



# Homeland Security Exercise and Evaluation Program (HSEEP)

*April 2013*



Homeland  
Security

# Contents

|   |         |
|---|---------|
| INTRODUCTION AND OVERVIEW .....               | INTRO-1 |
| Purpose .....                                 | Intro-1 |
| Role of Exercises .....                       | Intro-1 |
| Applicability and Scope .....                 | Intro-2 |
| Supersession .....                            | Intro-2 |
| How to Use This Document .....                | Intro-2 |
| Revision Process.....                         | Intro-3 |
| 1. HSEEP FUNDAMENTALS .....                   | 1-1     |
| Overview .....                                | 1-1     |
| Fundamental Principles .....                  | 1-1     |
| Exercise Program Management.....              | 1-1     |
| Exercise Methodology .....                    | 1-2     |
| Exercise Design and Development .....         | 1-3     |
| Exercise Conduct .....                        | 1-3     |
| Exercise Evaluation .....                     | 1-3     |
| Improvement Planning.....                     | 1-3     |
| 2. EXERCISE PROGRAM MANAGEMENT .....          | 2-1     |
| Overview .....                                | 2-1     |
| Engage Elected and Appointed Officials.....   | 2-1     |
| Multi-year Exercise Program Priorities.....   | 2-1     |
| Training and Exercise Planning Workshop ..... | 2-2     |
| Multi-year Training and Exercise Plan.....    | 2-3     |
| Progressive Approach .....                    | 2-3     |
| Discussion-Based Exercises.....               | 2-4     |
| Operations-Based Exercises.....               | 2-5     |
| Rolling Summary of Outcomes .....             | 2-6     |
| Manage Exercise Program Resources .....       | 2-7     |
| Exercise Budget Management .....              | 2-7     |
| Program Staffing.....                         | 2-7     |
| Other Resources .....                         | 2-7     |
| 3. EXERCISE DESIGN AND DEVELOPMENT .....      | 3-1     |
| Overview .....                                | 3-1     |
| Exercise Foundation .....                     | 3-1     |
| Exercise Planning Team and Events .....       | 3-2     |
| Exercise Planning Team Considerations.....    | 3-2     |
| Exercise Planning Team Positions.....         | 3-3     |
| Planning Activities.....                      | 3-4     |
| Exercise Design.....                          | 3-9     |
| Scope.....                                    | 3-10    |
| Exercise Objectives.....                      | 3-11    |
| Evaluation Requirements .....                 | 3-12    |
| Scenario .....                                | 3-12    |
| Exercise Documentation .....                  | 3-13    |
| Media or Public Affairs Guidance .....        | 3-19    |
| Exercise Development.....                     | 3-20    |
| Planning for Exercise Logistics .....         | 3-20    |
| Planning for Exercise Control.....            | 3-22    |

|  |            |
|--|------------|
| Planning for Exercise Evaluation.....                              | 3-25       |
| 4. EXERCISE CONDUCT .....  | 4-1        |
| Overview .....   | 4-1        |
| Exercise Play Preparation.....                                     | 4-1        |
| Setup for Discussion-Based Exercises.....                          | 4-1        |
| Setup for Operations-Based Exercises.....                          | 4-1        |
| Briefings.....   | 4-2        |
| Exercise Play .....  | 4-2        |
| Participant Roles and Responsibilities.....                        | 4-3        |
| Conduct for Discussion-Based Exercises .....                       | 4-4        |
| Conduct for Operations-Based Exercises .....                       | 4-5        |
| Contingency Process.....   | 4-7        |
| Wrap-Up Activities .....   | 4-7        |
| Debriefings.....   | 4-7        |
| Player Hot Wash .....  | 4-7        |
| Controller/Evaluator Debriefing .....                              | 4-8        |
| 5. EVALUATION.....   | 5-1        |
| Overview .....   | 5-1        |
| Evaluation Planning .....  | 5-1        |
| Evaluation Team.....   | 5-1        |
| Exercise Evaluation Guide Development .....                        | 5-2        |
| Recruit, Assign, and Train Evaluators .....                        | 5-3        |
| Evaluation Documentation.....                                      | 5-3        |
| Pre-Exercise Evaluator Briefing .....                              | 5-4        |
| Exercise Observation and Data Collection.....                      | 5-4        |
| Observation.....   | 5-4        |
| Data Collection .....  | 5-4        |
| Data Analysis .....  | 5-5        |
| After-Action Report Draft.....                                     | 5-5        |
| 6. IMPROVEMENT PLANNING .....                                      | 6-1        |
| Overview .....   | 6-1        |
| Corrective Actions.....  | 6-1        |
| After-Action Meeting .....   | 6-1        |
| After-Action Report/Improvement Plan Finalization.....             | 6-2        |
| Corrective Action Tracking and Implementation.....                 | 6-2        |
| Using Improvement Planning to Support Continuous Improvement ..... | 6-2        |
| GLOSSARY OF TERMS.....   | GLOSSARY-1 |
| ACRONYMS AND ABBREVIATIONS .....                                   | ACRONYM-1  |

# Introduction and Overview

## Purpose

The Homeland Security Exercise and Evaluation Program (HSEEP) provides a set of guiding principles for exercise programs, as well as a common approach to exercise program management, design and development, conduct, evaluation, and improvement planning. Exercises are a key component of national preparedness—they provide elected and appointed officials and stakeholders from across the whole community with the opportunity to shape planning, assess and validate capabilities, and address areas for improvement.

Through the use of HSEEP, exercise program managers can develop, execute, and evaluate exercises that address the priorities established by an organization’s leaders. These priorities are based on the National Preparedness Goal, strategy documents, threat and hazard identification/risk assessment processes, capability assessments, and the results from previous exercises and real-world events. These priorities guide the overall direction of a progressive exercise program, where individual exercises are anchored to a common set of priorities or objectives and build toward an increasing level of complexity over time. Accordingly, these priorities guide the design and development of individual exercises, as planners identify exercise objectives and align them to core capabilities<sup>1</sup> for evaluation during the exercise. Exercise evaluation assesses the ability to meet exercise objectives and capabilities by documenting strengths, areas for improvement, core capability performance, and corrective actions in an After-Action Report/Improvement Plan (AAR/IP). Through improvement planning, organizations take the corrective actions needed to improve plans, build and sustain capabilities, and maintain readiness.

In this way, the use of HSEEP—in line with the National Preparedness Goal and the National Preparedness System—supports efforts across the whole community that improve our national capacity to build, sustain, and deliver core capabilities.

## Role of Exercises

Exercises play a vital role in national preparedness by enabling whole community stakeholders to test and validate plans and capabilities, and identify both capability gaps and areas for improvement. A well-designed exercise provides a low-risk environment to test capabilities, familiarize personnel with roles and responsibilities, and foster meaningful interaction and communication across organizations. Exercises bring together and strengthen the whole community in its efforts to prevent, protect against, mitigate, respond to, and recover from all hazards. Overall, exercises are cost-effective and useful tools that help the nation practice and refine our collective capacity to achieve the core capabilities in the National Preparedness Goal.

---

<sup>1</sup> Core Capabilities are distinct critical elements necessary to achieve the specific mission areas of prevention, protection, mitigation, response, and recovery. Capabilities provide a common vocabulary describing the significant functions required to deal with threats and hazards that must be developed and executed across the whole community to ensure national preparedness.

## Applicability and Scope

HSEEP exercise and evaluation doctrine is flexible, scalable, adaptable, and is for use by stakeholders across the whole community.<sup>2</sup> HSEEP doctrine is applicable for exercises across all mission areas—prevention, protection, mitigation, response, and recovery. Using HSEEP supports the National Preparedness System<sup>3</sup> by providing a consistent approach to exercises and measuring progress toward building, sustaining, and delivering core capabilities.

HSEEP doctrine is based on national best practices and is supported by training, technology systems, tools, and technical assistance. The National Exercise Program (NEP) is consistent with the HSEEP methodology. Exercise practitioners are encouraged to apply and adapt HSEEP doctrine to meet their specific needs.

## Supersession

This 2013 iteration of HSEEP supersedes the 2007 HSEEP Volumes. The current version reflects the feedback, lessons learned, and best practices of the exercise community, as well as current policies and plans.

## How to Use This Document

This document serves as a description of HSEEP doctrine. It includes an overview of HSEEP fundamentals that describes core HSEEP principles and overall methodology. This overview is followed by several chapters that provide exercise practitioners with more detailed guidance on putting the program's principles and methodology into practice.

The doctrine is organized as follows:

- **Chapter 1:** [\*HSEEP Fundamentals\*](#) describes the basic principles and methodology of HSEEP.
- **Chapter 2:** [\*Exercise Program Management\*](#) provides guidance for conducting a Training and Exercise Planning Workshop (TEPW) and developing a Multi-year Training and Exercise Plan (TEP).
- **Chapter 3:** [\*Exercise Design and Development\*](#) describes the methodology for developing exercise objectives, conducting planning meetings, developing exercise documentation, and planning for exercise logistics, control, and evaluation.
- **Chapter 4:** [\*Exercise Conduct\*](#) provides guidance on setup, exercise play, and wrap-up activities.
- **Chapter 5:** [\*Evaluation\*](#) provides the approach to exercise evaluation planning and conduct through data collection, analysis, and development of an AAR.
- **Chapter 6:** [\*Improvement Planning\*](#) addresses corrective actions identified in the exercise IP and the process of tracking corrective actions to resolution.

---

<sup>2</sup> The whole community includes individuals, families, communities, the private and nonprofit sectors, faith-based organizations, and Federal, State, local, tribal, and territorial governments.

<sup>3</sup> The National Preparedness System includes identifying and assessing risks; estimating the level of capabilities needed to address those risks; building or sustaining the required levels of capability; developing and implementing plans to deliver those capabilities; validating and monitoring progress; and reviewing and updating efforts to promote continuous improvement.

## Revision Process

The Department of Homeland Security (DHS) Federal Emergency Management Agency (FEMA) will review HSEEP doctrine and methodology on a biennial basis, or as otherwise needed, to make necessary modifications and incorporate lessons learned.

# 1. HSEEP Fundamentals

## Overview

HSEEP doctrine consists of fundamental principles that frame a common approach to exercises. This doctrine is supported by training, technology systems, tools, and technical assistance, and is based on national best practices. It is intended to enhance consistency in exercise conduct and evaluation while ensuring exercises remain a flexible, accessible way to improve our preparedness across the nation.

## Fundamental Principles

Applying the following principles to both the management of an exercise program and the execution of individual exercises is critical to the effective examination of capabilities:

- **Guided by Elected and Appointed Officials.** The early and frequent engagement of elected and appointed officials is the key to the success of any exercise program. They provide the overarching guidance and direction for the exercise and evaluation program as well as specific intent for individual exercises.
- **Capability-based, Objective Driven.** The National Preparedness Goal identifies a series of core capabilities and associated capability targets across the prevention, protection, mitigation, response, and recovery mission areas. Through HSEEP, organizations can use exercises to examine current and required core capability levels and identify gaps. Exercises focus on assessing performance against capability-based objectives.
- **Progressive Planning Approach.** A progressive approach includes the use of various exercises aligned to a common set of exercise program priorities and objectives with an increasing level of complexity over time. Progressive exercise planning does not imply a linear progression of exercise types.
- **Whole Community Integration.** The use of HSEEP encourages exercise planners, where appropriate, to engage the whole community throughout exercise program management, design and development, conduct, evaluation, and improvement planning.
- **Informed by Risk.** Identifying and assessing risks and associated impacts helps organizations identify priorities, objectives, and core capabilities to be evaluated through exercises.
- **Common Methodology.** HSEEP includes a common methodology for exercises that is applicable to all mission areas—prevention, protection, mitigation, response, and recovery. This methodology enables organizations of divergent sizes, geographies, and capabilities to have a shared understanding of exercise program management, design and development, conduct, evaluation, and improvement planning; and fosters exercise-related interoperability and collaboration.

## Exercise Program Management

Exercise program management involves a collaborative approach that integrates resources, organizations, and individuals in order to identify and achieve program priorities. Through the

management of an exercise program, stakeholders provide oversight to specific training and exercise activities sustained over time. An effective exercise program maximizes efficiency, resources, time, and funding by ensuring that exercises are part of a coordinated and integrated approach to building, sustaining, and delivering core capabilities.

Key elements of HSEEP’s approach to exercise program management include:

- **Engaging Elected and Appointed Officials to Provide Intent and Direction.** Elected and appointed officials must be engaged early and often in an exercise program. They provide both the strategic direction for the program as well as specific guidance for individual exercises. Routine engagement with elected and appointed officials ensures that exercises have the support necessary for success.
- **Establishing Multi-year Exercise Program Priorities.** These overarching priorities inform the development of exercise objectives, ensuring that individual exercises evaluate and assess core capabilities in a coordinated and integrated fashion.
- **Using a Progressive Approach.** A progressive exercise program management approach includes exercises anchored to a common set of objectives, built toward an increasing level of complexity over time, and involves the participation of multiple entities.
- **Developing a Multi-year Training and Exercise Plan.** A TEP, developed through a TEPW, aligns exercise activities and supporting training to exercise program priorities.
- **Maintaining a Rolling Summary of Exercise Outcomes.** A rolling summary report provides elected and appointed officials and other stakeholders with an analysis of issues, trends, and key outcomes from all exercises conducted as part of the exercise program.
- **Managing Exercise Program Resources.** An effective exercise program utilizes the full range of available resources for exercise budgets, program staffing, and other resources.

## Exercise Methodology

HSEEP uses a common methodology for planning and conducting individual exercises. This methodology applies to exercises in support of all national preparedness mission areas. A common methodology ensures a consistent and interoperable approach to exercise design and development, conduct, evaluation, and improvement planning, as depicted in **Figure 1.1**. The following chapters contain more detailed descriptions of each phase.



**Figure 1.1: HSEEP Exercise Cycle**



## **Exercise Design and Development**

In designing and developing individual exercises, exercise planning team members are identified to schedule planning meetings, identify and develop exercise objectives, design the scenario, create documentation, plan exercise conduct and evaluation, and coordinate logistics. At key points in this process, the exercise planning team engages elected and appointed officials to ensure their intent is captured and that the officials are prepared to support the exercise as necessary.

## **Exercise Conduct**

After design and development activities are complete, the exercise is ready to occur. Activities essential to conducting individual exercises include preparing for exercise play, managing exercise play, and conducting immediate exercise wrap-up activities.

## **Exercise Evaluation**

Evaluation is the cornerstone of an exercise and must be considered throughout all phases of the exercise planning cycle, beginning when the exercise planning team meets to establish objectives and initiate exercise design. Effective evaluation assesses performance against exercise objectives, and identifies and documents strengths and areas for improvement relative to core capabilities.

## **Improvement Planning**

During improvement planning, the corrective actions identified during individual exercises are tracked to completion, ensuring that exercises yield tangible preparedness improvements. An effective corrective action program develops IPs that are dynamic documents, which are continually monitored and implemented as part of the larger system of improving preparedness.

# 2. Exercise Program Management

## Overview

Exercise program management is the process of overseeing and integrating a variety of exercises over time. An effective exercise program helps organizations maximize efficiency, resources, time, and funding by ensuring that exercises are part of a coordinated, integrated approach to building, sustaining, and delivering core capabilities. This approach—called multi-year planning—begins when elected and appointed officials, working with whole community stakeholders, identify and develop a set of multi-year exercise priorities informed by existing assessments, strategies, and plans. These long-term priorities help exercise planners design and develop a progressive program of individual exercises to build, sustain, and deliver core capabilities.

Effective exercise program management promotes a multi-year approach to:

- Engaging elected and appointed officials
- Establishing multi-year exercise program priorities
- Developing a multi-year TEP
- Maintaining a rolling summary of exercise outcomes
- Managing exercise program resources

Through effective exercise program management, each exercise becomes a supporting component of a larger exercise program with overarching priorities. Exercise practitioners are encouraged to apply and adapt HSEEP doctrine on exercise program management to meet their specific needs.

## Engage Elected and Appointed Officials

Engaging elected and appointed officials in the exercise process is critical because they provide both the strategic direction for the exercise program, as well as specific guidance for individual exercises. As representatives of the public, elected and appointed officials ensure that exercise program priorities are supported at the highest level and align to whole community needs and priorities. Elected and appointed officials should be engaged early and often in an exercise program, starting with the development of exercise program priorities at the TEPW. In developing individual exercises, the exercise planning team should continue to engage their appropriate elected and appointed officials throughout the exercise planning cycle in order to ensure the leaders' vision for the exercise is achieved.

## Multi-year Exercise Program Priorities

An exercise program should be based on a set of strategic, high-level priorities selected by an organization's elected and appointed officials. These priorities guide the development of exercise objectives, ensuring that individual exercises build and sustain preparedness in a progressive and coordinated fashion. Exercise program priorities are developed at the TEPW, as described in the following sections.

## Training and Exercise Planning Workshop

### *Purpose*

The TEPW establishes the strategy and structure for an exercise program. In addition, it sets the foundation for the planning, conduct, and evaluation of individual exercises. The purpose of the TEPW is to use the guidance provided by elected and appointed officials to identify and set exercise program priorities and develop a multi-year schedule of exercise events and supporting training activities to meet those priorities. This process ensures whole community exercise initiatives are coordinated, prevents duplication of effort, promotes the efficient use of resources, avoids overextending key agencies and personnel, and maximizes the efficacy of training and exercise appropriations. TEPWs are held on a periodic basis (e.g., annual or biennial) depending on the needs of the program and any grant or cooperative agreement requirements.

### *Participation*

When identifying stakeholders, exercise program managers should consider individuals from organizations throughout the whole community, including but not limited to:

- Elected and appointed officials responsible for providing direction and guidance for exercise program priorities and those responsible for providing resources to support exercises;
- Representatives from relevant disciplines that would be part of the exercises or any real-world events, including appropriate regional or local Federal department/agency representatives;
- Individuals with administrative responsibility relevant to exercise conduct; and
- Representatives from volunteer, nongovernmental, nonprofit, or social support organizations, including advocates for children, seniors, individuals with disabilities, those with access and functional needs, racially and ethnically diverse communities, people with limited English proficiency, and animals.

Once a comprehensive set of stakeholders has been identified, exercise program managers can include them in the exercise program by having them regularly participate in TEPWs.

### *Conduct of the TEPW*

When developing exercise program priorities and the multi-year schedule at the TEPW, stakeholders should engage organizational elected and appointed officials early in the process to obtain their intent and guidance. TEPW participants also review and consider various factors such as:

- Jurisdiction-specific threats and hazards (e.g., Threat and Hazard Identification and Risk Assessment [THIRA], local risk assessments);
- Areas for improvement identified from real-world events and exercises;
- External requirements such as State or national preparedness reports, homeland security policy (e.g., the National Preparedness Goal), and industry reports; and
- Accreditation standards (e.g., hospital accreditation requirements), regulations, or legislative requirements.

**Figure 2.1** illustrates some of the specific factors for consideration in developing exercise program priorities.



**Figure 2.1: Factors for Consideration in Developing Exercise Program Priorities**

Drawing on the above factors and core capabilities, the workshop facilitator leads a group stakeholder discussion to review exercise program priorities and outline training and exercise priorities shared across multiple organizations. The group should also develop a multi-year schedule of training and exercise activities designed to meet those priorities.

At the conclusion of the TEPW, program managers will have a clear understanding of specific multi-year training and exercise program priorities, and any available information on previously planned training and exercises that align to those priorities. This combined set of information is used to develop a multi-year TEP.

## Multi-year Training and Exercise Plan

Once the training and exercise program priorities have been outlined, stakeholders develop the multi-year TEP. The TEP identifies a combination of exercises—along with associated training requirements—that address the priorities identified in the TEPW.

### Progressive Approach

A progressive, multi-year exercise program enables organizations to participate in a series of increasingly complex exercises, with each successive exercise building upon the previous one until mastery is achieved. Regardless of exercise type, each exercise within the progressive series is linked to a set of common program priorities and designed to test associated capabilities.

Further, by defining training requirements in the planning process, organizations can address known shortfalls prior to exercising capabilities.

This progressive approach, with exercises that build upon each other and are supported at each step with training resources, will ensure that organizations do not rush into a full-scale exercise too quickly. Effective planning of exercises and integration of the necessary training will reduce the waste of limited exercise resources and serve to address known shortfalls prior to the conduct of the exercise. The different types of exercises that may be included in the multi-year plan are described in the following sections.

A progressive exercise program is a series of exercises tied to a set of common program priorities. Each exercise builds on previous exercises using more sophisticated simulation techniques or requiring more preparation time, personnel, and planning.

## Discussion-Based Exercises

Discussion-based exercises include seminars, workshops, tabletop exercises (TTXs), and games. These types of exercises can be used to familiarize players with, or develop new, plans, policies, agreements, and procedures. Discussion-based exercises focus on strategic, policy-oriented issues. Facilitators and/or presenters usually lead the discussion, keeping participants on track towards meeting exercise objectives.

### *Seminars*

Seminars generally orient participants to, or provide an overview of, authorities, strategies, plans, policies, procedures, protocols, resources, concepts, and ideas. As a discussion-based exercise, seminars can be valuable for entities that are developing or making major changes to existing plans or procedures. Seminars can be similarly helpful when attempting to assess or gain awareness of the capabilities of interagency or inter-jurisdictional operations.

### *Workshops*

Although similar to seminars, workshops differ in two important aspects: participant interaction is increased, and the focus is placed on achieving or building a product. Effective workshops entail the broadest attendance by relevant stakeholders.

Products produced from a workshop can include new standard operating procedures (SOPs), emergency operations plans, continuity of operations plans, or mutual aid agreements. To be effective, workshops should have clearly defined objectives, products, or goals, and should focus on a specific issue.

### *Tabletop Exercises*

A TTX is intended to generate discussion of various issues regarding a hypothetical, simulated emergency. TTXs can be used to enhance general awareness, validate plans and procedures, rehearse concepts, and/or assess the types of systems needed to guide the prevention of, protection from, mitigation of, response to, and recovery from a defined incident. Generally, TTXs are aimed at facilitating conceptual understanding, identifying strengths and areas for improvement, and/or achieving changes in perceptions.

During a TTX, players are encouraged to discuss issues in depth, collaboratively examining areas of concern and solving problems. The effectiveness of a TTX is derived from the energetic

involvement of participants and their assessment of recommended revisions to current policies, procedures, and plans.

TTXs can range from basic to complex. In a basic TTX (such as a Facilitated Discussion), the scenario is presented and remains constant—it describes an emergency and brings discussion participants up to the simulated present time. Players apply their knowledge and skills to a list of problems presented by the facilitator; problems are discussed as a group; and resolution is reached and documented for later analysis.

In a more advanced TTX, play advances as players receive pre-scripted messages that alter the original scenario. A facilitator usually introduces problems one at a time in the form of a written message, simulated telephone call, videotape, or other means. Players discuss the issues raised by each problem, referencing established authorities, plans, and procedures for guidance. Player decisions are incorporated as the scenario continues to unfold.

During a TTX, all participants should be encouraged to contribute to the discussion and be reminded that they are making decisions in a no-fault environment. Effective TTX facilitation is critical to keeping participants focused on exercise objectives and associated capability targets.

### **Games**

A game is a simulation of operations that often involves two or more teams, usually in a competitive environment, using rules, data, and procedures designed to depict an actual or hypothetical situation. Games explore the consequences of player decisions and actions. They are useful tools for validating plans and procedures or evaluating resource requirements.

During game play, decision-making may be either slow and deliberate or rapid and more stressful, depending on the exercise design and objectives. The open, decision-based format of a game can incorporate “what if” questions that expand exercise benefits. Depending on the game’s design, the consequences of player actions can be either pre-scripted or decided dynamically. Identifying critical decision-making points is a major factor in the success of evaluating a game.

### **Operations-Based Exercises**

Operations-based exercises include drills, functional exercises (FEs), and full-scale exercises (FSEs). These exercises can be used to validate plans, policies, agreements, and procedures; clarify roles and responsibilities; and identify resource gaps. Operations-based exercises are characterized by actual reaction to an exercise scenario, such as initiating communications or mobilizing personnel and resources.

### **Drills**

A drill is a coordinated, supervised activity usually employed to validate a specific function or capability in a single agency or organization. Drills are commonly used to provide training on new equipment, validate procedures, or practice and maintain current skills. For example, drills may be appropriate for establishing a community-designated disaster receiving center or shelter. Drills can also be used to determine if plans can be executed as designed, to assess whether more training is required, or to reinforce best practices. A drill is useful as a stand-alone tool, but a series of drills can be used to prepare several organizations to collaborate in an FSE.

For every drill, clearly defined plans, procedures, and protocols need to be in place. Personnel need to be familiar with those plans and trained in the processes and procedures to be drilled.

### *Functional Exercises*

FEs are designed to validate and evaluate capabilities, multiple functions and/or sub-functions, or interdependent groups of functions. FEs are typically focused on exercising plans, policies, procedures, and staff members involved in management, direction, command, and control functions. In FEs, events are projected through an exercise scenario with event updates that drive activity typically at the management level. An FE is conducted in a realistic, real-time environment; however, movement of personnel and equipment is usually simulated.

FE controllers typically use a Master Scenario Events List (MSEL) to ensure participant activity remains within predefined boundaries and ensure exercise objectives are accomplished. Simulators in a Simulation Cell (SimCell) can inject scenario elements to simulate real events.

### *Full-Scale Exercises*

FSEs are typically the most complex and resource-intensive type of exercise. They involve multiple agencies, organizations, and jurisdictions and validate many facets of preparedness. FSEs often include many players operating under cooperative systems such as the Incident Command System (ICS) or Unified Command.

In an FSE, events are projected through an exercise scenario with event updates that drive activity at the operational level. FSEs are usually conducted in a real-time, stressful environment that is intended to mirror a real incident. Personnel and resources may be mobilized and deployed to the scene, where actions are performed as if a real incident had occurred. The FSE simulates reality by presenting complex and realistic problems that require critical thinking, rapid problem solving, and effective responses by trained personnel.

The level of support needed to conduct an FSE is greater than that needed for other types of exercises. The exercise site for an FSE is usually large, and site logistics require close monitoring. Safety issues, particularly regarding the use of props and special effects, must be monitored. Throughout the duration of the exercise, many activities occur simultaneously.

## Rolling Summary of Outcomes

To help ensure that exercise program priorities are adequately addressed, exercise program managers should periodically develop and distribute a rolling summary of exercise outcomes, or rolling summary report. A rolling summary report provides stakeholders with an analysis of issues, trends, and key outcomes from all exercises conducted as part of the exercise program. This report is designed to:

The rolling summary report is an analysis of exercise trends, which guides the development of future exercises.

- Inform elected and appointed officials on the progress of the exercise program;
- Provide data to support preparedness assessments and reporting requirements; and
- Enable exercise planners to modify objectives and the exercise schedule to reflect knowledge gathered from the exercises.

The rolling summary report is not a collection of AARs, but rather an analysis of trends across exercises. It is developed periodically throughout the series of exercises covered in a multi-year TEP (e.g., quarterly or biennially, depending how many exercises are conducted). This report is

intended to serve as an exercise program management and communications tool, which informs stakeholders and guides the development of future exercises.

## Manage Exercise Program Resources

An effective exercise program should utilize the full range of available resources. Program managers should ensure that they have planned for an exercise budget, program staffing, and other resources.

### Exercise Budget Management

Effective budget management is essential to the success of an exercise program, and it is important for exercise managers to maintain awareness of their available resources and expected expenditures. In developing and maintaining an exercise program budget, program managers should work with the full range of stakeholders to identify financial resources and define monitoring and reporting requirements as required by individual exercises.

### Program Staffing

Program managers should identify the administrative and operational staff needed to oversee the exercise program. The TEP can be one basis for determining exercise program staffing needs in addition to grant funds or other programmatic considerations. Program managers should also identify gaps between staffing availability and staffing needs. Exercise program managers can consider alternative means of procuring staff members, such as adding volunteers, students from universities (e.g., student nurses or emergency management students), or interns.

### Other Resources

Exercise program managers should also consider other resources that can support exercises. Such resources can include:

- Information technology (e.g., modeling and simulation capabilities)
- Exercise tools and resources (e.g., document templates)
- Materials from previous exercises
- Training courses
- Mutual aid agreements, memoranda of understanding, and memoranda of agreement
- Technical assistance
- Equipment or props (e.g., smoke machines)



# 3. Exercise Design and Development

## Overview

In the design and development phase, exercise practitioners use the intent and guidance of their elected and appointed officials and the exercise program priorities developed in Program Management to plan individual exercises. Exercise planning teams apply this guidance to shape the key concepts and planning considerations for an individual exercise or series of exercises. The eight key steps of exercise design and development include:

- Setting the exercise foundation by reviewing elected and appointed officials' guidance, the TEP, and other factors;
- Selecting participants for an exercise planning team and developing an exercise planning timeline with milestones;
- Developing exercise-specific objectives and identifying core capabilities based on the guidance of elected and appointed officials;
- Identifying evaluation requirements;
- Developing the exercise scenario;
- Creating documentation;
- Coordinating logistics; and
- Planning for exercise control and evaluation.

Exercise practitioners are encouraged to apply and adapt HSEEP doctrine on exercise design and development to meet their specific needs.

## Exercise Foundation

The exercise foundation is a set of key factors that drive the exercise design and development process. Prior to the beginning of its design, exercise program managers should review and consider the following items:

- Elected and appointed officials' intent and guidance
- Multi-year TEP
- Relevant AAR/IPs from real-world events and exercises
- THIRA or other risk, threat, and hazard assessments
- Organizational plans and procedures
- Grant or cooperative agreement requirements.

By reviewing these elements, exercise program managers adhere to the progressive approach to exercises, and ensure the exercise builds and sustains a jurisdiction's capabilities while taking prior lessons learned into account during the exercise design process.

## Exercise Planning Team and Events

### Exercise Planning Team Considerations

The exercise planning team manages, and is ultimately responsible for, exercise design, development, conduct, and evaluation. Using the exercise program priorities and guidance from elected and appointed officials, the team determines exercise objectives and core capabilities to be assessed; creates a realistic scenario to assess them; and develops supporting documentation, processes, and systems that are used in evaluation, control, and simulation. Planning team members also help with developing and distributing pre-exercise materials, and conducting exercise planning meetings, briefings, and training sessions. An Exercise Director with authority to make decisions for the sponsoring organization provides direction to, and oversight of, the exercise planning team.

Whole community stakeholders include:

- ✓ All levels of government
- ✓ Volunteer organizations
- ✓ Community groups
- ✓ Private entities
- ✓ Nonprofit organizations
- ✓ Faith-based groups
- ✓ Groups working with individuals with disabilities or access and functional needs

The exercise planning team should be of manageable size yet represent the full range of participating organizations as well as other relevant stakeholders. For multi-jurisdictional exercises, planning team members should include representatives from each jurisdiction and participating functional areas or relevant disciplines. The membership of an exercise planning team should be modified to fit the type or scope of an exercise, which varies depending on exercise type and complexity. Usually the exercise planning team is managed by a designated team leader. To design and develop exercises most effectively, exercise planning teams should:

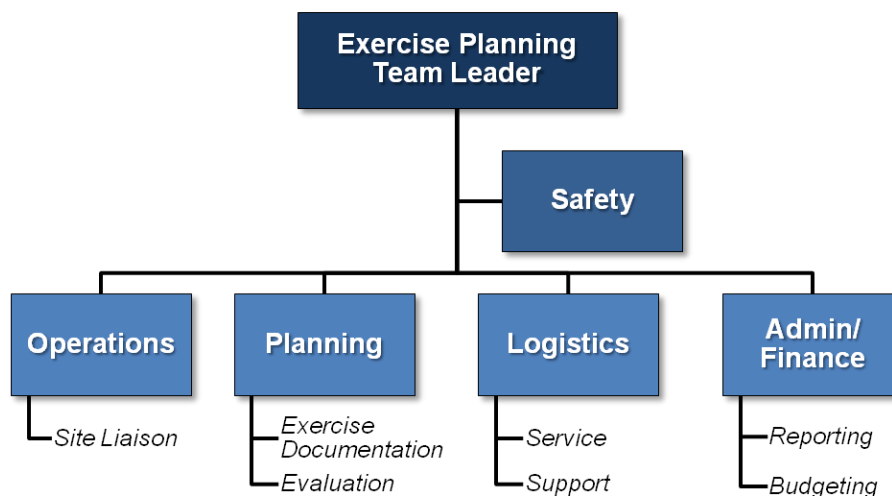
- Adhere to a clear organizational structure, with a distinct chain of command, roles and responsibilities, and accountability to the exercise planning team leader;
- Use proven management practices, processes, and tools, such as project plans and timelines, status reports, and other communications;
- Identify and understand the desired objectives and associated core capabilities for the exercise, and design and develop the exercise accordingly;
- Incorporate evaluation planning from the start of exercise design and development; and
- Use subject-matter experts (SMEs) to develop a realistic and challenging scenario.

Support agencies/organizations including advocates for children, seniors, individuals with disabilities, those with access and functional needs, diverse communities, and people with limited English proficiency should also be included throughout the planning process. In doing so, exercise planners can better understand their perspectives and promote early understanding of roles, responsibilities, and planning assumptions.

Generally, planning team members are not exercise players. When resources are limited, exercise planning team members who act as both planners and players should be especially careful not to divulge sensitive exercise information to other players.

## Exercise Planning Team Positions

Regardless of the scale and complexity of an exercise, the exercise planning team can be most effective if it adheres to a coherent organizational structure that clearly delineates roles and responsibilities. In developing a structure for the planning team, exercise planners may use ICS principles, as established in the National Incident Management System (NIMS). This structure can expand or contract to reflect the scope of the exercise and the available resources and personnel of the participating organizations; depending on available resources, the same personnel can be used to execute multiple functions. This structure may include the following, which is illustrated in **Figure 3.1**:



**Figure 3.1: Sample Exercise Planning Team**

- **Command Section.** The Command Section coordinates all exercise planning activities. The Command Section includes the exercise planning team leader, who assigns exercise activities and responsibilities, provides guidance, establishes timelines, and monitors the development process.
- **Operations Section.** The Operations Section provides most of the technical or functional expertise for scenario development and evaluation. This includes development of the Master Scenario Events List (MSEL).
- **Planning Section.** The Planning Section is responsible for compiling and developing all exercise documentation. The Planning Section collects and reviews policies, plans, and procedures that will be assessed in the exercise. This group is also responsible for planning exercise evaluation. During the exercise, the Planning Section may be responsible for developing simulated actions by agencies not participating in the exercise and for setting up a SimCell as required.
- **Logistics Section.** The Logistics Section provides the supplies, materials, facilities, and services that enable the exercise to function smoothly without outside interference or disruption. This section consists of two subsections: service and support. The service subsection provides transportation, barricading, signage, food and drinks, real-life medical capability, and exercise security. The support subsection provides

communications, purchasing, general supplies, management of very important persons (VIPs) and observer processing, and recruitment and management of actors.

- **Administration/Finance Section.** The Administration/Finance Section provides financial management and administrative support throughout exercise development, including exercise registration support and scheduling.

## Planning Activities

This section describes the types of planning activities—often in the form of planning meetings<sup>4</sup>—most useful in exercise design and development. The exercise planning team members decide the type and number of planning activities needed to successfully plan a given exercise, based on its scope and complexity. When arranging meeting and exercise site locations, the planning team should take into consideration those individuals who require assistance or accommodations during attendance.

### *Concept and Objectives Meeting*

#### ***Primary Focus***

A Concept and Objectives (C&O) Meeting is the formal beginning of the planning process. It is held to identify the scope and objectives of the exercise. For less complex exercises and for organizations with limited resources, the C&O Meeting can be conducted in conjunction with the Initial Planning Meeting (IPM).

Elected and appointed officials, representatives from the sponsoring organization, participating organizations, and the exercise planning team leader typically attend the C&O Meeting. The C&O Meeting helps planners determine the exercise program priorities to be addressed based on elected and appointed officials' guidance, design objectives based on those priorities, align exercise objectives to core capabilities, and identify exercise planning team members.

#### ***Discussion Points***

Topics or issues generally covered during a C&O Meeting include the following:

- Exercise scope
- Proposed exercise objectives and their aligned core capabilities
- Proposed exercise location, date, and duration
- Participants and anticipated extent of play for exercise participants
- Exercise planning team
- Exercise assumptions and artificialities
- Exercise control and evaluation concepts
- Exercise security organization and structure
- Available exercise resources
- Exercise logistics

---

<sup>4</sup> HSEEP uses the term “meetings” to indicate smaller events focused on a specific topic (exercise planning), rather than “conferences,” which are generally larger gatherings with broader agendas.

- Exercise planning timeline and milestones
- Local issues, concerns, and sensitivities

### ***Tools***

The primary tools for the C&O Meeting are an agenda and the background and rationale for conducting the exercise. A briefing is useful for presenting the exercise background and rationale, as well as exercise methodology for persons unfamiliar with HSEEP.

### ***Outcomes***

The following outcomes are expected from the C&O Meeting:

- Agreement regarding exercise concept (scope, type, mission area[s], exercise program priorities to be addressed), exercise objectives, and aligned core capabilities;
- Consensus on the target exercise timeframe;
- Anticipated extent of participation;
- Identification of exercise planning team members; and
- Exercise planning timeline with milestones, including the date of the next planning meeting.

### ***Initial Planning Meeting***

#### ***Primary Focus***

The IPM marks the beginning of the exercise development phase. Regardless of whether a C&O Meeting is held, an IPM should be conducted for all exercises. Its purpose is to determine exercise scope by getting intent and direction from elected and appointed officials, and gathering input from the exercise planning team; and to identify exercise design requirements and conditions (e.g., assumptions and artificialities), exercise objectives, participant extent of play, and scenario variables (e.g., time, location, hazard selection). The IPM is also used to develop exercise documentation by obtaining the planning team's input on exercise location, schedule, duration, and other relevant details.

During the IPM, exercise planning team members are assigned responsibility for activities associated with designing and developing exercise documents, such as the Exercise Plan (ExPlan) and the Situation Manual (SitMan), and coordinating exercise logistics.

#### ***Discussion Points***

Topics or issues generally covered during an IPM include the following:

- Clearly defined exercise objectives and aligned core capabilities;
- Evaluation requirements, including EEG capability targets and critical tasks;
- Relevant plans, policies, and procedures to be tested in the exercise;
- Exercise scenario;
- Modeling and simulation planning;
- Extent of play for each participating organization;

- Optimum duration of the exercise;
- Exercise planners' roles and responsibilities;
- Decision to record exercise proceedings (audio or video);
- Local issues, concerns, or sensitivities;
- Any discussion points typically covered during a C&O Meeting if a C&O Meeting was not conducted; and
- Consensus regarding the date, time, and location for the next meeting.

### ***Tools***

The primary tools for the IPM are the read-ahead packet, agenda, core capabilities, threat and hazard information (if applicable), a proposed room layout (if applicable), and the exercise planning timeline with milestones. A briefing is useful for presenting an overview of the exercise and meeting discussion points.

### ***Outcomes***

The IPM results in desired outcomes, such as:

- Any outcomes listed in the C&O Meeting section above if a C&O Meeting was not conducted;
- Clearly defined exercise objectives and aligned core capabilities;
- Initial capability targets and critical tasks, which will be reviewed and confirmed prior to the next planning meeting;
- Identified exercise scenario variables (e.g., threat scenario, scope of hazard, venue, conditions);
- A list of participating exercise organizations and anticipated organizational extent of play;
- Draft SitMan or ExPlan;
- Identification and availability of all source documents (e.g., policies, plans, procedures) needed to draft exercise documents and presentations;
- A refined exercise planning timeline with milestones;
- Identification and availability of SMEs, as necessary, for scenario vetting and/or expert evaluation;
- Determination of preferred communication methods among the exercise planning team;
- Clearly identified and assigned responsibility for exercise logistical issues;
- A list of tasks to be accomplished by the next planning meeting with established dates for completion and responsible planning team members identified; and
- An agreed-upon date, time, and location for the next planning meeting and the actual exercise.

### *Midterm Planning Meeting*

Midterm Planning Meetings (MPMs) provide additional opportunities to engage elected and appointed officials and to settle logistical and organizational issues that may arise during exercise planning.

#### ***Primary Focus***

The MPM is a meeting to discuss exercise organization and staffing concepts, scenario and timeline development, scheduling, logistics, and administrative requirements. It is also held to review draft documentation. If only three planning meetings are scheduled (i.e., IPM, MPM, and Final Planning Meeting [FPM]), a portion of the MPM should be devoted to developing the MSEL, as needed. See the next section, MSEL Meeting, for more information.

Prior to the MPM, the exercise team leader should engage elected and appointed officials to provide awareness of the planning process, address any questions, and ensure alignment with guidance and intent.

#### ***Discussion Points***

Possible topics or issues for an MPM include the following:

- Comments on draft exercise documentation
- Construction of the scenario timeline—usually the MSEL—if an additional MSEL Planning Meeting will not be held
- Identification of exercise venue artificialities and/or limitations
- Agreement on final logistical items
- Assignment of additional responsibilities

#### ***Tools***

MPM tools include, but are not limited to, an agenda, IPM minutes, draft scenario timeline, draft documentation (e.g., ExPlan, Controller/Evaluator [C/E] Handbook), and other selected documentation needed to illustrate exercise concepts and provide planning guidance.

#### ***Outcomes***

The following outcomes are expected from the MPM:

- Fully reviewed SitMan or ExPlan;
- Draft Facilitator Guide or C/E Handbook, including EEGs;
- A fully reviewed exercise scenario timeline, which is typically the MSEL (if an additional MSEL Meeting will not be held);
- Well-developed scenario injects (imperative if an additional MSEL Planning Meeting is not scheduled);
- Agreement on the exercise site; and
- Finalization of date, time, and location of the MSEL Planning Meeting and/or FPM.

## Master Scenario Events List Meeting

For more complex exercises, one or more additional planning meetings—or MSEL Meetings—may be held to review the scenario timeline. If not held separately, topics typically covered in a separate MSEL Meeting can be incorporated into the MPM and FPM.

### Primary Focus

The MSEL Meeting focuses on developing the MSEL, which is a chronological list that supplements the exercise scenario with event synopses, expected participant responses, objectives and core capability targets to be addressed, and responsible personnel. It includes specific scenario events (or *injects*) that prompt players to implement the plans, policies, procedures, and protocols that require testing during the exercise, as identified in the capabilities-based planning process. It also records the methods that will be used to provide injects (e.g., phone call, radio call, e-mail).

### Discussion Points

In developing a MSEL, the exercise planning team should first consider the critical tasks, conditions, and standards set forth by each exercise objective. A *condition* is the environment in which a task is performed; it can be provided by the scenario or through the MSEL.

If scenario conditions do not trigger performance of the appropriate critical task, the exercise planning team should develop a MSEL entry to simulate the desired situation. A well-written entry considers the following questions:

- Is the event key (i.e., is it directly related to meeting an exercise objective)?
- What is the desired critical task? Who will demonstrate the critical task?
- What will stimulate the behavior (e.g., course of play, phone call, actor, video)?
- Who originates the stimulant? Who receives it and how?
- What action is the player expected to complete?
- Should a contingency entry be developed for injection into the exercise in case the players fail to demonstrate the critical task?

MSEL entries are tied to the Exercise Evaluation Guide critical tasks to ensure the critical tasks and core capabilities can be demonstrated during the exercise.

### Tools

MSEL Meeting tools include, but are not limited to, previous planning meeting minutes, draft exercise documentation, and an agreed-upon MSEL template.

### Outcomes

Following a MSEL Meeting, the level of MSEL completion may vary. At a minimum, key events and the time of their delivery are identified, and responsibility for constructing the remaining events is assigned.



### *Final Planning Meeting*

The FPM is the final forum for reviewing exercise processes and procedures. Both before and after the FPM, the exercise team leader should engage elected and appointed officials to ensure that the exercise is aligning with their intent, address any questions, and receive any last-minute guidance.

#### *Primary Focus*

An FPM should be conducted for all exercises to ensure that all elements of the exercise are ready for conduct. Prior to the FPM, the exercise planning team receives final drafts of all exercise materials. No major changes to the exercise's design, scope, or supporting documentation should take place at or following the FPM. The FPM ensures that all logistical requirements have been met, outstanding issues have been identified and resolved, and exercise products are ready for printing.

#### *Discussion Points*

The following items are addressed during the FPM:

- Conduct a comprehensive, final review and approve all remaining draft exercise documents (e.g., SitMan, MSEL, C/E Handbook, EEGs) and presentation materials;
- Resolve any open exercise planning issues and identify last-minute concerns; and
- Review all exercise logistical activities (e.g., schedule, registration, attire, special needs).

#### *Tools*

The primary tools for the FPM include IPM and/or MPM minutes, an agenda, and previously finalized and/or drafted exercise documents.

#### *Outcomes*

The FPM should not generate any significant changes. The following outcomes are expected:

- Exercise documents and materials for production are approved;
- Attendees understand and approve exercise processes and procedures;
- Last-minute issues are identified and resolved; and
- Logistical elements, including equipment, facilities, and schedule, are confirmed.

#### *Follow-Up*

The exercise planning team finalizes all publications, prepares all supporting materials, rehearses presentations and briefings, and prepares to conduct the exercise. Prior to the exercise, documentation and any additional instructions should be disseminated to the appropriate personnel (e.g., presenters, facilitators, controllers, evaluators, simulators).

## **Exercise Design**

The exercise planning meetings serve as the principal mechanism for executing the major steps of exercise design. The core components of design include establishing the scope of the exercise, setting exercise objectives, creating an exercise scenario, developing exercise documentation, and determining media and public relations guidance.

## Scope

Determining exercise scope enables planners to “right-size” an exercise to meet the objectives while staying within the resource and personnel constraints of the exercising organizations. Key elements in defining exercise scope include exercise type, participation level, exercise duration, exercise location, and exercise parameters. Some of these elements are determined, or initially discussed, through program management activities or grant requirements. However, the exercise planning team finalizes the scope based on the exercise objectives. Alterations to the scope are reviewed with the exercise objectives in mind; planners must consider whether a change in the scope will improve or impede the ability of players to meet the objectives.

### *Exercise Type*

A first step in defining exercise scope is determining what exercise type to conduct. The exercise type is selected based on the purpose of the exercise. If the intent is to review and discuss a new policy, plan, or set of procedures, a discussion-based exercise may be appropriate. If the intent is to assess the responders’ knowledge of a plan, policy, or set of procedures, an operations-based exercise may be appropriate.

### *Participation Level*

Active participation by appropriate entities and key leaders is paramount to meeting the exercise objectives successfully. Participation level refers to the organizations and level of personnel (e.g., tactical operators, line supervisors, agency directors) participating in the exercise, as well as the general number of personnel who will participate in the exercise.

At times, scheduling conflicts, real-world events, or other competing requirements will limit an organization’s or key players’ ability to participate in an exercise. In this case, exercise designers will need to simulate the decisions and actions of those participants through an exercise SimCell. An Extent of Play Agreement (XPA) defines the level of participation.

### *Exercise Duration*

When selecting the exercise duration, the planning team should determine how long it will take to address the exercise objectives effectively. Discussion-based exercises and some drills are generally shorter, ranging from a couple of hours to a full day. FEs and FSEs may take longer. Prevention-focused FEs that exercise the intelligence and information sharing core capability may last up to 30 days with limited duration of play each day. Resource constraints, including the opportunity cost of having employees away from their primary roles, should be factored into determining duration.

### *Exercise Parameters*

Exercise parameters clearly outline what should be included in an exercise scenario based on the objectives and scope, and what should not be exercised. Often there is a desire to add exercise activities that fall outside of the scope of the exercise in order to meet diverse planning and training requirements. While these activities may be useful to an organization, they may impact the ability of players to meet exercise objectives or may reduce the benefit of the exercise by diluting its focus. Clearly defining the exercise scope early in the design process will help exercise planners keep the exercise to a manageable and realistic level.

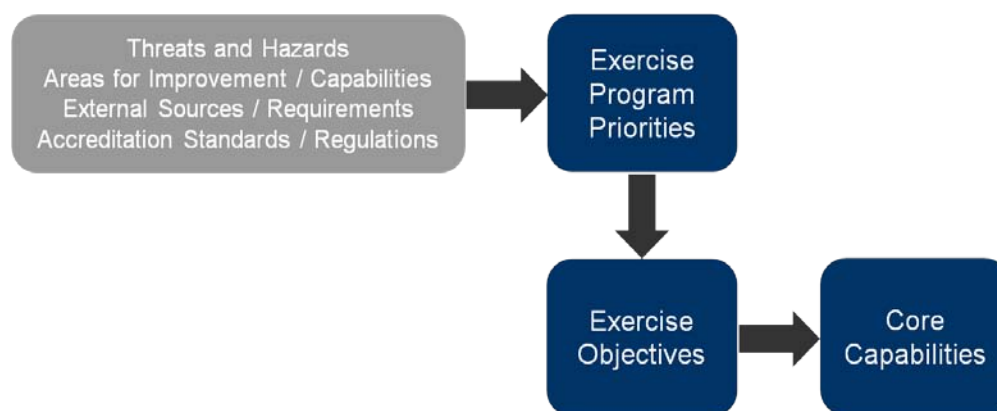
## Exercise Objectives

Based on direction from elected and appointed officials, the exercise planning team selects one or more exercise program priorities on which to focus an individual exercise. These priorities drive the development of exercise objectives, which are distinct outcomes that an organization wishes to achieve during an exercise. Exercise objectives should incorporate elected and appointed officials' intent and guidance, and exercise participants' plans and procedures, operating environment, and desired outcomes. Generally, planners should select a reasonable number of specific, measurable, achievable, relevant, and time-bound (SMART) exercise objectives to facilitate effective scenario design, exercise conduct, and evaluation. **Table 3.1** depicts guidelines for developing SMART objectives.

| SMART Guidelines for Exercise Objectives |   |
|--|---|
| <b>Specific</b>                          | Objectives should address the five Ws- who, what, when, where, and why. The objective specifies what needs to be done with a timeline for completion.         |
| <b>Measurable</b>                        | Objectives should include numeric or descriptive measures that define quantity, quality, cost, etc. Their focus should be on observable actions and outcomes. |
| <b>Achievable</b>                        | Objectives should be within the control, influence, and resources of exercise play and participant actions.   |
| <b>Relevant</b>                          | Objectives should be instrumental to the mission of the organization and link to its goals or strategic intent.   |
| <b>Time-bound</b>                        | A specified and reasonable timeframe should be incorporated into all objectives.  |

**Table 3.1: SMART Guidelines for Exercise Objectives**

The exercise planning team aligns each exercise objective to one or more core capabilities. **Figure 3.2** shows the relationship between exercise program priorities, exercise objectives, and core capabilities.



**Figure 3.2: Priorities, Objectives, and Core Capabilities**

Aligning objectives to a common set of capabilities enables:

- Systematic tracking of progress over the course of exercise programs and/or cycles;
- Standardized exercise data collection to inform preparedness assessments; and
- Fulfillment of grant or funding-specific reporting requirements.

## Evaluation Requirements

It is important to develop exercise evaluation requirements early in the design process, as they will guide development of the exercise scenario, discussion questions, and/or MSEL. Evaluation requirements clearly articulate what will be evaluated during the exercise and how exercise play will be assessed. This information is documented in the EEGs.

Once the exercise planning team aligns objectives to core capabilities, it identifies which capability targets and critical tasks for each core capability are being addressed by the exercise. *Capability targets* are the performance thresholds for each core capability; they state the exact amount of capability that players aim to achieve. Generally, these targets are based on targets identified as part of an organization's or jurisdiction's THIRA or other threat and hazard identification or risk assessment process. *Critical tasks* are the distinct elements required to perform a core capability. Critical tasks may be derived from Mission Area Frameworks, organizational operations plans or SOPs, or discipline-specific standards.

## Scenario

A scenario is an outline or model of the simulated sequence of events for the exercise. It can be written as a narrative or depicted by an event timeline. For discussion-based exercises, a scenario provides the backdrop that drives participant discussion, and is contained in a SitMan. For operations-based exercises, a scenario provides background information about the incident catalyst(s) of the exercise. The overall scenario is provided in the C/E Handbook, and specific scenario events are contained in the MSEL.

Exercise planners should select and develop scenarios that enable an exercise to assess objectives and core capabilities. All scenarios should be realistic, plausible, and challenging; however, designers must ensure the scenario is not so complicated that it overwhelms players.

A scenario consists of three basic elements: (1) the general context or comprehensive story; (2) the required conditions that will allow players to demonstrate proficiency and competency in conducting critical tasks, demonstrating core capabilities, and meeting objectives; and (3) the technical details necessary to accurately depict scenario conditions and events. The exercise planning team ensures that the design effort is not characterized by a fixation on scenario development; rather, the scenario facilitates assessment of exercise objectives and core capabilities. Because of this, exercise planners should refrain from developing the scenario until after the scope and objectives of the exercise have been clearly defined. Furthermore, scenarios should avoid any sensitivity that may arise, such as the use of real names of terrorist groups or sensitive venues.

### *Threat or Hazard*

The first step in designing a scenario is determining the type of threat or hazard on which the exercise will focus. Each type of emergency has its own strengths and weaknesses when it comes to evaluating different aspects of prevention, protection, mitigation, response, and recovery. The exercise planning team should choose a threat or hazard that best assesses the objectives and core capabilities on which the exercise will focus. The identification of this threat or hazard scenario should also be based on the organization's threat/hazard identification and risk assessment.<sup>5</sup> Developing and maintaining these risk analyses is an essential component of

---

<sup>5</sup> For further guidance on identifying and assessing risks and associated impacts, please refer to the DHS *Comprehensive Preparedness Guide 201: Threat and Hazard Identification and Risk Assessment Guide*, First Edition, April 2012.

the National Preparedness System, as they enable organizations to identify potential events that would stress their core preparedness capabilities.

### *Modeling and Simulation*

When incorporated into the development of the scenario and overall exercise design, modeling and simulation can bring versatility, cost savings, and fidelity to exercises.

A model is a representation of a system at a point in time or space intended to expand an understanding of the real system. Simulation is a method of implementing the performance of a model, or combination of models, over time. Modeling and simulation supports decision-making processes by providing human and/or computer feedback to players during exercise play, thus dynamically representing the impact of their decisions. For example, human-based simulation during exercises is often manifested through the SimCell, which represents nonparticipating entities. An example of a computer-based simulation could include wind damage and storm surge forecasting models developed by the National Oceanic and Atmospheric Administration, which enable simulation of a hurricane's effects on coastal communities.

Benefits of using modeling and simulation in exercises include:

- ✓ Enhanced realism
- ✓ Efficiency
- ✓ Ability to exercise situations that cannot be safely or realistically replicated

Modeling and simulation can also be applied in situations where reality cannot be achieved. For example, for safety reasons a bioterrorism exercise cannot be conducted by releasing a deadly virus into the environment. However, it is still important to exercise the capabilities necessary to respond to this type of scenario. The use of modeling and simulation can realistically replicate variables such as disease propagation, radiation, and chemical attacks.

### **Exercise Documentation**

Comprehensive, organized exercise documentation is critical to ensure an accurate account of the exercise is preserved. This in turn allows organizations to leverage past documentation to support future exercises and, more importantly, ensures that all critical issues, lessons learned, and corrective actions are appropriately captured to support improvement efforts.

While most exercise materials are not sensitive or classified, some materials (e.g., scenario details) may necessitate restrictions on distribution. It is important for the exercise sponsor(s) to understand the specific requirements for security marking rules and requirements, access and dissemination, storage, disposal, and incident reporting of sensitive documents.

Consideration should also be given to the accessibility of presentations and documents, such as making information available in alternative formats (e.g., large print, compact disc, Braille), closed captioning or another form of text display, or the provision of sign language interpreters.

**Table 3.2** lists the key exercise design and development documents identified by the exercise type and relevant audience.

| Document Title                          | Exercise Type   | Distribution Audience                   |
|---|---|---|
| Situation Manual (SitMan)               | Seminar (Optional), Workshop (Optional), TTX, Game      | All Participants                        |
| Facilitator Guide                       | Seminar (Optional), Workshop (Optional), TTX, Game      | Facilitators                            |
| Multimedia Presentation                 | Seminar (Optional), Workshop (Optional), TTX, Game      | All Participants                        |
| Exercise Plan (ExPlan)                  | Drill, FE, FSE  | Players and Observers                   |
| Controller and Evaluator (C/E) Handbook | Drill, FE, FSE  | Controllers and Evaluators              |
| Master Scenario Events List (MSEL)      | Drill, FE, FSE, Complex TTX (Optional), Game (Optional) | Controllers, Evaluators, and Simulators |
| Extent of Play Agreement (XPA)          | FE, FSE   | Exercise Planning Team                  |
| Exercise Evaluation Guides (EEGs)       | TTX, Game, Drill, FE, FSE                               | Evaluators                              |
| Participant Feedback Form               | All Exercises   | All Participants                        |

**Table 3.2: Exercise Design and Development Documents**

### *Situation Manual*

SitMans are provided for discussion-based exercises as the core documentation that provides the textual background for a facilitated exercise. The SitMan supports the scenario narrative and serves as the primary reference material for all participants during conduct.

The introduction provides an overview of the exercise—including scope, objectives and core capabilities, structure, rules, and conduct—as well as an exercise agenda. The next section of the SitMan is the scenario, which may be divided up into distinct, chronologically sequenced modules. Each module represents a specific time segment of the overall scenario, based on exercise objectives and scenario requirements.

Each module is followed by discussion questions, usually divided by organization or discipline. Responses to the modules' discussion questions are the focus of the exercise, and reviewing them provides the basis for evaluating exercise results. These discussion questions should be derived from the exercise objectives and associated core capabilities, capability targets, and critical tasks documented in each EEG.

The SitMan generally includes the following information:

- Exercise scope, objectives, and core capabilities
- Exercise assumptions and artificialities
- Instructions for exercise participants
- Exercise structure (i.e., order of the modules)
- Exercise scenario background (including scenario location information)
- Discussion questions and key issues

- Schedule of events

SitMan reference appendices may include, but are not limited to:

- Relevant documents regarding plans, SOPs, etc.
- Jurisdiction- or organization-specific threat information
- Material Safety Data Sheet<sup>6</sup> or agent fact sheet, when applicable
- A list of reference terms

### *Facilitator Guide*

A Facilitator Guide is designed to help facilitators manage a discussion-based exercise. It usually outlines instructions and key issues for discussion during the event and provides background information to help the facilitator answer questions from participants or players. This guide may also include an evaluation section that provides evaluation staff members with guidance and instructions on evaluation or observation methodology to be used as well as essential materials required to execute their specific functions.

### *Multimedia Presentation*

Multimedia presentations are often used to illustrate the general scenario for participants. They are given at the Start of Exercise (StartEx) and support the SitMan. The presentation should concisely summarize information contained in the written documentation. Like the SitMan, the multimedia presentation is also divided into distinct, chronologically segmented modules that, when combined, create the entire scenario.

This presentation typically contains, at a minimum, the following information:

- Introduction
- Exercise scope, objectives, and core capabilities
- Exercise play rules and administrative information
- Modules that describe the scenario

The presentations are intended to help focus and drive the exercise as well as add realism. A/V enhancements to a presentation include video or sounds that convey information to participants.

### *Exercise Plan*

ExPlans are general information documents that help operations-based exercises run smoothly by providing participants with a synopsis of the exercise. They are published and distributed to the participating organizations following development of most of the critical elements of the exercise. In addition to addressing exercise objectives and scope, ExPlans assign activities and responsibilities for exercise planning, conduct, and evaluation. The ExPlan is intended to be seen by the exercise players and observers—therefore, it does not contain detailed scenario information that may reduce the realism of the exercise. Players and observers should review all elements of the ExPlan prior to exercise participation.

---

<sup>6</sup> Material Safety Data Sheet (MSDS) or Product Safety Data Sheet (PSDS) is intended to provide emergency personnel with procedures for handling or working with a substance in a safe manner and includes information such as toxicity, health effects, first aid, storage, disposal, protective equipment, and handling procedures.

An ExPlan typically contains the following sections:

- Exercise scope, objectives, and core capabilities
- Participant roles and responsibilities
- Rules of conduct
- Safety issues, notably real emergency codes and phrases, safety controller responsibilities, prohibited activities, and weapons policies
- Logistics
- Security of and access to the exercise site
- Communications (e.g., radio frequencies or channels)
- Duration, date, and time of exercise and schedule of events
- Maps and directions

### ***Player Handout***

The Player Handout provides key information to exercise players. A Player Handout can supplement the SitMan or ExPlan by providing a quick-reference guide to logistics, agenda or schedule, and key contact data for players.

### ***Controller and Evaluator Handbook***

The C/E Handbook describes the roles and responsibilities of exercise controllers and evaluators and the procedures they should follow. Because the C/E Handbook contains information about the scenario and about exercise administration, it is distributed to only those individuals designated as controllers or evaluators. The C/E Handbook may supplement the ExPlan or be a standalone document. When used as a supplement, it points readers to the ExPlan for more general exercise information, such as participant lists, activity schedules, required briefings, and the roles and responsibilities of specific participants. Used as a standalone document, it should include the basic information contained in the ExPlan, and detailed scenario information.

The C/E Handbook usually contains the following sections:

- Assignments, roles, and responsibilities of group or individual controllers and evaluators
- Detailed scenario information
- Exercise safety plan
- Controller communications plan (e.g., a phone list, a call-down tree, instructions for the use of radio channels)
- Evaluation instructions

The Controller portion of the C/E Handbook, sometimes known as Control Staff Instructions (COSIN), provides guidelines for control and simulation support and establishes a management structure for these activities. This section provides guidance for controllers, simulators, and evaluators on procedures and responsibilities for exercise control, simulation, and support. The Evaluation portion of the C/E Handbook, sometimes known as the EvalPlan, provides evaluation



staff members with guidance and instructions on evaluation or observation methodology to be used, as well as essential materials required to execute their specific functions.

### ***Controller and Evaluator Packets***

While C/E Handbooks contain detailed information that should be read and understood well in advance of the exercise, Controller Packets and Evaluator Packets are provided immediately prior to an exercise to controllers and evaluators respectively. The packets contain key information from the C/E Handbook and additional information specific to the functional area in which the given controller or evaluator will be working. This information is needed during exercise play in order to carry out control and evaluation responsibilities.

Both Controller Packets and Evaluator Packets should contain the following:

- Essential C/E Handbook information
- Ground truth document, detailing key elements of the exercise scenario (primarily used for prevention-focused exercises)
- MSEL, including injects and events for each responsible controller and evaluator
- Appropriate EEGs
- Maps and directions

### ***Master Scenario Events List***

A MSEL is typically used during operations-based or complex discussion-based exercises and contains a chronological listing of the events that drive exercise play. Each MSEL entry should contain the following at a minimum:

- Designated scenario time
- Event synopsis
- Controller responsible for delivering the inject, with controller or evaluator special instructions (if applicable)
- Intended player (i.e., agency or individual player for whom the MSEL event is intended)
- Expected participant response (i.e., player response expected upon inject delivery)
- Objective, core capability, capability target, and/or critical task to be addressed (if applicable)
- Notes section (for controllers and evaluators to track actual events against those listed in the MSEL, with special instructions for individual controllers and evaluators)

Scenario timelines listed in a MSEL should be as realistic as possible and based on input from SMEs. If the activity occurs sooner than the MSEL writers anticipated, then controllers and evaluators should note the time it occurred, but play should not be interrupted.

Controllers delivering MSEL injects will either be co-located with players in the venue of play, or they will reside in a SimCell. A SimCell is a location from which controllers deliver messages representing actions, activities, and conversations of an individual, agency, or organization that is not participating in the exercise but would likely be actively involved during

a real incident. Prior to StartEx, the mechanisms for introducing injects into exercise play should be tested to ensure that controllers are aware of the procedures for delivering MSEL injects and that any systems that will be used to deliver them are functioning properly.

The three types of descriptive MSEL events that support exercise play include:

1. *Contextual injects* introduced to a player by a controller help build the exercise operating environment and/or keep exercise play moving. For example, if the exercise is designed to test information-sharing capabilities, a MSEL inject can be developed to direct an actor to portray a suspect by behaving suspiciously in front of a law enforcement player.
2. *Expected action* events reserve a place in the MSEL timeline and notify controllers when a response action would typically take place. For example, during an FSE involving a chemical agent, establishing decontamination is an expected action that the players will take without the prompting of an inject.
3. *Contingency injects* are provided by a controller or simulator to players to ensure play moves forward to adequately evaluate performance of activities. For example, if a simulated secondary device is placed at an incident scene during a terrorism response exercise, but is not discovered, a controller may want to prompt an actor to approach a player and state that he or she witnessed suspicious activity close to the device location. This should prompt the responder to discover the device, resulting in subsequent execution of the desired notification procedures.

MSELs are typically produced in long formats, short formats, or both. Short-form MSELs usually list injects in a single row in a spreadsheet format. These can be used as a quick-reference guide during exercise play or projected onto a large screen in a control cell or SimCell. Long-form MSELs are used when greater detail is necessary; they include more detailed descriptions, exact scripting language for actors and simulators, and more detailed descriptions of expected actions.

### *Extent of Play Agreements*

XPAs can be used to define the organizations participating in the exercise as well as their extent of play (e.g., one fire station for 8 hours, county Emergency Operations Center [EOC] activated at level A for 24/7 exercise operations). These agreements are formed between exercise participants and the exercise sponsor, and can be vital to the planning of an exercise, recruitment of evaluators, and development of support requirements.

### *Exercise Evaluation Guides*

EEGs are intended to help evaluators collect relevant exercise observations. These documents are aligned to objectives, and document the related core capability, capability target(s), and critical tasks. Each EEG provides evaluators with information on what they should expect to see demonstrated or hear discussed. For more information on EEGs, see Chapter 5: Evaluation.

### *Participant Feedback Form*

At the end of an exercise, participants may receive a Participant Feedback Form that asks for input regarding observed strengths and areas for improvement that players identified during the exercise. Providing Participant Feedback Forms to players during the exercise wrap up activities allows them to provide their insights into decisions made and actions taken. A Participant Feedback Form also provides players the opportunity to provide constructive criticism about the

design, control, or logistics of the exercise to help enhance the planning of future exercises. At a minimum, the questions on the Participant Feedback Form solicit the following:

- Strengths and areas for improvement pertaining to the implementation of participating agencies and organizations' policies, plans, and SOPs; and
- Impressions about exercise conduct and logistics.

Information collected from feedback forms contributes to the issues, observations, recommendations, and corrective actions in the AAR/IP. Feedback forms can be supplemented by the conduct of a Hot Wash immediately following the exercise, during which facilitators, controllers, and evaluators capture participant perspectives on the key strengths and areas for improvement identified during the exercise.

### *Waiver Forms*

Each actor should receive a waiver form prior to the exercise. Signing this form waives liability for all exercise planners and participants. Exercising entities should use discretion when recruiting actors under the age of 18 because of additional challenges and concerns related to liability. If the exercise requires volunteers younger than 18-years-old, parents or legal guardians must sign their waiver forms.

### *Weapons and Safety Policy*

All exercises, where applicable, should employ a written weapon and safety policy that is in accordance with applicable State or local laws and regulations. Exercise sponsors should coordinate the application of this policy with the appropriate safety and/or legal departments as necessary.

### **Media or Public Affairs Guidance**

Members of the media have the unique ability to fulfill an important function before, during, and after an exercise. Prior to an exercise, they inform the public that an exercise will take place, and raise public awareness that the community is preparing for disasters. During an exercise, they can facilitate the validation of public information plans and procedures. Following an exercise, the media may release details to the host community on the state of its preparedness, if the exercise planning team leader provides such information. Therefore, exercise sponsors should work to incorporate media-related issues into exercise planning.

### *Press Release*

Prior to an exercise, the exercise planning team should develop a written press release to disseminate to media outlets, including web-based and/or social media outlets, as appropriate. This release informs the media and the public about general exercise information. Additionally, this information can be distributed to observers, elected and appointed officials, and other VIPs. This release should *not* contain detailed scenario information, such as the type of threat or hazard, nor should it contain information that might hinder meeting exercise objectives if a participant were to see it.

Typically, the contents of a media or public information release include the following:

- Introduction, including sponsor and exercise program information
- Exercise scope and objectives

- General scenario information
- Participating agencies or disciplines

### *Public Announcement*

Public announcements should be made prior to any exercise involving public space or space that will be viewable by the public. This precaution helps avoid confusion on the part of the public. It will also help the public avoid congestion near the exercise site by providing suggestions for alternate routes. Announcements can be made through local media, through mass mailings or pamphlets, and/or on signs near the exercise site.

### *Media Policy*

The agency or organization sponsoring the exercise should decide whether to invite media representatives to the exercise. If invited, media representatives should have an opportunity prior to the exercise to conduct interviews with key planners and participants.

At discussion-based exercises, media representatives should not be present during the discussion of any potentially sensitive information, and filming exercise conduct should be avoided so as not to inhibit or hinder discussion or the flow of play.

During operations-based exercises, media representatives may be allowed to film certain activities but should be cautioned not to interfere with exercise play or film any sensitive operations. Unless media representatives are invited to participate in the exercise, a guide—typically a public information officer or designee—should escort media representatives at all times. If mock media or exercise controllers simulating the real-world media are employed during an exercise to test public affairs training, they should be kept completely separate from any real-world media representatives who may be observing the exercise.

## Exercise Development

Exercise development involves planning for the critical elements of exercise conduct: logistics, control, and evaluation.

### **Planning for Exercise Logistics**

Logistical details are important, but often overlooked, aspects of an exercise. They can make the difference between a smooth, seamless exercise and one that is confusing or even unsafe.

### *Venue*

#### ***Facility and Room***

Meetings, briefings, and exercises should be conducted in facilities that are appropriate for the exercise scope and attendance. Planners should also ensure that all environmental and historical preservation documentation is completed if required. Facilities should be reserved solely for exercise purposes and should be accessible to all participants and free from distractions.

When selecting a facility and room for exercise planning or conduct, planners should account for the following considerations:

- Ensure there are enough tables and chairs for every relevant participant.
- Arrange tables to best suit the meeting or exercise (e.g., U-shaped layout for exercises requiring facilitation and participant interaction).

- Select a facility with room acoustics that facilitate ease of discussion.
- Select a facility with accessibility of parking and restrooms for all participants.

### ***Audio/Visual Requirements***

A/V requirements are identified during the design phase *including* individuals assigned to ensure equipment is properly functioning.

### ***Supplies, Food, and Refreshments***

Exercise planners should not assume participants will bring necessary supplies with them. Writing utensils, notepads, easels, copies of plans and procedures, name badges, and any other equipment deemed necessary should be procured prior to exercise conduct and provided to participants.

The exercise planning team should also consider whether food and refreshments can be provided for participants and observers, in accordance with applicable funding guidance or venue policies. For discussion-based exercises, it is often beneficial to have a working lunch provided to minimize disruption to play. For operations-based exercises, hydration of participants is an important consideration.

### ***Badging and Identification***

For security purposes, all exercise participants should wear some form of identification. Although some players may wear their uniforms, badges are typically used to identify each exercise participant by name and organization. Where appropriate, name tents should be placed on tables prior to StartEx to ensure proper seating arrangements. Additionally, each table should have a table tent identifying the organization or functional area seated at that table.

### ***Registration and Table/Breakout Identification***

Participants register upon arrival, for both identification and security reasons. Each participant should, at minimum, provide their name, organization, telephone number, and e-mail address. The exercise planning team retains copies of the sign-in sheets, so that participants can receive follow-up correspondence such as thank-you notes, certificates of completion, copies of the AAR/IP, and invitations to future planning meetings and exercises.

### ***Actors***

Volunteer actors provide added realism and prompt players to provide simulated victim care. Exercise planning team members can recruit them from local colleges and universities, medical and nursing schools, drama clubs, theaters, civic groups, emergency response academies, and Federal and State military units. Consideration should be given to soliciting volunteer actors from within the access and/or functional needs population to provide an opportunity to practice meeting the needs of these individuals in a variety of operational environments.

Prior to the exercise, actors should receive the following:

- Waiver forms for signature, clearing liability for exercise planners and participants;
- Actor instructions including information on when to arrive, where to report, and other logistical details; and

- Symptomatology cards containing the signs and symptoms the actor will portray, as well as information for medical providers.

### *Parking, Transportation, and Designated Areas*

Established parking areas should be clearly labeled for use by participants arriving in personal owned vehicles. If required, law enforcement personnel should be available to help direct vehicles to proper parking areas.

Operations-based exercises may also have several key areas for exercise conduct. Designated exercise areas should be clearly marked, and can include:

- **Exercise Assembly Area.** This is a gathering place for all deployable resources that will be playing in an exercise. The purpose of the exercise assembly area is to gather all resources and personnel near the exercise site prior to StartEx for safety briefings, weapons checks, and to ensure that resources and personnel are transported in a safe and unhurried manner.
- **Operations Area.** This is a large space where tactical operations—such as decontamination, triage, or render-safe procedures—take place.
- **Response Route.** This is the path traveled by responding emergency units from the Assembly Area to the exercise site during a response-focused exercise.
- **Observer/Media Area.** This is a designated area that provides observers and real-world media representatives with a view of the exercise but prevents them from interfering with exercise play.

### **Planning for Exercise Control**

Exercise control maintains exercise scope, pace, and integrity during conduct under safe and secure conditions. Key elements of exercise control include controller staffing, structure, training, communications, and safety and security.

#### *Staffing*

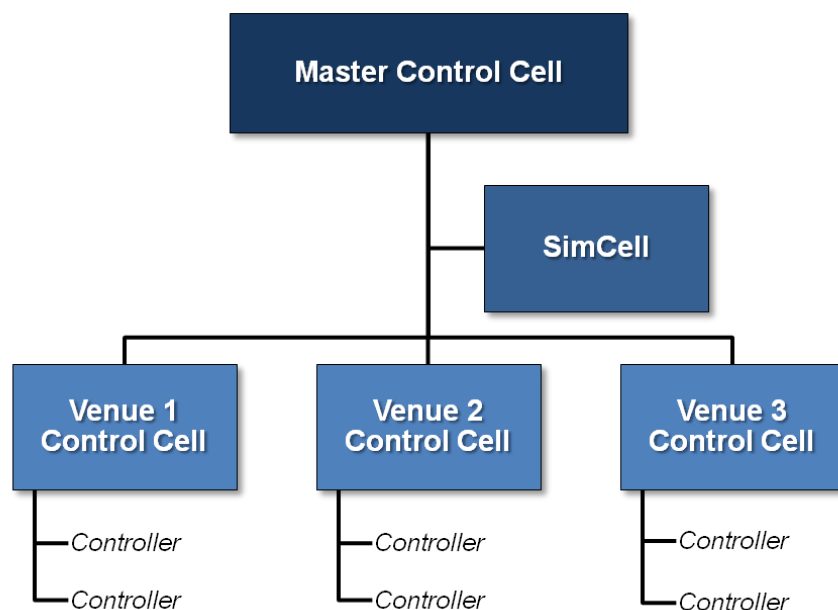
The planning team identifies the number of controllers needed during the exercise to deliver and track information. As a guiding principle, at least one controller should be present at every venue whenever possible. In addition to controlling the flow of information and release of MSEL events, positioning a controller at every site helps ensure the exercise is conducted safely with proper security controls.

During discussion-based exercises, the control staff provides the facilitation. If participants divide into groups for part of conduct, a table facilitator is assigned to each group. A complex multijurisdictional FSE, on the other hand, may require hundreds of controllers at field and headquarters play sites, as well as additional controllers in control cells, to coordinate among the various play sites or serve in a SimCell. Resource constraints may make placing a controller at every site challenging. Multitasking personnel to serve as both a controller and an evaluator can help. While not desirable, exercise planners may also assign selected players to serve as controllers. Such players/controllers would need to understand clearly how to separate the roles to avoid feeding advance information into play or otherwise harming exercise integrity.

### Control Structure and Simulation Cell

The *control structure* is the framework that allows controllers to communicate and coordinate with other controllers at other play sites or at a control cell to deliver and track exercise information. For discussion-based exercises, the structure is usually minimal. For operations-based exercises, however, the control structure may need to be fairly substantial to allow for proper coordination.

In an exercise involving field and headquarters play among multiple organizations in one location, a control cell serves as a central node for sharing information among controllers at the various sites and for putting all of the information together to form a common exercise picture. If an exercise contains multiple jurisdictions, particularly multiple levels of government in different geographic locations, it may be beneficial to establish multiple *venue control cells* that communicate and coordinate with each other through a *master control cell*. When an exercise does require establishment of multiple control cells, it is important to define their roles and relationships, including their decision-making hierarchy. **Figure 3.3** shows a sample control structure with multiple control cells.



**Figure 3.3: Sample Exercise Control Structure**

A *SimCell* is used to generate injects, receive player responses, and provide information in place of nonparticipating organizations that would likely participate actively if exercise events were real. Physically, the *SimCell* is a working location for a number of qualified professionals who portray these non-participating organizations. These professionals are knowledgeable of the organizations they are portraying, and they deliver injects in a realistic fashion. Depending on the type of exercise, the *SimCell* may require a telephone, computer, e-mail account, radio, or other means of communication.

When developing the control structure, exercise planners should consider their resource environment. Ideally, a control cell will contain a point of contact (POC) or a liaison representing each participating organization. In exercises involving a mix of classified and unclassified information, it may be required to separate control cells, with appropriate security

firewalls set up to handle classified and unclassified information. Moreover, if an exercise uses a SimCell to drive exercise play, a determination needs to be made how to staff and integrate it into the broader control structure.

### *Controller Training*

If all exercise controllers can be recruited from the exercise planning team, there is little need to develop and provide special training for controllers. If, however, controllers are recruited from participating entities or other sources outside the planning team, it is very beneficial to provide some level of advance training to ensure that controllers understand the exercise, their role in it, and what they need to do.

The training generally includes a basic primer on the exercise design and all of the developed aspects of exercise control, including the scenario, information delivery methods, control staff, structure, and communications plan. Controllers are also trained to use the documents (e.g., MSEL) and the facilities (e.g., SimCell) that will help them control the exercise.

### *Communications Plan*

The best-designed exercise control structure staffed by the most experienced exercise practitioners will fail if controllers cannot communicate effectively and efficiently. A communications section in the C/E Handbook or COSIN serves as a communications plan by telling controllers who to communicate with, what they need to communicate, and how they will communicate. This communications section may include:

- **Controller Communications.** Controllers at field or headquarters play sites may need to communicate with controllers at other sites or only with a control cell. Control cells will need to be able to communicate with all controllers at field or headquarters play sites, internally, and with other control cells if appropriate. Controllers and control cells may also need to communicate with players through means other than face-to-face interaction.
- **Timing and Content of Communications.** While controllers should communicate exercise events as they occur, establishing a regular communications schedule with defined information requirements will help to ensure effective information flow.
- **Communications Methodology.** Communications may occur by phone, radio, e-mail, over a networked system, or a mix. Controllers and control cells will need to be equipped to use the designated method(s) of communication.

### *Safety and Security*

Controllers also play an important role in ensuring that the exercise is conducted safely in a secure environment. In exercises involving potentially dangerous field play or the use of classified materials, the control team designates a safety and/or security controller(s) to focus on those areas of control.

#### *Safety*

Safety is the most important consideration in planning any exercise. For operations-based exercises, consideration should be given to the following to help ensure a safe environment:

- Appoint a safety controller(s).



- Dedicate non-exercise participating advanced life support or basic life support ambulance unit(s) for real-world emergencies that may occur during the exercise.
- Identify real-world emergency procedures with a code word or phrase.
- Outline safety requirements and policies.
- Consider other safety issues outside the scope of exercise control (e.g., weather, heat stress, hypothermia, etc.).

### *Security*

Because of the sensitive nature of many exercises, it is important for the exercise site to be secure. Local law enforcement should provide site security where appropriate. Exercises often also involve sensitive or classified information or procedures. For all exercises involving sensitive or classified information, exercise planners should identify and adhere to appropriate security standards to ensure that this information is not compromised. Such measures can include conducting registration prior to a discussion-based exercise, ensuring that uninvited or unregistered individuals do not participate, or having law enforcement or security guards monitor and control access to a play site for the duration of the exercise.

### **Planning for Exercise Evaluation**

Thorough planning and organization prior to an exercise is imperative to effective and successful exercise evaluation. As described above, the exercise planning team identifies evaluation elements early in the exercise design process. Additionally, during exercise development, an evaluation team organizes itself appropriately and develops a comprehensive plan to address how the exercise will be evaluated. Additional details regarding evaluation planning can be found in Chapter 5: Evaluation.

# 4. Exercise Conduct

## Overview

Exercise conduct involves activities such as preparing for exercise play, managing exercise play, and conducting immediate exercise wrap-up activities. For discussion-based exercises, conduct also entails presentation, facilitation, and discussion. For operations-based exercises, conduct encompasses all operations occurring between the designated StartEx and End of Exercise (EndEx). Exercise practitioners are encouraged to apply and adapt HSEEP doctrine on exercise conduct to meet their specific needs. Throughout these efforts, the engagement of elected and appointed officials by practitioners will ensure that the exercise is addressing the guidance and intent of officials.

## Exercise Play Preparation

### Setup for Discussion-Based Exercises

Members of the exercise planning team assigned to support exercise setup should visit the exercise site at least one day prior to the event to arrange the room, test A/V equipment, and discuss administrative and logistical issues. On the day of the exercise, planning team members should arrive several hours before StartEx to handle setup activities and arrange for registration.

Prior to exercise conduct, the exercise planning team must deliver the necessary exercise materials and equipment, which may include the following:

- SitMans or other written materials for exercise participants
- Multimedia presentation
- Appropriate A/V equipment including televisions, projectors, projection screens, microphones, and speakers
- Table tents for each table
- Name tents for each participant
- Badges identifying the role of each exercise participant
- Sign-in sheets
- Participant Feedback Forms

### Setup for Operations-Based Exercises

The appropriate exercise planning team members should begin event setup as many days prior to the event as necessary, depending on the scope of the simulated environment. Setup entails arranging briefing rooms and testing A/V equipment, placing props and effects, marking the appropriate exercise areas and their perimeters, and checking for potential safety issues. On the day of the exercise, all exercise planning team members should arrive several hours before StartEx to handle any remaining logistical or administrative items pertaining to setup, and arrange for registration. A communications check should also be conducted prior to the start of an operations-based exercise.

## Briefings

Held before an exercise, briefings educate participants about their roles and responsibilities. By scheduling separate briefings for elected and appointed officials, controllers and evaluators, actors, players, and observers, exercise planning team members can avoid giving extraneous material to different groups and ensure the design, development, and conduct of an exercise aligns to their elected and appointed officials' guidance.

### *Elected and Appointed Official Briefing*

Elected and Appointed Official Briefings should occur during design and development and prior to the conduct of an exercise. The exercise planning team leader should periodically consult with the elected and appointed officials within the exercise planning team to ensure the exercise aligns with leadership intent.

### *Controller/Evaluator Briefing*

The C/E Briefing is generally conducted before operations-based exercises. It begins with an exercise overview and then reviews the exercise location and area, schedule of events, scenario, control concept, controller and evaluator responsibilities, instructions on completing EEGs, and any miscellaneous information. Additional training for evaluators may be conducted.

### *Actor Briefing*

The Actor Briefing should be conducted before the exercise, prior to the actors taking their positions. The actor controller leads this briefing and includes the following information: exercise overview, safety, real emergency procedures, symptomatology, acting instructions, and schedule. Identification badges and symptomatology cards are distributed at this briefing.

### *Player Briefing*

Shortly before StartEx, a controller conducts a briefing for all players to address individual roles and responsibilities, exercise parameters, safety, security badges, and any remaining logistical exercise concerns or questions. Participant Handouts and ExPlans or SitMans, depending on the type of exercise being conducted, are often distributed during this briefing. Following the exercise, controllers ensure that appropriate players attend the post-exercise Hot Wash in their respective functional area.

### *Observer Briefing*

An Observer Briefing is generally conducted the day of an exercise and informs observers and VIPs about the exercise background, scenario, schedule of events, observer limitations, and any other miscellaneous information. Often, observers will be unfamiliar with public safety procedures and will have questions about the activities they see. Designating someone, such as a public information officer, to answer questions prevents observers from asking questions of players, controllers, or evaluators.

## Exercise Play

During exercise play, participants accomplish various roles and responsibilities aimed at achieving exercise objectives and demonstrating core capabilities.

## Participant Roles and Responsibilities

**Table 4.1** describes the exercise participant role and responsibilities associated with exercise conduct and the applicable exercise types.

| Role              | Responsibilities   | Exercise Type                |
|-------------------|--|------------------------------|
| Exercise Director | The Exercise Director oversees all exercise functions during exercise conduct, oversees and remains in contact with controllers and evaluators, debriefs controllers and evaluators following the exercise, and oversees setup and cleanup of the exercise as well as positioning of controllers and evaluators.   | All                          |
| Evaluator         | Evaluators are chosen based on their expertise in the specific functional areas they will observe. Evaluators use evaluation documents to document observations, capture unresolved issues, and analyze exercise results. Evaluators do not interfere with exercise flow.  | All                          |
| Lead Evaluator    | The lead evaluator should participate as a member of the exercise planning team and be familiar with all relevant issues associated with the exercise, including plans, policies, and procedures; incident command and decision-making processes; and interagency and/or inter-jurisdictional coordination issues. The lead evaluator should have the management skills needed to oversee a team of evaluators over an extended process as well as the knowledge and analytical skills to undertake a thorough and accurate analysis of all capabilities.  | All                          |
| Facilitator       | During a discussion-based exercise, the facilitator(s) is responsible for keeping participant discussions on track with exercise objectives and ensuring all issues and objectives are explored as thoroughly as possible within time constraints. If an exercise uses breakout groups, more than one facilitator may be needed.   | Seminar, Workshop, TTX, Game |
| Controller        | In operations-based exercises and some games, controllers plan and manage exercise play, set up and operate the exercise incident site, and possibly take the roles of individuals and agencies not actually participating in the exercise. Controllers direct the pace of exercise play, provide key data to players, and may prompt or initiate certain player actions and injects to the players as described in the MSEL to ensure exercise continuity. Controllers issue exercise materials to players as required, monitor the exercise timeline, and supervise the safety of all exercise participants. Controllers are the only participants who should provide information or direction to players. All controllers should be accountable to one senior controller. | Game, Drill, FE, FSE         |
| Senior Controller | The senior controller (sometimes known as a lead controller) is responsible for the overall organization of the exercise. The senior controller monitors actions by controllers and exercise progress, and coordinates decisions regarding deviations or significant changes to the scenario caused by unexpected developments during play. The senior controller debriefs controllers and evaluators after the exercise and oversees the setup and takedown of the exercise.  | Game, Drill, FE, FSE         |
| Safety Controller | The safety controller is responsible for monitoring exercise safety during exercise setup, conduct, and cleanup. All exercise controllers assist the safety controller by reporting any safety concerns. The safety controller should not be confused with the safety officer, who is identified by the incident commander during exercise play.   | Drill, FE, FSE               |

| Role                              | Responsibilities   | Exercise Type  |
|-----------------------------------|--|----------------|
| Exercise Assembly Area Controller | The exercise assembly area controller is responsible for the logistical organization of the exercise assembly area, including placement locations for units entering the exercise assembly area, the release of dispatched units into the field, and coordination of pathways and overall safety within the exercise assembly area.  | FSE            |
| Simulator                         | Simulators are control staff personnel who role play as nonparticipating organizations or individuals. They most often operate out of SimCell, but they may occasionally have face-to-face contact with players. Simulators function semi-independently under the supervision of SimCell controllers, enacting roles in accordance with instructions provided in the MSEL. All simulators are ultimately accountable to the Exercise Director and senior controller.   | Drill, FE, FSE |
| Observer                          | Observers do not directly participate in the exercise; rather, they observe selected segments of the exercise as it unfolds, while remaining separated from player activities. Observers view the exercise from a designated observation area and are asked to remain within the observation area during the exercise. A dedicated controller or public information officer should be assigned to manage these groups. In a discussion-based exercise, observers may support the development of player responses to the situation by asking relevant questions, delivering messages, or citing references; however, they generally do not participate in moderated discussion. | All            |
| Player                            | Players have an active role in preventing, responding to, or recovering from the risks and hazards presented in the scenario, by either discussing or performing their regular roles and responsibilities. Players initiate actions that will respond to and/or mitigate the simulated emergency.  | All            |
| Actor                             | Actors are typically volunteer personnel responsible for simulating a specific role in an exercise. Actors are vital to creating a realistic scenario and can play a variety of roles.   | Drill, FSE     |

**Table 4.1: Exercise Participant Roles**

## Conduct for Discussion-Based Exercises

### *Multimedia Presentation*

The multimedia presentation is a crucial vehicle for conveying information to the players. The presentation typically starts with brief remarks by representatives from the exercise planning team or sponsoring organization, and/or elected and appointed officials from the governing jurisdiction. After the opening remarks, the presentation moves into a brief introductory and explanatory phase led by a facilitator. During this phase, attendees will be introduced to any other facilitators, controllers (games only), or evaluators; given background on the exercise process; and advised about their individual roles and responsibilities.

The facilitator generally presents the multimedia briefing, which describes the scenario and any relevant background information. The facilitator also leads the discussion, introduces spokespersons, poses questions to the audience, and ensures that the schedule remains on track.

### *Facilitated Discussion*

Facilitated group discussions can occur in a plenary session or in breakout groups, which are typically organized by discipline or agency/organization. In both formats, a facilitator is responsible for keeping the discussion focused on the exercise objectives and making sure all issues are explored within the time allotted. A good facilitator should possess:

- The ability to keep side conversations to a minimum, keep discussions on track and within established time limits, control group dynamics and strong personalities, and speak competently and confidently about the subject without dominating conversation;
- Functional area expertise or experience;
- Awareness of appropriate plans and procedures; and
- The ability to listen well and summarize player discussions.

If feasible and/or appropriate, co-facilitators who are knowledgeable about local issues, plans, and procedures may assist the lead facilitator. Also, designating a recorder to take notes allows the facilitator to focus on key discussion issues.

### *Moderated Discussion*

Moderated discussions generally follow breakout discussions. In moderated discussions, a representative from each group presents all participants with summarized results from a group's facilitated discussion. This spokesperson is selected before the facilitated discussion so that he or she can prepare to speak on behalf of the group. During moderated discussions, spokespersons summarize the facilitated discussion, present key findings and issues, and discuss any unresolved issues or questions. At the end of the moderated discussion period, the facilitator opens the floor for questions.

Time for moderated discussion is generally scheduled at the end of each module, with another longer period for each at the conclusion of the exercise. During the moderated discussion, groups should focus only on the material presented in a given module.

### *Exercise Data Collection*

During discussion-based exercises, facilitators help evaluators collect useful data by keeping discussions focused on exercise objectives, core capabilities, capability targets, and critical tasks. Additional information about data collection can be found in Chapter 5: Evaluation.

## **Conduct for Operations-Based Exercises**

During conduct of operations-based exercises, the exercise planning team leader normally serves as the senior controller or Exercise Director. Controllers and evaluators report key activities to the senior controller. The senior controller is responsible for both commencing exercise play by announcing StartEx, and announcing EndEx at the conclusion of the scenario, after a certain period of time has passed, or when all exercise objectives have been met.

Prior to StartEx, rules for exercise play should be disseminated to all participants to establish the parameters that they must follow during the exercise. These rules help players understand their roles in the exercise environment, describe appropriate behavior, establish guidelines for physical contact, and aim to prevent physical harm to individuals or damage to property. Written rules should be reviewed and approved by appropriate authorities.

Exercise areas for operations-based exercises should be clearly defined, and all exercise operations should take place within these designated areas. The exercise area for an FE is usually limited to the control or command centers and their onsite staff members. All other activity and deployment of resources outside of these locations are notional and is simulated by the SimCell staff. The exercise area for an FSE or drill might include one or more simulated incident sites, as well as control or command centers. It is important that these areas be clearly marked to ensure player safety and avoid confusion with real-world operations.

To prevent confusion with real-world communications or accidental deployment of resources, all communications must be clearly identified as exercise-related. This can be accomplished by displaying the phrase “exercise material only” prominently on all typed or printed communications, and by beginning each verbal communication by stating, “*This is an exercise,*” or a similar statement as agreed upon by the exercise planning team. Additionally, players should be supplied with an exercise directory that provides contact information for each of the simulated organizations portrayed by simulators in the SimCell.

### *Control*

As detailed in Chapter 3: Exercise Design and Development, the control structure for an operations-based exercise describes how controllers communicate and coordinate with one another and how they track exercise information. These procedures, as well as clearly defined roles and responsibilities for each controller, should be detailed in the C/E Handbook. During exercise play, controllers carry out these responsibilities and closely monitor exercise play to ensure a safe and effective exercise.

During FE play, SimCell control is particularly important. Because of the great deal of simulated activity that occurs during FEs, these exercises require a robust and detailed MSEL and close communication between the site controller(s) and the SimCell. Site controllers should advise the SimCell on the pace of exercise play, and request more or fewer injects as necessary to maintain an appropriate pace.

During FSEs and drills, the exercise assembly area controller plays a key role. The exercise assembly area controller remains in close communication with other controllers throughout the exercise to ensure safe and realistic deployment of personnel. When a unit arrives at the assembly area, the exercise assembly area controller takes attendance to ensure all players are present. Units are positioned according to their deployment times, and qualified individuals perform a weapons check to guarantee the tagging of all inspected weapons to indicate they are safe for exercise play. This controller is also responsible for the exercise assembly area’s logistical organization, including placement locations for units and coordination of exiting patterns for dispatched units. It is imperative for the exercise planning team to create a deployment timetable based on realistic response times; failure to do so will result in a compromised and disorganized exercise. The exercise assembly area controller must be informed about any updates to the exercise that may require changes to the deployment timetable, and he or she should update the deployment timetable accordingly.

In all operations-based exercises, it is critical that all exercise controllers take appropriate actions to ensure a safe and secure exercise environment. These actions may involve monitoring conditions that impact player and/or actor safety, such as heat stress and other health issues.

### *Exercise Data Collection*

During the exercise, each evaluator should use the EEGs to record both quantitative and qualitative data for capabilities, capability targets, and critical tasks, as assigned by the lead evaluator. During operations-based exercises, evaluators should be strategically pre-positioned in locations at which they can gather useful data, and they should track and record participant actions carefully.

### **Contingency Process**

An effective contingency process is critical to ensure the exercise can be halted, postponed, or canceled if a real-world event takes place.

In order to prevent jeopardizing mission performance in response to real-world events, the exercise planning team should maintain a contingency process to halt, postpone, or cancel an exercise as necessary. Should the conduct of the exercise put at risk any efforts to respond to real-world events or should real-world events hinder conduct of the exercise, the Exercise Director and exercise planning team should convene, in coordination with elected and appointed officials from participating organizations, to determine the appropriate course of action. Following decision on a final course of action, the Exercise Director should communicate that course of action to all exercise planners, participants, and other key stakeholders through all relevant communications mechanisms.

### **Wrap-Up Activities**

Performing thorough exercise wrap-up will ensure that all relevant data is collected to support effective evaluation and improvement planning.

### **Debriefings**

Immediately following the exercise, a short debriefing should be conducted with exercise planning team members to ascertain their level of satisfaction with the exercise, discuss any issues or concerns, and propose improvements. Planners should collect exercise attendance lists, provide copies to the exercise planning team leader, collect Participant Feedback Forms, and develop debriefing notes.

### **Player Hot Wash**

A Hot Wash provides an opportunity for exercise participants to discuss exercise strengths and areas for improvement immediately following the conduct of an exercise. The Hot Wash should be led by an experienced facilitator who can ensure that the discussion remains brief and constructive. The information gathered during a Hot Wash can be used during the AAR/IP process, and exercise suggestions can be used to improve future exercises. Hot Washes also provide opportunities to distribute Participant Feedback Forms, which, when completed by players, can be used to help generate the AAR/IP.

For operations-based exercises, a Hot Wash should be conducted for each functional area by that functional area's controller or evaluator immediately following an exercise. It can also provide an opportunity for players to gain clarification on exercise play at other exercise sites or in other functional areas.



## **Controller/Evaluator Debriefing**

The C/E Debriefing provides a forum for functional area controllers and evaluators to review the exercise. The exercise planning team leader facilitates this debriefing, which provides each controller and evaluator with an opportunity to provide an overview of the functional area they observed and to discuss both strengths and areas for improvement. During the debriefing, controllers and evaluators complete and submit their Participant Feedback Forms. Debriefing results are captured and may be included in the AAR/IP. Similarly, for discussion-based exercises, a Facilitator/Evaluator Debriefing is held to review exercise conduct. This debriefing can be facilitated by the exercise planning team leader and provides a forum for facilitators and evaluators to discuss strengths, areas for improvement, and progress in completing exercise objectives.

# 5. Evaluation

## Overview

Exercise evaluation maintains the fundamental link between the exercise and improvement planning. Through exercise evaluation, organizations assess the capabilities needed to accomplish a mission, function, or objective. This assessment is based on the performance of critical tasks to capability target levels. Effective exercise evaluation involves:

- Planning for exercise evaluation;
- Observing the exercise and collecting exercise data during exercise conduct;
- Analyzing collected data to identify strengths and areas for improvement; and
- Reporting exercise outcomes in a draft AAR.

Using a common approach to evaluation supports consistent and meaningful reporting of exercise results.

## Evaluation Planning

It is important that evaluation planning begins during the initial planning phases of the exercise, as described in Chapter 3: Exercise Design and Development. Identifying clear evaluation requirements early in the planning process will ensure that the design, development, and conduct of the exercise best support an effective evaluation. Exercise planners should collaborate to ensure a consistent approach for evaluating capabilities during an exercise. Additionally, elected and appointed officials should be engaged early in evaluation planning in order to identify any specific evaluation requirements. Planning an exercise evaluation typically includes:

- Selecting lead evaluator and define evaluation team requirements;
- Developing EEGs, which include objectives, core capabilities, capability targets, and critical tasks;
- Recruiting, training, and assigning evaluators;
- Developing and finalizing evaluation documentation; and
- Conducting a pre-exercise C/E Briefing.

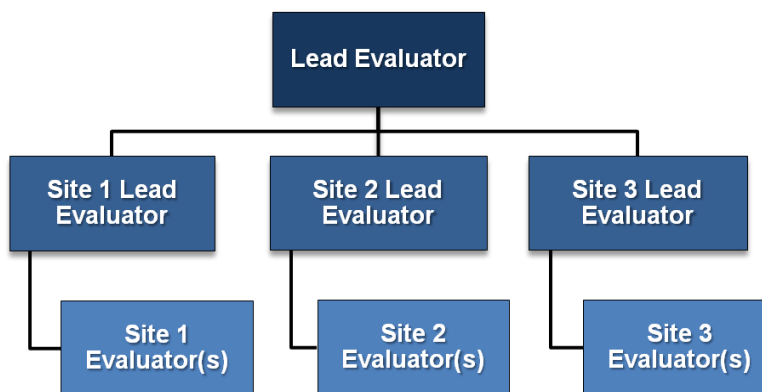
Through this process, an evaluation team can develop a thorough plan to address how the exercise will be evaluated.

## Evaluation Team

Early in the exercise planning process, the exercise planning team leader should appoint a lead evaluator to oversee all facets of the evaluation process. The lead evaluator participates fully as a member of the exercise planning team and should be familiar with the exercise's objectives. A lead evaluator should have the management skills needed to oversee a team of evaluators as well as the knowledge and analytical skills to undertake a thorough and accurate analysis of all objectives and core capabilities of an exercise. The lead evaluator must have the skills to effectively communicate and coordinate with the exercise controllers. In addition, the lead

evaluator should be familiar with the mission areas and core capabilities associated with the exercise; plans, policies, and procedures of the participating organizations; incident command and decision-making processes; and key preparedness doctrine and policy.

The exercise planning team and lead evaluator should determine the structure of the exercise evaluation team based on the scope of the exercise, the exercise objectives, associated core capabilities, and critical tasks that will be evaluated during the exercise. Specific security clearance levels may be required for some exercise play or locations. Exercises that involve multiple jurisdictions and/or multiple venues should consider assigning site leads, as illustrated by the example provided in **Figure 5.1**. A site could be a jurisdiction, a specific emergency operations center, or another exercise location. These individuals support the lead evaluator and manage the activities of other evaluators assigned to that location.



**Figure 5.1: Sample Exercise Evaluation Team Organization**

The exercise planning team and lead evaluator should determine the tools and documentation needed to support the evaluation team, such as the need for a separate Evaluation Plan instead of relying on the evaluation section in the C/E Handbook. The lead evaluator also identifies data collection methods to ensure that information specific to that exercise is recorded.

Consideration should be given to an exercise’s scope and objectives when selecting the number of individuals for evaluation support. For exercises of limited scope and having fewer objectives and capabilities, the lead evaluator and one additional person may be all that is needed. For more complex or larger exercises with a greater number of objectives and capabilities, more individuals may be required for evaluation and AAR development.

### **Exercise Evaluation Guide Development**

EEGs provide a consistent tool to guide exercise observation and data collection. EEGs are aligned to exercise objectives and core capabilities, and list the relevant capability targets and critical tasks. These targets and critical tasks may be drawn from the National Preparedness Goal and the five national planning frameworks, a threat/hazard identification and risk assessment product, or from an organization’s own plans and assessments, as described in Chapter 3: Exercise Design and Development.

EEGs are designed to accomplish several goals:

- Streamline data collection

- Enable thorough assessments of the participant organizations' capability targets
- Support development of the AAR
- Provide a consistent process for assessing preparedness through exercises
- Help organizations map exercise results to exercise objectives, core capabilities, capability targets, and critical tasks for further analysis and assessment

### Recruit, Assign, and Train Evaluators

Once evaluation requirements have been defined by the planning team, the lead evaluator oversees the recruiting, assigning, and training of evaluators. The evaluation requirements play a critical role in determining how many evaluators are needed, the type of subject matter expertise they should possess, their assignment during the exercise, and the type of training or instruction required prior to the exercise. Whenever possible, evaluators should have experience and subject matter expertise in their assigned functional area. Evaluator assignments should be communicated to evaluators prior to exercise conduct.

Effective evaluator training ensures that exercise evaluators have a shared understanding of the key data to be collected and how that data will contribute to the evaluation of the exercise.

Evaluator training typically includes reviewing the following:

- General information about the exercise, including scope, objectives and aligned core capabilities, scenario, and schedule;
- Relevant evaluator documentation (e.g., SitMan, C/E Handbook, evaluation tools); and
- Appropriate plans, policies, procedures, agreements, or other information that are the focus of the exercise.

Evaluator training should also include guidance on observing exercise discussion or operations, and criteria for inclusion of data in the final exercise analysis.

### Evaluation Documentation

Once exercise requirements have been defined and evaluation planning completed, the lead evaluator should finalize the evaluation section of the C/E Handbook or develop the Evaluation Plan. The C/E Handbook or Evaluation Plan typically contains the following information:

- **Exercise-Specific Details:** Exercise scenario, schedule of events, and evaluation schedule;
- **Evaluator Team Organization, Assignments, and Locations:** A list of evaluator locations, shift assignments, a map of the exercise site(s), evaluation team organizational chart, and evaluation team contact information;
- **Evaluator Instructions:** Step-by-step instructions for evaluators for activities before, during, and following the exercise; and
- **Evaluation Tools:** EEGs, the MSEL or a list of venue-specific injects, electronic or manual evaluation logs or data collection forms, relevant plans and procedures, Participant Feedback Forms, and Hot Wash templates.

In less complex exercises, the C/E Handbook may be a brief, simple document. For more complex exercises, the C/E Handbook will be a longer document, containing all the information and tools that evaluators require.

### **Pre-Exercise Evaluator Briefing**

Before exercise play begins, the lead evaluator should meet with all evaluators to verify roles, responsibilities, and assignments, and to provide any significant updates (e.g., last-minute changes to the scenario, new assignments). The Evaluator Briefing provides an opportunity for evaluators to ask questions and to ensure complete understanding of their roles and responsibilities. Depending on a variety of factors, including exercise scope, objectives, and scenario, this briefing may be done in conjunction with exercise controllers, as a Controller/Evaluator Briefing. Depending on the exercise organization, it may be necessary to conduct briefings at more than one exercise site.

## **Exercise Observation and Data Collection**

Exercise observations and data collection can differ between discussion-based exercises and operations-based exercises. Discussion-based exercises often focus on issues involving plans, policies, and procedures; consequently, observations of these exercises may consist of an evaluator or a note-taker recording data from participant discussions on EEGs. Operations-based exercises focus on issues affecting the operational execution of capabilities and critical tasks. During operations-based exercises, evaluators collect and record participant actions, which form the analytical basis for determining if critical tasks were successfully demonstrated and capability targets were met.

### **Observation**

Exercise evaluators should observe exercise activity in a non-attribution environment, in accordance with the evaluation training and EEGs. Evaluators will generally be able to observe many of the following topics:

- Plans, policies, and procedures used during the exercise;
- Legislative authorities used or implemented;
- Roles and responsibilities of the government agencies and private organizations;
- Pertinent decisions made, including information gathered to make decisions;
- Activation or implementation of processes and procedures, requests for resources, use of mutual aid agreements, etc.; and
- How and what information is shared with other agencies and the public.

### **Data Collection**

Evaluators should retain their notes and records of the exercise to support the development of the AAR. As necessary, the lead evaluator may assign evaluators to collect supplemental data during or immediately after the exercise. Such data is critical to fill in gaps identified during exercise evaluation. For example, useful sources of supplemental evaluation data might include records produced by automated systems or communication networks, and written records, such as duty logs and message forms.

## Data Analysis

The goal of data analysis is to evaluate the ability of exercise participants to perform core capabilities and to determine if exercise objectives were met. During data analysis, the evaluation team consolidates the data collected during the exercise and determines whether participants performed critical tasks and met capability targets. Evaluators consider participant performance against all targets to determine the overall ability to perform core capabilities. Additionally, the evaluation team takes notes on the course of exercise play, demonstrated strengths, and areas for improvement. This provides the evaluators with not only what happened, but why events happened.

Root-cause analysis involves not just identifying what issues emerged, but rather discovering the root causes of those issues.

After this initial data analysis, evaluators examine each critical task not completed as expected and each target not met, with the aim of identifying a root cause. A *root cause* is the source of or underlying reason behind an identified issue toward which the evaluator can direct an improvement. When conducting a root-cause analysis, the evaluator should attempt to trace the origin of each event back to earlier events and their respective causes. Root-cause analysis may also require the review and evaluation of an organization's plans, policies, and procedures. When completing the analysis, evaluators should consider the following questions:

- Were the capability targets met? If the targets were not met, what factors contributed to this result?
- Did discussion or activities suggest the critical tasks were executed to meet capability targets? If not, what was the impact or consequences?
- Do current plans, policies, and procedures support critical tasks and capability targets? Were participants familiar with these documents?

Analyzing events in this sequence will help evaluators determine the underlying cause of issues, and inform an organization's corrective actions to remedy the issue.

## After-Action Report Draft

The AAR is the document that summarizes key information related to evaluation. The length, format, and development timeframe of the AAR depend on the exercise type and scope. These parameters should be determined by the exercise planning team based on the expectations of elected and appointed officials as they develop the evaluation requirements in the design and development process. The main focus of the AAR is the analysis of core capabilities. Generally, AARs also include basic exercise information, such as the exercise name, type of exercise, dates, location, participating organizations, mission area(s), specific threat or hazard, a brief scenario description, and the name of the exercise sponsor and POC.

The AAR should include an overview of performance related to each exercise objective and associated core capabilities, while highlighting strengths and areas for improvement. Therefore, evaluators should review their evaluation notes and documentation to identify the strengths and areas for improvement relevant to the participating organizations' ability to meet exercise objectives and demonstrate core capabilities.

Upon completion, the evaluation team provides the draft AAR to the exercise sponsor, who distributes it to participating organizations. Elected and appointed officials, or their designees, review and confirm observations identified in the formal AAR, and determine which areas for improvement require further action. Areas for improvement that require action are those that will continue to seriously impede capability performance if left unresolved. As part of the improvement planning process, elected and appointed officials identify corrective actions to bring areas for improvement to resolution and determine the organization with responsibility for those actions. This process is further described in Chapter 6: Improvement Planning.

# 6. Improvement Planning

## Overview

Exercises afford organizations the opportunity to evaluate capabilities and assess progress toward meeting capability targets in a controlled, low-risk setting. After the evaluation phase concludes, organizations should reach consensus on identified strengths and areas for improvement and develop a set of improvements that directly addresses core capability gaps. This information is recorded in the AAR/IP and resolved through the implementation of concrete corrective actions, which are prioritized and tracked as part of a corrective action program. This process constitutes the improvement planning phase and the final step in conducting an exercise.

## Corrective Actions

Once exercise data are analyzed, organizations should perform an additional qualitative assessment to identify potential corrective actions. Corrective actions are concrete, actionable steps that are intended to resolve capability gaps and shortcomings identified in exercises or real-world events. In developing corrective actions, elected and appointed officials or their designees should first review and revise the draft AAR, as needed, prior to the After-Action Meeting (AAM) to confirm that the issues identified by evaluators are valid and require resolution. The reviewer then identifies which issues fall within their organization's authority, and assume responsibility for taking action on those issues. Finally, they determine an initial list of appropriate corrective actions to resolve identified issues.

Elected and appointed officials confirm that issues identified in the draft AAR are valid and need resolution, and they determine appropriate corrective actions to resolve those issues.

The organization's reviewer should use the following questions to guide their discussion when developing corrective actions:

- What changes need to be made to plans and procedures to improve performance?
- What changes need to be made to organizational structures to improve performance?
- What changes need to be made to management processes to improve performance?
- What changes to equipment or resources are needed to improve performance?
- What training is needed to improve performance?
- What are the lessons learned for approaching similar problems in the future?

## After-Action Meeting

Once the organization's reviewer has confirmed the draft areas for improvement and identified initial corrective actions, a draft IP is developed for review at an AAM. AAMs serve as forums to review the revised AAR and the draft IP. Prior to the AAM, as appropriate, the exercise sponsor will distribute the revised AAR, which incorporates feedback on the strengths and areas for improvement, and the draft IP to participants. Distributing these documents for review prior to the meeting helps to ensure that all attendees are familiar with the content and are prepared to discuss exercise results, identified areas for improvement, and corrective actions. The



organization's elected and appointed officials, or their designees, should attend the AAM along with exercise planners to answer any questions or provide necessary details on the exercise itself.

During the AAM, participants should seek to reach final consensus on strengths and areas for improvement, as well as revise and gain consensus on draft corrective actions. Additionally, as appropriate, AAM participants should develop concrete deadlines for implementation of corrective actions and identify specific corrective action owners/assignees. Participant organizations are responsible for developing implementation processes and timelines, and keeping their elected and appointed officials informed of the implementation status.

## After-Action Report/Improvement Plan Finalization

Once all corrective actions have been consolidated in the final IP, the IP may be included as an appendix to the AAR. The AAR/IP is then considered final, and may be distributed to exercise planners, participants, and other preparedness stakeholders as appropriate.

## Corrective Action Tracking and Implementation

Corrective actions captured in the AAR/IP should be tracked and continually reported on until completion. Organizations should assign points of contact responsible for tracking and reporting on their progress in implementing corrective actions. By tracking corrective actions to completion, preparedness stakeholders are able to demonstrate that exercises have yielded tangible improvements in preparedness. Stakeholders should also ensure there is a system in place to validate previous corrective actions that have been successfully implemented. These efforts should be considered part of a wider continuous improvement process that applies prior to, during, and after an exercise is completed.

Conducting exercises and documenting the strengths, areas for improvement, and associated corrective actions is an important part of the National Preparedness System, and contributes to the strengthening of preparedness across the Whole Community and achievement of the National Preparedness Goal. Over time, exercises should yield observable improvements in preparedness for future exercises and real-world events.

## Using Improvement Planning to Support Continuous Improvement

The identification of strengths, areas for improvement, and corrective actions that result from exercises help organizations build capabilities as part of a larger continuous improvement process. The principles of continuous improvement are:

- **Consistent Approach.** Organizations should employ a consistent approach for continuous improvement-related activities across applicable mission areas—prevention, protection, mitigation, response, and recovery. This consistent approach enables a shared understanding of key terminology, functions, processes, and tools. This approach also fosters continuous improvement-related interoperability and collaboration across an organization's components.
- **Support National Preparedness.** By conducting continuous improvement activities, organizations support the development and sustainment of core capabilities across the whole community. Continuous improvement activities also ensure that organizations are able to support assessments of national preparedness in a timely, actionable, and meaningful way.

- **Effective Issue Resolution and Information Sharing.** Through improvement planning, organizations complete continuous improvement action items at the lowest level possible while facilitating the sharing of strengths and areas for improvement.
- **Application across Operational Phases.** The functions, processes, and tools apply to all operational phases, including:
  - Near-real time collection and analysis during real-world events or exercises
  - Post-event/exercise analysis
  - Trend analysis across multiple events/exercises over time

Application of these principles and the conduct of improvement planning ultimately support the program management phase of the HSEEP exercise cycle. By continually examining the implementation of corrective actions, organizations can identify capability gaps, as well as determine which corrective actions require validation through exercises. In this way, improvement planning activities can help shape an organization's exercise program priorities and support continuous improvement in the building and sustaining of core capabilities.

# Glossary of Terms

This document provides descriptions for many of the commonly-used terms in HSEEP.

| A   |   |
|---|---|
| Term  | Description   |
| <b>Actor</b>                                    | Actors are volunteers who simulate specific roles, such as disaster casualty victims, in order to add realism to an exercise.   |
| <b>Actor Briefing</b>                           | An Actor Briefing is generally conducted before the exercise and provides actors with an overview of the exercise, including: exercise overview, safety, real emergency procedures, symptomatology, acting instructions, and schedule. Identification badges and symptomatology cards are distributed before or during this briefing.   |
| <b>Administration/ Finance Section</b>          | The Administration/Finance Section of the exercise planning team provides financial management and administrative support throughout exercise development, including exercise registration support and scheduling.  |
| <b>After-Action Meeting (AAM)</b>               | The AAM is a meeting held among elected and appointed officials or their designees from the exercising organizations, as well as the lead evaluator and members of the exercise planning team, to debrief the exercise and to review and refine the draft AAR/IP. The AAM should be an interactive session, providing attendees the opportunity to discuss and validate the analytical findings and corrective actions in the draft AAR/IP. |
| <b>After-Action Report (AAR)</b>                | The AAR summarizes key exercise-related evaluation information, including the exercise overview and analysis of objectives and core capabilities. The AAR is usually developed in conjunction with an IP. The lead evaluator and exercise planning team draft the AAR and submit it to meeting participants before the AAM.   |
| B   |   |
| <b>Best Practices</b>                           | Best practices are peer-validated techniques, procedures, and solutions that prove successful and are solidly grounded in actual experience in operations, training, and exercises.   |
| C   |   |
| <b>Capabilities-Based Planning</b>              | Capabilities-based planning is defined as planning, under uncertainty, to build capabilities suitable for a wide range of threats and hazards while working within an economic framework that necessitates prioritization and choice. Capabilities-based planning is the basis for guidance such as the National Preparedness Goal.   |
| <b>Capability</b>                               | A capability may be delivered with any combination of properly planned, organized, equipped, trained, and exercised personnel to achieve an intended target.  |
| <b>Capability Target</b>                        | Capability targets are the performance thresholds for a core capability. Capability targets may be derived from Threat and Hazard Identification and Risk Assessments (THIRAs), subject-matter experts, national guidance, or industry standards.   |
| <b>Concept and Objectives (C&amp;O) Meeting</b> | A C&O Meeting is the formal beginning of the exercise planning process. It is held to identify the scope and objectives of the exercise. For less complex exercises and for organizations with limited resources, the C&O Meeting can be conducted in conjunction with the IPM.   |

|  |   |
|--|---|
| <b>Contextual Inject</b>                     | Contextual injects are introduced to a player by a controller to help build the exercise operating environment and/or keep exercise play moving. For example, if the exercise is designed to test information-sharing capabilities, a MSEL inject can be developed to direct an actor to portray a suspect by behaving suspiciously in front of a law enforcement player.   |
| <b>Contingency Inject</b>                    | Contingency injects are events that a controller provides to a player if the players get off track or do not take an action that is necessary for the continuation of the exercise. This ensures that play moves forward, as needed, to adequately evaluate performance of activities. For example, if a simulated secondary device is placed at an incident scene during a terrorism response exercise, but is not discovered, a controller may want to prompt an actor to approach a player to say that he or she witnessed suspicious activity close to the device location.   |
| <b>Control Staff Instructions (COSIN)</b>    | The COSIN contains guidance that controllers, simulators, and evaluators need concerning procedures and responsibilities for exercise control, simulation, and support. The COSIN provides guidelines for control and simulation support and establishes a management structure for these activities.   |
| <b>Controller/Evaluator (C/E) Briefing</b>   | The C/E Briefing is a pre-exercise overview for controllers, evaluators, and the exercise administrative staff. The briefing summarizes the C/E Handbook (or the COSIN and EvalPlan) and focuses on explaining the roles and responsibilities of controllers and evaluators.  |
| <b>Controller/Evaluator (C/E) Debriefing</b> | The C/E Debriefing provides a forum for functional area controllers and evaluators to review the exercise. The exercise planning team leader facilitates this debriefing, which provides each controller and evaluator with an opportunity to provide an overview of the functional area they observed and to discuss both strengths and areas for improvement. During the debriefing, controllers and evaluators complete and submit their EEGs and their Participant Feedback Forms. Debriefing results are captured for inclusion in the AAR/IP.   |
| <b>Controller/Evaluator (C/E) Handbook</b>   | The C/E Handbook specifically describes the roles and responsibilities of exercise controllers and evaluators and the procedures they must follow. Because the C/E Handbook contains information about the scenario and about exercise administration, it is distributed to only those individuals specifically designated as controllers or evaluators.  |
| <b>Controllers</b>                           | In operations-based and some complex discussion-based exercises, controllers plan and manage exercise play, set up and operate the exercise incident site, and possibly take the roles of individuals and agencies not actually participating in the exercise. Controllers direct the pace of exercise play, provide key data to players, and may prompt or initiate certain player actions and injects to the players as described in the MSEL to ensure exercise continuity. Controllers issue exercise materials to players as required, monitor the exercise timeline, and supervise the safety of all exercise participants. Controllers are the only participants who should provide information or direction to players. All controllers should be accountable to one senior controller. |
| <b>Core Capabilities</b>                     | Distinct critical elements necessary to achieve the National Preparedness Goal.   |
| <b>Corrective Action</b>                     | Corrective actions are the concrete, actionable steps outlined in an IP that are intended to resolve preparedness gaps and shortcomings experienced in exercises or real-world events.  |

|  |  |
|--|--|
| <b>Critical Tasks</b>                    | Critical tasks are the distinct elements required to perform a core capability. Critical tasks may be derived from Mission Area Frameworks, organizational operations plans or SOPs, or discipline-specific standards.   |
| <b>D</b>                                 |  |
| <b>Drill</b>                             | A drill is a coordinated, supervised activity usually employed to validate a specific operation or function in a single agency or organization. Drills are commonly used to provide training on new equipment, develop or validate new policies or procedures, or practice and maintain current skills.  |
| <b>E</b>                                 |  |
| <b>End of Exercise (EndEx)</b>           | The official conclusion of an exercise.  |
| <b>Evaluation Plan (EvalPlan)</b>        | The EvalPlan is typically used for exercises of a large scope and scale. An EvalPlan provides evaluation staff with guidance and instructions on evaluation or observation methodology to be used as well as essential materials required to execute their specific functions.   |
| <b>Evaluation Team</b>                   | The evaluation team consists of evaluators trained to observe and record participant actions. These individuals should be familiar with the exercising jurisdiction's plans, policies, procedures, and agreements.   |
| <b>Evaluator</b>                         | Evaluators, selected from participating agencies, are chosen based on their expertise in the functional areas they will observe. Evaluators use EEGs to measure and assess performance, capture unresolved issues, and analyze exercise results. Evaluators passively assess and document players' performance against established emergency plans and exercise evaluation criteria, in accordance with HSEEP standards and without interfering with exercise flow.  |
| <b>Event</b>                             | Within the MSEL, an event is an expected action that is anticipated to take place during an exercise.  |
| <b>Exercise</b>                          | An exercise is an instrument to train for, assess, practice, and improve performance in prevention, protection, mitigation, response, and recovery capabilities in a risk-free environment. Exercises can be used for testing and validating policies, plans, procedures, training, equipment, and interagency agreements; clarifying and training personnel in roles and responsibilities; improving interagency coordination and communications; improving individual performance; identifying gaps in resources; and identifying opportunities for improvement. |
| <b>Exercise Assembly Area</b>            | The exercise assembly area is a gathering place for all deployable resources that will be playing in an exercise. The purpose of the assembly area is to gather all resources and personnel near the exercise site prior to StartEx for safety briefings, weapons checks, and to ensure that resources and personnel are transported in a safe and unhurried manner.   |
| <b>Exercise Assembly Area Controller</b> | The exercise assembly area controller is responsible for the logistical organization of the exercise assembly area, including placement locations for units entering the exercise assembly area, release of dispatched units into the field, and coordination of pathways and overall safety within the assembly area.   |
| <b>Exercise Director</b>                 | The Exercise Director oversees all exercise functions during exercise conduct; oversees and remains in contact with controllers and evaluators; debriefs controllers and evaluators following the exercise; and oversees setup and cleanup of the exercise as well as positioning of controllers and evaluators.   |

|  |   |
|--|---|
| <b>Exercise Evaluation Guide (EEG)</b> | EEGs provide a template for observing and collecting exercise data in relation to objectives and associated core capabilities. EEGs typically identify targets and critical tasks for exercise objectives and core capabilities and enable evaluators to capture structured and unstructured data regarding exercise performance. Evaluators should develop and customize EEGs to meet the unique objectives of their exercise and to reflect jurisdiction-specific capability targets.   |
| <b>Exercise Plan (ExPlan)</b>          | An ExPlan is a general information document that helps operations-based exercises run smoothly by providing participants with a synopsis of the exercise. It is published and distributed to the participating organizations following development of most of the critical elements of the exercise. In addition to addressing exercise objectives and scope, an ExPlan assigns activities and responsibilities for exercise planning, conduct, and evaluation. The ExPlan is intended to be seen by the exercise players and observers—therefore, it does not contain detailed scenario information that may reduce the realism of the exercise. |
| <b>Exercise Planning Team</b>          | The exercise planning team is responsible for the successful execution of all aspects of an individual exercise. The planning team determines exercise objectives and core capabilities, creates a realistic scenario to achieve the exercise objectives, and develops documents to guide exercise conduct and evaluation. The planning team’s organization and management principles should include clearly defined roles and responsibilities and a manageable span of control.   |
| <b>Exercise Play Area</b>              | The exercise play area is the site or facility where the bulk of tactical player activities and tasks are demonstrated during an exercise.  |
| <b>Exercise Play Rules</b>             | Exercise play rules are the parameters that exercise participants follow during the exercise. Exercise play rules describe appropriate exercise behavior, particularly in the case of real-world emergencies.   |
| <b>Exercise Program Management</b>     | Exercise program management is the process of overseeing a variety of individual exercises and supporting activities sustained over time. An effective exercise program helps whole community stakeholders maximize efficiency, resources, time, and funding by ensuring that individual exercises are part of a coordinated, integrated approach to building, sustaining, and delivering core capabilities.  |
| <b>Exercise Program Manager</b>        | The exercise program manager develops a self-sustaining exercise program through program budget management oversight, exercise conduct, and improvement tracking monitoring and reporting.  |
| <b>Exercise Project Management</b>     | Exercise project management is the act of engaging in design and development, conduct, evaluation, and improvement planning for an individual exercise. Effective project management ensures that all aspects of planning and executing an individual exercise are done efficiently and are grounded in common approaches and best practices.   |
| <b>Expected Action Event</b>           | An expected action event serves as a holding place in the MSEL and notifies controllers of when an expected action should occur.  |
| <b>F</b>                               |   |
| <b>Facilitated Discussion</b>          | A facilitated discussion is the focused discussion of specific issues through a facilitator with functional area or subject-matter expertise.   |

|  |  |
|--|--|
| <b>Facilitator</b>   | During a discussion-based exercise, the facilitator(s) is responsible for keeping participant discussions on track with exercise objectives and ensuring all issues and objectives are explored as thoroughly as possible within time constraints. If an exercise uses breakout groups, more than one facilitator may be needed.   |
| <b>Final Planning Meeting (FPM)</b>                              | The FPM is the final forum for reviewing exercise processes and procedures. An FPM should be conducted for all exercises to ensure that all elements of the exercise are ready for conduct. Prior to the FPM, the exercise planning team receives final drafts of all exercise materials. No major changes to exercise's design, scope, or supporting documentation should take place at or following the FPM. The FPM ensures that all logistical requirements have been met, outstanding issues have been identified and resolved, and exercise products are ready for printing. |
| <b>Full-Scale Exercise (FSE)</b>                                 | FSEs are typically the most complex and resource-intensive type of exercise. They involve multiple agencies, organizations, and jurisdictions and validate many facets of preparedness. FSEs often include many players operating under cooperative systems such as the Incident Command System or Unified Command.  |
| <b>Functional Exercise (FE)</b>                                  | Functional exercises are designed to validate and evaluate capabilities, multiple functions and/or sub-functions, or interdependent groups of functions. FEs are typically focused on exercising plans, policies, procedures, and staff members involved in management, direction, command, and control functions. In FEs, events are projected through an exercise scenario with event updates that drive activity at the management level. An FE is conducted in a realistic, real-time environment; however, movement of personnel and equipment is usually simulated.          |
| <b>G</b>   |  |
| <b>Game</b>  | A game is a simulation of operations that often involves two or more teams, usually in a competitive environment, using rules, data, and procedures designed to depict an actual or hypothetical situation. Games explore the consequences of player decisions and actions and are therefore excellent tools to use when validating or reinforcing plans and procedures or evaluating resource requirements.   |
| <b>Ground Truth</b>  | The ground truth is comprised of the detailed elements of a prevention exercise scenario that must remain consistent during exercise development and conduct to ensure that realism is maintained and objectives may be met in the unscripted move-countermove exercise environment. The ground truth includes the scenario timeline, local threat environment, simulated threat group, and individual adversary profiles and relationships. Once composed, the ground truth is used as the basis for MSEL development and red team operations planning, if applicable.            |
| <b>Ground Truth Advisor</b>                                      | In prevention exercises, the ground truth advisor tracks how the adversary (i.e., red team) and exercise participant moves and countermoves change the fabric of the exercise environment, potentially creating additional truths. To ensure consistency, each unscripted MSEL inject should be vetted by the ground truth advisor.  |
| <b>H</b>   |  |
| <b>Homeland Security Exercise and Evaluation Program (HSEEP)</b> | HSEEP is a program that provides a set of guiding principles for exercise programs, as well as a common approach to exercise program management, design and development, conduct, evaluation, and improvement planning.  |

|   |   |
|---|---|
| <b>Hot Wash</b>                           | A Hot Wash is a facilitated discussion held immediately after an exercise among exercise players. It captures feedback about any issues, concerns, or proposed improvements players may have about the exercise. The Hot Wash is an opportunity for players to voice their opinions on the exercise and their own performance.  |
| <b>I</b>                                  |   |
| <b>Improvement Plan (IP)</b>              | The IP identifies specific corrective actions, assigns them to responsible parties, and establishes target dates for their completion. The IP is developed in conjunction with the After-Action Report.   |
| <b>Initial Planning Meeting (IPM)</b>     | The IPM marks the beginning of the exercise development phase. An IPM's purpose is to determine exercise scope by gathering input from the exercise planning team; design requirements and conditions (e.g., assumptions and artificialities); objectives; extent of play; and scenario variables (e.g., time, location, hazard selection). The IPM is also used to develop exercise documentation by obtaining the planning team's input on exercise location, schedule, duration, and other relevant details.   |
| <b>Inject</b>                             | Injects are MSEL events that prompt players to implement the plans, policies, and procedures that planners want the exercise to validate. Exercise controllers provide injects to exercise players to drive exercise play toward achievement of objectives. Injects can be written, oral, televised, and/or transmitted via any means (e.g., fax, phone, e-mail, voice, radio). Injects can be contextual or contingency.   |
| <b>L</b>                                  |   |
| <b>Lead Evaluator</b>                     | The lead evaluator should participate fully as a member of the exercise planning team and should be a senior-level individual familiar with all relevant issues associated with the exercise, including plans, policies, and procedures of the exercising organizations; Incident Command and decision-making processes of the exercising organizations; and interagency and/or inter-jurisdictional coordination issues relevant to the exercise. The lead evaluator should have the management skills needed to oversee a team of evaluators over an extended process as well as the knowledge and analytical skills to undertake a thorough and accurate analysis of all capabilities being tested during an exercise. |
| <b>Logistics Section</b>                  | The Logistics Section of the exercise planning team provides the supplies, materials, facilities, and services that enable the exercise to function smoothly without outside interference or disruption. This section consists of two subsections: service and support. The service subsection provides transportation, barricading, signage, food and drinks, real-life medical capability, and exercise security. The support subsection provides communications, purchasing, general supplies, management of VIPs, observer processing, and recruitment and management of actors.  |
| <b>M</b>                                  |   |
| <b>Master Scenario Events List (MSEL)</b> | The MSEL is a chronological timeline of expected actions and scripted events to be injected into exercise play by controllers to generate or prompt player activity. It ensures necessary events happen so that all objectives are met. Larger, more complex exercises may also use a procedural flow, which differs from the MSEL in that it contains only expected player actions or events. The MSEL links simulation to action, enhances exercise experience for players, and reflects an incident or activity meant to prompt players to action.   |



|   |  |
|---|--|
| <b>MSEL Meeting</b>                               | The MSEL Meeting may be held in preparation for more complex exercises to review the scenario timeline and focus on MSEL development. A MSEL Meeting can be held in conjunction with or separate from the MPM to review the scenario timeline for the exercise.  |
| <b>Midterm Planning Meeting (MPM)</b>             | The MPM is a planning meeting for exercises. It is used to discuss exercise organization and staffing concepts; scenario and timeline development; and scheduling, logistics, and administrative requirements. It is also a session to review draft documentation.   |
| <b>Mitigation</b>                                 | The capabilities necessary to reduce loss of life and property by lessening the impact of disasters.   |
| <b>Moderated Discussion</b>                       | A moderated discussion is a facilitated, discussion-based forum where a representative from each functional area breakout presents to participants a summary and results from a group's earlier facilitated discussion. During moderated discussions, spokespersons summarize the facilitated discussion, present key findings and issues, and discuss any unresolved issues or questions. At the end of the moderated discussion period, the floor is open for questions.   |
| <b>N</b>  |  |
| <b>National Exercise Program (NEP)</b>            | The NEP's mission is to serve as the principal exercise mechanism for examining the preparedness and measuring the readiness of the United States across the entire homeland security enterprise by designing, coordinating, conducting, and evaluating a progressive cycle of exercises that rigorously test the Nation's ability to perform missions or functions that prevent, protect against, respond to, recover from, and mitigate all hazards.   |
| <b>National Incident Management System (NIMS)</b> | The NIMS standard was designed to enhance the ability of the United States to manage domestic incidents by establishing a single, comprehensive system for incident management. It is a system mandated by Homeland Security Presidential Directive 5 (HSPD-5) that provides a consistent, nationwide approach for Federal, State, local, tribal, and territorial governments; the private sector; and nongovernmental organizations to work effectively and efficiently together to prepare for, respond to, and recover from domestic incidents, regardless of cause, size, or complexity.               |
| <b>National Preparedness Goal (Goal)</b>          | The National Preparedness Goal defines the core capabilities necessary to prepare for the specific types of incidents that pose the greatest risk to the security of the Nation. The Goal emphasizes actions aimed at achieving an integrated, layered, and all-of-Nation preparedness approach that optimizes the use of available resources. Specifically, the Goal defines success as: A secure and resilient Nation with the capabilities required across the whole community to prevent, protect against, mitigate, respond to, and recover from the threats and hazards that pose the greatest risk. |
| <b>National Preparedness System</b>               | The National Preparedness System is an integrated set of guidance, programs, and processes that will enable the Nation to meet the National Preparedness Goal.   |

| <b>O</b>                         |   |
|----------------------------------|---|
| <b>Objectives</b>                | Objectives are the distinct outcomes an organization wishes to achieve during an individual exercise. Objectives should reflect the exercise sponsor's specific needs, environment, plans, and procedures, while providing a framework for scenario development and a basis for evaluation. Objectives can be based on outcomes from a THIRA, from Homeland Security Strategies, and other preparedness documents. Planners should create objectives that are specific, measurable, achievable, relevant, and time-bound (SMART) and should limit the number of exercise objectives to enable timely exercise conduct, facilitate reasonable scenario design, and support successful evaluation.  |
| <b>Observer</b>                  | Observers do not directly participate in the exercise; rather, they observe selected segments of the exercise as it unfolds, while remaining separated from player activities. Observers view the exercise from a designated observation area and are asked to remain within the observation area during the exercise. A dedicated controller or public information officer should be assigned to manage these groups. In a discussion-based exercise, observers may support the development of player responses to the situation during the discussion by delivering messages or citing references.  |
| <b>Observer Briefing</b>         | An Observer Briefing is generally conducted the day of an exercise and informs observers and VIPs about program background, scenario, schedule of events, observer limitations, and any other miscellaneous information. Participant Handouts and ExPlans or SitMans, depending on the type of exercise being conducted, are often distributed during this briefing.  |
| <b>Observer/Media Area</b>       | This is a designated area that provides observers and real-world media representatives with a view of the exercise but prevents them from interfering with exercise play.   |
| <b>Operations Section</b>        | The Operations Section of the exercise planning team provides most of the technical or functional expertise for both scenario development and evaluation. This includes development of the MSEL.  |
| <b>P</b>                         |   |
| <b>Participant</b>               | Participants are the overarching group that includes all players, controllers, evaluators, and staff members involved in conducting an exercise.  |
| <b>Participant Feedback Form</b> | Players and observers receive a Participant Feedback Form after the end of the exercise that asks for input regarding observed strengths and areas for improvement that players identified during the exercise. Providing Participant Feedback Forms to players during the exercise Hot Wash allows them to provide evaluators with their insights into decisions made and actions taken. A Participant Feedback Form also provides players the opportunity to provide constructive criticism about the design, control, or logistics of the exercise to help enhance future exercises. Information collected from feedback forms contributes to the issues, observations, recommendations, and corrective actions in the After-Action Report/Improvement Plan. |

|                               |   |
|-------------------------------|---|
| <b>Planning Meetings</b>      | Effective exercise design and development involve a combination of exercise planning meetings. These meetings bring together the full range of exercise stakeholders to discuss and agree on key aspects of the exercise's design and development. Various factors—including exercise scope, type, and complexity—inform the types of meetings needed, and exercise planners should tailor the planning meeting schedule to suit the particular nature of the exercise.   |
| <b>Planning Section</b>       | The Planning Section of the exercise planning team is responsible for compiling and developing all exercise documentation. To accomplish this effectively, the Planning Section also collects and reviews policies, plans, and procedures that will be assessed in the exercise. This group is also responsible for planning exercise evaluation. During the exercise, the Planning Section may be responsible for developing simulated actions by agencies not participating in the exercise and for setting up a SimCell as required. |
| <b>Player</b>                 | Players have an active role in preventing, responding to, or recovering from the risks and hazards presented in the scenario, by either discussing or performing their regular roles and responsibilities. Players initiate actions that will respond to and/or mitigate the simulated emergency.   |
| <b>Player Briefing</b>        | A Player Briefing is held immediately before an exercise and addresses individual roles and responsibilities, exercise parameters, safety, badges, and any other logistical items. For a drill or full-scale exercise, Player Briefings typically occur in the exercise assembly area.  |
| <b>Preparedness</b>           | The actions taken to plan, organize, equip, train, and exercise to build and sustain the capabilities necessary to prevent, protect against, mitigate the effects of, respond to, and recover from those threats that pose the greatest risk to the security of the Nation.   |
| <b>Prevention</b>             | The capabilities necessary to avoid, prevent, or stop a threatened or actual act of terrorism.  |
| <b>Prevention Exercises</b>   | Prevention exercises may focus on issues that pertain to information and intelligence sharing, credible threats, surveillance, and/or opposing forces.  |
| <b>Props</b>                  | Props are nonfunctional replications of objects. The presence or discovery of props requires certain actions by exercise players. Examples of props include simulated bombs, bomb blast debris (shrapnel), mannequins or body parts, and foam bricks and beams. Simulants that mimic the effects of chemical or radiological hazards or that cause a positive reading of an actual detection device are also considered props.  |
| <b>Protection</b>             | The capabilities necessary to secure the homeland against acts of terrorism and manmade or natural disasters.   |
| <b>R</b>                      |   |
| <b>Recovery</b>               | The capabilities necessary to assist communities affected by an incident to recover effectively.  |
| <b>Response</b>               | The capabilities necessary to save lives, protect property and the environment, and meet basic human needs after an incident has occurred.  |
| <b>Rolling Summary Report</b> | The rolling summary report is an analysis of outcomes across a series of exercises. The report includes an analysis of issues, trends, and key outcomes from all exercises listed in an organization's multi-year TEP. It is developed and updated periodically (e.g., quarterly or biennially), depending on the number of exercises conducted.  |

|                                  |  |
|----------------------------------|--|
| <b>Root-Cause Analysis</b>       | When evaluating exercises, root-cause analysis involves not merely identifying what issues emerged, but rather discovering the root causes of those issues. Root-cause analysis enables exercise stakeholders to target how best to address areas for improvement and close capability gaps.   |
| <b>S</b>                         |  |
| <b>Safety Controller</b>         | The safety controller is responsible for monitoring exercise safety during exercise setup, conduct, and cleanup. All exercise controllers assist the safety controller by reporting any safety concerns. The safety controller should not be confused with the safety officer, who is identified by the incident commander during exercise play.   |
| <b>Scenario</b>                  | A scenario provides the storyline that drives an exercise to test objectives. The scenario selected for an exercise should be informed by the actual threats and hazards faced by the exercise stakeholders. The exercise scenario should realistically stress the delivery of core capabilities, providing a mechanism for testing objectives and assessing core capability levels and gaps.  |
| <b>Scope</b>                     | Scope is an indicator of extent of the exercise. The key elements in defining exercise scope include exercise type, participation level, exercise duration, exercise location, and exercise parameters.  |
| <b>Seminar</b>                   | Seminars generally orient participants to, or provide an overview of, authorities, strategies, plans, policies, procedures, protocols, resources, concepts, and ideas. As a discussion-based exercise, seminars can be valuable for entities that are developing or making major changes to existing plans or procedures. Seminars can be similarly helpful when attempting to gain awareness of, or assess, the capabilities of interagency or inter-jurisdictional operations.   |
| <b>Senior Controller</b>         | The senior controller is responsible for the overall organization of the exercise. The senior controller monitors exercise progress and coordinates decisions regarding deviations or significant changes to the scenario caused by unexpected developments during play. The senior controller monitors actions by controllers and ensures they implement designated and modified actions at the appropriate time. The senior controller debriefs controllers and evaluators after the exercise and oversees the setup and takedown of the exercise. |
| <b>Simulation</b>                | (1) An electronic simulation is a method for predicting the results of implementing a model over time, i.e., modeling and simulation. (2) Simulation of nonparticipating personnel and agencies is a technique for increasing realism in exercises.  |
| <b>Simulation Cell (SimCell)</b> | A SimCell is used to generate injects for, receive player responses for, and provide information in place of nonparticipating organizations that would likely participate actively if exercise events were real. Physically, the SimCell is a working location for a number of qualified professionals who portray these nonparticipating organizations.   |
| <b>Simulators</b>                | Simulators are control staff personnel who role play as nonparticipating organizations or individuals. They most often operate out of the SimCell, but they may occasionally have face-to-face contact with players. Simulators function semi-independently under the supervision of SimCell controllers, enacting roles in accordance with instructions provided in the MSEL. All simulators are ultimately accountable to the Exercise Director and senior controller.   |

|   |   |
|---|---|
| <b>Situation Manual (SitMan)</b>                      | A SitMan is provided for TTXs and games as the core documentation that provides the textual background for a multimedia, facilitated exercise. The SitMan supports the scenario narrative and serves as the primary reference material for all participants during conduct.   |
| <b>Special Effects</b>                                | Special effects are technical, mechanical, or electronic scenario enhancements. Special effects typically require trained and licensed personnel, special permission for use, and additional safety and/or security precautions. Examples include use of pyrotechnics or explosives.  |
| <b>Sponsor</b>  | The sponsor is the primary funding organization for an exercise.  |
| <b>Start of Exercise (StartEx)</b>                    | The official beginning of an exercise.  |
| <b>Subject-Matter Expert (SME)</b>                    | SMEs add functional knowledge and expertise in a specific area or in performing a specialized job, task, or skill to the exercise planning team. They help make the scenario realistic and plausible and ensure jurisdictions have the appropriate capabilities to respond. SMEs are ideal for the positions of controllers and evaluators.   |
| <b>Support Staff</b>                                  | The exercise support staff includes individuals who are assigned administrative and logistical support tasks during the exercise (e.g., registration, catering).  |
| <b>Symptomatology Card</b>                            | Symptomatology cards are provided to each actor in a response-focused exercise. Each card is unique, containing the signs and symptoms the actor will portray as well as information for medical providers. At a minimum, symptomatology cards should include vital signs; symptoms; trauma injuries; acting instructions (e.g., disorientation, emotional distress); and special needs (e.g., language barriers, physical limitations).  |
| <b>T</b>  |   |
| <b>Tabletop Exercise (TTX)</b>                        | A TTX is typically held in an informal setting intended to generate discussion of various issues regarding a hypothetical, simulated emergency. TTXs can be used to enhance general awareness, validate plans and procedures, rehearse concepts, and/or assess the types of systems needed to guide the prevention of, protection from, mitigation of, response to, and recovery from a defined incident. Generally, TTXs are aimed at facilitating conceptual understanding, identifying strengths and areas for improvement, and/or achieving changes in attitudes. |
| <b>Training and Exercise Plan (TEP)</b>               | The TEP is the foundation document guiding a successful exercise program. The TEP articulates overall exercise program priorities and outlines a schedule of training and exercise activities designed to meet those priorities.  |
| <b>Training and Exercise Planning Workshop (TEPW)</b> | A TEPW is usually conducted to create a Multi-year TEP. At a TEPW, stakeholders work together in a collaborative workshop environment to identify and set exercise program priorities based on core capabilities. Based on these program priorities, TEPW stakeholders develop a multi-year schedule of specific training and exercises.  |
| <b>V</b>  |   |
| <b>Venue</b>  | A venue is the primary location of exercise conduct.  |

**W**

|                        |   |
|------------------------|---|
| <b>Whole Community</b> | A focus on enabling the participation in national preparedness activities of a wider range of stakeholders from the Federal, State, local, tribal, and territorial government, the private and nonprofit sectors (including nongovernmental organizations), and the general public in order to foster better coordination and working relationships. Used interchangeably with “all-of-Nation.”   |
| <b>Workshop</b>        | Although similar to seminars, workshops differ in two important aspects: participant interaction is increased, and the focus is placed on achieving or building a product. Effective workshops entail the broadest attendance by relevant stakeholders. Products produced from a workshop can include new standard operating procedures, emergency operations plans, continuity of operations plans, and mutual aid agreements. To be effective, workshops should focus on a specific issue, and the desired objective, product, or goal must be clearly defined. |

# Acronyms and Abbreviations

| Acronym/Abbreviation | Description  |
|----------------------|--|
| A/V                  | Audio/Visual   |
| AAM                  | After-Action Meeting                                   |
| AAR                  | After-Action Report                                    |
| C/E                  | Controller/Evaluator                                   |
| C&O                  | Concept and Objectives                                 |
| COSIN                | Control Staff Instructions                             |
| DHS                  | U.S. Department of Homeland Security                   |
| EEG                  | Exercise Evaluation Guide                              |
| EndEx                | End of Exercise  |
| EOC                  | Emergency Operations Center                            |
| EvalPlan             | Evaluation Plan  |
| ExPlan               | Exercise Plan  |
| FE                   | Functional Exercise                                    |
| FEMA                 | Federal Emergency Management Agency                    |
| FPM                  | Final Planning Meeting                                 |
| FSE                  | Full-Scale Exercise                                    |
| HSEEP                | Homeland Security Exercise and Evaluation Program      |
| ICS                  | Incident Command System                                |
| IP                   | Improvement Plan                                       |
| IPM                  | Initial Planning Meeting                               |
| MPM                  | Midterm Planning Meeting                               |
| MSEL                 | Master Scenario Events List                            |
| NEP                  | National Exercise Program                              |
| NGO                  | Nongovernmental Organization                           |
| NIMS                 | National Incident Management System                    |
| POC                  | Point of Contact                                       |
| SimCell              | Simulation Cell  |
| SitMan               | Situational Manual                                     |
| SMART                | Specific, Measurable, Achievable, Relevant, Time-bound |
| SME                  | Subject-Matter Expert                                  |
| SOP                  | Standard Operating Procedure                           |
| StartEx              | Start of Exercise                                      |
| THIRA                | Threat and Hazard Identification and Risk Assessment   |
| TEP                  | Training and Exercise Plan                             |
| TEPW                 | Training and Exercise Planning Workshop                |
| TTX                  | Tabletop Exercise                                      |
| VIP                  | Very Important Person                                  |
| XPA                  | Extent of Play Agreement                               |