



Transit Incident Drills and Exercises

Abstract: This Standard discusses minimum practices for conducting transit incident drills and exercises.

Keywords: drills, exercises, Homeland Security Exercise and Evaluation Program (HSEEP), security, terrorism.

Summary: Drills and exercises allow frontline employees to senior officials to validate training and to practice strategic and tactical prevention, protection, response and recovery capabilities in a risk-reduced environment. Exercises are the primary tool for assessing preparedness and identifying areas for improvement, while demonstrating community resolve to prepare for and prepare recovery from major incidents. Well-designed and well-executed exercises are the most effective means of assessing and validating policies, plans, procedures, training, equipment, assumptions and interagency agreements; clarifying roles and responsibilities; improving interagency coordination and communications; identifying gaps in resources; measuring performance; and identifying opportunities for improvement. The basis of an effective exercise program employs a cycle of increasingly complex exercises with scenarios that are realistic and threat-based through a systematic evaluation program.

Scope and purpose: This provides general guidance based on the Homeland Security Exercise and Evaluation Program (HSEEP), to transit agencies in developing effective drills and exercises. Exercises and drill scenarios based on natural, technological or human-caused incidents help transit agencies gain objective assessments of their capabilities so that gaps, deficiencies and vulnerabilities are addressed prior to a real incident.

In those cases, the government regulations take precedence over this standard. APTA recognizes that for certain applications, the standards or practices, as implemented by individual rail transit agencies, may be either more or less restrictive than those given in this document.

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1. Homeland Security Exercise and Evaluation Program (HSEEP)

HSEEP is a capabilities-based exercise program that provides standardization for exercises and drills and a methodology and consistent terminology for designing, developing, conducting and evaluating all exercises. It provides tools and resources to help build self-sustaining exercise programs and includes a cycle, mix and range of exercise activities of varying degrees of complexity and interaction. HSEEP also meets the National Incident Management System (NIMS) and the National Response Framework (NRF) doctrine and protocols.

1.1 Risk assessment considerations

Agencies shall evaluate risks and use individual risk assessments to determine the core capabilities to establish the types of drills and exercises that will be conducted. Scenarios for the exercises should be based on risks assessments and corrective actions from previous exercises. Drills and exercises shall utilize a “building block” approach to ensure that the exercises build upon one another.

1.2 System-wide assessment

Transit systems shall refer to their existing security risk assessments to determine the risks to their systems’ assets and the surrounding environment. Transit systems that do not have an existing security risk assessment shall develop one using current government guidelines.

1.3 Passenger facility risk assessment

To determine specific passenger facility risks, refer to the agency assets’ criticality ranking and the security and risk management issues for each specific location being considered.

2. Types of exercises

2.1 Discussion-based exercises

Discussion-based exercises which focus on strategic issues, policies and procedures should be used as a starting point in the building block approach to the cycle. Discussion-based exercises include seminars, workshops and tabletop exercises (TTXs). These types of exercises will highlight existing plans, policies, mutual aid agreements and procedures and will familiarize agencies and personnel with current or expected capabilities.

2.1.1 Seminars

Seminars are employed to orient participants to, or provide an overview of, authorities, strategies, plans, policies, procedures, protocols, response resources or concepts and ideas.

2.1.2 Workshops

Workshops are used to update, develop or present new policies and procedures.

2.1.3 Tabletop exercises

TTXs involving senior staff or other key personnel in an informal setting are aimed at facilitating understanding of concepts plans, policies and procedures, identifying strengths and shortfalls, or achieving a change in attitude.

2.2 Operations-based exercises

Operations-based exercises represent the next iteration of the exercise cycle and are used to validate the plans, policies, agreements and procedures solidified in discussion-based exercises. Operations-based exercises include drills, functional exercises (FEs) and full-scale exercises (FSEs). Operations-based exercises are

characterized by actual response, mobilization of equipment and resources, and commitment of personnel, usually over an extended period of time.

2.2.1 Drills

A drill is a coordinated, supervised activity usually employed to test a single specific operation or function in a single agency. Drills are commonly used to provide training on new equipment, to develop or test new policies or procedures, or to practice and maintain current skills.

2.2.2 Functional exercises

A Function Exercise (FE) is focused on exercising the plans, policies, procedures and staffs of the direction and control nodes of Incident Command (IC) and Unified Command (UC). Events are projected through an exercise scenario with event updates that drive activity at the management level. Movement of personnel and equipment is simulated.

2.2.3 Full-scale exercises

Full Scale Exercises (FSE) are multiagency, multijurisdictional exercises that test many facets of emergency response and recovery. They include many first responders operating under the Incident Command System (ICS) or Unified Command System (UCS) to effectively and efficiently respond to and recover from an incident. An FSE focuses on implementing and executing the plans, policies and procedures developed in discussion-based exercises and honed in previous, smaller, operations-based exercises. First responders and resources are mobilized and deployed to the scene, where they conduct their actions as if a real incident had occurred (with minor exceptions).

An FSE provides an opportunity to test mutual aid agreements in response to a simulated live event. Exercise program management and planning process

Program management functions in a cyclical way, much as exercise planning does, in that it starts with a plan, a budget or a funding request; moves on to exercise execution; and finally completes a full cycle with improvement planning. Exercise program management involves several elements, including project management, budgeting, grant management, hiring, funding allocation, exercise planning, exercise conduct, reporting, improvement tracking and expenditure tracking.

3. Emergency exercise development

The Exercise Planning Team is the backbone of an exercise because the planning team members develop the foundation upon which the rest of the exercise is built. The level of interest, cooperation and commitment from members can be the difference between a successful and an unsuccessful exercise. Transit agencies shall utilize the HSEEP program as a guideline for exercise development. HSEEP recommends conducting exercise planning meetings. These meetings normally consist of an initial, mid-term, and final planning conferences. Concepts and objectives, scope of the exercise, agencies and departments involved are determined in these meetings.

3.1 Organization of the Exercise Planning Team

The Exercise Planning Team designs, develops, conducts and evaluates exercises. The Team determines exercise objectives, creates scenarios and develops documentation. Exercises require a great amount of planning, creativity and preparation, and the Exercise Planning Team must use the hard work, experience and energy of all members to create and conduct an effective exercise. The size and scope of the exercise shall determine the size of the planning team.

3.1.1 Planning team leader

The planning team leader assigns tasks and responsibilities and has the overall responsibility for guiding the planning process and ensuring the successful implementation of the exercise.

3.1.2 Operations group

The operations group develops evaluation criteria and includes representatives from key agencies identified by the desired exercise concept. These representatives are responsible for selecting the exercise design objectives, constructing the scenario and protecting the safety of the exercise participants. They also identify representatives to act as controllers who will manage the exercise site.

3.1.3 Planning group

The planning group reviews policies and procedures relevant to the exercise and identifies and supplies an adequate representation of nonparticipating agencies needed for exercise response. These representatives also identify and train appropriate personnel capable of conducting the exercise evaluation.

3.1.4 Logistics group

The logistics group provides all supplies, equipment, services and facilities for the exercise.

3.2 Identifying exercise goals and objectives

Objectives should follow the SMART concept:

- **Simple:** Easily understood.
- **Measurable:** Can be gauged against a standard.
- **Achievable:** Challenging but not impossible.
- **Realistic:** Plausible for the jurisdiction and germane to what the agency wants to accomplish.
- **Task-oriented:** Focused on a task and exercise objectives (scenario development).

Objectives should be tailored to the training audience. Training objectives for first responders may not be the same as for managers or supervisors. Consider a “suite” of exercises with each one appropriate to the training audience, but using the same scenario. The scenario provides the backdrop that drives exercise discussion or role play. It should be risk-based and realistic to a current threat facing the agency or community. The scenario should be as realistic as possible, challenging to the participants and be developed based on the designed objectives.

3.3 Developing an evaluation plan and exercise briefing materials

An exercise shall be documented to ensure that the information learned can be used to validate current plans, procedures and capacities of the agency. HSEEP provides the process for exercise conduct and evaluations..

4. Conducting the exercise

Roles:

- **Exercise planning Team:** Designs exercise, determine objectives, coordinate participation, arrange for equipment specific to exercise objectives, secure staff to support the exercise process, pre-brief management
- **Controller:** Conducts the exercise, ensures specific scenario objectives are met, ensures the evaluators understand their role and complete it properly
- **Evaluator:** Correctly evaluates the activities and objectives of the exercise, lead evaluator conducts exercise “hot wash”

5. Evaluation, after-action reports and improvement planning

Transit agencies shall perform a formal evaluation of exercises and local significant real-world events in accordance with the HSEEP program.

Exercise evaluation and after action reporting maintains a fundamental link to improvement planning because it assesses an entity's performance in an emergency scenario and identifies strengths and areas for improvement. Through this process, evaluation identifies improvement opportunities, and improvement planning provides a disciplined process for implementing corrective actions.

An after-action report (AAR) captures observations of an exercise and makes recommendations for post-exercise improvements. An IP identifies specific corrective actions, assigns those actions to responsible parties and establishes target dates for action completion. The AAR and IP should be printed and distributed jointly as a single AAR/CAP following an exercise.

5.1 Developing the after-action report

The exercise AAR should include accurate feedback on the performance during the exercise. It provides participating agencies with information needed to assess the preparedness of the agency, and to identify needed resources and support. The AAR should include a summary of what happened, analysis how essential activities were performed, and major strengths and areas for improvement. The AAR needs to be submitted to those with the authority to implement corrective action.

5.2 Developing the corrective action program

Lessons learned from the exercise shall be identified in measurable steps that will result in an improved response, including tracking the methods used and assigning personnel to implement the corrective actions.

6. Frequency of exercises

An effective exercise program uses a combination of exercise types to effectively accomplish exercise-specific objectives and program goals. Although each exercise type can be executed as a single activity, greater benefits can be achieved through a building-block approach that exposes program participants to gradually increasing exercise complexity.

In order for an entity to be considered HSEEP-compliant, it must satisfy four distinct performance requirements:

- Conducting an annual training and exercise plan workshop and developing and maintaining a multi-year training and exercise plan
- Planning and conducting exercises in accordance with the guidelines set forth in HSEEP Volumes I-III
- Developing and submitting a properly formatted after-action report/ corrective action program (AAR/CAP). The format and submission timeline for the AAR/CAP is found in HSEEP Volume III.
- Tracking and implementing corrective actions identified in the AAR/CAP.

In accordance with the TSA/FTA Security and Emergency Management Action Items for Transit Agencies, transit agencies shall conduct exercises as follows:

- HSEEP compliant exercises shall be conducted annually in accordance with TSA/FTA guidelines.
- Conduct exercises in accordance with agency system security programs and emergency management plans.

- Participate as an active player in regional exercises. Coordinate with regional security partners, including federal, state and local government representatives and other affected entities (e.g., other transit agencies or rail systems) to integrate their representatives into exercise programs.
- Conduct debriefings (hot wash) immediately following the exercise.
- Develop after-action reports and review results of all exercises.
- Update plans, protocols and processes to incorporate after-action report findings, recommendations and corrective actions.

References

Homeland Security Presidential Directive 5: Management of Domestic Incidents.

http://www.dhs.gov/xabout/laws/gc_1214592333605.shtm

Homeland Security Presidential Directive 8: National Preparedness.

http://www.dhs.gov/xabout/laws/gc_1215444247124.shtm

Federal Emergency Management Agency: NIMS Resource Center. <http://www.fema.gov/emergency/nims/>

Homeland Security Exercise and Evaluation Program – Volumes I-IV.

https://hseep.dhs.gov/pages/1001_HSEEP7.aspx

TSA/FTA Security and Emergency Management Action Items for Transit Agencies.

<http://transit-safety.fta.dot.gov/Security/SecurityInitiatives/ActionItems/default.asp>

FTA Transit Agency Security and Emergency Management Protective Measures resource document.

<http://transit-safety.fta.dot.gov/Publications/order/singledoc.asp?docid=439>

APTA Emergency Response and Recovery Program.

<http://www.aptastandards.com/LinkClick.aspx?fileticket=e1OcyH%2Bggfo%3D&tabid=292&mid=1507>

Definitions

drill: A supervised activity to test a procedure that is a component of the overall Emergency Management Plan. A drill may be a step leading towards an exercise, but may be an actual field response. The true value of a drill lies in its ability to highlight a limited portion of the overall Emergency Management Plan and to examine it closely.

exercise: An instrument to train for, assess, practice and improve performance in prevention, protection, response and recovery capabilities in a risk-free environment. Exercises can be used for testing and validating policies, plans, procedures, training, equipment and inter-agency agreements; clarifying and training personnel in roles and responsibilities; improving interagency coordination and communications; identifying gaps in resources; improving individual performance; and identifying opportunities for improvement.

full-scale exercise: An exercise that evaluates the operational capability of emergency response management systems in an interactive manner. It includes the mobilization of emergency personnel and the resources required to demonstrate coordination and response capability. A full-scale exercise tests total response capability in a manner as closely resembling a real emergency as is possible.

functional exercise: A fully simulated interactive exercise that tests one or more functions in a time-pressured realistic situation that focuses on policies, procedures, roles and responsibilities.

hot wash: A functional discussion held immediately following an exercise among exercise players from each functional area.

Homeland Security Exercise and Evaluation Program (HSEEP): A capabilities- and performance-based exercise program that provides standardized policy, doctrine and terminology for the design, development, conduction and evaluation of homeland security exercises. HSEEP also provides tools and resources to facilitate the management of self-sustaining homeland security exercise programs.

multi-year training and exercise plan: A plan that provides a mechanism for long-term coordination of training and exercise activities toward an entity's preparedness goals. Such a plan describes the program's training and exercise priorities and associated capabilities and aids in employing the building-block approach for training and exercise activities. Within a multi-year training and exercise plan, the multi-year schedule graphically illustrates training and exercise activities that support the identified priorities. The schedule is color-coded by priority and presents a multi-year outlook for task and priority achievement. As training and exercises are completed, the document can be annually updated, modified and revised to reflect changes to priorities and new capabilities that need to be assessed.

orientation seminar: An informal discussion designed to familiarize participants with roles, plans and procedures and to resolve questions of coordination and assignment of responsibilities.

tabletop exercise: Exercise using paper (or PowerPoint) and verbal scenarios to evaluate the Emergency Management Plan and procedures effectiveness with a minimum amount of stress. A paper drill intended to demonstrate the working and communication relationships of functions found within the plan.

Abbreviations and acronyms

AAR	after-action report
APTA	American Public Transportation Association
CEO	chief executive officer
COOP	Continuity of Operations Plan
CPX	command post exercise
DHS	Department of Homeland Security
EEG	Exercise Evaluation Guide
FE	functional exercise
FSE	full-scale exercise
GETS	Government Emergency Telecommunications Service
HSEEP	Homeland Security Exercise and Evaluation Program
IC	Incident Command
ICS	Incident Command System
IED	improvised explosive device
IP	improvement plan
IPC	Initial Planning Conference
MPC	Midterm Planning Conference
MSEL	Master Scenario Events List
NECP	National Emergency Communications Plan
NEP	National Exercise Program
NIMS	National Incident Management System
NRP	National Response Plan
OCC	Operations Control Center
OEC	DHS Office of Emergency Communications
TA	transit agency
TCL	Target Capabilities List
TTX	tabletop exercise
SCIP	Statewide Communication Interoperability Plans
UC	Unified Command
UCS	Unified Command System
UTL	Universal Task List
WMD	weapon of mass destruction