

EXECUTIVE SUMMARY

Final HAZMAT Safety and Security Field Operational Test: Public Sector Detailed Test Plans

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Coordination and information sharing among law enforcement and emergency response agencies at the local, state, and national level is a constant challenge. Often, the inability to effectively gather and distribute information among public agencies is a situation that hampers preparation and response efforts in the event of a terrorist attack or a major hazardous material spill. One potential model for enhanced information gathering, processing, and dispersal to law enforcement and emergency response agencies is being tested under the auspices of the Federal Motor Carrier Safety Administration-led HAZMAT Safety and Security Field Operational Test (FOT), as the Public Sector Test.

The Public Sector Test is examining the potential improvements in public sector response capabilities utilizing a Public Sector HAZMAT Safety and Security Reporting Center (PSRC) as the information collection and dissemination point. The PSRC will coordinate information gathered from technologies that are in various stages of development to create centralized information processing and command and control capabilities. It is the goal of the test to identify and evaluate quantitative and qualitative results and metrics concerning the testing of first response technologies and the PSRC concept. This overall system seeks to be responsive to the following three public sector Functional Requirements developed by USDOT for the broader HAZMAT FOT:

- **Requirement 2.2:** HAZMAT driver identification and verification by roadside safety enforcement officers.
- **Requirement 2.4:** HAZMAT cargo route adherence by the dispatcher and roadside safety enforcement officers, as required, based on the quantity and type of HM being transported.
- **Requirement 2.11:** Real-time emergency alert message notification by the dispatcher to local and state law enforcement officials and emergency responders.

This add-on FOT to the HAZMAT Safety and Security FOT seeks to demonstrate a standardized approach to the data collection and dissemination requirements. It is anticipated that this standardized approach will be most efficient for the ultimate users (fire, police, emergency services, law enforcement and security agencies) of HAZMAT safety and security messages for prevention and response. The FOT demonstration of this technology solution for law enforcement and the emergency response community is designed to interface with the “carrier-side” technology systems and address some of the public sector hazardous materials safety and security needs. This demonstration will be conducted in parallel with the FOT already underway.

Key organizations deploying the Public Sector component of this FOT include: Battelle; the Commercial Vehicle Safety Alliance (CVSA); Qualcomm, and the Spill Center.

The Public Sector FOT will leverage the following technologies that are also being deployed in the larger HAZMAT Safety and Security FOT:

- Satellite Communications
- Global Login

- Biometric Global Login
- Electronic Supply Chain Manifest
- Geofencing
- Panic Buttons (In-dash and Wireless)

The public sector architecture is comprised of a Public Sector Reporting Center; Data Silo relational database; Smart Agents providing exception decision rules; and a number of information dissemination technologies. These elements are described as follows.

The evaluation effort for this test will focus on testing the two SOW-stated Public Sector FOT hypotheses:

- 1) *The response times for emergency and enforcement personnel to respond to a HAZMAT security or safety incident can be improved through the implementation of these technologies and the reporting center operational concept.*
- 2) *The quality of the information provided to first responders will improve through the implementation of these technologies and the reporting center operational concept.*

The Evaluation Team will implement the following two primary evaluation methods to assess these hypotheses:

- **Public Sector Interviews and Surveys:** Through interviews and survey questionnaires delivered to public sector participants in the FOT, the Evaluation Team will collect qualitative information concerning the quality and timeliness of information provided by the test technologies and the PSRC. Additionally, the effort will collect user perceptions of effectiveness, appropriateness to the enforcement operational environment and recommendations for system enhancements/improvements.
- **Field Testing:** Through tailored testing, the PSRC technology will be applied to 6 of the existing FOT scenarios (involving FOT Functional Requirements 2.2, 2.4 and 2.11). On-site testing will be conducted with carriers and state participants in Illinois and California in the months of February and March. The on-site tests will be involving scenario 4A and scenario 4B with the states of Illinois and California state enforcement, respectively. The objective of the test is not only to assess whether the PSRC systems adequately meet the public sector functional requirements with respect to generating customized alerts and handling data generated and delivered as part of the larger FOT, but to quantify and qualify potential improvements in timeliness of alert notification. Assessment of potential improvements in timeliness of information transfer among public sector agencies and private stakeholders shall be included in the Security Assessment being conducted under the auspices of the larger FOT evaluation effort. Field testing events at these sites are currently being planned in conjunction with the deployment team and the public and private sector test participants.