



# THE POWER OF TEAM COMMUNICATIONS FOR MINING

## UNIFIED WORKGROUP COMMUNICATIONS TO BOOST SAFETY AND EFFICIENCY

Mining is complex. Safety requirements, unstable commodity prices, productivity pressure, increasing costs, mineral theft, and asset write-downs can make it even more challenging.

In today's world of data abundance, your mining operations have access to many disparate networks to help your employees know when a drastic weather change may occur, the locations of critical delivery trucks and even knowing when gases may change levels underground. But, all of this data may be analyzed separately without the advantage of integration.

Motorola Solutions is with you on the front lines to better access data information leveraging existing voice communication systems. Our team communications solutions take push-to-talk (PTT) beyond the boundaries of radio, allowing all of your employees to communicate instantly, from anywhere, while leveraging intelligence from a wide range of applications designed to help your mining operations succeed while keeping your employees safe from harm.

Today, as the world's hunger for raw minerals continues to grow, investing in the right communication solution is critical to success.





## CONNECT WITHOUT COMPROMISE

Mining companies around the globe trust us to enable seamless collaboration between their teams underground, in the front office, and on the delivery dock. When teams can communicate clearly and instantly, from anywhere, then safety is enhanced, downtime is reduced, and deadlines are met. What if your employees could communicate with each other instantly and securely through push-to-talk (PTT) communications between smartphones, laptops, tablets, radios, landlines, or other connected devices? What if it did not matter where they were in the world, or to what network – LTE, LMR, LAN, WiFi - they were connected? What if they were able to use a rich application ecosystem and the Industrial Internet of Things (IIoT) to extract valuable intelligence

from the flood of data, and then share that information instantly with the team members who most need to know? This capability exists today. Take the first step toward a safer, more successful, and more efficient business by taking your communications further with Team Communications from Motorola Solutions.

## COMMUNICATE IN AN INSTANT

When a mission is underground and the team is in need of critical guidance from engineering teams in the office, or if a safety situation arises, nothing is faster than push-to-talk. Motorola Team Communications provide the instant group communications needed for high performing teams. Communicate one-to-one or one-to many across radios in challenging noise environment, and use the WAVE™ broadband push-to-talk (PTT) application on smartphones, tablets, or laptops to expand the same conversation to wherever network connectivity exists. Employees who do not use a radio can contact those who do, and vice versa, instantly. In an emergency, priority voice and data communications guarantee that critical information is heard by all, bypassing routine conversations. When your team can reach anyone necessary to resolve critical issues – regardless of device, or physical location – employees stay safe, schedules are maintained and businesses thrive. Remove the roadblocks and improve outcomes with Team Communications from Motorola Solutions.



## COMMUNICATE WITHOUT BOUNDARIES

It used to be easier. You had a team in one location, everyone carried a radio, and when a problem arose it was discussed and quickly resolved.

Today, you still have employees carrying radios, but now there are other critical team members that don't need or want to carry a radio. They use smartphones, or tablets, or laptops as their preferred device. Instead of everyone on the team residing in one location, team members are scattered across the county, the state, the country, or even the world. Technology has provided more operational visibility – GPS locations, alarms, sensors, voice over IP, even video – but this data is often stranded in different corners

of the organization, using disparate networks. There may even be multiple focal points for dispatching this data, specialized to the needs of a smaller group and the network (LMR, LTE, WiFi or LAN) they use to communicate. These pockets of information lead to delays and frustration when the right decisions must be made faster than ever before to be safe, successful, and efficient.

Tear down the technological walls stranding your personnel and critical data with the power of Team Communications. Using WAVE Workgroup Communications, network, device, and geographic boundaries are overcome – your team members can connect from their preferred device to other team members, anywhere, anytime. Simply push, talk, and succeed.

## COMMUNICATE WITH ADDED INTELLIGENCE

The stream of information flowing through a typical business today can be overwhelming. If key information is not extracted and used to make the business better, then it is simply data piling up in a storage drive somewhere. Are you fully utilizing information from your dispatch application? Video surveillance? GPS tracking? Integrated command and control system? Sensors? Monitors? Alarms?

You can use existing EAM (Enterprise Asset Management) data captured for large mining trucks and leverage this to track the loading of the trucks. Shift managers in the field can see and query current shift data and asset utilization data from a mobile table device. This includes how much ore the trucks were hauling - and most importantly, if they were full. If the trucks are not full, supervisors can get on radios or phones and drive to the location to adjust the behaviors of drivers and operators quickly. Issues can be fixed immediately.

Within this stream of information is the intelligence that separates the businesses that succeed from those that fail. A more efficient route. A root cause behind seemingly unrelated issues. A pattern of sensor trips indicating a larger issue. An inventory shortage that will impact the business. An alarm warning that someone is in the wrong place at the wrong time.

By connecting every member of the group regardless of device, Team Communications unlocks the potential of your company's data. The critical piece of intelligence needed to make your business safer... more successful... or more efficient can now be communicated – instantly – by the person who knows to the people who need to know.



# TAKE YOUR COMMUNICATIONS FURTHER



## SEAMLESS COMMUNICATIONS IS A PRIORITY, BUT NOT ALWAYS A REALITY

**49%**

of energy workers reported using cellphones as their primary form of voice communication to reach workers, while **32%** reported two-way radios as their primary form of voice communication.

**90%**

of energy workers said most workers within their operations are using **multiple devices** to communicate with each other.

**94%**

of respondents stressed that it would be of importance to seamlessly connect all of their different communication devices.

**50%**

of energy workers stated they have some general awareness around the Industrial Internet of Things Solutions, but only **29%** are using or investing in these solutions today.

## MOTOROLA SOLUTIONS **TEAM COMMUNICATIONS** FOR MINING

### ANY STAFF MEMBER



#### SUPERVISORS

- Improve safety and security throughout mines
- Communicate with first responders in real-time
- Bridge communications between mines and first responders
- Leverage transit interrupt features to prioritize critical communications



#### TRANSPORTERS

- Alert personnel to emergency situations or trouble
- Ensure greater safety with hands-free features
- Enjoy better audio clarity with background noise cancellation



#### MINE PERSONNEL

- Instantly connect with other personnel using PTT
- Communicate with first responders in real-time
- Stay connected from anywhere



#### CENTRAL OFFICE

- Easily and seamlessly keep all operations connected
- Maximize your existing infrastructure investments
- Cost effectively enhance communications and better manage budgets

### ANY NETWORK



### ANY DEVICE



### ANY APPLICATION

- Text Messaging
- GPS Tracking
- Fleet Management
- IIOT Data
- Work Order Ticketing
- Mass Notification Siren Alerting
- WAVE™ PTT



## TAKE YOUR COMMUNICATIONS FURTHER WITH MOTOROLA SOLUTIONS TEAM COMMUNICATIONS FOR MINING

With unified work group communications, your employees can connect instantly, without boundaries, and with key information at their fingertips. The safety of all team members and the organization overall is enhanced. The intelligence to improve productivity can be shared immediately with the team members who most need to know. A rich ecosystem of applications to streamline workflows and make your business more efficient awaits. Boost your team's satisfaction and your company's bottom line with Team Communications from Motorola Solutions.

Learn more at [https://www.motorolasolutions.com/en\\_xl/solutions/mining.html](https://www.motorolasolutions.com/en_xl/solutions/mining.html)



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