



# RIDE THE **WAVE**: ENABLING DISASTER COMMUNICATIONS

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MOTOROLA SOLUTIONS INC

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**SAFER CITIES. THRIVING COMMUNITIES.**

# INTEROPERABILITY CHALLENGES



## Many users and roles

- Police, Fire, Ambulance/Emergency Medical, Search & Rescue, Water, Electricity, Public Works, Hospitals

## Variety of user equipment

- Radios, Smartphones, Tablets, Laptops, PCs

## Using disparate networks

- Cellular, WiFi, P25, TETRA, analog radio, landline telephone, DMR



***NEED BETTER COLLABORATION  
DURING TIMES OF CRISIS  
AND DISASTER***



# MOTOROLA'S INNOVATION



*INTRODUCING*  
**WAVE**

Make it possible for teams of people,  
in the field, or in the office,  
to effectively communicate and collaborate  
through voice and data  
– securely, reliably and in real-time –  
regardless of network, carrier, protocol or device  
whether deployed on-premise or in the cloud.



# WAVE AT-A-GLANCE



## RADIO NETWORKS

### PURPOSE-BUILT RADIOS



ANALOG / DIGITAL  
CONVENTIONAL / TRUNKED



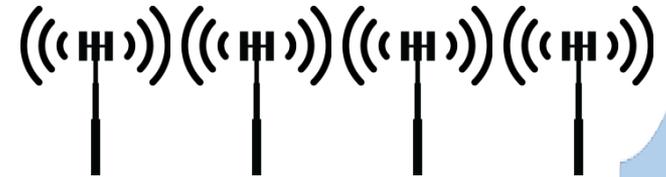
HARDWARE-BASED ENCRYPTION  
DISPATCH & DATA APPLICATIONS

## BROADBAND NETWORKS

### BYOD, ANDROID & IOS



PUBLIC CARRIER / PRIVATELY OWNED  
WIFI / 3G / 4G LTE



SOFTWARE-BASED ENCRYPTION  
PTT & DATA APPLICATIONS

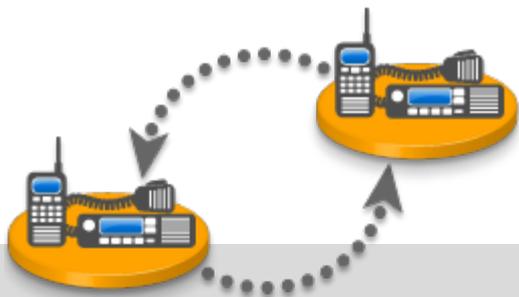


**WAVE**  
SECURE  
INTEROP  
PTT VOICE  
PRESENCE  
LOCATION  
TEXT



# THREE PILLARS OF WAVE

## *WHAT IT DOES:*



**Connect**  
Radio Systems

Connect disparate land mobile radio systems and remove barriers to interoperability and mutual aid



**Extend**  
Radio to Broadband

Extend communications beyond radio to include modern devices and broadband networks ensuring greater workforce connectivity, flexibility and interoperability



**Broadband**  
Push-to-Talk

Secure Push-to-talk applications over broadband provide users greater workforce collaboration and emergency decision-making

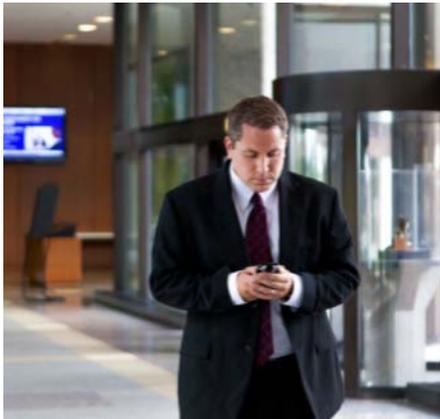




# GOVERNMENT USE CASES

## Potential Users

- Police and Fire Chiefs
- Off-duty officers
- Volunteer Firefighters
- Command & supervisory staff
- Sheriff and County Police
- Disaster response teams
- Detectives
- HAZMAT teams
- City Administration
- City, county and state officials



A **Police Chief** stays in touch with his officers on-duty while travelling across county



A **Civil Engineer** warns local authorities that a bridge is about to fail



An **volunteer fire fighter** remains connected and ready to respond



A **Disaster Management Official** contacts the City Mayor with progress reports on recovery efforts



# WAVE SUMMARY

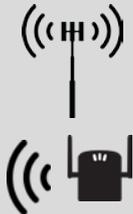
Enhance the Reach, Choice & Productivity of your  
Emergency & Disaster Response Workforce via WAVE



## Conventional & Trunked Radio

### Bridge Disparate Radio Systems Together

- Wireless integration for any radio system via WAVE Radio Gateway Unit & Donor Radios



## Over Any Network

### Connect With Any Broadband Network

- Public Cellular (3G/4G)
- Public WiFi
- Private LTE
- Private WiFi / LAN / WAN



## To Any Device

### Use Any Broadband Device

- Specialized/Ruggedized mobile devices
- Commercial Smartphones, Tablets and PCs
- Android & iOS BYOD





**THANK  
YOU**

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