial environments, fostering both one-to-many and one-to-one communication. But not all push-to-talk solutions are created equal, and organizations should not limit their considerations strictly to phones.

This white paper describes a range of options available to those who will be impacted by the Nextel network shutdown. These options extend beyond phones and beyond ownership of a phone fleet.
What’s Happening and Why

At businesses across the country, June 30, 2013, is circled on the calendar. That’s the day that the Nextel National Network is scheduled to go down. As it does, a generation of Nextel push-to-talk phones—once among the most versatile wireless communications options available—will cease to operate.

Nextel Communications, builders of the Nextel network, began as FleetCall, and it specialized in wireless communications for fleet and dispatch customers. It was a pioneer in offering a push-to-talk option in addition to direct-dialed voice calls.

That one-to-one or one-to-many capability came from a mobile communications technology known as iDEN, or integrated digital enhanced network. Developed by Motorola in the early 1990s, iDEN technology was designed to support three or six phone users per channel and six push-to-talk users per channel. Transmission and receiving were separated, so that a user would never need to send and receive at the same time.

Push-to-talk capability found a devoted following among manufacturers, construction companies, tradespeople, event managers, and organizations with employees in the field, such as delivery workers. Communication was instant, and it could be one-to-many, both important in a business environment.

Nextel had more than 20 million U.S. subscribers in 2005 when it was acquired by Sprint. But by then, iDEN’s data speeds were far too slow to accommodate smartphones, and the merged Sprint Nextel did not want to incur the expense of operating two incompatible networks. In 2010, Sprint said it would decommission the Nextel network, and in May 2012, the effective date of the shutdown was announced.

In the interim, Sprint launched its own push-to-talk service, Sprint Direct Connect, which provides broadband data capabilities, familiar push-to-talk features, and rugged and reliable handset options. It signed up 1 million customers in less than a year on the strength of new features and greatly expanded coverage.

At the end of 2012, according to Sprint, there were still more than 1 million business subscribers to the Nextel network. Sprint has said it has retained a significant percentage of Nextel subscribers in the face of competition from rivals, notably Verizon Wireless. More recently, AT&T joined the fray.

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The competition no doubt has led to confusion in the minds of some Nextel subscribers about their options. And while the shutdown has been preceded by plenty of warning, replacing a business communications system is no easy task.

Fortunately, the best wireless providers have the latest information on the available options and how they can best be evaluated. In some cases, the device that best meets a company's wireless communications needs may not be a phone at all.

**What Nextel Users Can Do**

Businesses looking to replace communications systems dependent on the Nextel Network may be tempted to investigate their options on their own and request proposals from a bunch of competing vendors. But this only leaves them with a stack of competing plans, each of which claims to be tailored to the business' needs.

There is a better way. It starts with an evaluation of the organization's needs by a wireless solutions provider that offers a variety of products from a range of manufacturers. Such an evaluation determines exactly how the organization uses wireless communication and the capabilities it needs—but doesn't yet have. It focuses on coverage area, service-level issues, and deployment options.

Also necessary is a review of the Nextel experience. What worked? What didn't? What additional functionality is needed? What led the company to Nextel in the first place? What's needed now?

Such a detailed evaluation shouldn't be followed by a sales pitch. Instead, it should begin consultations that lead to the engineering and implementation of a solution that exceeds a company's needs and works within its budget. The key here is finding a wireless provider that is vendor agnostic, and is thus free to research the various available technologies and manufacturers to provide the best and most cost-effective options.

**Considering Options**

Following a review of a business’ wireless communications needs is the presentation of the most appropriate options available. In the case of organizations moving off the Nextel network, those options start with push-to-talk phones available from other providers, but they certainly don’t end there.
**Sprint**

Sprint's push-to-talk service, Sprint Direct Connect, was expanded in June 2012 to offer three times the coverage area of the legacy Nextel network. It said the upgraded nationwide service supports broadband capabilities, the latest business productivity applications, social media, and multimedia on Sprint's broadband CDMA network.

“The coverage expansion through roaming and 1xRTT takes Sprint Direct Connect to a new level,” a company official said at the time. “To all customers—from first responders who consult with peers across time zones to big businesses that use push-to-talk to communicate with employees on different coasts—the expansion will have instant value.”

Sprint said customers would experience the same instant connectivity when a push-to-talk call has been established, but it warned that the initial call setup time would increase slightly for users who were roaming or in a 1xRTT area.

Sprint offers a line of phones featuring Direct Connect that ranges from full-featured smartphones to rugged devices designed for tough work environments. Combining the best of both is the Kyocera Torque with its large touch screen and an ultra-rugged exterior built to Military Standard 810G. Another option is the Kyocera DuraCore, which boasts military-grade specs, 3G speeds, and GPS support for location-based services.

**Verizon Wireless**

Verizon Wireless, Sprint's chief rival in push-to-talk, has said that “with Sprint's decision to eliminate its iDEN service by mid-2013, some cell sites will be decommissioned—which could negatively affect service. That means it's the ideal time to consider Verizon Wireless push-to-talk.”

Verizon claims the nation's largest push-to-talk network coverage area, and it offers the ability to communicate instantly with up to 50 team members at once. It highlights one device and one number for all communications. Its Presence Indicator feature shows who is available to receive a call. Contacts can be managed easily through a centralized portal.

Verizon says, “With our commitment to support push-to-talk, you get instant communication and coast-to-coast coverage to keep your teams productive. Plus, choose from a range of rugged push-to-talk phones.”
phones with advanced operating systems like Android. Combine our push-to-talk service with other mobile solutions to get the most out of Verizon business apps and features.”

Verizon’s push-to-talk service includes unlimited one-to-one and group push-to-talk calls for a monthly access fee.

The Verizon devices with push-to-talk capability include the Blackberry Bold, with its distinctive push-button keyboard, and the rugged Casio G’zOne Commando. Its outdoorsy features include a compass, pedometer, and thermometer.

**AT&T**

AT&T is the big new kid on the push-to-talk block, unveiling its AT&T enhanced push-to-talk service in November. “AT&T enhanced PTT is designed for 4G LTE from the get-go, while others are still deploying push-to-talk services on legacy CDMA and iDEN networks,” the company said in its announcement.

A company official said, “For workers in industries like construction, manufacturing, and public safety, mobile devices that can withstand harsh conditions are essential. We’re offering AT&T enhanced PTT on a variety of rugged devices to give our customers the performance and durability they need to get in touch quickly on the job—no matter what conditions they face.”

Those devices include the Samsung Rugby III, a rugged flip phone, and the Samsung Galaxy Rugby Pro, an Android smartphone. AT&T’s new service also runs on the Blackberry Curve and Blackberry Bold.

AT&T is offering consumers two rate plans: $5 per month when added to existing AT&T voice and data plans or $30 per month for a push-to-talk-only plan with no voice or non-PTT data included. Both plans include unlimited push-to-talk, and data used by the Enhanced PTT application doesn’t count against the customer’s monthly data totals or incur pay-per-use charges.

**Motorola Solutions**

In considering the options for replacing Nextel push-to-talk services, why should companies restrict themselves to phones? Two-way radios were the inspiration for push-to-talk, and they can be configured to facilitate one-to-one communication without the airtime fees common to phones.

Motorola Solutions, the industry leader in two-way radios, offers a huge selection, led by its MOTOTRBO line of digital radios. Digital
technology means clearer voice communication over a greater range. Even when signal strength drops with distance, MOTOTRBO’s digital error-correction technology means accurate voice and data content with no loss throughout the coverage area.

Noise suppression software filters out background noise, and call volume is automatically adjusted based on conditions. MOTOTRBO radios meet demanding specifications for durability, reliability, and even submersion in water. Intrinsically safe (iS) models are available for use in areas where flammable gases, vapors, or combustible dust is present.

An integrated GPS modem allows the tracking of workers and vehicles without cumbersome external GPS devices. And with MOTOTRBO, users can send text messages for fast and discreet communications when voice communication isn’t feasible.

MOTOTRBO eliminates the limitations imposed by the Nextel network on the number of talk groups and the number of users in a talk group. Also eliminated are service-level issues caused by networks that get overloaded with users during peak usage times. And with Motorola Solutions, there are no concerns about which devices have push-to-talk capability. They all do.

“When you opt to buy a MOTOTRBO system, you own it and you control it,” Motorola says. “Unlike the cellular network, you decide where and how to build out the infrastructure, helping to ensure seamless indoor and outdoor coverage wherever you need it—deep inside terminals to the delivery dock, the yard, and beyond.”

**The Rental Option**

Not every organization wants to take on the challenge of owning a fleet of phones or two-way radios. For them, it may make more sense to rent or lease that equipment, leaving the support and repair responsibilities to a contractor.

BearCom’s Rental Group manages the largest wireless communications fleet in the nation and provides long-term leases and short-term rentals. Phones from Sprint and Verizon Wireless and two-way radios from Motorola Solutions are all included in its extensive rental inventory.

BearCom’s expertise in rentals is demonstrated in the number of high-profile events where its equipment is routinely employed—events like the Super Bowl, World Series, and New York Marathon.
as well as gatherings like South by Southwest, Burning Man, and the Bonnaroo Music & Arts Festival. BearCom has provided radios used at the Olympic Games, World Cup competitions for both soccer and cricket, and World Youth Day. BearCom once assisted with the NBA All-Star Game and the Academy Awards—on the same day.

Choosing a Dealer

Replacing a wireless communications system requires much more than just a dealer of the latest wireless technologies. BearCom has a long history of processing large, complex orders. Success in this area requires substantial inventory depth, financial stability, prompt and accurate shipping to multiple locations, and customized reporting—a combination that is unique to BearCom in the wireless industry.

BearCom is staffed with a large, knowledgeable Professional Services Group, which designs and implements ideal wireless solutions for organizations. It also offers a number of customer-focused extras, such as customized extranet sites with sophisticated functionality, another solution that sets it apart.

BearCom has served a wide variety of customer types in numerous industries—heavyweights like Amazon.com, BASF, ExxonMobil, Halliburton, JCPenney, Rohm & Has, Shell, and U.S. Steel. In all, more than 80% of Fortune 100 companies have relied on BearCom.