

Communications-Specific Tabletop Exercise Methodology



**Homeland
Security**

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Note: Additional forms, samples, and templates are available in the Homeland Security Exercise and Evaluation Program Library, Volume IV at <http://hseep.dhs.gov/>.

Introduction

Executive Summary

The Department of Homeland Security's (DHS) *Communications-Specific Tabletop Exercise Methodology* is intended to help local policymakers and Federal technical assistance programs plan, design, and conduct communications-specific exercises in collaboration with the emergency response community. Tabletop Exercises (TTXs) are an important component of interoperability training and exercises. Replicable nationwide, the *Communications-Specific Tabletop Exercise Methodology* may be tailored to the specific needs, realities, and organizational cultures of diverse localities.

In keeping with its practitioner-driven approach, DHS developed the *Communications-Specific Tabletop Exercise Methodology* in partnership with local, tribal, state, and Federal emergency responders who participate in TTX planning, design, execution, and evaluation processes. By incorporating the objective input of practitioners, the methodology develops realistic exercise scenarios, tests actual response processes and procedures, generates usable exercise results, and enables the identification and implementation of effective interoperable communications solutions.

Interoperable Communications

Communications interoperability refers to the ability of emergency response agencies—police officers, firefighters, emergency medical services (EMS) personnel, and emergency managers—to exchange data and voice communications across disciplines and jurisdictions on demand, in real time, and as authorized. During coordinated response operations, these traditional practitioners also need to communicate with partner disciplines and organizations (e.g., the Federal Emergency Management Agency, the National Guard, the Coast Guard, public utilities, transportation agencies, and private security forces).

Many people assume that emergency response agencies across the Nation are already interoperable. In actuality, emergency responders often cannot talk to some parts of their own agencies—let alone communicate with agencies in neighboring cities, counties, or states. Too often, inadequate and unreliable communications compromise emergency responders' ability to respond effectively to incidents ranging from day-to-day operations to large-scale emergencies.

Interoperability is not solely a technology problem that can be solved with the "right" equipment or the "right" communications system. Interoperability is a multi-dimensional issue, as graphically depicted by the DHS Interoperability Continuum (figure 1). This framework visually depicts the core facets of interoperability that must be addressed to ensure successful and sustained interoperability improvements. The Interoperability Continuum facilitates discussions between emergency responders and policymakers as they collaborate to frame key initiatives for their short- and long-term interoperability efforts. Additionally, the Interoperability Continuum helps emergency response practitioners and policymakers evaluate the maturity of their agencies' and regions' interoperable communications capabilities.

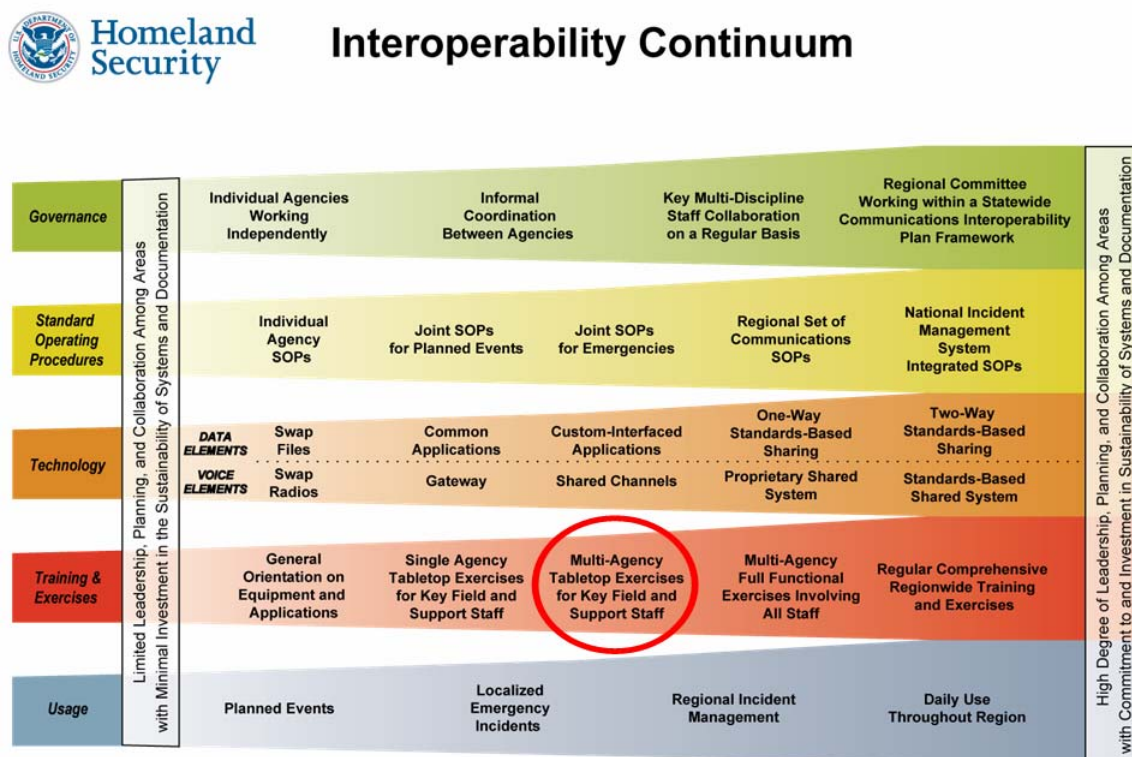


Figure 1. Interoperability Continuum

DHS is working to provide the emergency response community with tools—templates, guidance documents, and methodologies—to improve each of the areas identified in the Interoperability Continuum. To advance training and exercises progress, DHS worked with Federal partners and the emergency response community to develop a methodology for communications-focused, multi-agency TTXs. Localities, states, and Federal technical assistance programs may use this *Communications-Specific Tabletop Exercise Methodology* as a guide for conducting TTXs that will lead to the identification of communications gaps and improvements to address those gaps.

What is a Tabletop Exercise?

A TTX is a discussion-based exercise that focuses on existing plans, policies, mutual aid agreements, and procedures used among multiple agencies. Typically, a TTX involves representatives from the entire range of agencies and jurisdictions that would take action in all-hazards or terrorist response incidents. To conduct a TTX, some type of high-impact or large-scale disaster scenario is presented to the exercise players in phases. As the scenario unfolds, the players describe the actions that they would take to respond. Players' descriptions of the processes and procedures employed are noted in real time for the debrief section of the exercise. Facilitators lead the scenario discussion, help to keep participants on track, and ensure that exercise objectives are met. In the weeks following the exercise, an After Action Report (AAR) is developed and a debrief discussion is conducted; during the completion of these tasks, players,

observers, and facilitators have an opportunity to share their thoughts, observations, and recommendations from the exercise in a “no fault, no blame” forum.

The effectiveness of a TTX is derived from the energetic involvement of *all* participants and their assessment of recommended revisions to current policies, procedures, and plans. All types of TTXs are usually constructed with the following common features:

- They incorporate group problem solving.
- Senior officials become familiar with critical issues related to their responsibilities.
- They employ the conditions of a specific scenario.
- Personnel contingencies are examined.
- Group message interpretation is examined.
- Participants share information.
- Interagency/inter-organization coordination is assessed.
- Limited or specific objectives are achieved.
- They prepare participants for more complex exercises.

What Is a Communications-Specific Tabletop Exercise?

A communications-specific TTX is a forum to evaluate current communications plans, communications concepts, resources, and interoperable capabilities. The emphasis of a communications-specific TTX is on interoperable communications capabilities or gaps; interoperable communications assets in place, or their absence; and the use of processes that support interoperable communications, such as those in the National Incident Management System’s (NIMS) Incident Command System (ICS). Following the completion of a TTX, the after action debrief and AAR feed into process Improvement Plans (IPs) containing specific initiatives to improve communications interoperability in the participating community. The end result of the TTX includes: a better understanding of local communications interoperability capabilities, a gap analysis and AAR of the communications capabilities that require improvement, and an IP to mitigate those gaps.

How to Use the Communications-Specific Tabletop Exercise Methodology

DHS developed the *Communications-Specific Tabletop Exercise Methodology* to provide a detailed, step-by-step approach for effectively planning, conducting, and evaluating an interoperable communications-specific TTX. The exercises developed and executed as a result of this methodology will help localities identify interoperability capabilities and gaps in existing processes.

The *Communications-Specific Tabletop Exercise Methodology* should be used with the general principles for planning and conducting effective exercises put forth by DHS. It should also adhere to the Homeland Security Exercise and Evaluation Program’s (HSEEP) guidelines. HSEEP serves as the Federal Government’s overarching program for formulation, execution, and evaluation of emergency response exercises. This guide incorporates HSEEP recommendations to provide a detailed methodology focused on TTXs for improving interoperability communications. This guide *does not* address the HSEEP-recommended exercises that are focused on topics other than communications interoperability. Additional HSEEP guidance, planning support tools, and documentation

templates are available at the HSEEP Web site (<http://hseep.dhs.gov/>). Exercise Planning Teams (EPTs) may use the electronic versions of these forms and templates to prepare for a communications-specific TTX.

Security Guidance

While the content found in the *Communications-Specific Tabletop Exercise Methodology* is not sensitive or classified, some of the materials generated using the methodology (e.g., scenario examples) may necessitate restrictions on distribution. Exercise materials that are produced in accordance with this guidance and are deemed sensitive should be designated as For Official Use Only (FOUO). FOUO identifies unclassified information of a sensitive nature, not otherwise categorized by statute or regulation, the unauthorized disclosure of which could adversely impact a person's privacy or welfare, the conduct of Federal programs, or other programs or operations essential to national interest.¹ Examples of materials that may require FOUO designation include scenario information, the Master Scenario Events List, AAR, and IP. Access to FOUO information is on a need-to-know basis. If a specific need-to-know has been established and if the information supports a coordinated and official government activity, then FOUO information may be shared with other agencies; local, tribal, state, and Federal governments; and emergency response officials.

Communications-Specific Tabletop Exercise Goals

The goals of this methodology are to:

- Increase the awareness of emergency response communications and interoperability capabilities throughout a region through education, discussion of a plausible scenario, and the sharing of observations.
- Determine how existing communications policies, procedures, and Memoranda of Understanding (MOUs) are enacted during response to major regional events.
- Identify gaps in current capabilities and processes.
- Develop a greater understanding of communications issues faced by other agencies and to assist participating agencies in coordination and collaboration to reach optimum solutions.
- Allow practitioners to network and collaborate with other disciplines and jurisdictions.
- Determine the ability of participating agencies to establish interoperable communications during a major multi-jurisdictional event.
- Validate the effectiveness of efforts to improve previously identified communications interoperability issues.
- Help agencies to prepare for field-level, full-scale exercises (FSEs) by effectively identifying communications gaps prior to an FSE, during which discovery and mitigation is much more difficult and expensive.

¹ Department of Homeland Security Management Directive System. MD Number: 11042.1, p. 1. <http://www.fas.org/sgp/othergov/dhs-sbu-rev.pdf>.

Communications-Specific Tabletop Exercise Phases

The TTX methodology development process is comprised of four phases, with a continuous improvement loop (figure 2):

- **Plan:** Provides an overview of the necessary elements recommended for conducting a successful communications-specific TTX, including the type of individuals and sponsorship needed from the region
- **Design:** Describes the purpose, objectives, and suggested actions for the EPT as it develops a customized exercise designed for a particular area
- **Conduct:** Describes the process for executing the TTX on the actual day and outlines recommended logistical and support requirements for a successful exercise
- **Follow-up:** Describes how to develop and use an effective AAR and IP to structure follow-up and feedback

Continuous Improvement Loop: Identifies areas to continually improve, modify, and implement exercises of various scales and scope every six to nine months. Ideally, conducting TTXs will become an ongoing process.

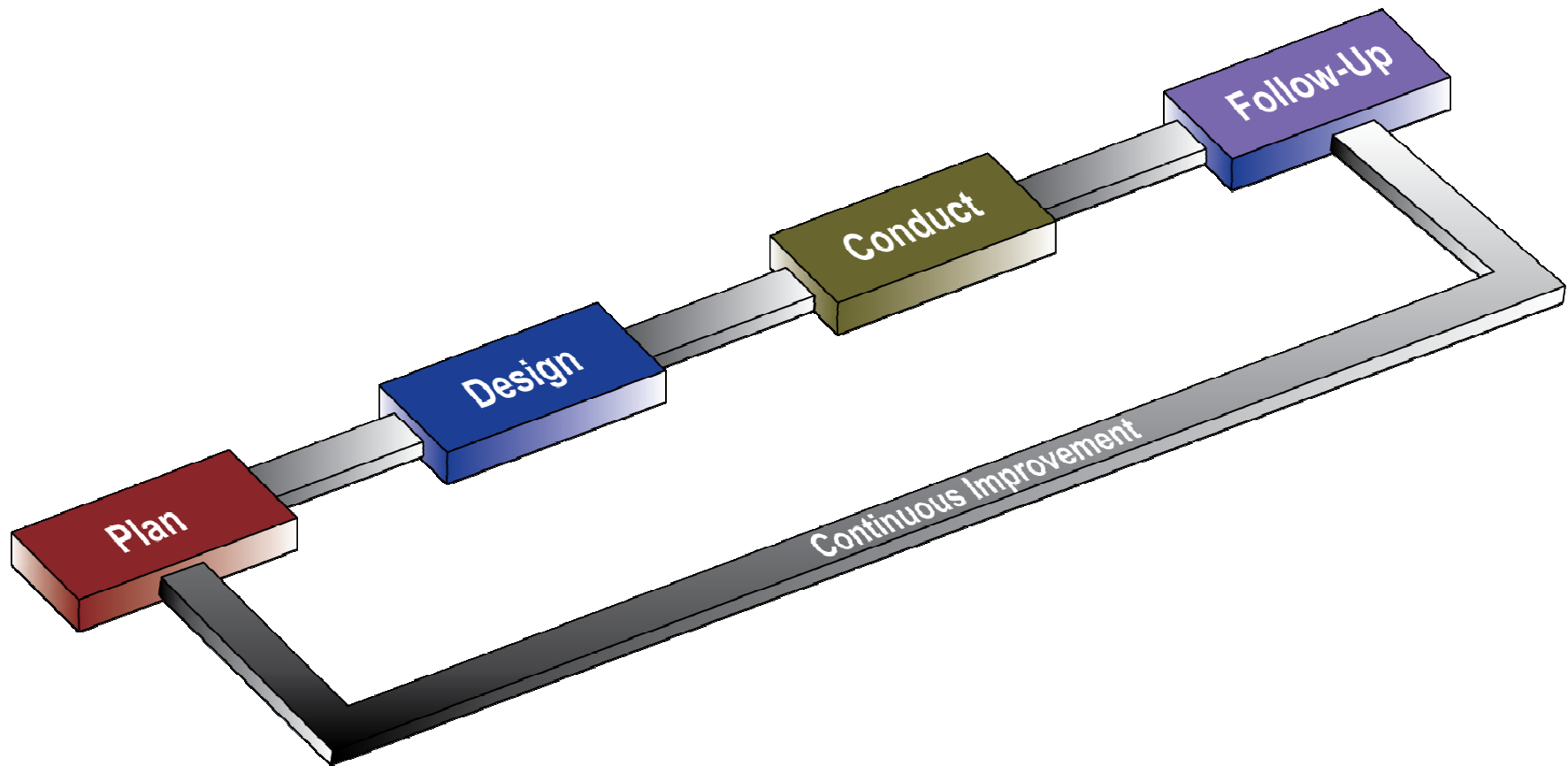
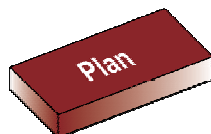


Figure 2. Tabletop Exercise Methodology Development Process

Phase 1: Exercise Planning



The success of a TTX hinges on multiple factors and milestones. It is important for EPT leaders to understand these factors and milestones early in the planning process so that they may ensure that leadership, participants, logistics, scenario development, and other preparations effectively support exercise goals.

TTX Critical Success Factors

DHS identified the following nine factors as critical to the success of the TTX process:

- Defined Purpose and Goals
- Local Practitioner Involvement
- Sponsorship
- EPT
- Scenario Development
- Situation Manual (SITMAN)
- Logistics
- TTX Roles and Responsibilities
- Commitment to Action

Factor: Defined Purpose and Goals

Exercise goals and objectives reflect the capabilities that a jurisdiction or organization seeks to demonstrate, and thereby observe during the TTX. By identifying the capabilities, activities, and tasks that are being evaluated, exercise planners may determine the subject matter expertise required of evaluators.

Effective TTXs have pre-determined, clearly defined goals and objectives that provide criteria for measuring success. The following are recommended goals and associated objectives for the local EPT to consider:

- ***GOAL: Increase regional interoperable communications awareness and proficiency.***
 - **Objective** – Provide opportunities for emergency response personnel from various regional agencies to work together and build professional relationships and contacts.
 - **Objective** – Provide opportunities for emergency response personnel to learn the capabilities and methods of peers in other regional agencies.
- ***GOAL: Determine the participating agencies' ability to establish interoperable communications during a major, multi-jurisdictional event.***
 - **Objective** – Determine how existing communications policies, procedures, and MOUs are enacted during the response to the incident.

- **GOAL: Identify regional interoperable communications gaps.**
 - **Objective** – Review and evaluate participant observations and comments to identify regional interoperable communications gaps.
 - **Objective** – Examine identified gaps, categorize gaps along the Interoperability Continuum, and document gaps in an IP.
- **GOAL: Provide recommendations for resolving regional interoperable communications gaps.**
 - **Objective** – Draft recommendations designed to mitigate or eliminate each gap's negative impacts on regional interoperable communications.
 - **Objective** – Include recommendations for resolving each gap in the exercise AAR and the IP.

Factor: Local Practitioner Involvement

It has become increasingly clear that communications interoperability cannot be solved by any one entity. The solution requires a partnership among emergency response organizations across all levels of government. A practitioner-driven approach ensures that a TTX successfully addresses the needs of responders on the front lines and incorporates their field expertise. Early on, the EPT should identify and include local practitioners in the planning process.

Factor: Sponsorship

In addition to being locally-driven, it is important for the TTX process to be sponsored by a champion. A well-known champion or supporter may be an important agent for change—giving an interoperability initiative the momentum it needs to achieve end goals. Champions should have a record of achieving region-wide interoperability progress.

Factor: EPT

The EPT is responsible for planning, conducting, evaluating, and following up on the TTX. Comprised of emergency responders representing agencies across all levels of government, the EPT should be staffed by personnel who are well-versed in and committed to the interoperability improvements that a TTX is designed to address.

Ideally, a locality will already have an existing practitioner body tapped to address regional emergency response communications and interoperability issues. The leader of that body may identify a subset of its membership for the EPT. If a locality does not have an existing practitioner body, the TTX sponsor should identify an EPT leader and set of members and should assign roles accordingly. Documenting the organization of the EPT using an ICS organization is recommended. This structure enforces NIMS best practices and offers a logical mechanism for the assignment of responsibilities and action items. See the sample EPT organizational chart in Appendix A.1.

The ideal EPT will possess the following characteristics:

- ***A strong champion for communications interoperability who is well regarded in the region:*** This individual will lead the EPT to ensure that the resources and participation required to execute the TTX are in place.
- ***Clearly defined roles for EPT members:*** The EPT members should be assigned to the following roles to ensure the success of the TTX:
 - ✓ **EPT Leader** – The leader is ultimately responsible for planning, conducting, and evaluating the TTX. He or she oversees all efforts relating to the TTX, including chairing the exercise planning conferences. The leader is normally the individual who leads the post-exercise analysis and who is responsible for writing the AAR. This individual may also serve as the aforementioned champion for the TTX.
 - ✓ **Facilitator** – The facilitator is the individual who leads the discussions at the planning conferences, the TTX, and the after action debriefs. At the TTX, the EPT leader often works as a facilitator alongside a neutral facilitator—an impartial guide from outside of the community hosting the TTX who ensures the agenda stays on track and the TTX outcomes are achieved. A neutral facilitator collaborating with a local leader, one who can influence and balance multiple perspectives, can be very powerful. The local leader will command respect, will understand local issues, and will be able to appropriately intervene to keep the discussions moving forward. The partnership between the neutral facilitator and the local leader will have to be explicit and transparent to bring existing issues and gaps into the open.
 - ✓ **Data Collectors** – These individuals will record proceedings and note action items at all planning events for the exercises. The collector will be able to process verbal information accurately and quickly transcribe it onto a computer. At the TTX, multiple data collectors may be useful to ensure the complete and accurate capture of findings.
 - ✓ **Exercise Observers/Evaluators** – These individuals observe the exercise proceedings and note communications gaps and other issues in accordance with the evaluation criteria established for the exercise. They also contribute content for the exercise's AAR. Subject matter experts (SMEs) often do double duty as exercise evaluators.
 - ✓ **SMEs** – Agency representatives on the EPT may serve as SMEs, providing the benefit of their experience and expertise in planning the details of the exercise's scenario. SMEs serve as the liaisons between the EPT and their agencies. They will have sufficient decision-making authority to represent their agencies effectively for exercise-related issues.
 - ✓ **Specialized Support** – Throughout the planning of a TTX, several specialized tasks will arise. These may range from coordinating

logistics to managing administrative issues. The EPT will select an organized, detail-oriented leader for logistical tasks such as securing the facility, arranging for food and refreshments, and preparing the facility for the TTX. Additionally, someone with strong writing and communications skills will lead the development of meeting agendas and summaries, the exercise's documentation, and external communications. It is important that the specialized support is accorded the respect their role deserves. They should be acknowledged for their efforts and given the resources and time needed to carry out their tasks.

- **Authority to make regional and agency-specific decisions:** Members of the EPT will have the authority from its agencies' regional bodies to design and develop the TTX according to the requirements they determine necessary (within the guidelines of this methodology). Additionally, EPT members will have the authority from their agencies or jurisdictions to identify and request the involvement of individuals they deem necessary to participate on the actual day of the TTX.
- **EPT charter:** Before making any decisions on the design of the TTX, the EPT should reach shared agreement on how decisions and processes will occur during the TTX design and execution process. These agreements may be captured in a charter document that outlines the EPT's purpose, authority, scope, goals, and operating principles. Alternatively, these processes may be thoroughly discussed and defined at the first planning conference. The EPT leader may subsequently enforce them.
- **Commitment to achieving desired goals within a set time frame:** EPT members must be prepared to address any actions that come out of each session. The EPT leader and facilitator will co-facilitate the exercise planning conferences to help address action items, move sessions along, and keep the process consistent.
- **Size of the EPT:** The EPT should remember its goal is to develop a scenario that draws in maximum participation from all agencies during the TTX; this goal allows the EPT to test as many interoperable communications capabilities as possible. Representatives from each of the agencies in the TTX should be invited to attend EPT meetings in the early stages of the planning process. Extending an invitation to the broadest group of potential TTX participants encourages the valuable involvement of non-traditional emergency responders (e.g., public health, environmental services, and hospital personnel).

Realistically, budget and time constraints will make it impossible for *all* agencies and jurisdictions in the TTX to attend every EPT meeting. Additionally, the size of the EPT should be kept manageable and should balance the need to move forward quickly with the need to be inclusive and thorough.

The EPT should also ensure that leaders of all agencies and jurisdictions who are asked to participate in the TTX receive progress updates throughout the planning process. The EPT should do this by sharing the planning conference meeting reports with them, and giving the leaders an opportunity to provide input. Ultimately, the EPT should consist of and strive to balance a mix of EMS, fire response, and law enforcement responders with non-traditional emergency responders from various local, state, and Federal agencies and jurisdictions in the TTX.

Factor: Scenario Development

A TTX scenario is an outline or a model of the simulated sequence of events for the exercise. It may be written as a narrative or depicted by an event timeline. For a TTX, the scenario provides the backdrop that drives participant discussion; it is contained in a SITMAN.

A realistic, broadly scoped scenario is critical to the success of the TTX. Such a scenario will provide the setting and the conditions for productive participant discussions. The scenario itself is divided up into distinct sub-events, or modules, that make up the TTX structure. Each module represents a specific time segment of the overall scenario—pre-incident warning, notification, response, or recovery. The segments are selected based on exercise objectives and scenario requirements. For example, pandemic disease exercises typically contain an incubation module whereas chemical or explosive terrorism scenarios offer planners the opportunity to include a warning phase as well as initial response modules.²

In the first planning conference, the EPT should brainstorm a range of possible scenarios. The group should then decide on one that best suits the objectives of the exercise to further develop in the subsequent conference. The scenario chosen should drive communications interoperability actions for the regional participants. In addition, it should test the capability of the region to meet the proposed TTX goals and objectives.

The scenario should be extensive enough to exhaust initial local resources, challenge mutual aid systems, and highlight potential areas of weakness in the communications systems. It is best to begin at a high level with a list of various emergency incident types. Remember that the purpose of the exercise is to test the capacity and effectiveness of the existing communication systems under demanding circumstances and to effectively evaluate communications gaps. Thus, the scenario should maximize participation across agencies, disciplines, jurisdictions, and levels of government.

Exercise planners should select and develop scenarios with the aim of enabling an exercise to meet its objectives. There are a number of factors that should be taken into consideration when developing a scenario, including the level of realism, type of threat/hazard, location, weather variability, and optimal date and time for exercise execution. All scenarios should be realistic, plausible, and challenging; however,

² Homeland Security Exercise and Evaluation Program, 2007. *Volume II: Exercise Planning and Conduct*, p. 13-14. <http://hseep.dhs.gov/support/Volumell.pdf>.

designers must ensure the scenario is not so complicated that it overwhelms participants. Scenario development should also take into account the capabilities and critical tasks that an exercise seeks to test. Planners must identify the kinds of player activities that need to be demonstrated to meet exercise objectives and then ensure that those activities can take place within the scenario framework.

Note: If an FSE is planned for the near future, it may be helpful to use that exercise scenario and modify it, as needed, to include a strong communications evaluation component for the TTX.

After choosing a scenario from those discussed, the EPT should identify the agencies that would be involved in the incident, in both emergency responder and support roles. Then, the scenario should be modified as needed to include communications with other regional agencies.

Note: An example of a TTX scenario may be found in Appendix A.6.

Factor: SITMAN

The SITMAN is the main document provided to exercise participants upon check-in. It features an overview of the exercise, such as the scope, objectives, and agenda for the TTX. For some participants, it also contains the chronologically sequenced scenario script. In addition, the SITMAN provides the basic information for the overview and the initial briefing provided to all participants on the day of the TTX.

There are three versions of the SITMAN, which are tailored to the responsibilities of the following roles:

- Facilitators and exercise staff
- Observers and evaluators
- Players

Each version should contain only the information for that particular role. For instance, the SITMAN for the facilitators and exercise staff should be extensive and include the scenario script, a detailed agenda, information that will raise key discussion topics and help resolve ambiguous situations, and insights regarding key participants. It is important to note that the SITMAN for the players should not contain the scenario script, as the exercise simulates a realistic, real-time response to a sequence of events.

The table on the following page lists the elements of the SITMAN and where they should be included in each version of the SITMAN. An exercise facilitator's version of the SITMAN template is available in Appendix B.

Table 1. Elements of the SITMAN

Contents	Facilitators/ Exercise Staff	Observers/ Evaluators	Players
Purpose	X	X	X
Scope	X	X	X
Exercise Goals	X	X	X
Exercise Objectives	X	X	X
Exercise Rules	X	X	X
Assumptions and Artificialities	X	X	X
Schedule of Events	X	X	X
Roles and Responsibilities	X	X	X
Scenario Script	X	X	
Initial Events and Response	X	X	
Regional Response	X	X	
Observer/Evaluator General Questions	X	X	
Incident Maintenance	X	X	
Special Notes	X		
Appendices	X	X	X

The planning team should assign an EPT member to prepare and present a draft SITMAN that will be reviewed and refined as a result of the planning conferences.

The facilitator's version of the SITMAN is the logical version to develop and review throughout the planning conference cycle as it contains all of the SITMAN elements. After finalizing the facilitator's version, the planning team may easily produce the players' and observers/evaluators' versions by following the contents outlined in the table 1.

Factor: Logistics

Important logistical concerns include exercise design, facility arrangements, exercise room setup, and registration, as outlined below.

Exercise Design

The TTX should be designed as a structured, large-group discussion session moderated by one or more facilitators. The TTX is based on a major disaster scenario, which the EPT scripts in advance. The best TTX scenarios require the response of multiple agencies and jurisdictions in the area and require the use of multiple interoperable capabilities, pushing the local system to its limit.

Documents on the exercise are provided to the players and observers when they check in. Remember that the focus of the exercise is the ability of participants to communicate with one another through any available means. As such, every opportunity for players to engage in meaningful discussion of their interoperable communications capabilities should be encouraged. (See the Registration Process described on pages 15-16.)

It is preferable to hold the exercise in the morning with the post-exercise debrief scheduled either during or immediately after lunch. If at all possible, provide lunch for all participants at the exercise venue. This allows you to thank them for the time they devoted to the TTX, and to give them adequate time to gather their thoughts and provide their observations during the TTX discussion.

Facility Arrangements

All facility arrangements should be discussed and secured during the planning phase, well in advance of the TTX. When selecting a facility, room acoustics are paramount. Carpeting and low ceilings are effective room elements that help dampen the effect of simultaneous conversation. The facility should be prepared with necessary materials and equipment one day prior. Waiting until the day of the exercise to set up is too risky; an unexpected logistical issue could arise that requires time and effort to resolve.

The following matters should be considered in the days leading up to the TTX:

- ✓ Have arrangements been made with the facility point of contact to access the facility the day before and the day of the exercise?
- ✓ Is there an adequate number of tables and chairs, and have they been set up in accordance with the desired room layout guidelines? (See the options for TTX room layout in Appendix A.7.)
- ✓ Have arrangements been made for food or beverages and, if so, are they adequate for the number of participants?
- ✓ Is there a separate room or lobby space for the registration table? Has the table been set up?
- ✓ Have the participant packages been delivered to the facility? Are they available at the registration table?
- ✓ Are other necessary supplies, such as pens and note pads, on-site and available?
- ✓ Have arrangements been made the day before to set up and test the technology and audio/visual equipment (e.g., sound system, recording system, computers, and projectors)?

Exercise Room Setup

The layout of the large exercise room is far from arbitrary. A well-planned layout contributes to a successful TTX. First, arrange the tables so that:

- ✓ All players can see all other players.
- ✓ All players can see the facilitator.

- ✓ All players can see the screen to visually process the discussion and validate notes the data collector takes on a shared display.
- ✓ All observers are situated around the perimeter of the room.

Second, group players by their agency, geographical location, or jurisdiction. The observers and evaluators should not sit with the players and should not be in close proximity to the players from their own agency.

The exercise is designed to encourage cross-agency and cross-discipline interaction and cooperation. As such, players should be given ample break time to network and build relationships. However, they should not be allowed to discuss the TTX.

Registration Process

Ideally, all participants have pre-registered, and registration will simply be a process of checking off the participant names on a prepared list and distributing nametags and SITMANs. In the real world, issues may complicate registration such as last-minute substitutions of agency personnel to attend the exercises, the failure of some agencies to provide requested pre-registration information on time, and participants who show up without a clear notion of their role in the exercise.

The registration table should be set up to accommodate rapid registration. This will be the first experience participants have at the exercise, and first impressions are lasting ones. Considerations for the registration area include the following:

- Have at least two registrars at the exercise, if possible.
- Set up two tables: one for pre-registered participants and another for those who did not pre-register.
- Have copies of the pre-registration list for every registrar at the pre-registration table.
- Identify each type of participant using distinctive methods such as different colored name badges or tags. As noted, participants will have a variety of roles, such as players (emergency responders, operational leaders, and dispatchers), observers/evaluators (technical observers, general observers, or EPT members), and exercise staff (data collectors, facilitators, and logistical support staff). Distinctive badges will aid all participants in identifying their role in the exercise.
- Hand a registration sheet to any participants who have not pre-registered and direct them to another table where they may fill it out without impeding the progress of others in line.
- Be prepared to tell participants whether they are a player or an observer. This uncertainty is fairly common at such exercises. As a rule of thumb, if a participant does not know whether he or she is a player or an observer, the individual's agency almost certainly intended that person to be a

player. If there are other participants present from that person's agency, direct the person to them. They may be able to shed some light on the person's intended role.

- After checking the person in, either through the pre-registration list or by collecting his or her registration sheet, hand the person a badge or nametag and the appropriate SITMAN (for a player or observer), and direct the individual to their agency's table in the exercise room.

Factor: TTX Roles and Responsibilities

Table 2. Tabletop Roles and Responsibilities

Role	Responsibilities
Player (e.g., Emergency Responders, Operational Leaders, Dispatchers) Note: Members of the EPT cannot be players. They are too familiar with the expected responses, the scenario script, and the overall design of the TTX.	<ul style="list-style-type: none"> • Respond to the incident using procedures and protocols as if the exercise was a real operation. • Identify agencies with which communications are required to respond to the incident. • Volunteer information or respond to the facilitator, based on knowledge of current: <ul style="list-style-type: none"> ○ Response procedures and plans ○ Cross-jurisdictional agreements ○ Communications capabilities • Describe who is connected once interoperability is provided and how this interoperability is achieved (specify radio modes, frequencies, channels, patches, etc.) • Provide information on the available communications interoperability capabilities currently used by the home agency. • Comment on the authorization process required to establish interoperable connections. • Describe what actions dispatchers would take based on the information the emergency responder provides.
Observer/Evaluator (e.g., Technical Observers, General Observers, EPT Members)	<ul style="list-style-type: none"> • Observe and evaluate the TTX only. Do not participate during the TTX scenario discussions. Participation is encouraged during the debrief discussion. • Document the exercise proceedings. • Identify current procedural, policy-related, training, or technical gaps that impede interoperability. • Relate exercise findings to the home agency. Use information gathered to improve the home agency's communications interoperability capabilities. • Evaluate discoveries made at the exercise for possible improvement in the participating agencies' interoperable communications capabilities. • Provide overall suggestions to improve the exercise and operations.

Role	Responsibilities
Facilitator	<ul style="list-style-type: none"> • Lead and moderate the exercise discussion. • Provide situation updates. • Help to resolve questions and problems as they develop. • Assist and coordinate participants' input in the post-exercise debrief.
Data Collector	<ul style="list-style-type: none"> • Record and document all TTX proceedings, including planning conferences, the TTX, and the exercise debrief. • Validate data. • Prepare notes for analysis.

Suggestions for Assigning TTX Roles Based on Participants' Characteristics

Players

For the purpose of the exercise, any agency that would respond in a real-life incident, such as the one described in the exercise scenario, should participate in the exercise. The scenario should therefore be designed to be as inclusive as possible of all regional agencies. The scenario should also ensure that every agency has a meaningful role to play during the exercise.

For a communications-specific scenario, players typically include:

- Emergency Responders
- Dispatchers/Public Safety Communications Specialists
- State and Federal Offices and Operatives
- Military/National Guard Personnel
- Hospital Personnel
- Volunteer Organizations and Members
- Relief Organizations (e.g., Red Cross) and Personnel
- Emergency Operations Center (EOC) Personnel
- All Levels of Incident Command Staff, including Communications Unit Leaders
- Any Agency Communications Specialists who would be involved in a major disaster response

Note: One of the emergency responder participants will act as the Incident Commander on scene.

As the exercise unfolds, all players, whether called upon or not, should consider communications processes and needs. They also should make written notes of any communications issues in the notes section of their SITMAN. See Appendix B for a template of the SITMAN.

Evaluators/Observers

Evaluators have experience and subject matter expertise in the functional area they are assigned to observe (command and control, standard operating procedures [SOPs], a specific communications capability, etc.). Technical experts, such as equipment specialists, operational experts (e.g., experienced agency emergency responders and commanders), and EPT members, should be asked to serve in the role of exercise evaluator. Observers may be the political or governance group leaders who are not familiar with the specifics of current communications capabilities and processes, but are important to overall funding and strategic progress. Observers/evaluators are typically asked to refrain from participating in the facilitated discussion of the TTX scenario, but are encouraged to provide their verbal input during the exercise debrief.

Facilitator

Facilitators are quick thinkers who are able to respond to unexpected questions and fill in gaps in the exercise discussion. Facilitators are also adept at keeping the discussion focused and on track. Facilitators present the detailed scenario stages and unplanned scenario modifications (also known as scenario injects) to solicit player responses, and will enforce exercise ground rules (see Ground Rules in Phase 3 on page 28).

Ideally, the facilitator will not be a representative of any specific agency in the area; specifically, the facilitator will not represent an agency participating in the exercise. A trained, objective facilitator from outside the TTX region is recommended. Often the neutral facilitator partners with a local, influential leader from the area to conduct the TTX. Whereas the outside facilitator plays a neutral role in managing the process, the local leader ensures that the conversations remain focused on achieving the TTX objectives and avoid divisive issues that are not helpful to the discussion. Depending on the size of the exercise group and the complexity of the disaster scenario, the use of multiple facilitators may be advisable.

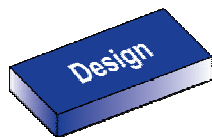
Data Collector

This individual should be able to process verbal information accurately and quickly transcribe it onto a computer. At the TTX, multiple data collectors may be useful to ensure the complete and accurate capture of findings.

Factor: Commitment to Action

Participating in the TTX design process and execution will provide regional emergency responders and agency leaders with an increased level of understanding and clarity on the issues and challenges associated with communications and interoperability. For emergency responders and agency leaders, the TTX will reveal existing communications gaps, identify difficulties that arise as a result of the gaps, and provide recommendations on how to improve interoperable communications. The greatest impact will result when the regional body is prepared and enabled to act upon the observations and recommendations captured in the AAR and IP.

Phase 2: Exercise Design and Documentation Development



The exercise design phase begins once the EPT understands what needs to be planned and has identified an approach to accomplish the critical success factors. Exercise design typically involves four planning conferences with the EPT over a series of several weeks. Each planning conference produces more in-depth details about the exercise scenario and logistics in line with the overarching exercise goals and objectives. The planning conferences include the following:

- Concept and Objectives Meeting (exercise planning kick-off meeting)
- Initial Planning Conference (IPC)
- Mid-Term Planning Conference (MPC)
- Final Planning Conference

In some cases, localities may have complex issues to resolve before they can develop the exercise objectives and the scenario. As a result, more planning conferences may be warranted. In other cases, a community may have a solid foundation of trusting relationships in place along with a pre-determined scenario in mind; these elements may accelerate the design phase.

Four large, ongoing tasks must be completed during the design phase:

- **Assign Roles and Responsibilities** – Ensure that EPT members understand their roles and responsibilities and are equipped to complete them successfully.
- **Design and Develop the Scenario** – Design and write the major disaster scenario upon which the entire exercise play is based.
- **Prepare Documentation** – Write the documentation that is required for a successful exercise, including SITMANs, slides, and participant packages.
- **Coordinate Logistics** – Make arrangements for the physical requirements of the exercise, including room setup, equipment rental, and catering.

In addition, there are several preliminary activities that need to be completed in advance of the first planning conference. A description of these activities and a sample agenda follow.

Pre-Meeting Planning Activities

Typically, the EPT leader is the primary coordinator for the Concept and Objectives Meeting. This leader should complete the following:

- Identify and invite the core group leaders and colleagues from the area to participate in the EPT.
- Prepare an initial draft of the exercise goals and objectives.
- Develop an initial draft of the exercise timeline.
- Create an initial draft of the EPT charter.

- Schedule the Concept and Objectives Meeting.
- Send EPT members a Concept and Objectives Meeting package that includes the following information:
 - Date, time, location, and duration of the meeting
 - Copy of this methodology document
 - Draft of the exercise goals, objectives, and performance measures
 - Draft of the exercise timeline
 - Draft of the EPT charter

Preparing the Exercise Timeline

The EPT leader should present a draft of the exercise timeline as a starting point for discussions at the Concept and Objectives Meeting. In preparing a realistic timeline, it is important to allow sufficient time for planning and evaluating the exercise. Additionally, the timeline should reflect the time constraints faced by EPT members; for most members, daily demands and responsibilities will take precedent over their EPT duties. The schedule should not be overly compressed, but should set achievable time frames that ensure progress is made. Because the date of the exercise may not be known prior to the start of the exercise planning conferences, use the generic “exercise date” (figure 3) as a placeholder in the draft timeline. The timeline may be updated with the actual date(s) as details are set.

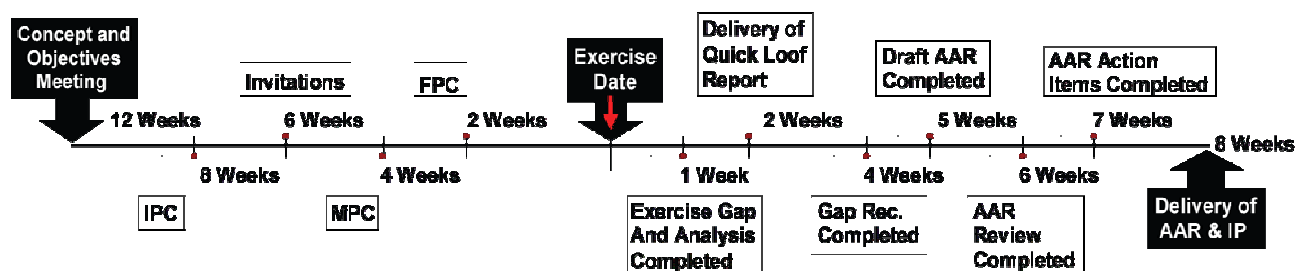


Figure 3. Tabletop Exercise Timeline

The pages that follow outline the components for each of the four planning conferences.

Planning Conference #1: Concept and Objectives Meeting Outline

IPurpose	To introduce the communications-specific TTX methodology to the EPT and identify information required to proceed with the development of a scenario.
Agenda	<p>EPT Membership, Structure, and Schedule</p> <ul style="list-style-type: none"> • Introductions • EPT Membership and Roles • EPT Charter • Timeline and Schedule <p>Logistics</p> <ul style="list-style-type: none"> • Date and Location Discussion • Agency Identification for TTX <p>Exercise and Scenario Details</p> <ul style="list-style-type: none"> • TTX Methodology Overview • Goals and Objectives Discussion • Preliminary Scenario and Elements Discussion
EPT Membership, Structure, and Schedule	<ul style="list-style-type: none"> • Introduce EPT members. • Review EPT membership to ensure it is complete and representative of agencies and disciplines in the area. If it is not, issue invitations as needed. • Review and upgrade the EPT charter, including the purpose, authority, scope, outcomes, and operating principles. • Introduce, discuss, modify, and gain agreement on the timeline, schedule, and locations for the planning conferences. • Discuss EPT roles and assign duties. It is recommended that the EPT use a variant of ICS Form 207 to make EPT assignments. See the sample EPT organization chart in Appendix A.1 for additional ideas. • Designate one EPT member as the “logistics chief” to complete or delegate any future logistical tasks needed for the exercise (e.g., catering, audio/visual equipment, etc.). See the logistics discussion on facility arrangements and exercise room setup in Phase 1 (pages 13-15) for additional details. • Designate one of the EPT members as a registrar to be responsible for both pre-registration and check-in/registration at the exercise. • Designate one EPT member to be responsible for the SITMAN. Refer to the section on the SITMAN in Phase 1 (pages 12-13) for details. • Assign one EPT member to track action items. <p>Action Items</p> <ul style="list-style-type: none"> • Assign action items to be completed prior to the IPC.

<p>Logistics</p>	<ul style="list-style-type: none"> • Begin discussing the TTX date and identify potential locations for the TTX. The availability of a facility may influence the date selection; conversely, the date selection may influence which facility is selected. See the facility arrangements discussion in the logistics portion of Phase 1 (page 14) for help in determining a facility's usability. • Begin identifying the agencies that should participate in the exercise. <p>Action Items</p> <ul style="list-style-type: none"> • Research and draft a list of options for the TTX date and location; bring the options to the IPC. • Draft a list of agencies that should participate; bring the list to the IPC.
<p>Exercise and Scenario Details</p>	<ul style="list-style-type: none"> • Provide the TTX methodology overview, with special emphasis on Phase 3. This will ensure EPT members are familiar with what will occur on the day of the TTX. • Discuss the exercise goals and objectives. • Address and discuss what the EPT members and their organizations expect to gain from the TTX. • Introduce and describe the SITMAN. • Brainstorm possible scenarios and locations that would maximize participation across disciplines, jurisdictions, and levels of government. • Identify a scenario that ensures communications situations across disciplines at the emergency responder level. • Begin identifying what agencies would respond to the incident as described in the scenario. • Consider the need to include elements in the proposed scenario that help meet funding or other government requirements, such as those laid out in the Tactical Interoperable Communications Plans or in the DHS Target Capabilities List. <p>Action Items</p> <ul style="list-style-type: none"> • Have an EPT member or support staff draft the initial scenario outline. Distribute it to the EPT before the IPC.

Planning Conference #2: Initial Planning Conference Meeting Outline

Purpose	To familiarize EPT members with roles; gain consensus on the TTX scenario, date, and location; and identify potential TTX participants.
Agenda	<p>Logistics</p> <ul style="list-style-type: none"> • TTX Participant List Discussion • TTX Facility Location Discussion • Documentation Preparation (invitations, registration forms, etc.) • Options for Technical Demonstration Discussion (if applicable). <p>Exercise and Scenario Details</p> <ul style="list-style-type: none"> • Detailed Scenario Breakdown (also known as the Master Scenario Events List) • SITMAN • Exercise Evaluation Guidelines
Logistics	<ul style="list-style-type: none"> • Refine the TTX participant list from all agencies and jurisdictions in the region. • Finalize the TTX date, time, and location. • Discuss potential exercise facilities and book a facility, if possible. • Modify the sample invitation letter in Appendix A.3 as needed to prepare for sending out invitations. • Review the sample registration sheet in Appendix A.4. Note: Registration sheets should be sent with the exercise invitations. • Review and adapt the exercise evaluation form in Appendix C.1. The form gives exercise participants a chance to share their insights and opinions about the exercise. • (Optional) Identify one or more SMEs to prepare a brief on the region's interoperable communications capabilities. <p>Action Items</p> <ul style="list-style-type: none"> • Modify documentation (e.g., evaluation form and registration sheet) as needed. • Prepare and issue invitations and pre-registration sheets to agency individuals no later than six weeks prior to the exercise. • (Optional) Prepare the regional interoperable communications capabilities brief.

**Exercise
and
Scenario
Details**

- Revisit the proposed scenarios identified in the initial meeting, remembering that the goal is to stress communications in new ways.
- Reach consensus on which scenario will maximize participation and will meet the requirements of the TTX's purpose, scope, and goals.
- Break down the scenario into sub-events, including the time and activities. Sub-events are typically tied to scenario events that would trigger additional communications.
- Discuss the SITMAN.
- Discuss roles required for the TTX. (See the role descriptions in Phase 1 on pages 16-18 for more details on responsibilities and tasks.)
Roles include:
 - Player
 - Observer/Evaluator
 - Facilitator
 - Data Collector
- Discuss exercise evaluation guidelines using questions such as the following:
 - How will we measure the achievement of our goals and objectives?
 - How do we evaluate interoperable communications capabilities during the TTX?
 - What criteria will we use to determine items such as communication gaps?
- See Appendix C.2's interoperable communications evaluation guide for additional ideas on exercise evaluation guidelines.

Action Items

- Have an EPT member or someone from the support staff revise the initial scenario outline. Break the scenario into distinct steps based on the discussion of the EPT.
- Complete the draft facilitator's version of the SITMAN. Refer to the section on the SITMAN in Phase 1 (pages 12-13).

Planning Conference #3: Mid-Term Planning Conference Outline

Purpose	To finalize the list of participants and to verify that the developed scenario is plausible and that sub-events for the scenario will elicit comments on communications or help to raise awareness of communications gaps.
Agenda	<p>Logistics</p> <ul style="list-style-type: none"> • TTX Agenda • Participant List • TTX Date, Time, and Location • QuickLook Debrief Date, Time, and Location <p>Exercise and Scenario Details</p> <ul style="list-style-type: none"> • Scenario Review and Breakdown • SITMAN • Focusing Questions
Logistics	<ul style="list-style-type: none"> • Finalize the TTX agenda. • Discuss, update, and finalize the list of participants (including agencies, individuals, and jurisdictions). • Assign TTX roles for the final list of participants. • Identify any logistical issues for the day of the TTX. • Remind EPT members of the date, time, and location of the TTX. • Ensure EPT members are preparing for Phase 4: Exercise Evaluation and Data Analysis. • Schedule the QuickLook Debrief date, time, and location (the initial meeting convened to review and analyze the TTX data). This meeting should occur within two weeks of the exercise. • Determine what scenario sites would be best for the facilitator to visit prior to the TTX. The aim is to gain a greater understanding of scenario events and available communications equipment and procedures. Sites to visit may include: <ul style="list-style-type: none"> ○ EOCs ○ Mobile communications vans ○ Dispatch centers ○ Scenario incident scenes <p>Action Items</p> <ul style="list-style-type: none"> • Send out official invitations to all TTX participants, including TTX role assignments and registration sheets. (A sample invitation letter is provided in Appendix A.3.) • Visit identified scenario sites to gain an understanding of scenario events and available communications equipment and procedures.

**Exercise
and
Scenario
Details**

- Review and refine the scenario language and sub-events to ensure realistic timing for events.
- Discuss the draft facilitator's SITMAN.
- Ensure that after each scenario sub-event participants will be prompted to address the following questions:
 - What communication is required (from whom/to whom)?
 - What is the purpose of the communication?
 - How is this communication established (equipment, frequency, etc.)?
 - What is the next action in the incident response?

Note: If sub-events do not prompt the participants to respond with an action that involves the use of communications, the scenario will need to be revised.

Action Items

- Revise the scenario to allow for communication drivers, if needed.
- Update the draft SITMAN.
- Develop the TTX slide presentation. A slide presentation should include one scenario increment and description per slide.

Scenario Development Checklist

The EPT should consider the following questions as it determines whether the scenario is realistic, plausible, and appropriate:

- ✓ Will this scenario and the associated sub-events highlight communications interoperability gaps in the region?
- ✓ Will this scenario and the associated sub-events maximize participation from regional agencies and jurisdictions?
- ✓ Will this scenario and the associated sub-events elicit an appropriate mix of cross-discipline, cross-jurisdictional response?

Planning Conference #4: Final Planning Conference Outline

Purpose	To finalize all aspects of the TTX session.
Agenda	<p>Logistics</p> <ul style="list-style-type: none"> • Wrap-Up of Logistics Details <p>Exercise and Scenario Details</p> <ul style="list-style-type: none"> • Scenario Review and Discussion • AAR Planning
Logistics	<ul style="list-style-type: none"> • Discuss any final logistics based on the Phase 1 exercise design and facility setup (pages 13-15). • Review invitation RSVPs and assign an EPT member to follow up with agencies who have not confirmed participants. <p>Action Items</p> <ul style="list-style-type: none"> • Assign all unresolved matters necessary for conducting the TTX to responsible parties with specific due dates for resolution. • Finalize content for an education session, if applicable. • Follow up with agencies that have not RSVP'd to confirm that all essential participants will be present.
Exercise and Scenario Details	<ul style="list-style-type: none"> • Review each increment of the scenario in the SITMAN and determine potential responses for the TTX. This will ensure the scenario will adequately drive communications across agencies, disciplines, and jurisdictions. Additionally, the facilitator should be prepared to stimulate responses from the TTX participants in cases where no one volunteers responses. • Once the scenario is set, develop a specific set of assumptions and artificialities. • Determine the audience for the AAR. <p>Action Items</p> <ul style="list-style-type: none"> • Finalize the scenario and SITMAN in preparation for TTX play. • Print copies of the SITMAN for all participants. • Print copies of the exercise evaluation forms (available in Appendix C.1).

Phase 3: Conduct Exercise



If all the goals of the design and planning processes are achieved, the EPT will have a plausible and effective scenario to identify interoperable communications issues. Comprehensive exercise preparations; an exercise date, time, and location; and a cast of invited participants—namely players and observers from the various local, tribal, state, and Federal agencies in the region—should be finalized.

The next phase outlines the steps required to conduct the TTX on the day of the session.

Introduce the Exercise and Energize Participants

Before beginning the session, the executive sponsor or EPT leader should provide a brief introduction of the TTX activities for the day. This speech should cover the following matters:

- TTX agenda, outcomes, and purpose
- Commitment to the protection of information captured during the session by designating it FOUO
- Indication that an organization with decision-making authority will consider acting on the recommendations that come out of this exercise as provided in the AAR
- Roles, responsibilities, and the importance of each individual in the room
- Ground rules for the exercise as developed and confirmed by the EPT
- Assumptions and artificialities
- Invitation to participants to introduce themselves

Ground Rules

When conducting a communications-specific TTX, keep the following ground rules in mind:

- Participants should avoid in-depth conversations concerning non-communications issues. When such issues arise, the facilitator should ask the group to move on after proposing a temporary solution to keep the TTX moving forward.
- Participants should tolerate varying viewpoints, including those with which they disagree.
- Participants should be aware that there is no single accepted solution.
- Artificialities or assumptions will exist to approximate real world conditions.
- The TTX is an open, “no fault, no blame” venue. (Note: This concept is very important for participants to accept, especially for supervisory personnel who are present.)
- To achieve interoperable communications during the exercise, participants must respond by only discussing existing assets, cross-jurisdictional agreements, and capabilities.

- Players should avoid workarounds, hypothetical responses, or futuristic solutions and wish lists if they are not a standard part of **current** response protocols.
- During the exercise, **only** players may contribute to the discussion. Observers may share their observations during the debrief discussion.
- When players give a response or make a comment, they should:
 - Speak into a microphone (if one is available).
 - Identify themselves and their agency.
 - Describe the incident response they would provide and the associated communications capabilities they would use.
 - Verify that the data collectors accurately captured their point.

Assumptions and Artificialities

A scenario is not a real emergency; therefore, a set of assumptions and artificialities is necessary to complete the TTX in the available time. The following suggested assumptions and artificialities may apply in the TTX:

- The scenario is plausible and the events occur as they are presented.
- The scenario takes place as the facilitator presents it.
- There are no trick questions or hidden agendas.
- Existing communications solutions (e.g., assets and current cross-jurisdictional agreements and capabilities) are used to respond.

Each EPT should include a specific set of assumptions and artificialities pertaining specifically to the scenario they developed.

Lesson Learned

No matter how much detail has gone into planning, all exercises suffer from certain real-world constraints because they are artificial constructs. The following are examples of issues along these lines that exercise planners may face:

- Some key players may not show up for the exercise, necessitating additional, on-the-spot scripting of exercise play to simulate the response of the agency in question.
- Players may fear negative impacts or consequences from supervisors who are observing if they give “incorrect” answers. Therefore, the facilitator should open the exercise by acknowledging that identifying gaps is an important outcome.

Exercise Play

The sequence of events in the exercise is summarized in the steps listed in table 3. These steps highlight general actions in a successful TTX; in addition, they emphasize professionalism and the role of the facilitator, and encourage participation by all personnel.

Table 3. Tabletop Exercise Sequence of Events

1. The EPT leader begins the TTX with welcoming remarks; at the discretion of the leader, senior governmental or agency officials who are present may also participate in welcoming remarks. The leader introduces the exercise staff; provides logistical information about restrooms, dining facilities, etc.; and ensures the designated players from the various jurisdictions are seated at the participants' tables.
2. The exercise facilitator defines the exercise ground rules and ensures all participants are aware of everyone's roles and responsibilities. The facilitator reviews the schedule for the day.
<p>3. The facilitator displays the initial event of the scenario and kicks off the exercise. Emergency responders continue to openly communicate until an interoperable communications capability is established and it has been clearly indicated how each agency ties into the incident response.</p> <p>Optional Facilitation Technique:</p> <p>As play proceeds and players become more involved in the incident, the emergency responders may move from their original position to an incident table in the front of the room. This technique allows the emergency responders to simulate the actual effect of being on scene at an incident.</p> <p>Typically, as a scenario progresses, most TTX emergency responders move from the table representing their home jurisdiction to the incident table. It is important to note that if this technique is attempted, the EPT must prepare the room for this approach during the design and planning phases. That way, an incident table will be set up in the room for the day of the TTX.</p>

4. Throughout the exercise, the facilitator introduces each sequential event in the scenario and presents questions based on phases of the incident.

Questions to Include:

- ✓ What communication is required (from whom/to whom)?
- ✓ What is the purpose of each communication?
- ✓ How is each communications capability (equipment, frequency, etc.) established?
- ✓ What happens next in the incident response?

It is important for participants to clearly state responses to these questions. Any player may volunteer responses. The facilitator may also call upon certain players to provide specific input. Data collectors record all the player responses.

Relevant participants discuss the communications required at that point to communicate with the incident responders on the scene.

One of the facilitators gathers the information detailing all pertinent communications taking place during the session.

The technical observers take notes, paying particular attention to how the proceedings highlight communications gaps for their area or with the agency with which they most frequently interact. Although the technical observers may respond to major questions, they cannot be active participants. This allows the scenario to unfold as naturally as possible.

5. A 15-minute break is recommended halfway through the exercise.

6. Repeat the actions in step 4 until the final scenario sub-event has been discussed. At that time, the exercise is over and the group breaks for lunch, if a break is needed.

7. The exercise debrief may be conducted either during or after lunch. Players or observers may blend together in a combined debrief session. Every participant—whether player, observer, or member of the EPT—should have a chance to share observations and suggestions. Data collectors record all comments.

8. The EPT leader concludes the exercise with appropriate thanks to all attendees and the EPT members for their leadership and coordination efforts. The leader outlines how the EPT will use the results from the exercise to improve communications in the region.

Exercise Debrief

Immediately following the exercise, the exercise facilitator should conduct a debrief discussion to reflect upon and evaluate the TTX play, including highlights and shortfalls. The goal of this review is to allow all participants to share their observations on successes and failures in the exercise, and to spur ideas for future improvements. This review will also provide a forum for participants to share information about other communications capabilities in the region that the exercise did not discuss.

When existing interoperable communications capabilities are not called in for use during the exercise, a gap is indicated. Such gaps indicate the need to conduct additional training for personnel and to raise awareness about asset availability.

When the exercise debrief is convened in the exercise room, the exercise facilitator should encourage observers and players to sit together. At this point, as there is no longer any separation of roles, everyone is responsible for contributing to the debrief and generation of process improvement ideas. During the exercise debrief, every participant, whether an observer, player, or member of the EPT, should have an opportunity to share his or her constructive comments. As with the exercise, data collectors should capture all comments. These post-exercise observations will aid the EPT in developing the exercise's AAR.

The exercise debrief discussion is based on discussion of the following questions:

- ✓ What worked well?
- ✓ What communications capabilities were underused, not used at all, or not discussed?
- ✓ What, if any, communications gaps and interoperable communications gaps exist?
- ✓ What are the suggested initiatives for resolving communications gaps?
- ✓ What capabilities or assets exist that were not widely known prior to the exercise?
- ✓ What are suggested upgrades for future exercises?

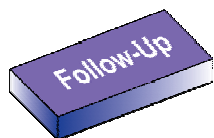
After the discussion is completed, the EPT leader should thank all participants and share details on how the EPT and/or the regional leadership will use the results from the exercise.

Prior to departing, participants should be encouraged to complete the exercise evaluation form (see Appendix C.1 for a sample) to share their insights and comments.

Technical Demonstration (Optional)

A technical demonstration is an optional educational activity that may be conducted after the review session. It may help increase awareness of local capabilities. One of the participating local emergency response agencies may organize the demonstration using an existing interoperable communications capability. This allows participants to learn more about a specific technology discussed during the session. The presentation should include a review of technical resources—such as fixed and mobile switches, radio caches, and shared channels—that are available to local agencies.

Phase 4: Exercise Evaluation and Data Analysis



The first step in evaluating the TTX is to gather all of the relevant data. The following best practices help ensure successful data collection and analysis:

- The exercise debrief session should be open to players and evaluators.
- At the conclusion of the exercise and exercise debrief, the data collectors should have captured their notes in a computer file. These notes should include the observations voiced by exercise participants during exercise play and the debrief discussion, as well as other observations.
- Immediately following the exercise debrief, the primary data collector should gather all notes from all data collectors and evaluators.
- The primary data collector should fill in the scenario discussion summary template with notes taken during the exercise. This provides a single location for the transcript of the exercise's proceedings, with all data collector and evaluator notes. The scenario discussion summary should be included as an appendix in the exercise AAR. Any identified interoperable communications gaps and their respective recommendations should be traced back to comments at the exercise.
- When writing preliminary analyses, evaluators should consider the following questions:
 - Did the discussion suggest personnel could successfully complete the tasks needed to carry out each communications interaction? If not, why?
 - What are the key decisions associated with each communication? Did discussion suggest personnel are adequately trained to complete the tasks needed to carry out each communications interaction?
 - Did the discussion identify any resource shortcomings that could inhibit the ability to carry out a communications interaction?
 - Do the current plans, policies, and procedures support performance of communications interactions? Are participants familiar with these documents?
 - Are the agreements or relationships in place to support the coordination required?
 - What should be learned from this exercise?
 - What strengths were identified for the region's communications capabilities?
 - What areas for improvement are recommended?
- After the scenario discussion summary is completed, the exercise facilitators and evaluators should meet. Their goal is to identify the communications and

interoperable communications gaps that were observed and to measure success against the goals and objectives established in the planning process. This meeting should take place within 24 hours of the exercise while details are fresh in evaluators' minds. The identified gaps may span one or more of the elements documented in the Interoperability Continuum, (i.e., governance, SOPs, technology, training and exercises, and usage). The resulting list of gaps, and their categorization, should be documented in the scenario discussion summary. They will form the basis of the QuickLook debrief activity and report document, which highlight exercise findings and provide a summary of communication gaps.

After the scenario discussion summary is completed, the data collector should turn over the scenario discussion summary file to the exercise facilitator or designee. The latter will begin the QuickLook report—the first step in completing the exercise's AAR.

QuickLook Debrief and Report

The QuickLook debrief should be scheduled within two weeks of the exercise. It is an opportunity to present to the participating agencies a summary of communications gaps noted at the exercise. Its purpose is twofold:

- To provide a quick summary of the exercise results. This gives agencies a chance to begin thinking about ways to resolve communications gaps while the formal AAR is still being written.
- To ensure that communications gaps noted at the exercise are correct. In some cases, the apparent gaps result from exercise players misunderstanding instructions; in other cases, gaps may be ascribed to data transcription errors.

Gaps should be summarized in a presentation (see the QuickLook report template in Appendix D.1). The exercise facilitator should deliver the presentation at the QuickLook debrief session.

QuickLook invitees should include the participating technical and operational experts of TTX agencies who are knowledgeable about the SOPs and communications equipment and capabilities of their agencies. These personnel are the best audience for validating the communications and interoperable communications gaps noted at the exercise.

During the QuickLook debrief, slides should be modified to correct errors or oversights. The exercise facilitator should retain the resulting file, which should be used to correct the scenario discussion summary file.

After conducting the QuickLook debrief and completing any necessary corrections, the EPT should be ready to begin the post-exercise analysis and the exercise's AAR.

Organizing Outcomes along the Interoperability Continuum

DHS recommends using the Interoperability Continuum to target areas for improvement across critical factors that affect interoperability. To do this, review the data collected in the debrief discussion and organize it under an element of the Continuum (governance,

SOPs, technology, training and exercises, and usage). Examples of topics to consider include, but are not limited to:

- **Governance**
 - How can information be disseminated from communications-specific groups to users in the field?
 - In order to fill identified communications gaps, what governance structure is in place that would distribute the AAR to local managers with budget responsibility?
- **SOPs**
 - What communications SOPs need to be provided to staff at the command post?
 - What SOPs exist to provide emergency responders with guidance on communications capabilities?
 - How can SOPs include all participating agencies in the region so they are able to effectively go about finding interoperability solutions?
- **Technology**
 - What issues bear upon the effectiveness of existing systems?
 - How can system coverage be expanded, if needed?
- **Training and Exercises**
 - What is the need for operator training for specific technology solutions?
 - What is the need for additional exercises?
- **Usage**
 - How often should interoperability capabilities be employed?

The Interoperability Continuum will help the group understand the current state of their agencies' and jurisdictions' interoperability capabilities and areas in need of progress.

Interoperable Communications Gap Analysis

After the QuickLook debrief has validated the interoperable communications gaps and possible intra-agency communications gaps, the EPT may begin a gap analysis. The purpose is to analyze the interoperable communications gaps and to determine and document recommended resolutions of the gaps. Examples of communications gaps are identified in table 4.

Table 4. Examples of Interoperable Communications Gaps

Interoperable Communications Gaps	
Governance	No MOUs in place about the assumption of on-site command for all-hazard events suspected of being crime scenes
SOPs	No SOP in place for reporting on lost or damaged equipment to the agency which lent the equipment
Training and Exercises	No recurring training schedule in place for support staff; no checklist in place for notifying staff personnel of upgrades to equipment

Staffing the analysis team with relevant members of the EPT will help bring about meaningful recommendations. For example, a technical expert should address a technology gap whereas an operational expert should tackle training or operating procedure gaps. In general, the analysis team should be composed of the technical and operational SMEs who were present at the exercise as observers. These individuals may work with regional agency personnel to develop the right solutions.

The exercise facilitator should work with the analysis team members to answer their questions, to encourage them to complete their analyses on time, and to serve as the collection point for their analysis reports. The analysis effort should be planned up front with a hard deadline; analysis team members should be aware of that deadline. See Phase 2: Exercise Design and Documentation Development for a recommended timeline.

After Action Report

The AAR is not an in-depth technical document. Rather, it is a review of the major issues identified during the exercise. It should contain a list of recommendations to improve regional communications and interoperability. The AAR should summarize the TTX results and mobilize action and support from regional policy and decision makers. These individuals may fund and allocate resources to the initiatives that will bridge the interoperable communications gaps identified in the TTX. Other stakeholders who might benefit from receiving the AAR include:

- Regional government officials
- Emergency response supervisors
- Agency communications specialists
- Dispatchers
- Field personnel

Purpose

The purpose of the AAR is to clearly present the issues that the emergency response community and local policymakers must address to achieve meaningful communications interoperability. Its content should be based on results and observations from exercise participants; it should also address any follow-up matters uncovered during the post-exercise communications gap analysis.

Before the TTX takes place, it is critical to establish the regional decision-making body. This body will receive the AAR, which will include a documented list of recommendations and suggested actions to improve regional emergency response communications and interoperability.

Content

The AAR structure recommended by DHS is based on the format prescribed by HSEEP. This structure helps to organize data gathered during the TTX in a clear and logical format that is accessible to readers of all communications expertise levels. Sample AARs are available in the sample exercise documents on the HSEEP Web site (http://hseep.dhs.gov/hseep_vols/AllDocs.aspx). AARs typically include the following sections:

Executive Summary

The executive summary provides a brief description of the purpose and goals of the TTX, a general overview of the current state of communications and interoperability in the regions, and a high-level summary of findings and recommendations. This section includes major strengths demonstrated during the exercise and areas that require improvement.

Section 1: Exercise Overview

The exercise overview briefly describes the details of the exercise; identifies the participating agencies and organizations; and describes how the exercise was structured, implemented, and carried out.

Section 2: Exercise Goals and Objectives

This section briefly lists the goals and respective objectives for the exercise. These are developed during the planning and design phases; they are used to define the scope and content of the exercise as well as the agencies and organizations that will participate.

Section 3: Exercise Events Synopsis

The events synopsis provides an overview of the scenario used to spur exercise play and details the actions taken by the players to respond to the simulation. This section should include a synopsis, the modules for the exercise, and a timeline of events for each element of the exercise.

Section 4: Analysis of Capabilities

The analysis of capabilities section discusses each critical task that was performed to respond to the simulation defined by the scenario. For those tasks that were performed as expected, this section provides a short write-up of observations and any lessons learned to describe how the task was performed. These tasks generally do not require recommendations.

For tasks that were not performed as expected, this section includes details on what happened or did not happen and the root causes for the variance from the plan or established procedures or agreements. It also includes recommendations for improvement. This section indicates whether the variance resulted in an improved response, which may result in a recommendation that plans or

procedures be changed. This section also highlights and describes innovative approaches that were used during the response.

To spur the tracking of recommendations and improvements, spell out any acronyms. Consult notes taken during the TTX as well as technical observer feedback when developing this section.

Important points to consider include:

- ✓ How many agencies were able to communicate effectively during a given stage?
- ✓ How did participants react to the communications discussions?
- ✓ What authorities and technologies were employed to accomplish tasks in support of emergency operations?

Section 5: Conclusion

The conclusion provides a summary of all the sections of the AAR. This section includes details regarding participants' demonstration of capabilities, lessons learned for improvement, and major recommendations. It also includes a summary of steps to ensure the results of the exercise will help to further refine plans, procedures, and training for this type of incident.

Appendix D.2 includes a suggested AAR template. This sample document may be used as a starting point for crafting the exercise AAR. EPTs are encouraged to use the standard phrasing from any pieces of the template that they find useful.

Continuous Improvement



Improvement planning is the process by which concrete improvement actions addressing issues observed during a TTX are developed, assigned, implemented, and tracked. The continuous improvement process focuses on using the information generated by the TTX to implement improvements that enhance interoperable communications capabilities. To realize the benefits of conducting a TTX, the lessons, observations, and insights gleaned during the exercise must be translated into actions that result in capability improvements.

Following the completion of a draft AAR, an After Action Conference should be held, in which the EPT, evaluation team, and others gather to review and refine the draft AAR. As part of the After Action Conference's activities, attendees should develop an IP. The IP articulates specific improvement actions addressing issues identified in the AAR and assigns each improvement action to a responsible person or group. The refined AAR and IP should then be finalized as a combined AAR/IP, and IP action items should be tracked to completion.

The IP communicates how the areas for improvement observed during an exercise are addressed by concrete, measurable steps that result in improved capabilities. It is developed by the exercising jurisdiction, agencies, or organizations, which are ultimately accountable for its implementation.

A documented IP may help focus the team in its efforts to increase effectiveness in specific areas. The IP is the means by which the lessons learned from the exercise (in this case, the interoperable communications and intra-agency communications gaps and associated recommendations for resolution) are turned into concrete, measurable actions that will result in improved response capabilities.

Improvement Plan Key Steps:

When developing an IP, remember to:

- Identify the lessons learned from the AAR.
- Identify actions to address each recommendation presented in the AAR.
- Identify areas of opportunity and target specific problems:
 - What problems were encountered?
 - What can be done differently?
- Define a list of prioritized improvements.
- Identify the individual or agency responsible for taking the action.
- Gather support and resources to execute the recommendations for making improvements.
- Set a timeline for completing the actions.
- Develop a plan and schedule to put the improvements into effect.
- Build measurement tools, monitor implementation of improvements, and evaluate measurements to baseline.

The exercise valuation team should evaluate the initial IP, based on the findings of the exercise analysis team. Generally, the initial IP is included in the AAR as an appendix. The regional communications interoperability groups should revisit the IP every six to nine months with lessons learned from the previous TTX on hand.

See the IP template in Appendix D.2 for additional ideas.

What's Next? Other Types of Exercises to Consider

Familiarity with communications equipment requires a cycle of exercises that are repeated at regular intervals. The annual Exercise Planning Workshop (EPW) is the typical venue for planning the region's schedule of communications exercises. See the HSEEP publication, *Training and Exercise Plan Workshop User's Handbook*,³ for guidelines on conducting the EPW.

After completing the TTX, DHS recommends that agencies repeat the exercise scenario at a Functional Exercise (FE), an Executive Tabletop Exercise (EX-TTX), and an FSE.

Functional Exercises

A FE is a multi-agency exercise, also known as a command post exercise. It is designed to test and evaluate individual capabilities, multiple functions or activities within a function, or interdependent groups of functions. FEs are generally focused on exercising the plans, policies, procedures, and staffs of the direction and control nodes of incident command and unified command. Movement of personnel and equipment is simulated. Generally, events are coordinated through an exercise scenario, and event updates drive activity at the management level.

The objective of the FE is to execute specific plans and procedures and apply established policies, plans, and procedures under crisis conditions, within or by particular function teams. An FE simulates the reality of operations in a functional area by presenting complex and realistic problems that require rapid and effective responses by trained personnel in a highly stressful environment.

The components of an FE include:

- Evaluating functions
- Evaluating EOCs, headquarters, and staff
- Reinforcing established policies and procedures
- Measuring resource adequacy
- Examining inter-jurisdictional relationships

For this communications-specific exercise, the basic approach is to repeat the TTX scenario at the actual geographic places in the scenario. Players use the communications equipment necessary to deal with the scenario incident (e.g., making radio transmissions/phone calls, entering in computerized data, etc.).

Executive Tabletop Exercises

An EX-TTX is designed to educate senior governmental officials about the gaps and recommendations uncovered at the TTX. During an EX-TTX, the officials are guided through the TTX scenario, and the facilitator leads discussions about governance and SOP issues that may hinder the region's ability to effectively communicate.

³ Homeland Security Exercise and Evaluation Program. *Training and Exercise Plan Workshop User's Handbook*. [http://hseep.dhs.gov/support/TEPW_Users_Handbook_\(V30\).pdf](http://hseep.dhs.gov/support/TEPW_Users_Handbook_(V30).pdf).

Full-Scale Exercises

An FSE is typically the most complex and resource-intensive type of exercise. These multi-agency, multi-jurisdictional exercises test many facets of emergency response and recovery. They require many emergency responders operating under an ICS or Unified Command System to effectively and efficiently respond to and initiate recovery from an incident.

An FSE focuses on implementing and analyzing the plans, policies, and procedures developed in TTXs and FEs. Events are presented using a scripted exercise scenario that has built-in flexibility to allow updates to drive activity.

The FSE is conducted in a real-time, stressful environment that closely mirrors a real event. Emergency responders and resources are mobilized and deployed to the scene, where they conduct their actions, with a few minor exceptions, as if a real incident had occurred. As previously discussed, interoperable communications—developed during the TTX, FE, and EX-TTX—should now assist the demonstration of operational capabilities in the FSE.

The FSE simulates reality by presenting complex and realistic problems involving operations in multiple functional areas that require critical thinking, rapid problem-solving, and effective responses by trained personnel in highly stressful environments. The HSEEP publication, *Volume II: Exercise Planning and Conduct*⁴, provides the detailed methodology to plan, conduct, and evaluate a communications-based FSE.

⁴ Homeland Security Exercise and Evaluation Program. *Volume II: Exercise Planning and Conduct*. <http://hseep.dhs.gov/support/Volumell.pdf>.

Conclusion

The *Communications-Specific Tabletop Exercise Methodology* is designed to provide an effective structure for the planning, implementation, and evaluation of a locality's interoperable communications issues. While this methodology is unique, it is fully compliant with HSEEP goals, guidelines, and formats. Ultimately, this methodology should achieve the following:

- Help communities increase the overall awareness of the existing communications and interoperability capabilities in their area.
- Emphasize the importance of communications by focusing the exercise solely on communications interoperability.
- Provide structure to the TTX process.
- Demonstrate the importance of using an EPT comprised of leaders from local, state, and Federal agencies to develop the TTX scenario.
- Provide an opportunity for the communications departments of area agencies to identify and discuss gaps in current capabilities and processes and learn from agencies that possess different technologies and follow different procedures.

Fluency in this TTX methodology is critical to each phase's success. EPT members should become familiar with every component—from big picture goals to the finest level of detail. The result is an effective exercise that clearly demonstrates regional communications gaps, recommendations on how to bridge those gaps, and a path to progress.

Acronym List

Acronym	Meaning
AAR	After Action Report
DHS	Department of Homeland Security
EMS	Emergency Medical Services
EOC	Emergency Operations Center
EPT	Exercise Planning Team
EPW	Exercise Planning Workshop
EX-TTX	Executive Tabletop Exercise
FE	Functional Exercise
FOUO	For Official Use Only
FSE	Full-Scale Exercise
HSEEP	Homeland Security Exercise and Evaluation Program
ICS	Incident Command System
IP	Improvement Plan
IPC	Initial Planning Conference
MOU	Memorandum of Understanding
MPC	Mid-Term Planning Conference
NIMS	National Incident Management System
SITMAN	Situation Manual
SME	Subject Matter Expert
SOP	Standard Operating Procedure
TTX	Tabletop Exercise

Appendix A Planning Tools

This appendix contains samples, templates, and checklists to assist Exercise Planning Team members in planning a tabletop methodology. Appendix A includes the following resources:

- **A.1:** Sample Exercise Planning Team Organization
- **A.2:** Facilities Checklist
- **A.3:** Sample Invitation Letter
- **A.4:** Sample Registration Sheet
- **A.5:** Sample Exercise Agenda
- **A.6:** Example, Communications-Specific Tabletop Exercise Scenario
- **A.7:** Options for the Room Layout

For these resources:

- The bracketed text found in these documents is included to provide instruction or to indicate a location to input text.
- All text that is not highlighted can be left as-is or adjusted for each resource.
- Each locality should adapt the resource to suit its own needs and circumstances.

A.1 Sample Exercise Planning Team Organization

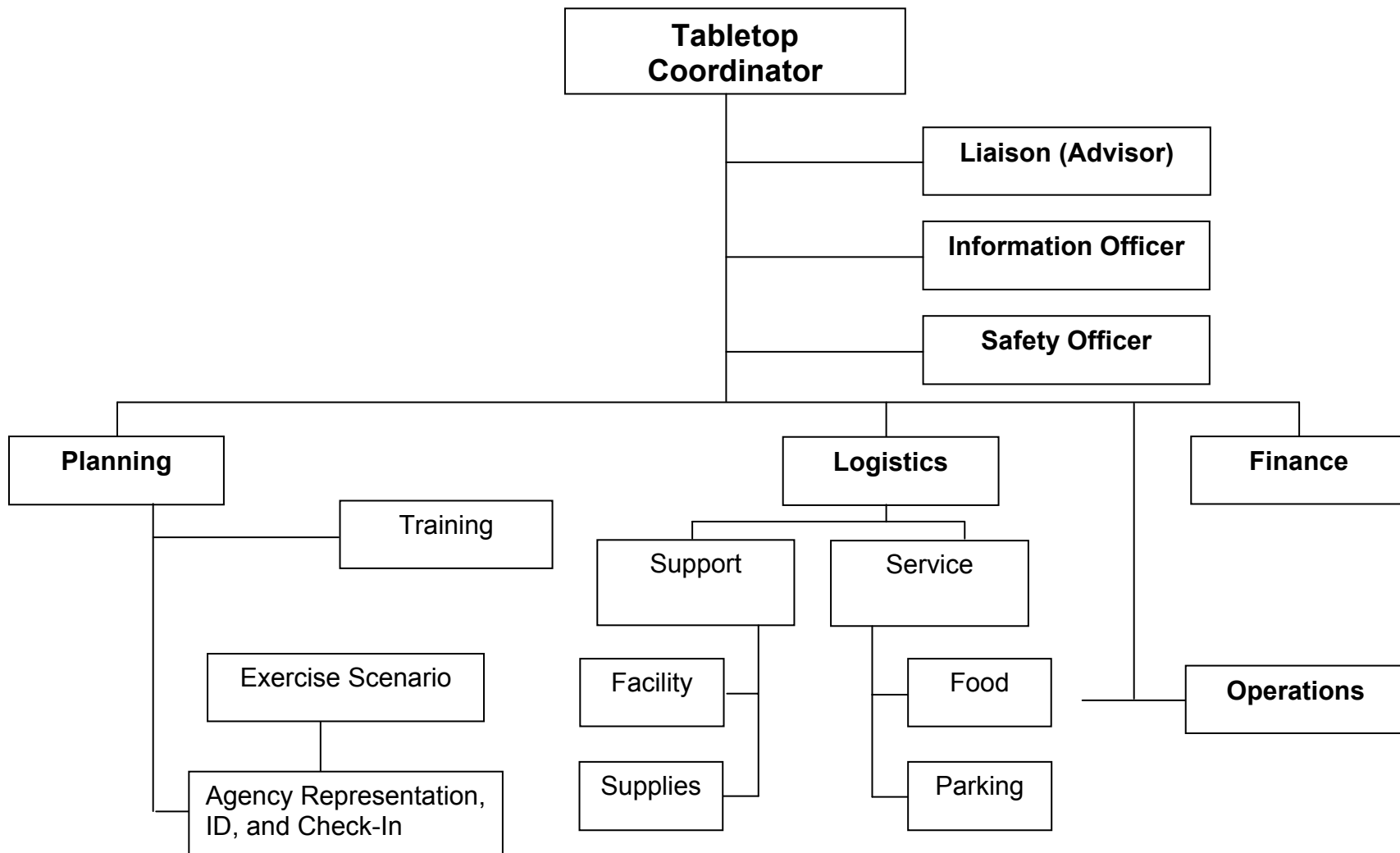


Figure 4. Sample Exercise Planning Team Organization

A.2 Facilities Checklist

<<Use the following checklist to confirm that logistical preparations are complete.>>

Tabletop Exercise Facilities Checklist

- ☐ Facility has been formally reserved for the dates of the exercise.
- ☐ Facility will allow exercise room setup at least one day in advance of the exercise.
- ☐ Facility point of contact is known and is easily accessible.
- ☐ Facility is accessible at least one hour before the exercise for sign-in and registration.
- ☐ Facility is adequately secure to protect equipment or sensitive documentation stored there.
- ☐ Facility has adequate parking to accommodate the expected number of participants.
- ☐ Facility has adequate restrooms.
- ☐ Facility has an available room or area for sign-in or registration.
- ☐ Facility has, or will allow to be brought in, equipment and supplies needed to run the exercise.
- ☐ Exercise room is the right size and shape to accommodate expected participants and table arrangement.
- ☐ Lighting and temperature control are adequate in the exercise room.
- ☐ Facility has an adequate number of tables and chairs for the exercise and for sign-in.
- ☐ Exercise room has sufficient electrical outlets to accommodate required equipment.
- ☐ Registration area has sufficient electrical outlets to accommodate registration requirements.
- ☐ Exercise room has, or can accommodate, an adequate sound system.
- ☐ Exercise room has, or can accommodate, projection equipment (projectors and screens).
- ☐ Exercise room has, or can accommodate, video or audio recording.
- ☐ Appropriate arrangements have been made for catering for the event (e.g., coffee and pastries in the morning, a simple working lunch, and beverages).
- ☐ If refreshments are being provided, facility has an area to accommodate food storage, refrigeration, and serving lines.
- ☐ If refreshments are being provided, facility can accommodate the arrival of caterers and setup of food and beverage services without disrupting the exercise.
- ☐ Arrangements have been made to secure and sign out of the facility when all exercise activities are completed.

A.3 Sample Invitation Letter

<<Date>>

Dear <<Area Emergency Response Official>>:

As part of <<Locality Name>> effort to advance its communications interoperability capabilities, a Communications-Specific Tabletop Exercise for key emergency agencies will be conducted on <<date>> at <<location>>. This exercise will run from <<xx:xx am to xx:xx>>.

The <<Area Workgroup>> chaired by <<Chair's Name>> would like to invite your agency to participate in this region-wide exercise.

This exercise has been supported and collaboratively developed through a working group consisting of leaders from the <<Area>>, state, and Federal agencies who are concerned with improving current interoperable communications capabilities and maintaining compliance with <<Urban Area Security Initiative, other grant, or local training requirements>>.

The exercise will focus on communications interoperability in response to a multi-agency, multi-jurisdictional event.

We are seeking one or more individuals from your agency to fill one of four distinct roles:

1. **Tactical Emergency Responder (Emergency Medical Services, Fire Response, Law Enforcement)** – Field-level responders who would be the first to respond to an incident. Individuals in this role will be key players in the exercise.
2. **Operational Specialists** – A mid-level responder who would assume a command role at the scene of an incident.
3. **Dispatcher** – A dispatcher familiar with the interoperability capabilities of your agency.
4. **Technical Observer** – A communications specialist who can observe the exercise to identify gaps in capabilities and give recommendations for the After Action Report.

Please provide the names of the individuals to represent your agency to <<RSVP Contact Name, Title, Phone, and E-Mail Address>> by <<RSVP Deadline>>.

This exercise was designed by practitioners as a way to increase awareness of the existing communications interoperability capabilities in <<Locality Name>>. The session will start with a presentation on current regional capabilities, followed by a multi-jurisdictional, multi-level communications tabletop exercise. <<Optional to include the following sentence: When the exercise is completed, there will be a technical demonstration using equipment.>>

The emergency response agencies of <<**Locality Name**>> look forward to working with members of your agency on <<**Date of Exercise**>> as we work together to advance interoperability progress.

Please contact <<**Point of Contact, Phone, E-Mail**>> if you have any questions.

Respectfully,

<<**Representative**>>

<<**Title**>>

A.4 Sample Registration Sheet

<<Enter Area Name Here>>

<<Tabletop Exercise>>

<<Month DD, YYYY>>

Sign-In Sheet

Name:

Title:

Organization:

Phone Number:

E-Mail:

**Role within Home
Agency:**

**Experience in Current
Role (*in years*):**

Exercise Role
(*check one*)

Practitioner

- ☐ Tactical Emergency Responder
- ☐ Operational Specialist
- ☐ Dispatcher
- ☐ Technical Observer

Support

- ☐ Observation
- ☐ Facilitation

**Communications
Background** (*check one*)

- ☐ **Specialist** – High technical familiarity with the home agency's communications systems
- ☐ **Moderate** – Familiar with the home agency's communications systems through regular training and exercises
- ☐ **Field User** – Only use communications equipment for day-to-day operations with little prior communications-specific training

**Regional
Interoperable
Communications
Familiarity**

- ☐ High
- ☐ Moderate
- ☐ Low

Time In:

Time Out:

A.5 Sample Exercise Agenda

- 8:00 A.M.** Sign In
- 9:00 A.M.** Introductions and Tabletop Exercise (TTX) Ground Rules, Assumptions, and Artificialities
- 9:30 A.M.** TTX Begins
- 10:30 A.M.** Break
- 12:00 P.M.** TTX Ends/Lunch
- 1:00 P.M.** Exercise Debrief

A.6 Example, Communications-Specific Tabletop Exercise Scenario

Draft scenario setting: On a Tuesday morning, the temperature is 60 degrees Fahrenheit, with a forecast for a high of 80 degrees Fahrenheit. Winds are five miles per hour out of the southwest. At 6:25 A.M., an accident occurs on the westbound Tropicana Avenue Bridge over I-15. A call is received reporting the accident; there is a possibility of people trapped inside the vehicles.

Sub-event 1: 6:27 A.M.

Metro police officers roll up to the scene of the accident on the westbound Tropicana Avenue Bridge over I-15. The accident involves a dump truck and a cargo tank truck, with placards on four sides of the latter vehicle. Cars and people are being sprayed with fine, oily droplets; the droplets are going onto the people's skin and clothing. Occupants of contaminated cars have exited their vehicles and gone into the street, resulting in further groups of contaminated people. A motorcycle club traveling north on I-15 passes under the bridge.

Sub-event 2: 6:29 A.M.

Metro police officers realize a chemical is being discharged into the atmosphere from a damaged area on the placarded cargo tank truck. Metro police officers managing the scene notice that the placards on the tank truck read "2902." Metro decides to shut down Tropicana Avenue and I-15 northbound. Wireless carrier service communications are overloaded and unavailable at this site.

Sub-event 3: 6:32 A.M.

The Nevada Highway Patrol is en route to the scene; officers are delayed by the mounting traffic on I-15.

Sub-event 4: 6:35 A.M.

Initial Clark County Fire and Rescue vehicles arrive on the scene and assume command. They are informed there is a chemical spill and call for the hazardous materials (HAZMAT) team. The group declares a HAZMAT level three alert.

Sub-event 5: 6:45 A.M.

Three operating zones are established: 1) The hazard zone includes the Tropicana Avenue Bridge overpass and a 200-foot perimeter; 2) HAZMAT teams are deployed in the decontamination area and evacuation zone. The teams set up 200 to 300 feet from the exterior of the hot zone. Also in this zone are all the contaminated people, including the emergency responders who made initial entry without proper protection; 3) Police

lines at the edge of the perimeter define the support zone. In this zone are all immediate support personnel and the command post.

Aerial reconnaissance by a Metro helicopter begins. A local news helicopter is also monitoring the scene.

Sub-event 6: 7:05 A.M.

A monumental traffic jam has developed within a mile of the incident, effectively delaying the arrival of emergency responders. Clearing access to the scene and performing triage for the injured takes precedence, but is slowed due to the large number of casualties and the heavy traffic congestion. People are starting to feel symptoms from exposure to the chemical. Care for patients, including decontamination as well as removal from the hazard zone, should already be underway. Close supervision of the patients will be necessary during triage and transport to the hospital.

Sub-event 7: 7:10 A.M.

Several members of the motorcycle club have fallen off their vehicles at the intersection of Lake Mead Boulevard and Las Vegas Boulevard. Several people are going to local area hospitals reporting or exhibiting symptoms of nausea, vomiting, diarrhea, or loss of consciousness.

Sub-event 8: 7:15 A.M.

The Incident Commander declares a Mass Casualty Incident (MCI). An immediate evacuation of the affected area is ordered.

Sub-event 9: 7:30 A.M.

Some hospitals are reporting their emergency rooms are overwhelmed and must communicate with incoming ambulances to redirect patients to other hospitals.

Sub-event 10: 7:35 A.M.

From the incident scene, the Metro Emergency Management Lieutenant contacts the Clark County Office of Emergency Management (OEM). The Clark County OEM requests an update on evacuation, monitoring, and containment efforts as soon as possible to provide the County Manager with information for the Governor. The OEM, notified of the MCI, immediately activates the Emergency Operations Center (EOC).

Sub-event 11: 7:40 A.M.

Contaminated patients are put into a holding area in the decontamination zone. Inbound resources are being assembled outside the support zone. Ten deaths are confirmed at this time; there are concerns that the coroner has not yet arrived. The fire departments have set up two decontamination stations on the edge of the decontamination area zone, on opposite sides of Tropicana Avenue. Affected patients pass through two decontamination stations. Emergency medical services have now set up outside the decontamination stations two triage areas. In these areas, officials process every person and provide medical treatment.

Sub-event 12: 7:50 A.M.

It is determined assistance is required from the state. The Governor subsequently holds a news conference. The Governor indicates he has declared a state of emergency, that an evacuation is in progress, and that the state EOC is activated. Hotel guests not evacuated are asked to remain indoors. The Governor orders the National Guard to mobilize to assist with the response.

Conclusion – Much later

As the incident winds down, agencies are no longer needed at the incident location and the area is secured. A decision is made to discontinue the command post.

A.7 Options for the Room Layout

The following two figures present two options for the room layout.

The first option has a format in which agencies and jurisdictions are seated together in round tables (see figure 5).

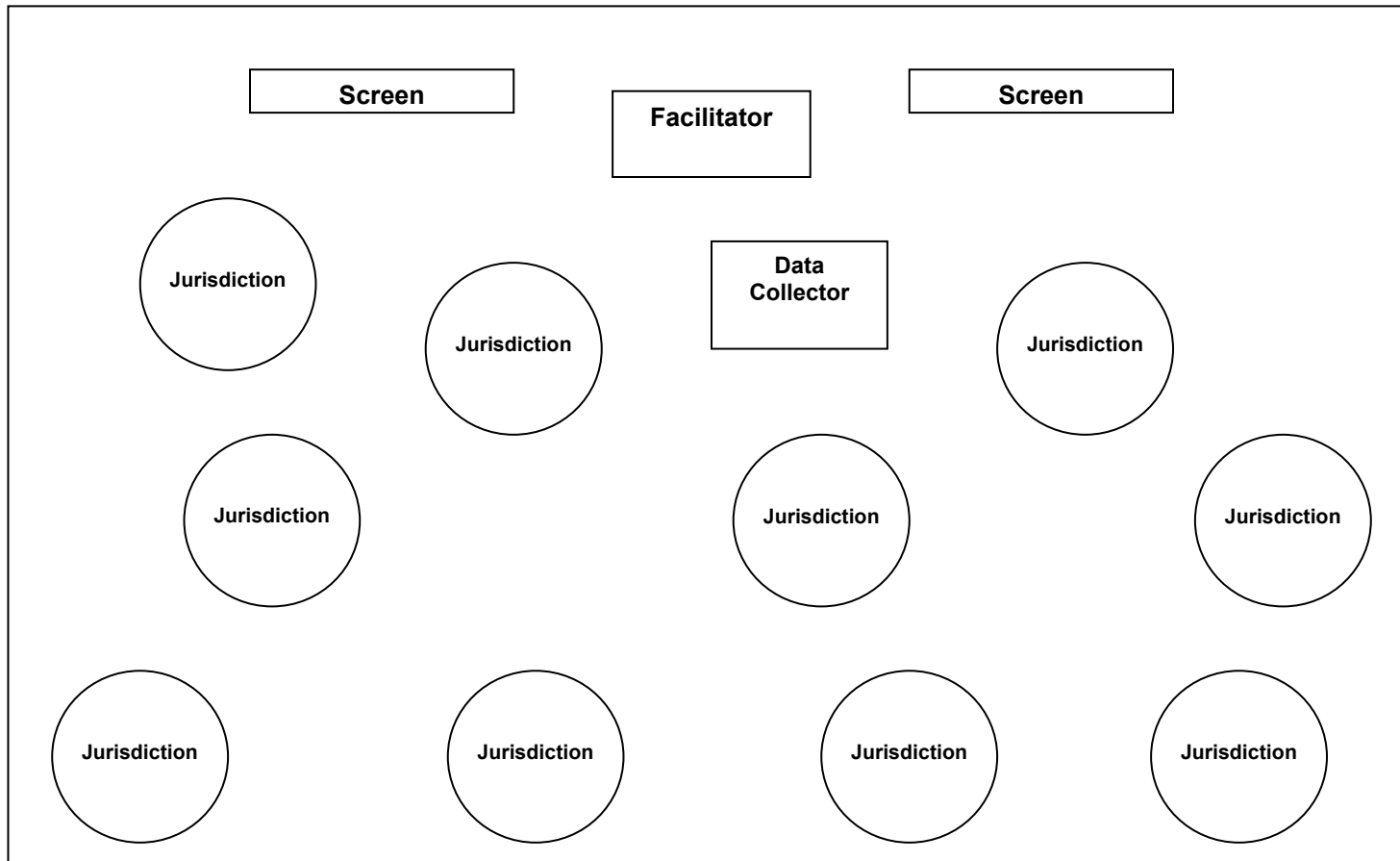


Figure 5. Option 1 for Room Layout

The second option for the room layout has a format in which agencies and jurisdictions are grouped around a set of tables, forming a large U-shaped table, and the incident tables are placed inside the larger set of U-shaped tables (see figure 6).

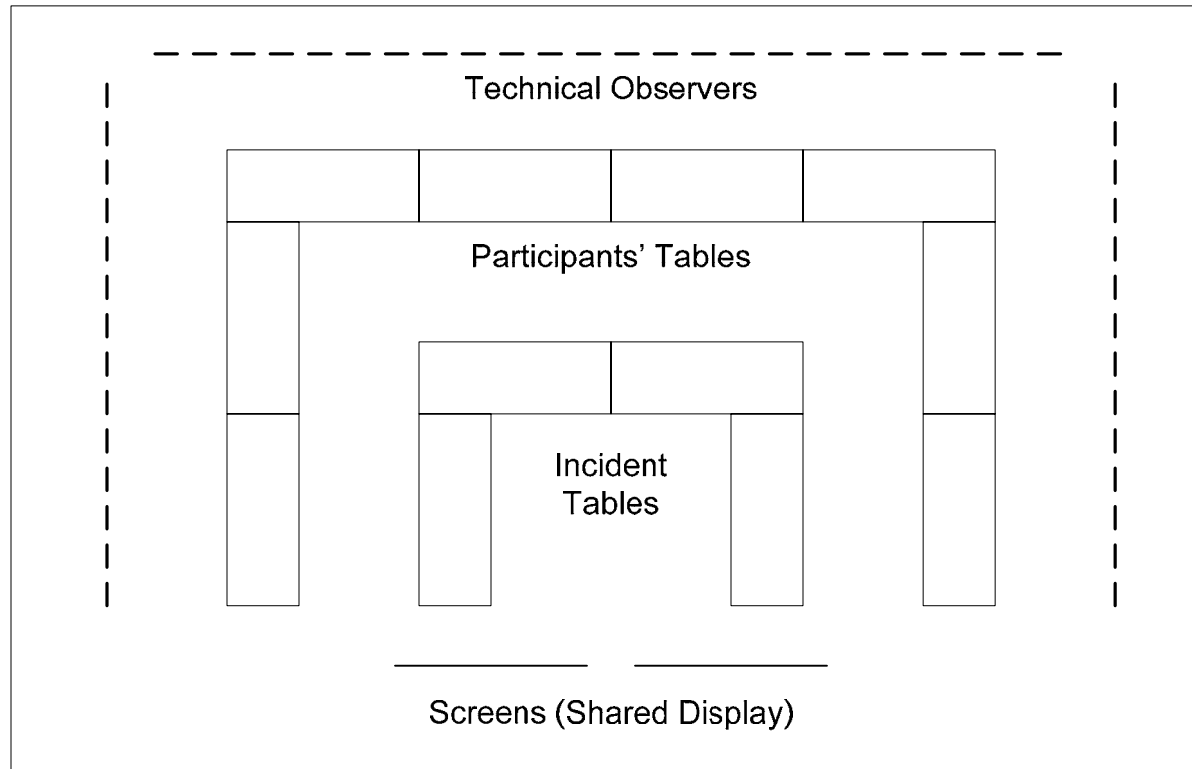


Figure 6. Option 2 for Room Layout

Appendix B Situation Manual Template

This appendix contains the Situation Manual Template. For this template:

- The bracketed text found in this document is included to provide instruction or to indicate a location to input text.
- All text that is not highlighted can be left as-is or adjusted for each exercise.
- Each locality should adapt the template to suit its own needs and circumstances.

<<Area>>

<<Exercise Name>>

**Tabletop Exercise (TTX)
Facilitator Situation Manual**

Name	
Title	
Discipline/Jurisdiction	

*****Please turn in these notes at the end of the session.*****

Facilitator's Roles and Responsibilities

Provide situation updates and moderate conversation. Provide additional information or resolve questions as they develop. Keep play focused.

<<Recommend insertion of map of incident location on this page.>>

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Purpose

This TTX is part of the process designed to provide emergency response agencies with assessments of, and improvements to, the communications required during a major disaster or critical incident.

This exercise gives participants an opportunity to evaluate current communications concepts, plans, and capabilities for a response to a major, multi-agency incident in **<<incident city>>** and its surrounding communities. The exercise will focus on key local emergency responder coordination; critical decisions; and the integration of local, tribal, state, and Federal assets necessary to save lives and protect public health following a terrorist event.

Scope

This TTX will focus on the **<<area's>>** communications interoperability during a multi-jurisdictional incident by walking through the emergency response community's role in response to the potential consequences as presented in the scenario. Throughout the exercise, emphasis will be placed on interoperable communications capabilities, or the lack thereof, based on assets that are currently in place in your area.

Outcomes from this TTX should include gaining a better understanding of communications interoperability in the **<<area>>** and developing a gap analysis of communications capabilities that require improvement.

Exercise Goals

The goal of this TTX is to discuss the policies, procedures, plans, available assets, and capability gaps of communications systems that regional agencies use in response to a multi-jurisdictional event. This TTX has been designed with emergency responder input from:

- **<<List all agencies that provided input during the planning process.>>**

This exercise is largely discussion guided by facilitators. The success of this TTX is determined by feedback from the participants and the impact this feedback may have on existing regional and agency communications policies, plans, and procedures.

Overall Exercise Objectives

This TTX will focus on the following objectives:

- To evaluate all levels of communications integration and interoperability available to or required by the <<area>> exercise participants. The evaluation will take place in accordance with operational procedures and regional response plans, including the integration of specialized communications equipment packages.
- To enhance the overall readiness of the region in the event of an actual emergency on the scale of a major disaster.
- To determine the ability to rapidly and effectively establish interoperable communications in the case of a major multi-agency event.

Exercise Structure

This activity is a structured TTX that is focused on the ability of the participants to communicate using available assets. The exercise will continue from the initial event response to the establishment of on-scene communications and through the coordination of multiple agencies and jurisdictions at various governmental levels. Following completion of the exercise, all participants will be encouraged to provide input during a debriefing.

This TTX is designed to help participants focus on interoperable communications capabilities and issues by providing the opportunity to engage in facilitated discussions and activities. The intent of this exercise is to provide a greater understanding of communications issues faced by other agencies and to assist in coordination and collaboration to reach optimum solutions for all participants.

Participants

The responding agencies and disciplines may include the following:

- <<List all potential responders.>>

Roles and Responsibilities

Players

Players respond to the situation presented based on current knowledge of response procedures, plans, cross-jurisdictional agreements, and communications capabilities. During the exercise, some players may have more active or less active roles than others, depending on their real-world jurisdictional proximity to, or involvement in, the scenario as presented. However, all players are encouraged to participate fully and to think through the potential ramifications of the scenario to their agency.

Observers

Observers take written notes of the jurisdictional, training, and technological interoperability gaps noted during exercise play. They should be prepared to provide their input to the group during the debriefing that follows the exercise. Please note that observers do not participate in exercise play during the moderated TTX discussion.

Facilitators

Facilitators provide situational updates and moderate the conversation. They also provide additional information or resolve questions as they develop. Facilitators keep the “play” of the exercise participants focused.

Data Collector

Data collectors transcribe processed verbal information accurately and quickly onto a computer. Multiple data collectors may be useful to ensure complete and accurate capture of findings.

Assumptions and Artificialities

In any exercise, a number of assumptions and artificialities will be necessary to complete the TTX in the time available. During this TTX, the following assumptions and artificialities apply:

- The scenario is plausible and the events occur as they are presented.
- The scenario takes place as the facilitator presents it.
- There are no trick questions or hidden agendas.
- Existing communications solutions (such as assets and current cross-jurisdictional agreements and capabilities) are used to respond.

Exercise Rules

In this exercise, the following rules should be considered to ensure an open, safe, stress-free environment:

- Expect and encourage varying viewpoints, even disagreements.
- Respond based on your knowledge of current communications capabilities, plans, and in-place assets. Do not give future capabilities or “wish lists” as answers in this exercise.
- Make the best decision based on the circumstances presented in the exercise.
- If a communication is needed, but is not a real-world capability, note the gap.
- Avoid using work-arounds such as personal cell phones if, in reality, they would not be part of the operational system.

- Be aware that decisions are not precedent-setting and may not necessarily reflect an organization's final position on a given issue. Treat this exercise as an opportunity to discuss and present multiple options and possible solutions.

Process

The facilitator will present questions during each phase of the incident. At each phase, responders will be asked first to identify themselves and then to discuss the communications required at that point in the scenario. If a player responds to the scene of a given scenario incident, that player should physically move themselves to the appropriate "incident table," as identified during the pre-exercise briefing. Following the completion of the exercise, players and observers alike will be given the opportunity to provide thoughts and feedback during a debrief session.

Following the completion of the TTX, the exercise staff will develop an After Action Report (AAR). The AAR will be based on information gleaned from discussion and comments made during the TTX. This document will serve as a gap analysis of the interoperable communications capabilities of the <<area>>. The AAR will be provided to responding agencies through the <<area organization tasked with reporting exercise results>>.

Follow-up activities are recommended. These activities include involvement in a functional exercise where equipment use is demonstrated and involvement in a full-scale field exercise. They would allow the field testing and validation of the interoperable communications solutions that may be implemented following this TTX.

Schedule

- 8:00 A.M.** Sign In
- 9:00 A.M.** Introductions and TTX Ground Rules, Assumptions, and Artificialities
- 9:30 A.M.** TTX Begins
- 10:30 A.M.** Break
- 12:00 P.M.** TTX Ends/Lunch
- 1:00 P.M.** Exercise Debrief

Scenario Script

<<Document the staged scenario, with time tags, in this section.>>

Initial Events and Response

<<Document the initial incident event and response by the initial agency in this section. This may be the first of several stages in the scenario.>>

List each scenario sub-event, with time tags, followed by communications-based questions that players and observers should keep in mind.

Typical initial response questions may include:

- How is the initial information about the <<incident>> relayed to the <<event>> command post?
- How is that information shared with firefighters or emergency medical service (EMS) personnel? With other on-scene police officers? Among agencies?
- How does the information flow back out to the dispatch center? From whom?
- How would emergency response officials first be notified of the event?
- Which agencies would initially be dispatched to the scene? How?
- Who initiates incident command (IC)? How?
- What on-scene communications will be needed?
- What communications resources are available?

Regional Response

<<Document the response by other agencies in this section.>>

Given the cross-jurisdictional nature of this mass casualty incident, agencies from different disciplines will be required.

Use the same format from the scenario section. List each stage, with time tags, followed by communications-based questions that players and observers should keep in mind. Sample questions may include:

- Who else will respond to the incident?
- How will mutual aid request communications be accomplished?
- Who will take control of the initial incident communications? How?
- What communications resources will be needed?
- How will on-scene communications be established between agencies?
- How will mutual aid communications be accomplished between en-route responders and on-scene responders?
- How will communications be maintained among mutual aid responders on scene?
- What communications assets are available to achieve downhill or downwind evacuations?
- When mutual aid channels can be used? How?
- Which state agencies will be contacted? How? What will their response be? What will their communications needs be?
- Which Federal agencies will be notified? How? What will their response be? What will their communications needs be?
- What communications assets can the state and Federal agencies bring to bear?
- How will the arrival of state and Federal agencies to the scene affect incident command and communications?
- What military assets are available? How will they be notified? What will their communications needs be? What are the constitutional aspects of using military assets?

General Observer/Evaluator Questions

Sample questions for general observers and evaluators may include:

- What successes did the dispatcher you observed demonstrate in his/her knowledge of the agency's current communications capabilities, plans, and in-place assets?
 - *(Note any plans, agreements, or authorizations cited.)*
- What successes did the emergency responders you observed demonstrate in their knowledge of the agency's current communications capabilities, plans, and in-place assets?
 - *(Note any plans, agreements, or authorizations cited.)*
- What initial communications occurred when the dispatcher was made aware of the incident?
- What initial communications occurred between the dispatcher and the field responder when their agency was made aware of the incident?
- At what point was IC established?
- How did IC ask the dispatcher to make notifications to other agencies?
- What means of achieving interoperability were used to allow IC to communicate with agencies beyond the emergency responders?
- How could IC have made better choices for achieving interoperability?
- What agencies should have been notified, but were not?

Incident Maintenance

<<Document the maintenance stages of the scenario in this section. Consider what happens after regional agencies respond to the incident.>>

List each scenario sub-event, with time tags, followed by communications-based questions that players and observers should keep in mind. Sample questions may include:

- How are communications established between the incident and local or state Emergency Operation Centers (EOCs)?
- How are data and resource requests transferred from EOC to EOC?
- How is information from the hospitals transferred to the EOC?
- Who would activate the interoperable communications gateway devices, such as an ACU-1000? Who has them? How would they be managed?

- How is the media (local, national, and potentially international) handled during the event?
- What agreements are in place to encourage back-up support? Which agencies?
- What call-back procedures are in place? How are they accomplished (e.g., via pager or cell phone)?
- How is the transfer of day-to-day operations to mutual aid/backfill communicated?
- How are communications conducted during mutual aid/backfill?
- What communications are used to maintain coordination via the Incident Command System? Which agencies have which responsibilities?
- How would the response be duplicated in the next operational period?

Attachment A – Acronyms

<<List all the acronyms used in the Situation Manual. A few that may be used are included here; however, this is by no means an exhaustive list.>>

Acronym	Meaning
AAR	After Action Report
ACU-1000	Gateway Device for Linking Disparate Radios
EMS	Emergency Medical Services
EOC	Emergency Operations Center
FBI	Federal Bureau of Investigation
HAZMAT	Hazardous Materials
ICS	Incident Command System
IED	Improvised Explosive Device
JTTF	Joint Terrorism Task Force
PSAP	Public Safety Answering Point (a 9-1-1 communications center)
SITMAN	Situation Manual
TSA	Transportation Safety Administration
TTX	Tabletop Exercise

Attachment B – Exercise Planning Team

<<If desired, include the names and/or contact information of the Exercise Planning Team.>>

Attachment C – Maps

<<Include any relevant maps that would aid players and observers during exercise play.>>

Appendix C Evaluation Tools

This appendix contains the following evaluation tools:

- **C.1:** Exercise Evaluation Form
- **C.2:** Interoperable Communications Evaluation Criteria

For these tools:

- The bracketed text found in these documents is included to provide instruction or to indicate a location to input text.
- All text that is not highlighted can be left as-is or adjusted for each exercise.
- Each locality should adapt the tools to suit its own needs and circumstances.

C.2 Exercise Evaluation Form

<<Provided in this section is a sample Exercise Evaluation Form that should be distributed to exercise participants at a post-exercise evaluation. Appendix C of the After Action Report/Improvement Plan should provide a summary of the feedback received through this form.>>

Exercise Name: <<Full Exercise Name>> **Exercise Date:** <<Date>>

Participant Name: _____ **Title:** _____

Agency: _____

Role: ___Player ___Observer ___Facilitator ___Evaluator

PART I – RECOMMENDATIONS AND CORRECTIVE ACTIONS

1. Based on the exercise today and the tasks identified, list the top three strengths and/or areas that need improvement.

2. Is there anything you saw in the exercise that the evaluator(s) might not have been able to experience, observe, and record?

3. Identify the corrective actions that should be taken to address the issues identified above. For each corrective action, indicate if it is a high, medium, or low priority.

4. Describe the corrective actions that relate to your area of responsibility. Who should be assigned responsibility for each corrective action?

5. List the applicable equipment, training, policies, plans, and procedures that should be reviewed, revised, or developed. Indicate the priority level (high, medium, or low) for each.

PART II – EXERCISE DESIGN AND CONDUCT: ASSESSMENT

Please rate, on a scale of 1 to 5, your overall assessment of the exercise relative to the statements provided below, with **1** indicating **strong disagreement** with the statement and **5** indicating **strong agreement**.

Table 5. Participant Assessment

Assessment Factor		Strongly Disagree			Strongly Agree	
a.	The exercise was well structured and organized.	1	2	3	4	5
b.	The exercise scenario was plausible and realistic.	1	2	3	4	5
c.	The facilitator/controller(s) was knowledgeable about the area of play and was able to keep the exercise on target.	1	2	3	4	5
d.	The exercise documentation provided to assist in preparing for and participating in the exercise was useful.	1	2	3	4	5
e.	Participation in the exercise was appropriate for someone in my position.	1	2	3	4	5
f.	The participants included the right people in terms of level and mix of disciplines.	1	2	3	4	5
g.	This exercise allowed my agency/jurisdiction to practice and improve priority capabilities.	1	2	3	4	5
h.	After this exercise, I believe my agency/jurisdiction is better prepared to deal successfully with the scenario that was exercised.	1	2	3	4	5

PART III – PARTICIPANT FEEDBACK

Please provide any recommendations on how this exercise or future exercises could be improved or enhanced.

Thank you for taking the time to provide us with your input!

C.3 Interoperable Communications Evaluation Criteria

Capability Description

The capability to provide an uninterrupted flow of critical information among responding multi-disciplinary and multi-jurisdictional agencies at all levels of government.

Outcome

A continuous flow of critical information is maintained among emergency responders, command posts, agencies, and government officials for the duration of the emergency response operation.

Associated Critical Tasks

- Coordinate and provide telecommunications and information technology support to local, tribal, regional, state, and Federal officials and the private sector.
- Establish and maintain response communications systems.
- Implement response communications interoperability plans and protocols.
- Coordinate communications policy and procedures across response organizations.
- Coordinate incident site communications.
- Communicate internal incident response information.
- Provide direction, information, or support—as appropriate—to incident command, unified command, or joint field offices.
- Coordinate and provide telecommunications and information technology support to local, tribal, regional, state, and Federal officials and the private sector.

Measures

Table 6. Measures

Capability Measures		
	Yes/No	Emergency response communications plans incorporate management structures in accordance with National Incident Management System (NIMS) regulations and the National Response Plan (NRP).
	Yes/No	Communications systems exist that operate reliably throughout the jurisdiction's response area. Communications "dead spots" are identified and alternate strategies are in place to maintain effective communications in "dead spot" areas.
	Yes/No	Personnel are trained to operate communications systems.
	Yes/No	The communications system is secure, redundant, and fault-tolerant.
	Yes/No	The communications system may operate exclusively (secure/encrypted), as needed, and is non-intrusive to other frequencies or modes of communication.
	Yes/No	The existing communications system is capable of interoperability across disciplines, mutual aid jurisdictions, and levels of government.
	Yes/No	Exercises are conducted to test operations plans.

Performance Measures		
	Yes/No	The flow of critical information was uninterrupted.
	Yes/No	Sufficient back-up equipment and power sources were available.
	Yes/No	Responders were able to communicate with counterparts in other jurisdictions.
	Yes/No	Responders were able to communicate across local, tribal, regional, state, and Federal levels.
	Yes/No	Redundant communications equipment was available and activated.
	Yes/No	Emergency response communications plans that were implemented incorporated management structures in accordance with NIMS regulations and the NRP.
	Yes/No	Mobile communications platforms were used, as needed.
	Yes/No	Communications "dead spots" were identified and alternate strategies were effectively used, as needed.
	Yes/No	Common language and coordinated communications protocols were effectively implemented.
	Yes/No	Alternate communications sites were identified and activated, as needed.
	Yes/No	Plans and procedures were followed.

Capability Elements

Personnel

- ☐ Technical specialists (e.g., network, systems and device technicians)
- ☐ Emergency communications coordination and operation personnel

Planning

- ☐ National Plan for Telecommunications Support in Non-Wartime Emergencies, 1992 – Authority for National Communications System to develop plans and coordinate and manage telecommunications support for Federal organizations
- ☐ Mutual aid agreements and Memoranda of Understanding
- ☐ Communications plan
- ☐ NIMS
- ☐ NRP

Organization and Leadership

- ☐ Applicable legislation, plans, directives, policies, and procedures
- ☐ NIMS
- ☐ NRP

Equipment and Systems

- ☐ Interoperable and redundant communications (e.g., data, fax, and voice) through landlines, cell lines, satellite, Internet, or radio

Training

- ☐ Interoperable communications
- ☐ NIMS

Appendix D Report Templates

This appendix has the following forms and report templates:

- **D.1:** QuickLook Report Template
- **D.2:** Homeland Security Exercise and Evaluation Program After Action Report Template

For these templates:

- The bracketed text found in these documents is included to provide instruction or to indicate a location to input text.
- All text that is not highlighted can be left as-is or adjusted for each exercise.
- Each locality should adapt the templates to suit its own needs and circumstances.

D.1 QuickLook Report Template

The content for the QuickLook Report is summarized below.

Slide 1

<<EXERCISE NAME>>

Tabletop Exercise QuickLook

Presented by

<<presenter name>>
<<contact information>>
<<presentation date>>

Slide 2 <<Exercise Name>>

- Agenda
 - Present overview of tabletop exercise (TTX) results.
 - Review governance and standard operating procedure (SOP) gaps.
 - Review technology gaps.
 - Review training and exercises and usage gaps.
 - Discuss process and next steps.
 - Determine the time and place of the next meeting.

Slide 3 Communications Interoperability Defined

- Interoperable communications has been defined as the ability for emergency response agencies "...to share vital data or voice information across disciplines and jurisdictions to successfully respond to day-to-day incidents and large-scale emergencies."⁵

⁵ Department of Homeland Security. *Interoperability Continuum Brochure*, p. 2. [http://www.safecomprogram.gov/NR/rdonlyres/54F0C2DE-FA70-48DD-A56E-3A72A8F35066/0/Interoperability Continuum Brochure 2.pdf](http://www.safecomprogram.gov/NR/rdonlyres/54F0C2DE-FA70-48DD-A56E-3A72A8F35066/0/Interoperability%20Continuum%20Brochure%202.pdf).

Slide 4 Interoperability Continuum

- <<Display the Interoperability Continuum>>

Slide 5 Governance Gaps

- <<List and summarize all governance gaps.>>

Slide 6 SOP Gaps

- <<List and summarize all SOP gaps.>>

Slide 7 Technology Gaps

- <<List and summarize all technology gaps.>>

Slide 8 Training and Exercises Gaps

- <<List and summarize all training and exercises gaps.>>

Slide 9 Usage Gaps

- <<List and summarize all usage gaps.>>

Slide 10 Questions and Unknowns

- <<Review any unknowns that surfaced at the TTX that the QuickLook meeting may be able to resolve.>>

Slide 11 QuickLook Wrap Up

- Review gap additions, deletions, and assignments.
- Set the date, time, and location of the next meeting.
- Ensure the host obtained your name on the sign-in sheet.
- Provide a projected After Action Report delivery time frame and process.

D.2 Homeland Security Exercise and Evaluation Program After Action Report/Improvement Plan Template

This appendix contains a Homeland Security Exercise and Evaluation Program (HSEEP) template for the After Action Report (AAR)/Improvement Plan (IP). For this template:

- The highlighted and bracketed text found in this document is included to provide instruction or to indicate a location to input text.
- All text that is not highlighted is to be included in the final version of the AAR/IP.
- Each locality should adapt the template to suit its own needs and circumstances.
- The template may also be downloaded at: [http://hseep.dhs.gov/support/HSEEP AAR-IP Template 2007.doc](http://hseep.dhs.gov/support/HSEEP_AAR-IP_Template_2007.doc).

[FULL EXERCISE NAME]

[Exercise Dates]

AFTER ACTION REPORT/ IMPROVEMENT PLAN

[Publication Date]

[On the cover page, insert additional graphics such as logos, pictures, and background colors as desired. The word “Draft” should be included before the phrase “After Action Report/Improvement Plan” on the cover page and in the header/footer of all versions except the final AAR/IP.]

This page is intentionally blank.

Handling Instructions

- The title of this document is [complete and formal title of document].
- The information gathered in this After Action Report (AAR)/Improvement Plan (IP) is classified as [For Official Use Only] and should be handled as sensitive information not to be disclosed. This document should be safeguarded, handled, transmitted, and stored in accordance with appropriate security directives. Reproduction of this document, in whole or in part, without prior approval from [agency] is prohibited.
- At a minimum, the attached materials will be disseminated only on a need-to-know basis and when unattended, will be stored in a locked container or area offering sufficient protection against theft, compromise, inadvertent access, and unauthorized disclosure.
- Points of Contact (POC): [List all POCs.]

[Federal POC:]

Name

Title

Agency

Street Address

City, State ZIP

xxx-xxx-xxxx (office)

xxx-xxx-xxxx (cell)

E-Mail

[Exercise Director:]

Name

Title

Agency

Street Address

City, State ZIP

xxx-xxx-xxxx (office)

xxx-xxx-xxxx (cell)

E-Mail

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[If an AAR contains graphics, figures, or tables, they should be numbered and listed in the Contents section (e.g., figure 1, table 1).]

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Executive Summary

[When writing the Executive Summary, keep in mind that this section may be the only part of the AAR/IP that some people will read. Introduce this section by stating the full name of the exercise and providing a brief overview of the exercise. This brief overview should discuss why the exercise was conducted; the exercise objectives; and what Target Capabilities List (TCL) capabilities, activities, and scenario(s) were used to achieve those objectives. All of these areas will be discussed in more detail in the subsequent chapters of the AAR/IP. In addition, the Executive Summary may be used to summarize any high-level observations that cut across multiple capabilities.]

The [agency or jurisdiction] [scenario type] [exercise type] exercise [exercise name] was developed to test [agency or jurisdiction]'s [Capability 1], [Capability 2], and [Capability 3] capabilities. The Exercise Planning Team (EPT) was composed of numerous and diverse agencies, including [list of agencies participating in the EPT]. The EPT discussed [include a brief overview of the major issues encountered, discussed, and resolved during the exercise planning process. Topics to address in this section could include the length of the planning process, the reasoning behind the EPT's choice of objectives to exercise, etc.]

Based on the EPT's deliberations, the following objectives were developed for [exercise name]:

- Objective 1: [Insert one-sentence description of the exercise objective]
- Objective 2: [Insert one-sentence description of the exercise objective]
- Objective 3: [Insert one-sentence description of the exercise objective]

The purpose of this report is to analyze exercise results, identify strengths to be maintained and built upon, identify potential areas for further improvement, and support the development of corrective actions.

[In general, the major strengths and primary areas for improvement should be limited to three each to ensure the Executive Summary is high-level and concise.]

Major Strengths

The major strengths identified during this exercise are as follows:

- [Use complete sentences to describe each major strength]
- [Additional major strength]
- [Additional major strength]

Primary Areas for Improvement

Throughout the exercise, several opportunities for improvement in [agency/jurisdiction name]'s ability to respond to the incident were identified. The primary areas for improvement, including recommendations, are as follows:

- [Use complete sentences to state each primary area for improvement and its associated key recommendation(s)]
- [Additional key recommendation]
- [Additional key recommendation]

[End this section by describing the overall exercise as successful or unsuccessful, and briefly state the areas in which subsequent exercises conducted by these agencies and/or jurisdictions should focus.]

Section 1: Exercise Overview

[Information in the Exercise Overview should be enumerated data—written as a list rather than in paragraph form—in order to facilitate the preparation of other parts of the AAR/IP, maintain consistency within AAR/IPs, and facilitate the analysis of AAR/IPs for program reporting.]

Exercise Details

Exercise Name

[Insert the formal name of the exercise, which should match the name in the header.]

Type of Exercise

[Insert the type of exercise as described in HSEEP, Volume I (e.g., seminar, workshop, drill, game, tabletop, functional exercise, or full-scale exercise).]

Exercise Start Date

[Insert the month, day, and year that the exercise began.]

Exercise End Date

[Insert the month, day, and year that the exercise ended.]

Duration

[Insert the total length of the exercise, in days or hours, as appropriate.]

Location

[Insert all applicable information regarding the specific location of the exercise, including any city, state, or Federal region; international country; or military installation.]

Sponsor

[Insert the name of the Federal agency or agencies that sponsored the exercise, as well as any co-sponsors, if applicable. Also list any applicable points of contacts.]

Program

[Insert the name of the program (e.g., FY 2007 State Homeland Security Grant Program) from which exercise funding originated.]

Mission

[Insert the appropriate mission areas of the exercise (e.g., Prevent, Protect, Response, and/or Recovery).]

Capabilities

[Insert a list of the target capabilities addressed within the exercise.]

Scenario Type

[Name the exercise scenario type (e.g., chemical release).]

Exercise Planning Team

[The name of each member of the EPT leadership should be listed along with their role in the exercise and their organizational affiliation, job title, mailing address, phone number, and e-mail address.]

Participating Organizations

[Insert a list of the individual participating organizations or agencies, including local, tribal, state, Federal, and international agencies; non-governmental organizations; and contract support companies, as applicable.]

Number of Participants

[Insert a list of the total number of each of the following exercise participants, as applicable:]

- Players
- Controllers
- Evaluators
- Facilitators
- Observers
- Victim Role Players]

Section 2: Exercise Design Summary

[The Exercise Design Summary is intended to provide a summary of the exercise design process.]

Exercise Purpose and Design

[This section should be a brief (e.g., 1-2 paragraphs) summation of why the exercise was conducted and what the exercise participants hoped to learn. It should also include a brief history of how the exercise was organized, designed, and funded.]

Exercise Objectives, Capabilities, and Activities

[The purpose of this section is to list exercise objectives and align them with associated capabilities from the TCL. For each TCL capability, there is an Exercise Evaluation Guide (EEG) which lists specific activities which must be performed to demonstrate a capability. In addition to TCL capabilities, the EEG activities relevant to each objective should also be included in this section. Begin this section with the following text: To download the latest version of the communications EEG, visit the HSEEP Web site at: <http://hseep.dhs.gov>.]

Capabilities-based planning allows for EPTs to develop exercise objectives and observe exercise outcomes through a framework of specific action items that were derived from the Target Capabilities List. The capabilities listed below form the foundation for the organization of all objectives and observations in this exercise. Additionally, each capability is linked to several corresponding activities and tasks to provide additional detail.

Based upon the identified exercise objectives below, the EPT decided to demonstrate the following capabilities during this exercise:

- **Objective 1:** [Insert a one-sentence description of the objective].
 - **[Capability Title]:** [Activity 1], [Activity 2], and [Activity 3].
 - **[Capability Title]:** [Activity 1], [Activity 2], and [Activity 3].

Scenario Summary

[For an operations-based exercise, this section should summarize the scenario or the time in which these events occurred. For a discussion-based exercise, this section

Section 3: Analysis of Capabilities

This section of the report reviews the performance of the exercised capabilities, activities, and tasks. In this section, observations are organized by capability and associated activities. The capabilities linked to the exercise objectives of [exercise name] are listed below, followed by corresponding activities. Each activity is followed by related observations, which include references, analyses, and recommendations.

[The format for Section 3, as described above, represents the preferred order for analysis of exercise observations. However, observations that are cross-cutting and do not apply to one specific activity within the capability should be listed first, directly under the capability summary. Below the cross-cutting observations, you may then present the complete list of activities which apply to the observation.]

CAPABILITY 1: [CAPABILITY NAME]

Capability Summary: [Include a detailed overview of the capability, drawn from the TCL capability description, and a description of how the capability was performed during an operations-based exercise or addressed during a discussion-based exercise. The exact length of this summary will depend on the scope of the exercise.]

Activity 1.1: [Using the EEGs, identify the activity to which the observation(s) below pertain.]

Observation 1.1: [Begin this section with a heading indicating whether the observation is a strength or an area for improvement. A strength is an observed action, behavior, procedure, or practice that is worthy of recognition and special notice. Areas for improvement are those areas in which the evaluator observed that a necessary task was not performed or that a task was performed with notable problems. Following this heading, insert a short, complete sentence that describes the general observation.]

References: [List relevant plans, policies, procedures, laws, and regulations in full or in sections. If no references apply to the observation, it is acceptable to simply list "N/A" or "Not Applicable."]

1. [Name of the task and the applicable plans, policies, procedures, laws, and regulations and one to two sentences describing their relation to the task]
2. [Name of the task and the applicable plans, policies, procedures, laws, and regulations and one to two sentences describing their relation to the task]
3. [Name of the task and the applicable plans, policies, procedures, laws, and regulations and one to two sentences describing their relation to the task]

Analysis: [The analysis section should be the most detailed section of Section 3. Include a description of the behavior or actions at the core of the observation as well as a brief description of what happened and the consequence(s) (positive or negative) of the action or behavior. If an action was performed successfully, include any relevant innovative approaches utilized by the exercise participants. If an action was not performed adequately, the root causes contributing to the shortcoming must be identified.]

Recommendations: [Based on the judgment and experience of the evaluation team, insert recommendations to address identified areas for improvement. If the observation was identified as a strength without corresponding recommendations, insert “None.”]

- [Complete description of recommendation]
- [Complete description of recommendation]
- [Complete description of recommendation]

[Continue to add additional observations, references, analyses, and recommendations for each capability, as necessary. Maintain the numbering convention to allow for easy reference.]

Section 4: Conclusion

[This section is a conclusion for the entire document. It provides an overall summary to the report. It should include the demonstrated capabilities, lessons learned, major recommendations, and summarized steps that should be taken to ensure that the concluding results will help to further refine plans, policies, procedures, and training for this type of incident.]

Subheadings are not necessary and the level of detail in this section does not need to be as comprehensive as that in the Executive Summary.]

Appendix A: Improvement Plan

This IP has been developed specifically for [identify the jurisdiction, county, state, etc., as applicable] as a result of [exercise name] conducted on [date of exercise]. These recommendations draw on both the AAR and the After Action Conference. [The IP should include the key recommendations and corrective actions identified in Section 3: Analysis of Capabilities, the After Action Conference, and the EEGs.]

Table 7. Improvement Plan Matrix

Capability	Observation Title	Recommendation	Corrective Action Description	Capability Element	Primary Responsible Agency	Agency POC	Start Date	Completion Date
Capability 1: [Capability Name]	1. [Observation 1]	1.1 [Insert Recommendation 1]	1.1.1 [Insert Corrective Action 1]	[Planning]	[State X Emergency Management Agency (EMA)]	[EMA Director]	[Dec 1, 2006]	[Sep 1, 2007]
			1.1.2 [Insert Corrective Action 2]	[Planning]	[State X EMS System]	[EMS System Director]	[Dec 1, 2006]	[Feb 1, 2007]
		1.2 [Insert Recommendation 2]	1.2.1 [Insert Corrective Action 1]	[Training]	[State X EMA]	[EMA Director]	[Dec 1, 2006]	[Jan 1, 2007]
			1.2.2 [Insert Corrective Action 2]	[Systems/Equipment]	[State X EMA]	[EMA Director]	[Dec 1, 2006]	[Mar 15, 2007]
	2. [Observation 2]	2.1 [Insert Recommendation 1]	2.1.1 [Insert Corrective Action 1]	[Planning]	[State X EMS System]	[EMS System Director]	[Dec 1, 2006]	[Jan 15, 2007]
			2.1.2 [Insert Corrective Action 2]	[Systems/Equipment]	[State X EMA]	[EMA Director]	[Dec 1, 2006]	[Jan 1, 2007]

[Optional]

Appendix B: Lessons Learned

While the AAR/IP includes recommendations that support the development of specific post-exercise corrective actions, exercises may also reveal lessons learned that may be shared with the broader homeland security audience. The Department of Homeland Security maintains the Lessons Learned Information Sharing (<http://www.llis.dhs.gov/index.do>) system as a means of sharing post-exercise lessons learned with the emergency response community. This appendix provides jurisdictions and organizations with an opportunity to nominate lessons learned from exercises that are shared on the Lessons Learned Information Sharing system.

For reference, the following categories and definitions are used in the Lessons Learned Information Sharing system:

- **Lesson Learned:** Knowledge and experience (positive or negative) derived from actual incidents, such as the September 11, 2001, attacks and Hurricane Katrina, as well as that which is derived from observations and historical study of operations, training, and exercises.
- **Best Practices:** Exemplary, peer-validated techniques, procedures, good ideas, or solutions that work and are solidly grounded in actual operations, training, and exercise experience.
- **Good Stories:** Exemplary, but non-peer-validated, initiatives (implemented by various jurisdictions) that have shown success in their specific environments and that may provide useful information to other communities and organizations.
- **Practice Note:** A brief description of innovative practices, procedures, methods, programs, or tactics that an organization uses to adapt to changing conditions or to overcome an obstacle or challenge.

Exercise Lessons Learned

[Insert an account of any observations nominated for inclusion in the Lessons Learned Information Sharing system: <http://www.llis.dhs.gov/index.do>. If there are not any nominations, a simple statement to that effect should be included here.]

[Optional]

Appendix C: Participant Feedback Summary

[Provided in this section is a sample Participant Feedback Form that should be distributed to exercise participants at a post-exercise evaluation. Appendix C of the AAR/IP should provide a summary of the feedback received through this form.]

PARTICIPANT FEEDBACK FORM

Exercise Name: [Exercise Name]

Exercise Date: [Date of Exercise]

Participant Name: _____

Title: _____

Agency: _____

Role: ___ Player ___ Observer ___ Facilitator ___ Evaluator

PART I – RECOMMENDATIONS AND CORRECTIVE ACTIONS

1. Based on the exercise today and the tasks identified, list the top three strengths and areas that need improvement.

2. Is there anything you saw in the exercise that the evaluator(s) might not have been able to experience, observe, and record?

3. Identify the corrective actions that should be taken to address the issues identified above. For each corrective action, indicate if it is a high, medium, or low priority.

4. Describe the corrective actions that relate to your area of responsibility. Who should be assigned responsibility for each corrective action?

5. List the applicable equipment, training, policies, plans, and procedures that should be reviewed, revised, or developed. Indicate the priority level for each.

PART II – EXERCISE DESIGN AND CONDUCT: ASSESSMENT

Please rate, on a scale of 1 to 5, your overall assessment of the exercise relative to the statements provided below, with **1** indicating **strong disagreement** with the statement and **5** indicating **strong agreement**.

Table 8. Participant Assessment

Assessment Factor	Strongly Disagree					Strongly Agree				
The exercise was well structured and organized.	1	2	3	4	5					
The exercise scenario was plausible and realistic.	1	2	3	4	5					
The facilitator/controller(s) was knowledgeable about the area of play and was able to keep the exercise on target.	1	2	3	4	5					
The exercise documentation provided to assist in preparing for and participating in the exercise was useful.	1	2	3	4	5					
Participation in the exercise was appropriate for someone in my position.	1	2	3	4	5					
The participants included the right people in terms of level and mix of disciplines.	1	2	3	4	5					
This exercise allowed my agency/jurisdiction to practice and improve priority capabilities.	1	2	3	4	5					
After this exercise, I believe my agency/jurisdiction is better prepared to deal successfully with the scenario that was exercised.	1	2	3	4	5					

PART III – PARTICIPANT FEEDBACK

Please provide any recommendations on how this exercise or future exercises could be improved or enhanced.

[Optional]**Appendix D: Exercise Events Summary Table**

[In formulating its analysis, the evaluation team may assemble a timeline of key exercise events. While it is not necessary to include this timeline in the main body of the AAR/IP, the evaluation team may find value in including it as an appendix. If so, this section should summarize what actually happened during the exercise in a timeline table format. This section focuses on the input presented to the players and the actions that the players took during the exercise. Successful development of this section is aided by the design, development, and planning actions of the EPT. Prior to the exercise, the EPT should have developed a timeline of anticipated key events.]

An example of the format for the Exercise Events Summary Table is presented below.]

Table 9. Exercise Events Summary

Date	Time	Scenario Event, Simulated Player Inject, Player Action	Event/Action
[02/20/06]	[0900]	[Scenario Event]	[Explosion and injuries reported at subway station 13]
[02/20/06]	[0902]	[Player Action]	[Subway services stopped in accordance with protocols; notifications started]
[02/20/06]	[0915]	[Player Action]	[Evacuation ordered for planning zone 2A]
[02/20/06]	[0940]	[Simulated Player Inject]	[Traffic at a standstill on major egress Route 1 reported to players (Response generated issue because personnel to staff traffic control points were not deployed)]

[Optional]**Appendix E: Performance Rating**

[When an agency or jurisdiction elects to use performance ratings or when initiatives require a rating within the AAR/IP, the following approach may be used. A qualitative performance rating is assigned to each activity demonstrated within its capability area. The performance rating is based on a systemic review by the lead evaluator of the exercise performance; it is specifically based on the evaluator's analysis of how well the participants demonstrated the capability. The results should be summarized within this appendix and should be based on the supporting narrative contained within the body of the AAR/IP.]

The performance rating categories refer to how well each activity was performed during the exercise and are detailed in the table below.

Table 10. Performance Ratings

Rating	Description
Performed without Challenges	The performance measures and tasks associated with the activity were completed in a manner that achieved the objective(s) and did not negatively impact the performance of other activities. Performance of this activity did not contribute to additional health and/or safety risks for the public or for emergency workers. Performance was conducted in accordance with applicable plans, policies, procedures, regulations, and laws.
Performed with Some Challenges, but Adequately	The performance measures and tasks associated with the activity were completed in a manner that achieved the objective(s) and did not negatively impact the performance of other activities. Performance of this activity did not contribute to additional health and/or safety risks for the public or for emergency workers. Performance was conducted in accordance with applicable plans, policies, procedures, regulations, and laws. However, opportunities to enhance effectiveness and/or efficiency were identified.
Performed with Major Challenges	The performance measures and tasks associated with the activity were completed in a manner that achieved the objective(s), but some or all of the following were observed: the demonstrated performance had a negative impact on the performance of other activities; contributed to additional health and/or safety risks for the public or for emergency workers; and/or was not conducted in accordance with applicable plans, policies, procedures, regulations, and laws.
Unable to be Performed	The performance measures and tasks associated with the activity were not performed in a manner that achieved the objective(s).

Appendix F: Acronyms

[Any acronym used in the AAR should be listed alphabetically and spelled out.]

Table 11. Acronyms

Acronym	Meaning

Appendix E Appendices Acronym List

Acronym	Meaning
AAR	After Action Report
EEG	Exercise Evaluation Guide
EMS	Emergency Medical Services
EOC	Emergency Operations Center
EPT	Exercise Planning Team
HAZMAT	Hazardous Materials
HSEEP	Homeland Security Exercise and Evaluation Program
IC	Incident Command
IP	Improvement Plan
MCI	Mass Casualty Incident
NIMS	National Incident Management System
NRP	National Response Plan
OEM	Office of Emergency Management
POC	Point of Contact
SOP	Standard Operating Procedure
TCL	Target Capabilities List
TTX	Tabletop Exercise

SAFECOM is a communications program of the Department of Homeland Security. SAFECOM provides research, development, testing and evaluation, guidance, tools, and templates on interoperable communications-related issues to local, tribal, state, and Federal emergency response agencies. The Office of Emergency Communications (OEC) supports SAFECOM's development of grant guidance, policy, tools, and templates, and provides direct assistance to local, tribal, state, and Federal practitioners. The Office for Interoperability and Compatibility (OIC) supports SAFECOM's research, development, testing and evaluation, standards, and tools such as reports and guidelines. OEC is an office within the Directorate for National Protection and Programs. OIC is an office within the Science and Technology Directorate.



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