



# DEPARTMENT OF DEFENSE

## URGENT NEED TO ADDRESS NEXT GENERATION 9-1-1 SHORTFALLS ON MILITARY INSTALLATIONS

### PROBLEM

Federal policy and funding for Next Generation 9-1-1 is primarily focused on local and state Public Safety Answering Points (PSAPs). None of the 205 DoD PSAPs supporting the 420 PSAPs at CONUS and OCONUS military installations are capable of multimedia call handling, and all continue to operate using analog technology originally designed for fixed location phones. Additionally, these systems are years beyond their normal five-year lifecycle. Because of these deficiencies, our service members and their families do not have access to the life-saving benefits of NG 9-1-1. In the event of an emergency, they are dependent on outdated technology, with no backup in place to protect against age-related failure. Moreover, the legacy technology in use today cannot determine if a mobile phone call to the PSAP is coming from inside a military installation or outside the fence line – causing calls to be routed to the incorrect PSAP and resulting in dangerous delays.

### HOW 911 WORKS

When someone dials 9-1-1, that call for emergency response is sent to an emergency communications center, known as a Public Safety Answering Point (PSAP). The PSAP takes the information and uses it to dispatch first responders. Since the inception of 9-1-1 in 1968, the capability of PSAPs to gather critical information has improved as the networks that carry calls have evolved. In its earliest form, the location of the caller came from information provided by the caller. Beginning in the mid-1970s, 9-1-1 technology became more effective with the introduction of location data. This permitted the PSAP to identify the street address

associated with the telephone number of the caller. The proliferation of mobile phones in recent years has necessitated the need for a similar ability to locate mobile devices, wherever they may be.

### THE DIFFERENCE BETWEEN E9-1-1 AND NG 9-1-1

With the widespread use of cellular and internet protocol (IP) based devices and networks, Next Generation 9-1-1 (NG 9-1-1) was developed to enable requests for emergency responses to be generated both by voice calls and through new communication technologies such as texting, automatic crash notifications, and medical alerting. IP based NG 9-1-1 also allows citizens to provide first responders with valuable data, such as more accurate location information, photos, and videos. PSAPs can then provide this data to first responders on handheld devices while en route to the emergency.

States and local agencies, which are the primary providers of 9-1-1 services through more than 6,000 call centers nationwide, are working to upgrade their 9-1-1 networks to NG 9-1-1. According to the Federal Communications Commission's most recent report, ten states have reported that all 9-1-1 calls are processed using NG 9-1-1 networks and call handling systems, while numerous other states are in the planning and implementation phases. As these NG 9-1-1 networks roll out, DoD installations must be equipped to interface with them and ensure interoperability with their civilian counterparts, while preserving the ability to operate as an autonomous jurisdiction within their boundaries.



Motorola Solutions proudly manufactures and deploys the sophisticated, cutting-edge communications, software, video security and analytics technologies that keep communities and nations safe. We have been on the frontlines with federal, state and local governments, including in times of crisis, for over 90 years. Today, our 17,000 innovators, engineers and manufacturing specialists are eager to help address critical gaps in the availability of medical and health management technology needed to fight the COVID-19 pandemic. We are pleased to offer hundreds of thousands of feet of secure, US-based manufacturing, unrivaled operational agility and the capacity for rapid deployment.

## MOTOROLA SOLUTIONS STANDS READY TO SERVE OUR COUNTRY IN THIS **MOMENT THAT MATTERS.**

### **BENEFIT**

Upgrading these aging and obsolete systems is overdue, and the Federal government can allocate funding for the implementation of NG 9-1-1 to provide DoD installations with modern, reliable, and secure NG 9-1-1 call handling systems. These systems are the building blocks for first responders to utilize the latest digital technology, allowing them to respond to emergency situations faster and more efficiently. They will also provide more effective mutual aid to neighboring public safety mission partners, when emergencies require additional support.

### **SOLUTION**

Motorola Solutions, based in Chicago, IL with facilities across the United States, is the market leader in public safety solutions. Our sole focus is on enabling our customers to be their best in moments that matter.

There are two paths that can be taken to implement the NG911 systems for the DoD. One is an "Enterprise" approach where many bases would share common Host Cores with

local redundancy. This is the direction that the military is going with many of its critical infrastructure projects. The ROM for this approach is around \$50M. The second path would be to replace the existing 200+ stand alone systems in the manner that they are implemented today, at a ROM of \$75M. The first option could be completed in two years from the time of award, while the second option would take roughly three years to implement. Along with implementations of these NG9-1-1 systems, DoD should consider purchasing centralized system monitoring, to improve support, maintenance, and lifecycle sustainment agreements that will help avoid large replacement costs in the future.

Regardless of which solution is selected, Motorola Solutions will rely on a network of small business partners, sub-contractors, and customer service providers, all of whom have been hard hit by COVID-19 related operational shutdowns, and are eager to return to work, implementing and sustaining these systems.

