



**PROJECT NAME:** Design and Implementation Services for a Channel 16 Radio System for Fire/EMS Dispatching, New York City, NY (Contract 2)

**Concepts To Operations** was retained by the Department of Information Technology and Telecommunications (DoITT) to provide Radio Frequency (RF) engineering services for the successful engineering, design, procurement, implementation supervision, and system acceptance testing services to implement a turnkey, citywide multi-agency, digital, trunked, **P25** compliant UHF radio system. The system serves the following agencies:

- NYC Sheriff Department
- NYC Parks and Recreation
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- Department of Transportation
- FDNY Fire Marshalls, Inspectors, Maintenance, etc.
- Department of Information Technology and Telecommunications
- Department of Sanitation
- Department of Corrections
- NYC Health and Hospital Corporation

These agencies are supported on a **24 channel, 23 site, simulcast trunked system**. The system is compliant with P25 Standards. Provision for interoperability with NYPD and other jurisdictions were included.

**PHASE I: Needs Assessment and System Design**

- ✓ Performing a citywide radio traffic analysis;
- ✓ Performing radio propagation measurements;
- ✓ Interviewing selected agency representatives;
- ✓ Determining system requirements;
- ✓ Developing a conceptual design;
- ✓ Determining impact on current agency operations;
- ✓ Preparing necessary FCC license modifications;
- ✓ Determining site construction requirements;
- ✓ Developing a detailed system design; and
- ✓ Developing Request for Proposal(s).

**PHASE II: Evaluation of Responses, Installation Supervision and Quality Assurance**

- ✓ Providing proposal evaluation and vendor recommendations;
- ✓ Aid in contract negotiation and award;
- ✓ Site Acquisition and Construction;
- ✓ Factory Staging;
- ✓ Installation oversight;
- ✓ System testing;
- ✓ System training; and
- ✓ System acceptance.

During Phase II face to face team meetings were held every other week and progress reports developed to track the project progress. In addition project team conference calls were held once a month. The team was composed of representatives of DoITT, FDNY, CTO, equipment vendor and the City's quality control vendor.

CTO attended and participated in system testing and observed system training to ensure vendor's contract obligations. The resulting system handles **13,000 users** and has **95% on-street coverage** which has improved the operation of public safety and other functions provided by the City of New York. The system as designed and installed exceeded all expectations.