CASE STUDY   DeKalb County, GA Fleetmapping and Training

CUSTOMER PROFILE

DeKalb County, Georgia is located in the Atlanta, Georgia metropolitan area. Within the county, 39 agencies share the radio communications system. Additionally, the county interoperates with at least 50 other public safety agencies in the Atlanta metropolitan area. DeKalb County is also a member of the Atlanta Area ITAC group, Urban Area Security Initiative (UASI), and the InterOp Area 7 group.

TECHNOLOGIES

The fleetmap design involved a solution that facilitated the migration of DeKalb County's legacy Motorola SmartNet radio trunking system to a new Motorola Astro P25 radio network. Other technologies requiring interoperability solutions included conventional radio channels on multiple frequency bands and interface to other Motorola SmartNet and SmartZone Systems in the region.

CONTEXT OF ASSIGNMENT

The new DeKalb County P25 radio system replacement is one of several planned for the region and requiring wide-area planning. The project required documentation of the existing Motorola SmartNet radio system fleetmap by reading existing subscriber radio templates, and then conversion of the existing fleetmap to a new P25 format. Once this was complete, Commdex conducted workshops and meetings with the user agencies to refine the new fleetmap for enhanced interoperability. Commdex also published a Talkgroup Definition Document and a Talkgroup List to ensure that future growth considerations could be addressed.

Other requirements included planning for the additional jurisdictions within the county that also shared the original Motorola SmartNet system and were migrating to the new platform. Additionally, the dispatch equipment was upgraded to the new Motorola internet protocol-based MCC 7500 console network. The assignments also required interoperability solutions for regional, intrastate, and interstate communications.

COMMDEX SOLUTION

First, Commdex documented the existing fleetmap by reading the Customer Programming Software (CPS) from sample, existing radios. Once this was complete, presentations and workshops were held with all 39 of the county departments as well as with the Emergency Communications Center (ECC) personnel to refine the fleetmap. Results were circulated to all county agencies operating on the system for review and comment.

To ensure that future growth requirements were taken into consideration, Commdex worked with county representatives to develop a Talkgroup naming convention that could be used throughout the region as additional systems joined. Additionally, subscriber radio templates were designed that standardized mapping for local, regional, intrastate communications and interoperability.

The final package included a fleetmap master plan for the P25 radio network that defined all Talkgroups on the system and conventional resources requiring interfaces for interoperability. It also included master radio subscriber definitions for all DeKalb County agencies as well as master definitions for jurisdictions migrating to the new system. Regional and state interoperability were defined by "zones" within the subscriber radio map where Talkgroups and conventional channels could be assigned for this purpose as agreements and mutual radio resources were developed for mutual aid.

COMMDEX ROLES

Commdex served as project lead for the fleetmapping effort, working closely with the Motorola project team and DeKalb County representatives. Commdex directed the migration of entities to updated technologies, conceptualized and implemented wide-area planning, documented and converted existing fleetmaps, conducted workshops and active review between all parties, designed radio templates for communication and interoperability, and established a sound technological foundation for future growth considerations.