Using R&D Funding to fill gaps in the Interagency Rad/Nuc Response and Recovery Architecture

More than three quarters of a million people pass through New York City’s Grand Central Terminal (GCT) every day. The Metropolitan Transportation Authority (MTA) currently deploys sensor technology to detect chemical, biological, and radiological threats, but the agency wants to expand its capability to detect radiological releases in or around GCT. Specifically, this project will install a radiological emergency management system (REMS) in Grand Central Terminal, integrate it into existing security monitoring systems, and, using the data gathered from the technology, draft a CONOPS of a system to be adopted by the MTA in the future.

Partnering with the MTA to improve radiological incident awareness

The National Urban Science and Technology Laboratory (NUSTL) will work with the MTA Police to develop technical requirements documents, including a Mission Needs Statement for radiological alert system and reports on specific operational requirements based on the instillation and piloting of the REMS system. This helps DHS S&T to learn more about responder technical needs in radiological alert and initial response.

Focusing R&D efforts to avoid commuter exposure to radiation through early detection processes

While an initial technology has been identified for piloting by responders, this project is designed to assist responders in identifying and documenting operational solution requirements for potential development in future fiscal years.

Anticipated Results of this Project

To improve the MTA’s ability to detect a radiological release, this project will:

- Develop plans for initial notification and response
- Identify requirements for future radiation detection technology specifically designed for high traffic, critical infrastructure

Building Critical Relationships and Partnerships to support Rad/Nuc Preparedness

As with all projects in DHS S&T’s Rad/Nuc Response and Recovery R&D portfolio, this work relies heavily on first responders and interagency workgroups to assist in the scoping and prioritizing initiatives. The research and testing associated with this project is being conducted by the following DHS S&T partners:

- National Urban Science & Technology Laboratory
- Metropolitan Transportation Authority
- Lawrence Livermore National Laboratory
- Brookhaven National Laboratory

To learn more about DHS S&T’s Radiological/Nuclear Response and Recovery R&D Portfolio please contact Ben Stevenson, NUSTL Program Manager, at benjamin.stevenson@hq.dhs.gov.