Modernizing the Emergency Communications Center (ECC) at NIH

THE PROBLEM

The National Institutes of Health found its public safety facilities and systems in need of upgrading. Existing technologies to support fire, police, emergency management, etc., were not integrated, causing challenges with communicating and collaborating. The NIH sought help in delving into the complex organization, evaluating both technology and business process. It called upon PURVIS Systems to conduct a thorough needs assessment, design, project management and system integration services.

THE APPROACH

In Phase I of the project, PURVIS Systems began methodically analyzing the organization's existing technology infrastructure and its current business methods. Redundant systems and dependencies were identified and cataloged. Then, subsystems were analyzed in greater detail, and a thorough needs analysis was completed across the entire organization. Specifically PURVIS provided engineering and technical services to the Security and Emergency Response Division (SER). This effort included conducting a review of all the ECC systems, both hardware and software. All available drawings, schematics and design documents were collected and reviewed. A Physical Configuration Audit (PCA) was conducted of all ECC systems, networking devices, and documentation. PURVIS compiled all data and developed an Integration Assessment Report at the conclusion of this initial Phase.

CUSTOMER PROFILE

The National Institutes of Health (NIH) is a biomedical research facility primarily located in Bethesda, Maryland, USA. An agency of the United States Department of Health and Human Services, it is the primary agency of the United States government responsible for biomedical and health-related research. It sits on a 300+ acre campus in Bethesda, MD supporting a workforce of 20,000 people and 20 institutional divisions.

LOOKING AHEAD

The future phases of the NIH program may include the extension of the emergency reponse network capacity and connectivity to integrate campus locations in Maryland, North Carolina, and Montana. The concept behind this design will be unified communications and information sharing for the purpose of better, more coordinated responses using the available NIH resources.

PURVIS SYSTEMS

Effective Technology Solutions for Public Safety

THE SOLUTION

In Phase II of the project, a full Concept of Operations (CONOPS) was developed by PURVIS, along with an initial design for the integration of all security and emergency response systems with the next generation ready 9-1-1 system. The design included program/project architecture; completed facility designs for a primary and backup Emergency Communication Center; and a design for a critical emergency response network infrastructure to transport voice, data and video. The preliminary design presented the requirements to integrate alarms, events and voice with the campus closed circuit camera system.

In Phase III, PURVIS provided the over site and coordination during the build out, test and validation, and cutover of the alternate ECC. The 9-1-1- dispatchers from the primary ECC were relocated to this fully functional backup facility in January 2013.

PURVIS continues to provide over site and coordination during the demolition and build out of the primary ECC. PURVIS will oversee the test and validation, and cutover for this facility as well. When completed the 9-1-1- dispatchers will be returned to the primary ECC and the backup will remain operational.

THE RESULTS

With the help of PURVIS Systems, the National Institutes of Health now has a cohesive view of its existing technologies. The NIH considers PURVIS Systems to be a primary program management resource, giving coordinating and oversight responsibilities to this proven external partner.

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