

**DTFWA-05-A-00005****Next Generation Air Transportation System Emergency Management Operations Control System (NextGen EMOCS)**

Purpose: The purpose of this task is to plan for the development and implementation of a fully operational low altitude airspace emergency management communications, navigation, surveillance, and weather system, applicable to both the civil and government first responders, which can support both fixed and rotary wing operations. Such a system must be comprehensive and provide for a deployable and viable platform capable of applying NextGen (also known as NGATS) enabling programs, such as, but not limited to, Automatic Dependent Surveillance – Broadcast (ADS-B) and Network Enabled Operations (NEO). The system needs to be easily transportable, self contained, and set up quickly in austere conditions. This is to be a quick reaction project to support operational evaluations in FY08 and FY09.

Background: The task provides for planning the implementation requirements of foundational NGATS capabilities. These foundational capabilities are the prerequisite for the eventual transformation of the National Airspace System (NAS) by 2025. They also allow NAS users to derive near-term benefits from the NextGen program. As defined in the NextGen vision in Public Law 108-176, these early operational initiatives are to be facilitated with planning support from the aviation community stakeholders whose participation in the Joint Planning and Development Office (JPDO) is managed through the NGATS Institute. The results of these planning efforts can assist the appropriate Federal agencies in managing the system development and implementation to both public and private sector users.

The results of this effort will be used to provide additional guidance and address pre-implementation issues for the refinement of a detailed NextGen Concept of Operations (CONOPS) and Enterprise Architecture. A key area of interest is the safe integration of non-scheduled flight operations in a congested or high density operations area. All potential solutions shall be aligned with published JPDO/NextGen planning and development documentation including, but not limited to, the Next Generation Air Transportation System Integrated Research Plan, CONOPS and Operational Improvement Roadmap as well as concurrently planned NextGen demonstrations such as the NEO Demo Spiral One effort funded by the Federal Aviation Administration (FAA), Department of Homeland Security (DHS) and the Department of Defense (DoD).

Statement of Work:**Subtask 1: Solutions**

The awardee shall provide a detailed approach, proposed architecture, and a plan of action that identifies potential solutions to provide coordination for emergency air services and disaster response assets in a low altitude route system operating in a multiple landing site environment, with emergency evacuation intermodal transportation access sites, and utilizing interactive pilot-controller-dispatcher displays. All proposed procedures and architectures must conform to standardized emergency management operations and safety procedures for the targeted local, state, and federal emergency management operations requirements. A key feature in this proposed operational demonstration is the development of secure, integrated emergency management information systems linking first responders at the local level with the national command authority. This demonstration is to investigate the implementation of Network-Enabled Operations (NEO) through FAA System-Wide Information Management (SWIM), DHS OneNet and DoD Global Information Grid capabilities. These agency systems support situational awareness applications for improved decision making. The awardee shall also provide guidance on how best to provide shared situational awareness among:

1. Federal state and local emergency management agency officials and operations centers,
2. Emergency Medical Services (EMS),
3. flight dispatchers and pilots,
4. FAA air traffic operations,
5. hospital trauma directors,
6. Federal Emergency Management Agency (FEMA) assisted mass casualty evacuation operations,
7. Transportation Security Administration (TSA) aviation security operations, and,
8. law enforcement, fire fighting, and National Guard resources.

Subtask 2: Utilization

The awardee shall identify potential urban and other critical infrastructure areas where an integrated air-ground emergency management system, incorporating current adaptable weather information, security and environment-friendly designs, would be most beneficial. Additionally, the study and its recommendations should be such that it provides the Department of Homeland Security and specifically, FEMA, a prioritized list of demonstration sites to include site selection criteria and guidance in site selection and the required capabilities for NextGen EMOCS. The awardee shall also provide guidance on how the proposed sites facilitate or constrain the utilization shared situational awareness by Federal state and local emergency management agency officials and operational centers.

Subtask 3: Implementation Recommendations

The final report for this study shall provide recommended implementation procedures for proposed sites, with suggested milestone schedules, and estimated resources to include

costs of the emergency management operations system to permit early deployment within two years of the task request completion.

Schedule and Deliverables:

SUBTASK 1

Description: NextGen EMOCS Solutions
 Deliverable: Project Report
 Due: 5 months after award of contract
 Notional Cost: 60%

SUBTASK 2

Description: Utilization Study
 Deliverable: Project Report
 Due: 6 months after award of contract
 Notional Cost: 10%

SUBTASK 3

Description: Implementation Recommendations
 Deliverable: Project Report for subtask 3, combined with reports for subtask 1 & 2
 Due: 8 months after contract award
 Notional Cost: 30%

Subtask	Deliverable	Due Date	Notional Cost
1	Subtask Project Report	5 months after contract award	60%
2	Subtask Project Report	6 months after contract award	10%
3	Subtask and Final Project Report	8 months after contract award	30%
Total			NTE \$350K

Desired Resource Selection Criteria

In addition to the minimum criteria specified in Section 8.1 of the Institute’s Task Award Process (<http://www.ncat.com/ngats/index.html>), other desired resource selection criteria include:

- 1) Experience with emergency command, control, & communications.
- 2) DHS Security Operations

Deliverable Acceptability Criteria

Deliverables that demonstrate the ability to conduct and document detailed and comprehensive evaluations, and well founded and supportable conclusions.