



MicroAutomation Implements a Nationwide E-911 Solution in the Kingdom of Jordan Sponsored by the US Department of State

Background

The Hashemite Kingdom of Jordan holds a critical location in the Middle East. Bordering Iraq, Syria, Israel, the West Bank and Saudi Arabia, it represents one of the few United States allies in the region. Since the establishment of diplomatic relations more than six decades ago, Jordan and the United States have enjoyed strong relations based on common goals and mutual respect. The relationship has endured the complexities and volatilities of the Middle East and has demonstrated that the two countries can rely on each other as allies and partners.

In 2009, the U.S. Department of State sponsored an initiative to build a nationwide, state-of-the-art, Emergency Operations Center for the Kingdom of Jordan to enhance emergency response and security for the country. The gesture was part of a mutual cooperation commitment made by President George W. Bush to celebrate the 10 year anniversary of the inauguration of King Abdullah II ascent to the throne.

To meet this challenging objective, the U.S. Department of State reached out to Intergraph Public Safety, who has a solid record of providing safety and security solutions worldwide, to design and build the solution. Intergraph Public Safety engaged MicroAutomation to help design and implement a custom 911 solution based upon MicroAutomation's system integration expertise and experience in providing Enhanced 911 (E-911) solutions in the U.S.

Challenge

The overall mission of the project was to build an integrated and custom, state-of-the-art Emergency Operations Center (EOC) that combines E-911 capabilities with Computer Aided Dispatch (CAD), advanced Mapping, radio integration, wall-size video displays, and redundant telephony systems – in a modern, secure facility. The E-911 system needed to support multiple emergency response agencies throughout the country as well as provide centralized command and control during multi-agency and multi-incident emergencies. And, all applications and reports needed to be presented in Arabic.

While the desire was to model the solution after EOCs in the United States, certain locale challenges existed. Access to real-time location information from the wireless carriers was not standardized requiring negotiation and cooperation from the carriers to deliver the necessary data to the EOC. In addition, in the capital city of Amman,

house addresses were not referenced in a standard street number / street name format. making adapting to the standard U.S. Master Street Address Guide (MSAG) format difficult. And, finally, Jordanian telecommunications engineers were familiar exclusively with the Nortel Meridian brand of telephone switches necessitating a solution that would be compatible with Nortel Private Branch Exchanges (PBXs).



Solution

In partnership with Intergraph Public Safety, MicroAutomation worked with the Jordanian Public Security Directorate (PSD) to establish a state-of-the-art E-911 system in Amman, Jordan that allows residents needing emergency services to quickly reach the new EOC.

MicroAutomation introduced the latest call handling advancements and integrated them with public safety technologies provided by Intergraph Public Safety to create a world class Emergency Operations Center for Jordan. The solution leverages call center features to receive and route calls to available call takers utilizing standard Nortel Meridian PBXs familiar to the telecommunication staff. Automatic Location Identification (ALI) information is retrieved from 4 wireless carriers and 1 landline carrier as calls are received to display real-time location information for callers. The solution utilizes advanced geospatial and automated vehicle location capabilities to enhance the effectiveness of local law enforcement agencies.

To meet the stringent E-911 requirements demanded in the United States, the city of Amman, Jordan assigned standard "postal" addresses for each building and location in the city. MicroAutomation established independent data links to each of the wireless and

landline carriers and normalized the different address formats used by each carrier into a standard MSAG format.

The new Emergency Operations Center solution in Jordan consists of the following features:

- A primary EOC and a backup EOC geographically separated for disaster recovery.
- Dedicated, redundant, Nortel telephone switches for the primary and backup EOCs supporting standard telephone and VoIP capabilities and interconnected Police and Emergency Responders operating on private Cisco Call Manager systems.
- A completely independent training center for training activities and overflow call handling during major incidents
- ANI/ALI Controller with custom interfaces to 5 independent carrier databases and a local database for ALI information
- Modern, multi-function workstations for all emergency dispatchers, call takers, and supervisors with multiple screens for telephony control, CAD, GIS-based mapping, and access to both digital and analog radio systems.

- Advanced E-911 SoftFone on all dispatcher and calltaker workstations for full workstation telephone control.
- Multiple large screen monitors in a wall display configuration with the ability to show CCTV feeds from the city as well as display current operational status of the EOC from any supervisor workstation
- Digital Logging systems for call recording and quality monitoring

While the solution utilizes standard public safety and communications products available in the United States, it has been customized to meet the unique requirements in Jordan.

Results

Jordan's new Emergency Operations Centers in Amman provides state-of-the-art emergency, public safety, and security features for the Kingdom of Jordan. In addition, to providing Jordan with the latest public safety technologies available from the US, the new centers also serve as a showcase in the Middle East for advanced Emergency Operations.



About MicroAutomation

MicroAutomation's custom 911 Emergency Operations Center solutions are proven, powerful and reliable. Developed to be effortless and intuitive when every second counts, emergency response solutions from MicroAutomation expertly accommodate expanding communities, changing technologies and evolving 911 standards. MicroAutomation's purpose-built Next Generation solutions adapt seamlessly to all PSAP requirements and call-taker needs while adhering to NENA i3 specifications to meet the 911 technologies of today – and tomorrow.

MicroAutomation also offers Emergency Operations Center products and professional services including:

- Omni911 Next Generation 911
- Complete PSAP and ESINet architecture and design
- Configurable, custom application development
- Turnkey implementation
- Comprehensive 24-hour/7-day customer support
- NENA i3 standards compliance

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