E/K/L0146: Homeland Security Exercise and Evaluation Program (HSEEP) Course

Student Manual

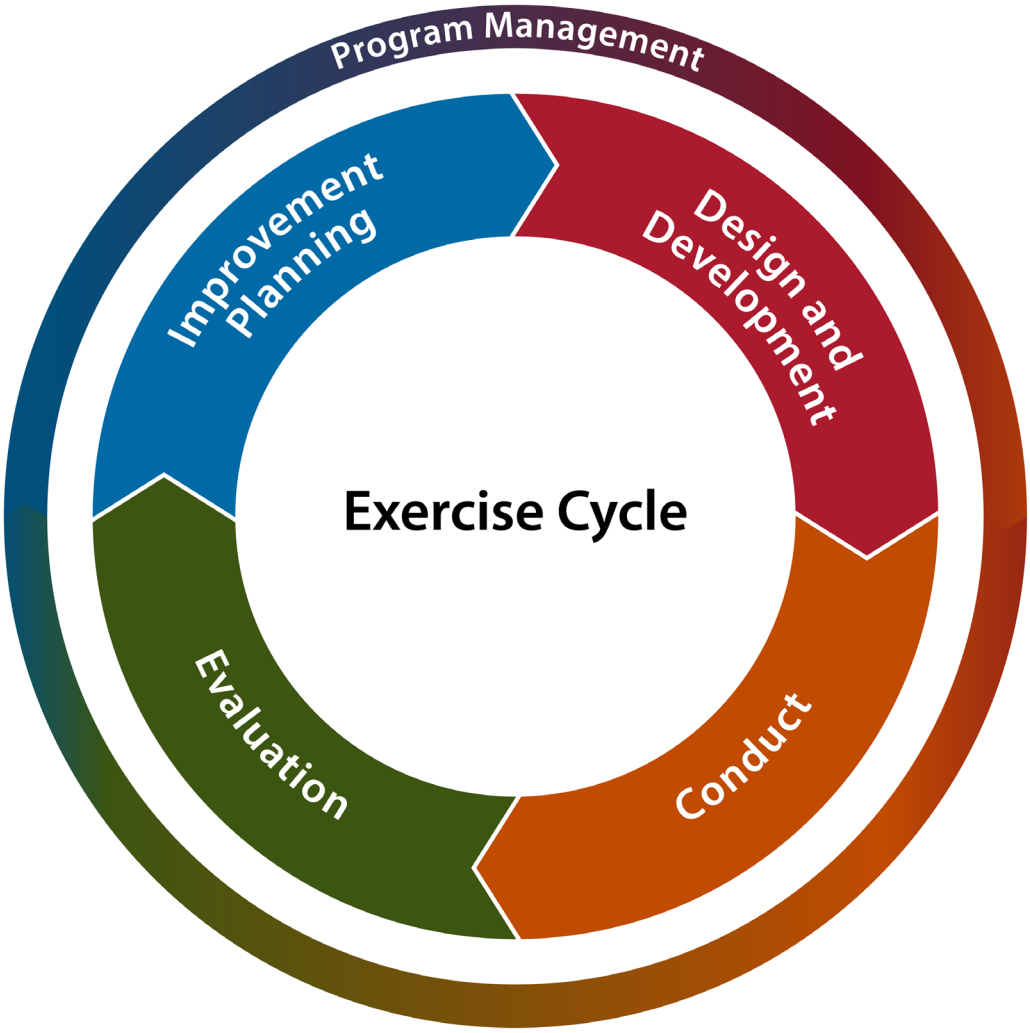
Date Released: January 2022

FEMA

Contents

HSEEP Course Introduction

Visual 1: Homeland Security Exercise and Evaluation Program (HSEEP)



The HSEEP Exercise Cycle

Key Points

Welcome to the **Homeland Security Exercise and Evaluation Program (HSEEP) Training Course**

This is a course designed to describe the principles and processes of the Homeland Security Exercise and Evaluation Program (HSEEP), its standardized methodology, and resources which are designed to assist you in developing an exercise program and individual exercises.

Visual 2: Introductions

Instructor Introduction(s)

Participant Introductions—please respond with:

- Name (or name preference)
- Agency/Organization/Jurisdiction/Affiliation
- Any previous exercise experience
- Course expectations

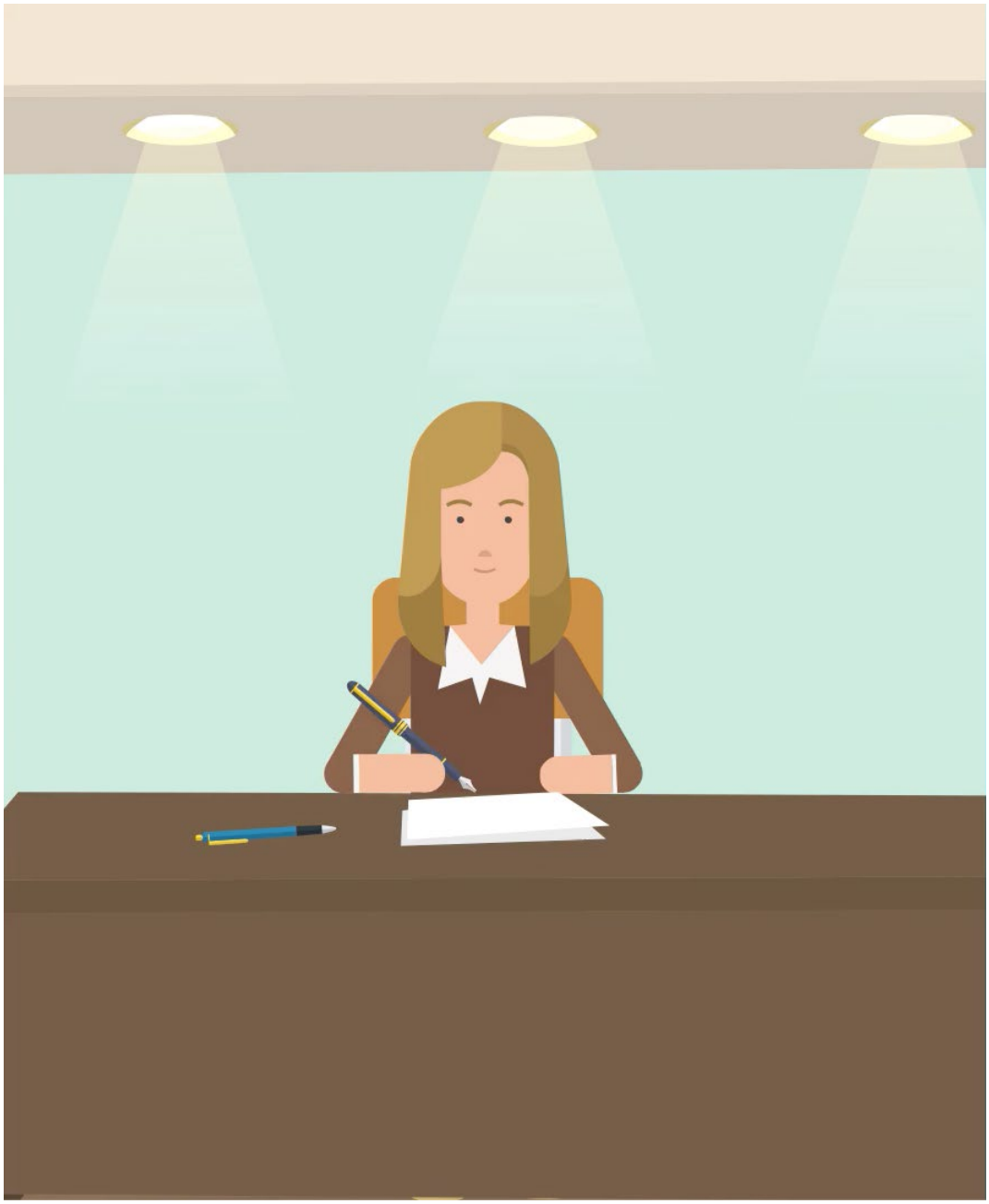
Key Points

When called on please respond by providing information on the following:

- Your name (or name preference),
- The name of the agency, jurisdiction, or organization you represent,
- Any previous exercises planning experience,
- What you hope to gain by participating in this training course.

Visual 3: Pre-Test

Students will now take a pre-test before instruction begins.



Visual 4: HSEEP Training Course Agenda

- Module 1: HSEEP Fundamentals
- Module 2: Exercise Program Management
- Module 3: Exercise Design and Development
- Module 4: Exercise Conduct
- Module 5: Exercise Evaluation
- Module 6: Improvement Planning

(Couse can be taught 2 days x 8 hours = 16 contact hours or 4 half days x 4 hours = 16 contact hours.)

Key Points

This is a look at the course agenda that will be used to cover the materials and activities.

- Module 1: HSEEP Fundamentals
- Module 2: Exercise Program Management
- Module 3: Exercise Design and Development
- Module 4: Exercise Conduct
- Module 5: Exercise Evaluation
- Module 6: Exercise Improvement Planning

In the Student Manual, there are two additional Modules that support the training you will receive.

- Appendix A contains the HSEEP course activities
- Appendix B contains reference materials

Following completion of the course, the Lead Instructor will provide you with a final exam and instructions for obtaining a course completion certificate.

Visual 5: Target Audience

The target audience for the Homeland Security Exercise and Evaluation Program (HSEEP) training includes:

- Exercise Planning Team Members
- Controllers and Facilitators
- Exercise Evaluators
- Exercise Program Managers
- Senior Leaders

Key Points

This course is designed to provide training of the January 2020 Homeland Security Exercise and Evaluation Program (HSEEP) Doctrine.

The target audience for this training are those involved in the planning, budgeting, management, design, development, conduct, and evaluation of exercises, or those involved in the following roles at all levels of the planning process including:

- Exercise Planning Team Leads/Members who require a comprehensive understanding of the Homeland Security Exercise and Evaluation Program (HSEEP) Exercise Planning Cycle
- Controllers and Facilitators who are responsible for the successful control and conduct of an exercise
- Evaluators who need to understand the evaluation processes; the supporting capabilities and Exercise Evaluation Guides (EEGs); and be familiar with exercise conduct
- Exercise Program Managers who require an understanding of the Program Management and Improvement Planning process; and
- Senior Leaders due to their responsibility for the continued operation of their assigned agencies/organizations to facilitate and direct improvement planning as required.

Visual 6: HSEEP Course Terminal Objective

After completing this course, you should understand the role of the Homeland Security Exercise and Evaluation Program (HSEEP) in Whole Community preparedness and how HSEEP exercise principles and methodology support efforts to improve our national capacity to build, sustain, and deliver capabilities.

Module 1: HSEEP Fundamentals

Visual 1: Module 1: HSEEP Fundamentals

- The purpose of the Homeland Security Exercise and Evaluation Program (HSEEP)
- How it supports National Preparedness
- HSEEP's fundamental principles

Figure 1.1: The HSEEP Exercise Cycle

Key Points

In this module, we will describe the purpose and fundamentals of the Homeland Security Exercise and Evaluation Program (HSEEP), and how it integrates with and supports national preparedness efforts across all stakeholders through a whole community approach.

Reference: Figure 1.1: HSEEP Exercise Cycle, HSEEP Doctrine January 2020, pg. 1-2.

Visual 2: What is HSEEP?

The Homeland Security Exercise and Evaluation Program (HSEEP) is a consistent approach to capability-based exercise program management.

HSEEP provides a set of **fundamental principles** as well as a **common approach** to exercises.

Key Points

The Homeland Security Exercise and Evaluation Program (HSEEP) is a consistent approach to capability-based exercise program management that uses a common methodology for designing, developing, conducting, and evaluating exercises to measure progress toward building, sustaining, and delivering capabilities. The program is designed to use lessons learned and best practices from the exercise community and adapt to the needs of each jurisdiction/organization regardless of size.

HSEEP fundamentals and common approach enable jurisdictions/organizations a consistent and shared understanding that helps provide a realistic mechanism to test whether the right equipment, personnel, plans, and training exist to validate a particular capability. As a key component of preparedness, exercises play a vital role in preparedness by providing senior leaders and stakeholders across the whole community with the opportunity to shape planning, assess and validate capabilities, and address areas for improvement.

Through HSEEP, preparedness priorities are identified and continually re-evaluated as part of the preparedness planning process which guides the overall direction of an exercise program. Individual exercises identify objectives that are aligned to capability requirements and anchored to the program priorities which support the design and development of exercises. Exercises bring together and strengthen the whole community in its efforts to prevent, protect against, mitigate, respond to, and recover from all hazards

A well-designed exercise provides a low-risk environment to test capabilities; familiarizes personnel with roles and responsibilities; fosters meaningful interaction and communication across jurisdictions/organizations; assesses and validates plans, policies, procedures, and capabilities; and identifies strengths and areas for improvement.

It is important for exercise planners to understand the purpose of each exercise they design and sponsor; what the intended outcomes is for the exercise, and the capabilities or procedures the exercise is intended to validate. Shortfalls and gaps identified through the evaluation process can direct your jurisdiction/organization to areas for improvement; additional resource requirements; shortcomings in plans, policies, and procedures; or poorly defined roles and responsibilities. Overall, exercises help the whole community and support national preparedness.

In this way, HSEEP aligns local preparedness efforts with the National Preparedness Goal, the National Preparedness System, stakeholder preparedness priorities, and support efforts across the whole community to improve our national capacity to build, sustain, and deliver capabilities.

Visual 3: National Preparedness

HSEEP exercises enhance consistency in exercise conduct and evaluation while ensuring exercises remain a flexible way to improve our preparedness and meet the intent of the Presidential Policy Directive-8 (PPD-8)& Guidance

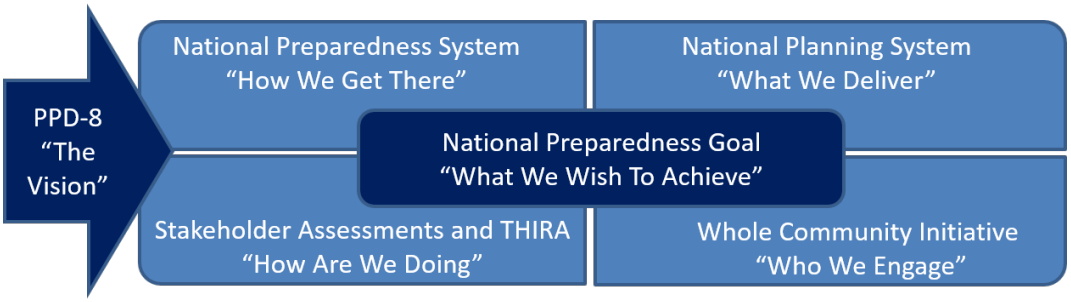


Figure 1.2: From Introduction to Emergency Management Fundamentals Course, IS-0230.d

Key Points

Preparedness requires the commitment of our entire Nation. HSEEP exercises enhance consistency in exercise conduct and evaluation while ensuring exercises remain a flexible, accessible way to improve our preparedness and meet the intent of the Presidential Policy Directive-8 (PPD-8) Guidance.

PPD-8 describes the Nation's approach to preparedness – one that involves the whole community, including individuals, businesses, community- and faith-based organizations, schools, and all levels of government.

PPD-8 links together national preparedness efforts using the following key elements:

- National Preparedness Goal: What We Wish to Achieve
- National Preparedness System: How We Get There
- National Planning System: What We Deliver
- Stakeholder Assessments and THIRA: How Are We Doing
- Whole Community Initiative: Who We Engage

The National Preparedness Goal is the cornerstone for the implementation of PPD-8. Within it are the Nation's core capabilities across five mission areas: Prevention, Protection, Mitigation, Response, and Recovery.

The National Preparedness System is the instrument the Nation will employ to build, sustain, and deliver those capabilities in order to achieve the goal of a secure and resilient Nation.

The guidance, programs, processes, and systems that support each component of the National Preparedness System enable a collaborative, whole community approach to national preparedness that engages individuals, families, communities, private and nonprofit sectors, faith-based organizations, and all levels of government.

HSEEP exercises, as part of the National Preparedness System, enhances consistency in conduct and evaluation while ensuring exercises remain a flexible, accessible way to improve our preparedness and meet the intent of PPD-8 guidance.

Reference: Presidential Policy Directive 8 / PPD-8: National Preparedness, October 21, 2011, https://www.fema.gov/learn-about-presidential-policy-directive-8

Reference: National Preparedness Goal, Second Edition, September 2015, https://www.fema.gov/national-preparedness-goal

Reference: National Preparedness System, November 2011, https://www.fema.gov/national-preparedness-system

Reference: Figure 1.2: From Introduction to Emergency Management Fundamentals Course, IS-0230.d

Visual 4: National Preparedness System (NPS)

- Instrument to build, sustain, and deliver capabilities
- Enables a collaborative, whole community approach
- Builds on current efforts to be more efficient and effective
- HSEEP supports in the validation of capabilities

Figure 1.3: Components of the National Preparedness System

Key Points

Presidential Policy Directive 8 (PPD-8) directs the development of the National Preparedness System (NPS) to guide activities that will enable the Nation to achieve National preparedness and track the progress of our ability to build and improve the capabilities necessary to secure the Nation.

The components of the NPS provide a consistent and reliable approach to support decision making, allocation of resources, and measure progress toward these outcomes. These components interact to build, sustain, and deliver the capabilities that ensure a community is prepared to address the threats and hazards of greatest concern. Through this capability estimation process, communities determine what resources they already have; what resources are available in the private and nonprofit sectors and from faith-based organizations; and what can be borrowed through mutual aid to determine if available resources can deliver the required capability and can meet the community's capability targets.

While each of the components of the NPS is essential to achieve preparedness, it is critical that the components be understood and used in the context of each other. The NPS contains segments representing the activities communities may utilize to identify and assess local threats and hazards; estimate and build on existing capabilities; sustain, deliver, and validate capability resources; and review, update, and manage community risks. This integrated approach becomes the means to achieve the National Preparedness Goal (NPG) in a consistent and measurable way

This NPS graphic illustrates the processes and components used to achieve the NPG. The foundation of this system is integration of the Whole Community in the planning process, the utilization of organizational structures, and the aligning of planning efforts to capabilities. The

NPS is the instrument the Nation will employ to build, sustain, and deliver the core capabilities outlined in the NPG in order to achieve a secure and resilient Nation.

HSEEP is the key component jurisdictions/organizations can use to validate capabilities.

HSEEP is linked to other elements of the NPS, including:

- Corrective actions/lessons learned from previous exercises and real-world events
- Identifying and assessing risk, estimating capability requirements
- Building and sustaining core capabilities
- Developing emergency management planning products to deliver capabilities

Reference: Figure 1.3: Mission Area Components of the National Preparedness System, National Preparedness System, November 2011, pg 1.

Visual 5: HSEEP Applicability and Scope

HSEEP is flexible, scalable, adaptable, and is for use by stakeholders across the Whole Community.

HSEEP provides a consistent approach to exercises.

Key Points

The Homeland Security Exercise and Evaluation Program (HSEEP) provides a common exercise program that promotes consistent terminology for all exercise planners. HSEEP supports the whole community by assessing their capabilities to identify shortfalls and gaps that can be resolved prior to a real-world incident.

HSEEP doctrine is flexible, scalable, adaptable, and is for use by stakeholders across the **whole community**.

HSEEP is applicable for exercises across **all mission areas** (prevention, protection, mitigation, response, and recovery), **all levels of government,** and **the private and public sector**. Using HSEEP supports the National Preparedness System by providing a consistent approach to exercises and measuring progress toward building, sustaining, and delivering capabilities.

The foundation of the HSEEP doctrine incorporates lessons learned and best practices from the exercise community and current policies and plans and is supported by training, technology systems, tools, and technical assistance.

Exercise practitioners are encouraged to apply and adapt HSEEP to meet their specific needs.

You will ***NOT*** find the term "HSEEP Compliant/Compliance" within the current HSEEP version or various FEMA grant requirements. The language you will see is "**consistent with HSEEP"** or "**HSEEP consistent**".

Visual 6: HSEEP Fundamentals

The principles of the HSEEP process include the following:

- Guided by Senior Leaders
- Informed by Risk
- Capability-Based, Objective Driven
- Utilizes a Progressive Exercise Planning Approach
- Whole Community Integration
- Common Methodology

Key Points

Lessons learned from other organizations who have implemented their exercise programs following HSEEP, have shown effective examination of capabilities necessary to successfully respond to all kinds of threats, hazards, and risks. By providing a common approach and consistent method for exercises, HSEEP principles provide a flexible way for each jurisdiction/organization to implement an exercise program—regardless of size or scope of the exercise.

This **common approach** is fundamentally important because it gives the whole community a way of conducting exercises individually and/or together in a manner where capabilities can be validated.

The fundamental principles of the HSEEP process include the following:

Guided by Senior Leaders

- Early and frequent engagement
- Provide overarching guidance and direction

Informed by Risk

- Help identify and evaluate priorities, objectives, and capabilities

Capability-based, Objective Driven

- Evaluate current capability levels/targets
- Identify gaps
- Assess performance against capability-based objectives

Progressive Exercise Planning Approach

- Use of various exercises aligned to a common set of program priorities and objectives
- Increasing level of complexity over time
- Does not always imply a linear progression of exercise types

Whole Community Integration

- Engage the whole community from program management through improvement planning

Common Methodology

- Used for exercises across all disciplines

- Enables a shared understanding of program management, design and development, conduct, evaluation, and improvement planning
- Fosters exercise-related interoperability and collaboration

Visual 7: HSEEP Exercise Cycle

Phases of the HSEEP Exercise Cycle:

- Program Management
- Design and Development
- Conduct
- Evaluation
- Improvement Planning

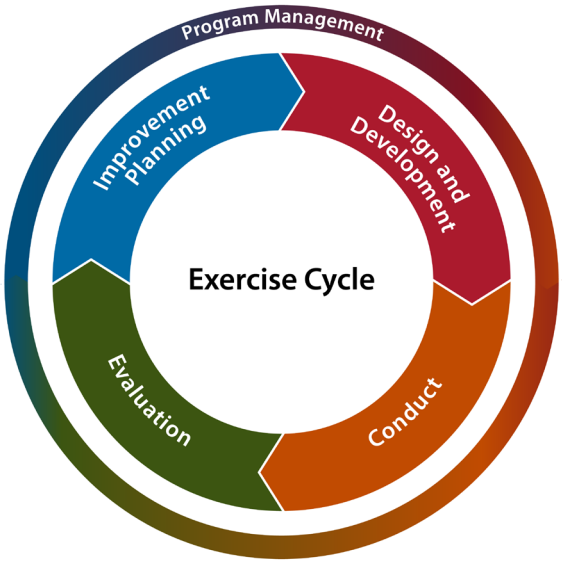


Figure 1.1: The HSEEP Exercise Cycle

Key Points

The Exercise Cycle represents the common planning methodology followed for all exercise types and includes: program management, design and development, conduct, evaluation, and improvement planning that is applicable to the management of exercise programs and execution of individual exercises—regardless of the scope or scale of the exercise.

HSEEP phases are explained through each chapter in the doctrine:

Chapter 1: HSEEP Fundamentals describes the basic principles and methodology of HSEEP

Chapter 2: Program Management provides guidance for conducting an Integrated Preparedness Planning Workshop (IPPW) and developing an Integrated Preparedness Plan (IPP)

Chapter 3: 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, development of an After-Action Report (AAR), and the After-Action Meeting (AAM)

Chapter 6: Improvement Planning addresses corrective actions identified in previous Improvement Plans (IP) from both exercises and real-world incidents, and describes the processes that assist organizations in tracking corrective actions to resolution

Ongoing Revision

The U.S. Department of Homeland Security (DHS), Federal Emergency Management Agency (FEMA) will review HSEEP doctrine and methodology as needed, making necessary modifications and incorporating the latest information on lessons learned from the field.

The following modules contain more detailed descriptions of each phase of the Exercise Cycle.

Reference: Figure 1.1: The HSEEP Exercise Cycle, HSEEP Doctrine January 2020, pg. 1-2.

Visual 8: Module 1: Summary

In Module 1, we discussed:

- HSEEP Purpose
- National Preparedness, PPD-8, and the National Preparedness System
- HSEEP applicability and scope
- HSEEP fundamentals, a common methodology, and doctrine

In Module 2, you will learn about HSEEP Program Management.

Key Points

HSEEP methodology, program and process is fundamental to National Preparedness. The HSEEP Doctrine connects exercise and evaluation with the needs of the Whole Community in their efforts towards a common goal of national preparedness.

Module 2: HSEEP Program Management

Visual 1: Module 2: HSEEP Program Management

Lesson 1 Program Management and the Integrated Preparedness Cycle

Lesson 2 Identifying Preparedness Priorities, the Integrated Preparedness Planning Workshop (IPPW), and the Integrated Preparedness Plan (IPP)

The HSEEP Exercise Cycle

Key Points

In **Module 2: HSEEP Program Management**, we will review the continuous processes used to manage preparedness efforts in support of a community's overall resilience in the face of threats, hazards, and risks. Following the HSEEP methodology will help jurisdictions/organizations create and maintain capabilities.

In **Lesson 1** we will discuss program management and how the components of the Integrated Preparedness Cycle provide a foundation for identifying exercise program priorities and the role of senior leaders.

In **Lesson 2** we will discuss how emergency managers and senior leaders identify priorities to address in the development of an Integrated Preparedness Plan (IPP) during the Integrated Preparedness Planning Workshop (IPPW).

Visual 2: Lesson 1: Program Management and Integrated Preparedness

- Program management is the process of overseeing and integrating a variety of exercises over time
- The Integrated Preparedness Cycle shows how the full breadth of preparedness activities affect the Whole Community

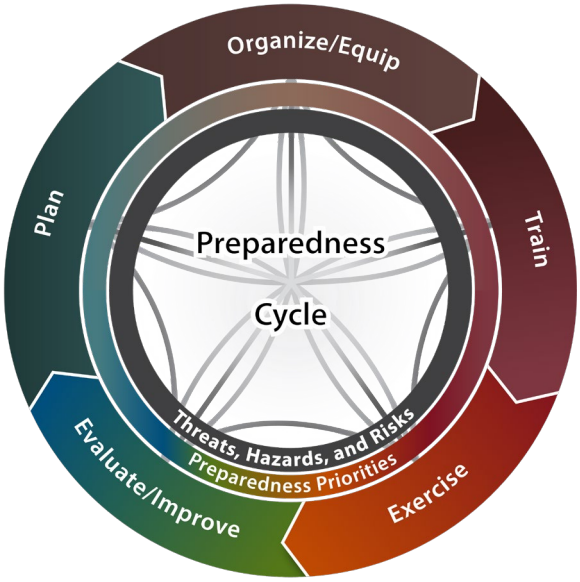


Figure 2.1: The Integrated Preparedness Cycle, pg. 2-1

Key Points

Program Management is the process of overseeing and integrating a variety of exercises over time. An effective exercise program helps jurisdictions/organizations maximize efficiency, resources, time, and funding by ensuring that exercises are part of a coordinated, integrated planning approach to building, sustaining, and delivering capabilities.

The integrated planning approach begins with the review of relevant threats, hazards, and risks by senior leaders and Whole Community stakeholders and development of their preparedness priorities.

These preparedness priorities ensure that the appropriate preparedness elements: planning organizing, equipping, training, exercising (POETE) are incorporated into the multi-year schedule and support the development of individual exercises.

Through the Integrated Preparedness Cycle, the program manager examines the full breadth of preparedness activities that impact their jurisdiction/organization and allows for a more deliberate approach to multi-year preparedness activity planning. This Cycle provides a continual and reliable approach to support decision making, resource allocation, and measuring progress toward building, sustaining, and delivering capabilities based on the jurisdiction/organization's threats, hazards, and risks. Ultimately, this integrated approach becomes a means to achieve whole community preparedness in a consistent and measurable way.

The components of the Integrated Preparedness Cycle are:

Threats, Hazards, and Risks

The regular examination of threats, hazards, and risks is a continual process throughout the Integrated Preparedness Cycle. The collection of historical and recent data on perceived, existing, and potential threats and hazards can be used to better prepare communities with the capabilities needed to address their risks.

Preparedness Priorities

The preparedness priorities are developed based on shortfalls and gaps identified that are specific to a jurisdiction/organization and drive the overall exercise program and the development of individual exercises.

Plan

Planning as it relates to exercises asks questions such as: What changes to plans, policies, procedures, and checklists will need validating? In this way, it is important to identify if current plans are adequate; if they have already been tested; if there are identified corrective actions/improvements that need to be incorporated into the plans; and if there are any new plans that will be written as a result of previous exercises or real-world events.

Organize/Equip

Organizing asks questions such as: What jurisdictions/organizations, departments, or teams need exercising and in what way? Organizing determines if there are organizational barriers such as human operational communication resources not available, gaps in the number of personnel needed to support efforts, are lines of authority identified, are there members within the community that still need to be involved, and any other organizational needs that have not been met. Also, are memorandums of understanding/memorandums of agreement (MOU/MOA) and contract in place to provide additional support should your jurisdiction/organization not have everything it needs.

Equipping involves ensuring the equipment and supplies needed are available to handle the different types of incidents.

Train

Training involves determining what training gaps exist and when/how will they be addressed. Are responders and stakeholders trained regularly on their task associated with identified threats and hazards? Is training up to date and are personnel trained at the appropriate levels? Is there a new plan or procedure, team, etc. that needs training before we validate the capability? Training provides personnel with the necessary knowledge, skills, and abilities to perform the tasks required during emergencies.

Exercise

Exercising determines which exercises have been conducted, which ones are currently on the multi-year schedule to be conducted, and what new exercises need to be scheduled to test and/or validate capabilities. Exercises identify strengths and areas for improvement and test/validate the plans, organization, equipment, and training conducted. They provide an assessment of shortfalls within plans, policies, and procedures which allow for improvements before a real-world event. Exercises also clarify roles and responsibilities among all entities to improve coordination and communications and identify where needed resources are available or identify resource gaps.

Evaluate/Improve

Evaluate/Improve involves identifying strengths, areas for improvement, and corrective actions that result from exercises and real world events. This helps jurisdictions/organizations build, sustain, and deliver capabilities as part of a continuous improvement process. By continually examining the implementation corrective actions, jurisdictions/organizations can identify capability gaps across all components of the Integrated Preparedness Cycle. This component can help shape a jurisdiction's/organization's future preparedness priorities and support continuous improvement.

The inner **Sand Dollar design** shows that all components of the Integrated Preparedness Cycle are interwoven with each other.

Reference: Figure 2.1: The Integrated Preparedness Cycle, HSEEP Doctrine January 2020, pg. 2-1.

Visual 3: Linkage of the Integrated Preparedness Cycle and HSEEP

- The exercise component of the Integrated Preparedness Cycle is linked to the Program Management phase of the Exercise Cycle.
- Preparedness priorities drive the design and development of individual exercises.

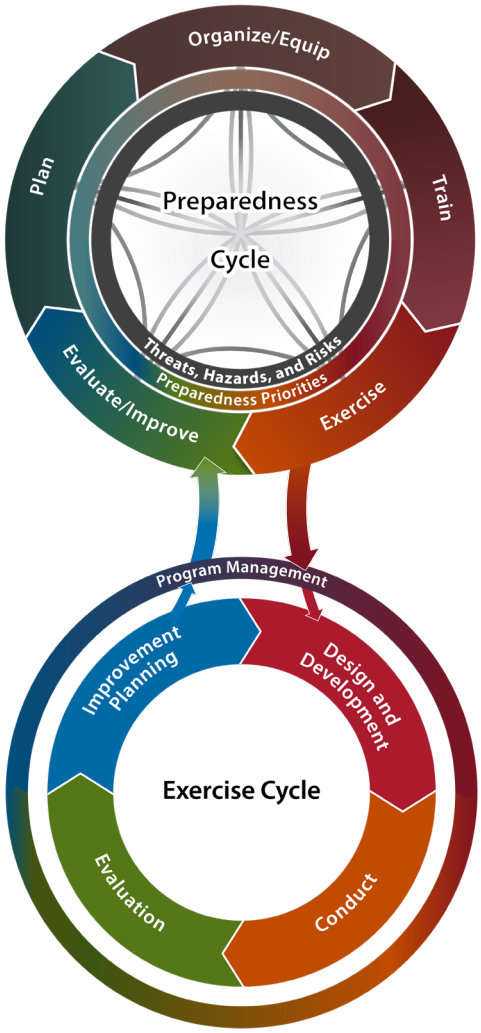


Figure 2.2: The Relationship of the Integrated Preparedness Cycle and the HSEEP Cycle, pg. 2-2

Key Points

The exercise component of the Integrated Preparedness Cycle is linked to the Program Management phase of the Exercise Cycle. The Preparedness Priorities identified during the Integrated Preparedness Planning Workshop (IPPW) will inform the exercise program by providing clear direction for producing quality individual exercises. These individual exercises are used to test and/or validate capabilities which will build, sustain, and deliver capabilities within those preparedness priorities.

Effective program management is comprised of the following components:

- Engaging Senior Leaders
- Establishing multi-year preparedness priorities
- Conducting an Integrated Preparedness Planning Workshop (IPPW)
- Developing an Integrated Preparedness Plan (IPP)
- Maintaining program reporting of exercise and real-world outcomes
- Managing exercise program resources

The preparedness priorities are developed during the Integrated Preparedness Planning Workshop (IPPW) and documented in the Integrated Preparedness Plan (IPP).

Through effective program management, each exercise becomes a supporting component of a larger exercise program and integrated preparedness with overarching priorities.

More about the IPPW/IPP will be coming up later in this module.

Reference: Figure 2.2: The Relationship of the Integrated Preparedness Cycle and the HSEEP Cycle, HSEEP Doctrine January 2020, pg. 2-2.

Visual 4: Engage Senior Leaders

- Engage early and often
- Identify preparedness priorities
- Specify overarching guidance and direction
- Provides specific intent for individual exercises

Key Points

Senior Leaders should be engaged early in the exercise program management process to identify a schedule of preparedness activities and capability targets.

Senior leaders utilize the outcomes of continuous assessment processes to identify and validate preparedness priorities that will be addressed through a schedule of preparedness activities. Senior leaders use information gathered in identifying the capabilities of highest concern to local and jurisdictional/organizational planning efforts.

Factors for consideration in developing exercise program priorities.

- Results of risk assessments
- Areas for improvement and capabilities (corrective actions, newly acquired capability/resource, etc.)
- External sources and requirements (preparedness reports, grants or funding-specific requirements, etc.)
- Accreditation standards and regulations

Since local planners often report difficulty in engaging senior leaders in this process, the individual community, jurisdiction, or organization should strive to identify throughout the program planning process where opportunities may exist to engage leaders in meaningful ways. One way to engage senior leaders and build more support for the exercise program as a component of the larger preparedness effort is to invite them to attend exercise events, and assign someone from the planning team to act as a tour guide to various staging areas of the exercise. At

each of these staging areas this tour guide should be prepared to provide senior leaders with information on the critical capabilities their particular jurisdiction/organization are attempting to address. They also may describe the importance of the participation of the various stakeholder agencies, jurisdictions, and organizations in addressing the broader Emergency Management goals and building and sustaining capabilities.

Recognizing that a community's preparedness status is dynamic and changes as the community demographic undergoes change, another method available to engage senior leaders is to implement Program Reporting. Since it is critical to begin each planning effort with a review of the local Emergency Management research and maintain situational awareness on capabilities of stakeholder and partner jurisdictions/organizations, program reporting can be used to keep senior leaders aware of progress made toward meeting priority capabilities.

These reports are another method of providing leaders with information on the periodic assessment of the exercise program's overall progress toward meeting capabilities and raise awareness on the role of exercises in ensuring the needs of the community are being adequately met. Program managers should attempt to identify what motivates interest from senior leaders and engage leaders at their level of interest. If the primary focus of your particular leader is limited to budgetary aspects, be prepared to provide the senior leader with explanations on how the exercise program helps to target funding requirements during staging area tours or through the summary report process. The important point is to use your knowledge of topics of importance to your senior leaders to provide a frame of reference customized to the level of interest your senior leader will understand. Program Reporting will be described in greater detail in Lesson 2.

This engagement process of review, validation, and report-back ensures the success of the HSEEP Exercise Cycle by ensuring each exercise effort addresses the latest local trends and preparedness activities. The outcomes of this iterative process set priorities that guide exercise planning and set the specific intent for individual exercises.

Visual 5: Preparedness Priorities

- Identified by senior leaders
- Guide program planning and resource allocation
- Determine type and range of preparedness activities
- Provide a roadmap for selecting and prioritizing individual exercise design

Key Points

Multi-year program priorities are the outcome of risk assessments related to specific capabilities. They guide the development of exercise program priorities as well as, objectives developed for individual exercises. At the program management level, these priorities are used as the basis for identifying the type and range of exercises that will form a comprehensive, integrated exercise program.

These identified priorities inform the Integrated Preparedness Plan (IPP) and ensure the tasks associated with each of the high-priority capabilities measure, assess, and validate the community's existing capabilities within the context of each identified focus area.

It is important to consider how each preparedness element has an effect on each identified preparedness priority and corresponding capability identified. As discussed earlier, the interconnecting lines in the center of the Integrated Preparedness Cycle shows the relationship between each element. When one element is affected, it will ultimately have an impact on other elements.

During the Integrated Preparedness Planning Workshop (IPPW), Whole Community stakeholders develop a multi-year schedule of preparedness activities. One or more of these priority capabilities and their associated tasks will become the focus of these preparedness activities within the larger program plan and the individual exercise program when developing objectives.

This process will also be explained later in Lesson 2 of this Module.

Visual 6: Lesson 2: Integrated Preparedness Planning Activities

- Integrated Preparedness Planning
- The Integrated Preparedness Planning Workshop (IPPW)

Key Points

Integrated preparedness planning begins when emergency management and senior leaders identify priorities to address in the development of a multi-year schedule of preparedness activities which includes the creation of an effective capabilities-based exercise program. These priorities are informed by risk and capability assessments, findings, and corrective actions from previous events and external requirements like regulations and grant guidance.

Identifying the priorities begins with the conduct of an Integrated Preparedness Planning Workshop (IPPW). This is not the same as the planning meetings used to identify and plan for individual exercises, but is a strategic, high-level effort designed to bring together stakeholders from across the Whole Community to establish **program level** priorities and establish a multi-year schedule of preparedness activities designed to address those priorities and validate capabilities.

IPPWs are held on a periodic basis (e.g., annual or biennial) depending on the needs of the program requirements (grant or other funding or cooperative agreements) and establish the strategy and structure for the overall exercise program and sets the foundation for the planning, conduct, and evaluation of individual exercises.

During the Integrated Preparedness Planning Workshop (IPPW), participation from the Whole Community ensures preparedness activities are included in the program's priorities.

It is important to note that the Integrated Preparedness Planning Workshop (IPPW) and the Integrated Preparedness Plan (IPP) replaces the Training and Exercise Planning Workshop (TEPW) and the Training and Exercise Plan (TEP).

Visual 7: Integrated Preparedness Planning Workshop (IPPW)

- Coordination of Whole Community initiatives
- Prevention of duplication of efforts
- Assurance of the efficient use of resources and funding
- Avoidance of overextending key agencies and personnel
- Translate priorities into specific objectives and exercises
- Track Improvement Plan (IP) actions against current capabilities

Key Points

The Integrated Preparedness Planning Workshop provides a collaborative environment for the whole community to engage in a forum to discuss and coordinate preparedness activities across local jurisdictions/organizations in order to maximize the use of available resources and prevent duplication of effort. Agencies, jurisdictions, organizations, and public and private sector partners responsible for delivering or supporting the delivery of capabilities to the local community should participate in the workshop. We will look at who these participants might be momentarily.

The purpose of the Integrated Preparedness Planning Workshop (IPPW) is to engage senior leaders and Whole Community stakeholders in identifying exercise program priorities and planning a schedule of preparedness activities to meet those priorities. The outcomes of the IPPW inform the writing of the Integrated Preparedness Plan (IPP).

During the workshop participants:

- Review program accomplishments to date
- Review/identify jurisdictional/organizational and national threats and hazards
- Review each jurisdiction’s/organization's progress and accomplishments over the past year
- Identify needs and modifications required—such as changes to the multi-year schedule or other information and planning that may need updating
- Translate these needs into priorities and develop specific objectives to address through exercises
- Track Improvement Plan (IP) actions against current capabilities, plans, equipment, training, and exercises
- Identify and coordinate possible funding sources, and most important
- Coordinate preparedness activities and scheduling—a major part of the workshop should be spent on schedule coordination since the workshop is an excellent opportunity for all jurisdictions/organizations to coordinate their multi-year schedules to avoid duplication of efforts and collaborate to maximize resources. This is especially beneficial for scheduling of exercises tied to “grant deliverables”.

The Integrated Preparedness Planning Workshop (IPPW) is one of the key elements of HSEEP because it is an opportunity for Whole Community stakeholders to discuss and develop a plan to increase preparedness using a carefully coordinated preparedness activity schedule. This allows

local jurisdictions/organizations to function as a whole more effectively when translating goals and priorities into specific objectives and exercises, coordinating preparedness activities, and tracking Improvement Plan actions against current capabilities, plans, equipment, training and exercises.

There are seven good questions to ask as a foundation for the IPPW:

- What are the greatest threats and risks?
- How should we address those risks (preparedness priorities)?
- What plans are in place to support the capability/priority? (P)
- What organizational structure is in place to support the capability/plan? (O)
- What equipment is needed to support the capability/plan? (E)
- What training is needed to support the capability/plan? (T)
- What exercises are needed to validate the capability/plan? (E)

Visual 8: Whole Community Participants

Involve the whole community in the development of national preparedness documents and ensure their roles and responsibilities are reflected.

Key Points

It is important to have the right people at the table when conducting the Integrated Preparedness Planning Workshop. The Whole Community means involving all relevant stakeholders in the development of national preparedness documents and ensuring their roles and responsibilities are reflected in the content of the materials.

Examples of Whole Community partners include, but are not limited to:

- **Medical Facilities**: Hospitals, Nursing Homes, Private Ambulances
- **Emergency Management:** Resource Typing, Fire Services/Emergency Medical Service (EMS), Search and Rescue, Memorandum of Understanding/Memorandum of Agreement (MOUs/MOAs)
- **Business:** Distribution Centers, Refrigerated Container Service, Food/Water
- **Public Transportation:** Bus, Rail, Taxi
- **Schools/Colleges:** Shelters, Evacuation Centers, Academia, Subject Matter Experts (SMEs)
- **Religious Organizations:** Churches, Counseling Services
- **Non-Profits:** Red Cross, Salvation Army, Counseling Services
- **Social Networking:** Facebook Groups, Volunteer Organizations
- **Public/Private Partnerships:** MOUs, MOAs

Using Whole Community concepts, exercise program managers should identify individuals from jurisdictions/organizations including but not limited to:

- Senior leaders or those responsible for providing guidance and direction for preparedness priorities, planning activities, and those responsible for providing resources to support preparedness efforts.
- Relevant planning, training, exercise, and grant program managers who would be responsible for carrying out the activities identified during the workshop.
- Individuals with knowledge of the community's or jurisdiction's/organization's risks and capabilities.
- Representatives from relevant disciplines that would be part of the exercises or any real-world events, including appropriate local, regional, or federal department and agency representatives.
- Individuals with administrative responsibility relevant to exercise conduct.
- Advocates for individuals with disabilities and access and functional needs which includes advocates for children, seniors, racially and ethnically diverse communities, people with limited English proficiency, and animals.
- Community representatives to include businesses; the healthcare sector; volunteer, nongovernmental, nonprofit, faith-based, and social support organizations.

In keeping with the Whole Community approach, which focuses on enabling the participation of a wider range of players from the private and nonprofit sectors (including non-governmental organizations and the general public in order to foster better coordination and working relationships). it may be appropriate to include some of these stakeholders in the workshop planning process, particularly if it is likely there would be a need to enter into formal agreements to aid during disaster response. It’s critical that those who attend are individuals who have the authority to make decisions and are empowered to carry them out. This includes a manageable number of officials from participating agencies. The officials who attend from participating agencies are those who sponsor training and exercises and should not be confused with those involved in exercise planning or players.

Once a comprehensive set of stakeholders has been identified, exercise program managers can integrate them into the exercise program by having them regularly participate in Integrated Preparedness Planning Workshops (IPPWs).

Visual 9: Considerations for Program Priorities

- Threats and Hazards
- Areas for Improvement/Capabilities
- External Sources Requirements
- Accreditation Standards/Regulations

Key Points

Preparedness priorities should be informed by risk, capability assessments, findings, and corrective actions from previous events, and external requirements. Preparedness priorities should be comprehensive to meet Whole Community needs and will drive preparedness activities throughout the Integrated Preparedness Cycle. It is important that the IPPW engages individuals from partner organizations who can adequately weigh the risks specific to each discipline, functional area, and group represented by stakeholder organizations who work together to identify the context of the threats or concerns of the local community.

At this stage, the overall goal of the workshop process is to identify the scope of the program planning effort. Outcomes of the process include lists of preparedness activities aimed at building and sustaining the capabilities that senior leaders identify as priorities.

In support of these efforts, IPPW participants identify factors for consideration in developing exercise program priorities which are the strategic, high-level priorities that will be used to guide the overall exercise program. These priorities then inform the development of individual exercise objectives to ensure that individual exercises evaluate and assess the community's priority capability targets in a coordinated and integrated fashion.

IPPW participants should consider the following factors:

Threats and hazards including:

- Jurisdictional/organizational threats and hazards
- National threats and hazards
- Risk assessments
- Hazard vulnerability analysis

Areas for improvement/capability assessments from exercises and real-world events, including:

- Real-world incident corrective actions
- Exercise corrective actions
- Identified and/or perceived areas for improvement
- Validating plans and training efforts
- Newly acquired capabilities and resources

External sources and requirements, including:

- Industry reports
- State or national preparedness reports
- Homeland security strategies
- Grants or funding-specific requirements

Accreditation standards, regulations, or legislative requirements, including:

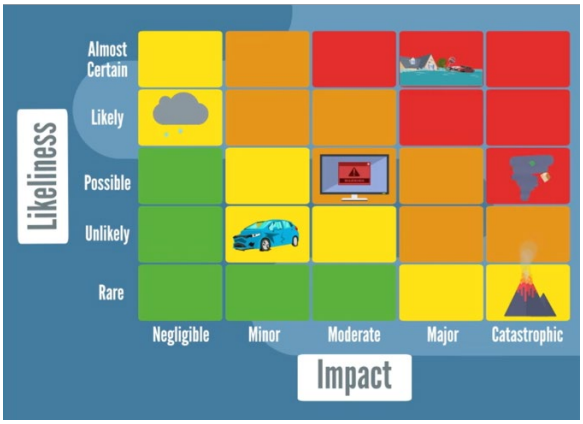
- Accreditation standards (e.g., hospital accreditation requirements)
- Regulations or legislative requirements (local, state, and federal)

Workshop participants review and consider all the identified factors associated with each high priority capability and compare the resources necessary for addressing each against the resources available from all stakeholder jurisdictions/organizations. This process can be used to identify the capabilities that are in greatest need of improvement that senior leaders can designate for use in guiding the overall direction of an exercise program.

Reference: Table 2.1: Factors for Consideration in Developing Exercise Program Priorities, HSEEP Doctrine January 2020, pg. 2-4.

Visual 10: Risk Assessments

- Threat and Hazard Identification and Risk Assessment (THIRA) Guide (CPG 201)
- Other forms of risk assessments
- Results used to define goals for the Integrated Preparedness Plan (IPP)



Key Points

The cornerstone of an effective preparedness program is a thorough understanding of the threats, hazards, and risks facing a jurisdiction/organization. With this understanding, a jurisdiction/organization can then consider other factors which may influence the program's preparedness priorities.

Risk assessment is a process to identify potential hazards and analyze what could happen if a hazard occurs. Conducting a risk assessment will allow jurisdictions/organizations to determine the greatest threats and hazards their communities are likely to face. There are many types of risk assessment processes that are used by the whole community, for instance, the American Society of Safety Professionals uses the Hazard Identification (HAZID) study for risk analysis, risk evaluation, and risk communication. Another example are internal and external reviews that the private sector uses. There are multiple methods used to determine risk, but we are going to discuss in further detail the THIRA process.

One method communities can use to determine program priorities is to conduct risk assessments following the process presented in the **Threat and Hazard Identification and Risk Assessment (THIRA) Guide, *Comprehensive Preparedness Guide (CPG) 201.***. The THIRA process defines three steps communities can use to identify and understand likely vulnerabilities. We recommend you read CPG 201 as well as the publication **Developing and Maintaining Emergency Operations Plans, *Comprehensive Preparedness Guide (CPG) 101***. Both preparedness guides describe processes that can help state and local partners understand the basics of the hazard and risk assessment process and how it supports the development of good program and operational plans.

Each industry that provides support for local infrastructure may also have additional guidelines that can be used as reference, providing workshop participants guidance in identifying the scope of program plans by describing standards and credentialing requirements for various stakeholder organizations.

The THIRA assessment process is intended to help stakeholders identify and prioritize capability targets and desired outcomes which can be tracked over time to identify improvement requirements in order to deliver or sustain core capabilities.

The three basic steps of the THIRA process support the preparedness planning effort, and these are:

Step 1.

Identify the Threats and Hazards of Concern. Based on a combination of experience, forecasting, subject matter expertise, and other available resources, identify a list of the threats and hazards of primary concern to the community. Broken down into three categories: *natural, technical, and man-made hazards.*

Communities should consider two criteria when identifying threats and hazards:

- The threat or hazard most likely to affect the community
- The impact to the community would be such that it would challenge at least on capability more than any other hazard

Step 2.

Give the Threats and Hazards Context. Describe the threats and hazards of concern, showing how they may affect the community. The two steps within this process include writing context descriptions for the threat or hazard, including things like locations, magnitude, and time; and the second step is estimating the impacts.

Step 3.

Establish Capability Targets. Assess each threat and hazard in context to develop a specific capability target for each capability identified. The capability target defines success for the capability.

Because the THIRA process is scalable and focuses on identification of capabilities, it can be employed at all levels of response planning−by small, one-person departments as well as larger organizations with greater needs and resources.

Using the results of this risk analysis process, organizations of all sizes can develop a strategy for allocating resources more effectively to achieve capability targets and reduce risk. On a smaller scale these assessment steps can also be utilized to reassess and update the current hazard and risk landscape when planning for development of training or individual exercises.

When used as part of a continuous cycle of capability assessment, developing program plans, and planning for individual exercises, the incorporation of the results from repeated cycles of the THIRA process allows organizations to identify and manage changes to their risk landscape.

A suggested practice is to make available the results of the program level assessment to provide transparency into the planning process and educate the community on the local preparedness environment. By sharing these results, the whole community can realize where they stand on preparedness and provide support for resource funding to build and sustain capabilities within the local community.

Visual 11: Determining Capabilities

- Link each identified risk factor to the capabilities that mitigate that risk
- Prioritize these capabilities
- Identify which stakeholder provides the capability

Key Points

During the THIRA or other threat, hazard, and risk assessment, capabilities and capability targets should be established. These capabilities can then be linked to the identified Preparedness Priorities and referenced throughout the Integrated Preparedness Planning Workshop (IPPW) and in the Integrated Preparedness Plan (IPP). We will discuss more about capability targets in Module 5.

Capabilities are the means to accomplish a mission, function, or objective based on the performance of related tasks, under specified conditions, to target levels of performance. Using the latest demographic information for the local community or jurisdiction/organization, senior leaders with decision-making authority review a compiled list of capabilities that is obtained from the risk assessment process to determine which capabilities are of greatest concern. From this list of capabilities, senior leaders identify those that should be considered high priorities for improvement, and these become the focus of preparedness efforts.

Once these priority capabilities are identified, workshop participants attempt to identify which of the assembled stakeholder organizations have responsibility for providing support toward mitigation of the identified risks. When the time comes for planning individual exercises, Exercise Program managers must determine which of these organizations should be invited to participate in planning for individual exercises.

This review process frames the planning efforts and ensures assessments evaluate current status of the personnel, team, facilities, equipment and supplies, existing plans, policies, procedures, strategies, training, exercises, programs, systems, technologies, services, funding, authorities, laws, ordinances, and policies necessary to meet the capabilities.

Maintaining the context for the planning effort is very important since some preparedness activities can be viewed as taking resources away from other political priorities. To avoid politicizing the planning effort, it is important for workshop facilitators and participants to be aware that the potential does exist for some participants to promote political agendas. To maintain an appropriate context workshop, participants should work together to link the exercise program efforts to real-world capability priorities. Emphasizing the linkage of the program can keep these planning discussion focused on the context a program of preparedness activities has toward Whole Community preparedness.

Visual 12: Activity 1: Risk Assessment Process for Establishing Priorities

Objective: : Use the risk assessment process to identify the core capabilities needed to address the preparedness priorities identified.

Time: 30 minutes (video, workgroup and report)

Instructions:

- Watch video
- Use the risk assessment process to determine the top threats and hazards for your jurisdiction
- Identify the top three core capabilities most useful to mitigate those threats and hazards
- Annotate results on the Jurisdictional Analysis Worksheet.
- Reference National Preparedness Goal 2nd Edition, September 2015, Table 1: Core Capabilities by Mission Area and Appendix B - Jurisdiction Reference

Video Link:

Assessing Threats Hazards and Risk Video

Activity 1: THIRA Process for Establishing Priorities Video Transcript

The diversity around the country means that each community will face unique threats to safety and security.

From natural hazards such as hurricanes and technological hazards such as a dam failure to human-caused incidents like cyber-attacks, understanding potential threats and how they affect a community is the first step to building a successful exercise program.

This video will provide an overview of how communities conduct threat assessments to inform the priorities of their exercise program.

While there are many different types of risk assessments a community can use, this video will specifically focus on the Threat and Hazard Identification and Risk Assessment (THIRA). THIRA is a three-step risk assessment process that helps communities identify and understand their most challenging threats and hazards and determine the level of capability they need in order to assess those threats and hazards. It helps community leaders answer the following questions:

- What threats and hazards can affect our community?
- If they occurred, what impacts would those threats and hazards have on our community?

Based on those impacts, what capabilities should our community have? Let's take a closer look the THIRA process

The first step is to identify threats and hazards. Communities should consider the likelihood of a threat or hazard and the challenge presented by the impacts of that threat or hazard if it occurred.

The next step is to give threats and hazards context. This means creating descriptions with potential time, place, location details, and estimating the impacts and magnitude of an incident.

The final step of the THIRA process is where communities establish capability targets. Core capabilities are the means to accomplish a mission or function based on the performance of related tasks under specified conditions. (Reference National Preparedness Goal 2nd Edition, September 2015, Table 1: Core Capabilities by Mission Area). Capability targets describe the level of capability a community plans to work towards achieving to address a threat or hazard. FEMA provides standardized language to help communities craft their targets.

Capability targets are not a reflection of the current capability, but rather of the performance level communities aspire to and build towards.

Throughout the entire THIRA process, exercise planners should include subject matter experts and representatives from the Whole Community to ensure the threats and hazards identified are comprehensive.

Risk and capability assessments such as THIRA are important because they:

- Help exercise planners prioritize their preparedness goals and core capabilities, and
- allows communities to focus their limited resources to build and assess core capabilities that address threats and hazards with the greatest challenge

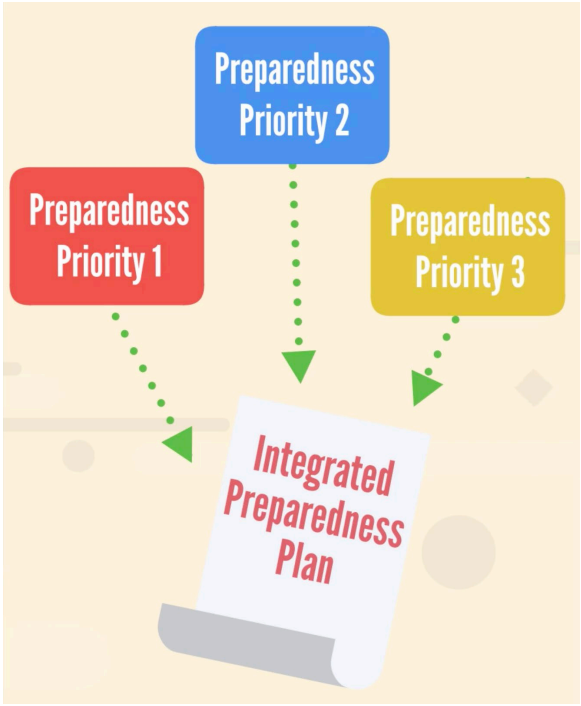
Exercises should be informed by risk and threat assessments so that a community can assess current core capabilities or strengthen them to close any gaps.

Threats and hazards are always changing, so exercise planners should regularly review their community's THIRA.

With this information you now understand the importance of threat and risk assessments for your own exercise planning. Good luck!

Visual 13: Integrated Preparedness Plan (IPP)

- Identifies preparedness priorities
- Outlines a multi-year schedule of preparedness activities
- Validates capabilities



Key Points

The creation of an effective capabilities-based preparedness program begins with an Integrated Preparedness Plan (IPP) which establishes overall preparedness priorities and outlines a multi-year schedule of preparedness activities designed to address those priorities and validate capabilities. The Integrated Preparedness Plan (IPP) is designed to coordinate the effort to provide improved capabilities among all stakeholder jurisdictions/organizations.

The IPP is a living document that is meant to be updated and refined annually or as needed to inform the continuous improvement of a jurisdiction's/organization's ability to build, sustain, and deliver capabilities. The IPP not only lists the preparedness priorities and the preparedness activities scheduled, but also provides a graphic illustration of the multi-year schedule.

In developing an Integrated Preparedness Plan (IPP), stakeholders should remember that public law, presidential directives, grant requirements, or various regulations may outline specific functional and reporting requirements and timelines for certain exercises; therefore jurisdictions/organizations must review all funding source requirements as they prepare to establish their program plan.

The component of a typical Integrated Preparedness Plan (IPP) should present an outline of the identified program priorities and target capabilities to be addressed using an associated multi-year schedule of preparedness activities.

Major components to the plan include:

- The **Purpose** provides an overview of the IPP document and the jurisdiction's/organization's overall multi-year schedules.
- **Preparedness Activity Considerations** describes how the jurisdiction/organization established the priorities and how the existing strategy documents, risk assessments, capabilities assessments, and past After-Action Reports (AARs) and Improvement Plans (IPs) informed the development of the priorities.
- **Program Priorities** list each decided upon priority, the corresponding capability, the rationale, and the Integrated Preparedness Cycle elements supporting the priority and associated capabilities.
- **Continuous Improvement Planning** discusses the preparedness activities and how they are intended to influence capability improvement and the methodology for prioritizing, assigning, monitoring, tracking, and reporting the progress made on building, improving, and sustaining capabilities. This section could include program reporting actions.
- **Multi-year schedule of preparedness activities.** A schedule of preparedness activities that should illustrate the proposed activities scheduled in the Integrated Preparedness Plan.

Following is a review of the different types of exercises that may be included in the Integrated Preparedness Plan (IPP).

Visual 14: Discussion-Based Exercises

- Typically focus on strategic, policy-oriented issues
- Provides a forum for developing or reviewing plans, policies, procedures, and/or agreements
- Facilitators or presenters usually lead the discussion to keep the exercise on track and meet objectives
- Type includes seminars, workshops, table-top exercises (TTX), and games

Key Points

Discussion-based exercises include **seminars, workshops, tabletop exercises (TTXs), and games.** These types of exercises can be used to familiarize players with **current plans, policies, agreements, and procedures or develop new plans, policies, agreements, and procedures.** Discussion-based exercises focus on strategic, policy-oriented issues.

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.

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 include new standard operating procedures (SOPs), emergency operations plans, continuity of operations plans, and mutual aid agreements. The workshop format is open and adaptable to different purposes. They can be done in a tabletop format with scenario and presentation slides but be designed to have players actually develop a procedure or procedural step or design a plan or plan element. While they can be conducted in many different ways, to be effective, workshops should focus on a specific issue, focused objective, product, or goal that is clearly defined.

Tabletop Exercises which are commonly referred to by their acronym—**TTXs,** are aimed at facilitating conceptual understanding, identifying strengths and areas for improvement, and/or achieving changes in perceptions. 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; therefore, facilitation is critical to keeping participants focused on exercise objectives. They come in a variety of flavors that fall into two types—the **traditional basic or advanced TTX.** Basically, an **advanced TTX provides more complex exercise play** that can combine certain disciplines, with small teams or task level or functional area players working on games in coordination with senior level players using a scenario that improves or moves forward over time in a series of moves over several modules. The idea is to use TTXs as a way to look at traditional functional and task level policies and procedures, and especially where these involve coordination across multiple jurisdictions or organizations in order to identify potential improvements.

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. 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 games because players make their evaluated moves at these crucial points.

Reference: Table 2.3: Discussion-Based Exercise Types: Seminar, Table 2.4: Discussion-Based Exercise Types: Workshop, Table 2.5: Discussion-Based Exercise Types: Tabletop, Table 2.6: Discussion-Based Exercise Types: Game, HSEEP Doctrine January 2020, pgs. 2-6 through 2-8.

Visual 15: Operations-Based Exercises

- Used to validate plans, policies, procedures, and/or agreements
- Clarify roles and responsibilities, identify resource gaps, and improvement opportunity
- Focuses on action-oriented activities
- Involves deploying personnel and resources
- Types include drills, functional exercises (FE), and full-scale exercises (FSE)

Key Points

Operations-based exercises are more complex and include ***drills, functional exercises (FEs),*** and ***full-scale exercises (FSEs).*** These exercises are used to validate plans, policies, agreements, and procedures; clarify roles and responsibilities; and identify resource gaps. Operations-based exercises are characterized by actual *implementation of response activities* in reaction to an exercise scenario.

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 tasks specific to new equipment or procedures, to introduce or validate procedures, or practice and maintain current skills.** 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. During drills the command and control or coordination of agency or organizational elements are simulated or not in play.

A drill is useful as a stand-alone tool for use when implementing the use of new equipment or procedures within a single agency or organization, but a series of drills can also be used to prepare several agencies and organizations to collaborate in a Full-Scale Exercise or FSE.

Functional Exercises or FEs are traditionally used to evaluate coordination of **management-level command and control functions** and are designed to validate and evaluate capabilities, multiple functions and/or sub-functions, or interdependent groups of functions. As they are traditionally used FEs focus on exercising plans, policies, procedures, and staff members involved in **management, direction, command, and control branches of the Incident Command System (ICS) and Unified Command, or multiagency coordination centers (e.g., Emergency Operations Centers [EOCs])** where movement of personnel and equipment and task level activities are usually simulated.

FSEs are typically the most complex and resource-intensive type of exercise and include command-and-control, functional and task level components. They are conducted in a real-time, stressful environment intended to mirror a real incident where many activities occur simultaneously throughout the duration of the exercise. In an FSE, events are projected through an exercise scenario with event updates that drive activity at the operational level. They involve multiple agencies, organizations, and jurisdictions and validate many facets of preparedness operating under the Incident Command System (ICS) and Unified Command, or multiagency coordination centers (e.g., Emergency Operations Centers [EOCs]). Personnel and resources may be mobilized and deployed to the scene where actions would be conducted 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. Safety issues, particularly regarding the use of props and special effects, must be monitored and the exercise site or venue is usually large; therefore, site logistics require careful planning and close monitoring.

Not every exercise that you can do will neatly fit into these seven exercise types. This is especially true as you move towards the use of games as operational exercises that may have elements of one or more exercise types.

For Example:

Do you think it is possible for a game—which is a type of discussion-base exercise—to utilize Controllers to facilitate exercise play? Games are often described as a competition between two or more **teams** but are also described as an exercise event where players utilize a computer or some sort of technology which alters scenario play based on player actions and responses.

Controllers are not typical participants for discussion-based exercises, but games can also be used to describe exercise scenarios designed to explore individual **OR** team decision-making processes.

When games are used to evaluate team decisions rather than individual player actions, **Controllers** (rather than a computer) implement various scenario paths based on team decisions using a flow chart representing the decision points within the scenario, with instructions provided for altering game play as a result of competing team decisions at each decision point.

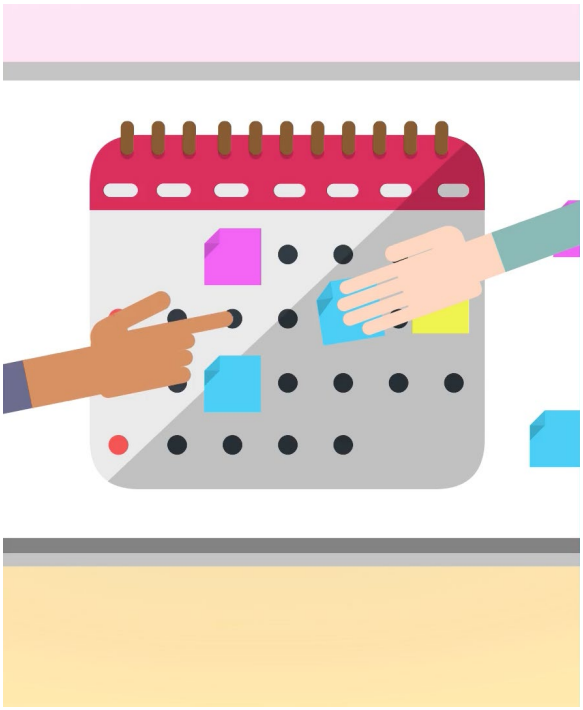
Another example of this blending of types and terminology crossover is the use of Seminars to introduce new plans or procedures. Seminars usually do not include a feedback or evaluation process; however, Seminar attendees may possess expertise or insights not available to the originators of the plan. To provide the opportunity to obtain added value from the Seminar process, attendees should be provided with the added feature of a feedback mechanism to allow attendees the opportunity to raise questions or concerns on details of plan implementation and invite recommendations on potential improvements for implementation of the plan in the field.

The main thing to remember is to avoid getting hung up over the HSEEP exercise ***type*** terminology when your exercise uses elements of different types or incorporates additional focus areas in a blended delivery. In these cases, be prepared to characterize and describe your blended exercise activities using one or more exercise of the common exercise type descriptions and be sure to describe the rationale for blending these types in your exercise program plan and when describing requirements for the design and development of scenarios and implementation of exercise conduct.

Reference: Table 2.7: Operations-Based Exercise Types: Drill, Table 2.8: Operations-Based Exercise Types: Functional, Table 2.9: Operations-Based Exercise Types: Full-Scale, HSEEP Doctrine January 2020, pgs. 2-9 through 2-11.

Visual 16: Multi-Year Schedule

- Combination of preparedness activities
- Graphic representation of proposed preparedness activities
- Emphasizes coordination between stakeholders



Key Points

The multi-year schedule is a combination of preparedness activities that are used to accomplish program goals and objectives. These activities are tied to exercises so the program objectives can be achieved or validated. This multi-year schedule uses a progressive planning approach to expose participants to increasingly complex exercises over time.

The Integrated Preparedness Plan (**IPP)** should reflect a multi-year schedule of preparedness activities. When building a multi-year schedule, be sure that it is not overly aggressive. Each element of the Integrated Preparedness Cycle should be considered and integrated both independently and as it relates to and affects the other elements of the Cycle.

The schedule should:

- Provide a graphic representation of the proposed preparedness activities scheduled
- Emphasize coordination between jurisdictions
- Allow adequate time for a natural progression of increasingly complex exercises designed to build and validate capabilities

Creating a multi-year schedule requires ongoing coordination with stakeholders to:

- Plan revision, review, or development - (planning)
- Experience of stakeholder jurisdictions/organizations - (organizing)
- Consider current capabilities and equipment acquisitions - (equipping)
- Personnel training and preparedness levels - (training)
- Identify the appropriate type and timeline for exercises - (exercises)

These items of planning, organizing/equipping, training, and exercises is known as POETE which are components of the Integrated Preparedness Cycle and are the focus of the multi-year schedule.

The completed IPP and multi-year schedule should be distributed as appropriate.

Reference: Templates for creation of the IPP and other exercise documentation are available on the HSEEP homepage (https://www.fema.gov/hseep).

Visual 17: Activity 2: IPPW/IPP Development

Objective: Prepare for an IPPW to coordinate preparedness priorities, activities, goals, and types

Time: 30minutes (video, workgroup and report)

Instructions:

- Watch video
- Determine your top three jurisdiction priorities
- Determine your top three associated core capabilities
- Determine existing preparedness activities
- Determine new preparedness activities required to meet capabilities
- Reference National Preparedness Goal 2nd Edition, September 2015, Table 1: Core Capabilities by Mission Area and Appendix B - Jurisdiction Reference

Video Link:

Charting the Exercise Program Vision: The Integrated Preparedness Planning Workshop Video

Charting the Exercise Program Vision: The Integrated Preparedness Planning Workshop Video Transcript

In order to prepare for potential threats and hazards, communities should develop an exercise program.

This video will provide an overview of how communities establish the strategy for their exercise programs, starting with the Integrated Preparedness Planning Workshop. The Integrated Preparedness Planning Workshop (IPPW) is a forum for establishing the strategy and structure of an exercise program, while charting the vision for future planning, conduct, and evaluation of individual exercises.

Workshop participants collaborate to set exercise program priorities and develop a schedule of preparedness activities. The workshop should include representatives from the Whole Community. Inviting members from different sections of the community ensures an integrated and collaborative approach to preparedness.

A key activity during the IPPW is establishing preparedness priorities. These are the capability areas a community wants to strengthen through exercises.

Some factors participants should review to develop their priorities include:

- Threats and Hazards
- Capabilities Assessments
- External Sources and Requirements
- Accreditation Standards and Regulations

Once preparedness priorities have been decided, the group will create a plan to address or improve them. This results in a multi-year schedule of all preparedness activities such as trainings and exercises.

As the participants build out their community's exercise program, they will need to review each component of the Integrated Preparedness Cycle.

Let's break these elements down: Participants should discuss what plans, policies, procedures, or other planning factors are scheduled to be reviewed, updated, or written during the time period being discussed.

They should ask themselves:

- What plans, policies, procedures, and checklists will need validating or need to be developed? Participants should review organization and equipment factors such as anticipated changes to organizational structures or available equipment. They should ask themselves:
- What organizations, departments, and teams need exercising?
- Does equipment usage need validation?
- Are there any shortages of equipment or personnel?
- Next, participants should identify training priorities and opportunities.

They should ask themselves:

- What training is needed prior to exercising? Subsequently, participants should identify potential exercises. In doing so, they should think through how exercises can meet their community's specific needs and capabilities They should ask themselves:
- What previous corrective actions need to be validated?
- What type of exercises will meet their needs?
- What are the goals and objectives of the chosen exercises?
- How do the exercise objectives align to a community's capabilities?

Finally, participants should think about how to continuously improve their exercise program. They should use the outcomes of an exercise to identify any gaps in their capabilities. Doing so allows communities to examine the effects of preparedness activities on capabilities and better plan future exercise program efforts.

At the end of the IPPW, program managers will have a clear understanding of specific multi-year preparedness priorities and related activities that address those priorities.

These inputs are used to develop the Integrated Preparedness Plan (IPP), a key outcome of the Workshop (Reference Appendix B - Central City and Liberty County Integrated Preparedness Plan). In this way, you can use the Integrated Preparedness Planning Workshop to set a strong vision for exercise program management. Good luck!

Visual 18: Program Reporting

- Provide data to support preparedness assessments and reporting requirements (grant or funding related)
- Analysis of exercise-specific trends used to inform senior leaders of program progress
- Support modification of program goals and schedule, as required, based on lessons learned in previous exercises
- Developed/Updated periodically

Key Points

Program reporting is intended to provide senior leaders with the analysis of issues, trends, and key outcomes from all exercises conducted as part of the exercise program, along with a continuous update on corrective actions. To help ensure that exercise program priorities are adequately addressed, Program Managers should periodically develop/update and distribute a report to senior leaders updating the status of identified issues and corrective actions.

The rolling summary report is one example of program reporting and is not a collection of AARs, but rather an analysis of trends across exercises. It is developed/updated periodically throughout the series of exercises completed as part of an IPP (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.

This report is designed to:

- Inform senior leaders on the progress of the exercise program
- Provide data to support preparedness assessments and reporting requirements
- Enable exercise planners to modify objectives and the exercise schedule as required to reflect knowledge gathered from the exercises

Visual 19: Exercise Program Resources

- Exercise budget management maintains awareness of available resources and expected expenditures
- Program staffing requirements include administrative and operational staffs
- Other resource considerations should be considered to support all exercises

Key Points

An effective exercise program should utilize the full range of available resources. Program managers should also ensure they have planned for an exercise budget, program staffing, and other program support 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 and determine what expected expenditures will be associated with the exercises.

Program Staffing

Program managers should identify the administrative and operational staff needed to oversee the exercise program and to carry out the necessary exercises to improve capabilities across the whole community. The IPP can be the 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 as:

- Information technology (e.g., modeling and simulation capabilities)
- Subject Matter Experts (SMEs)
- Exercise tools and resources (e.g., document templates)
- Materials from previous exercises
- Training courses
- Mutual Aid Agreements, Memoranda of Understanding (MOU), and Memoranda of Agreement (MOA)
- Technical assistance
- Equipment or props (e.g., smoke machines)

Visual 20: Module 2: HSEEP Program Management Summary

In this module, we have discussed:

- The importance of exercise program priorities to HSEEP program management
- The processes and products of Integrated Preparedness Planning to develop a multi-year schedule of preparedness activities
- How to develop a comprehensive and integrated exercise program and manage exercise program resources

In Module 3, you will learn about HSEEP Exercise Design and Development.

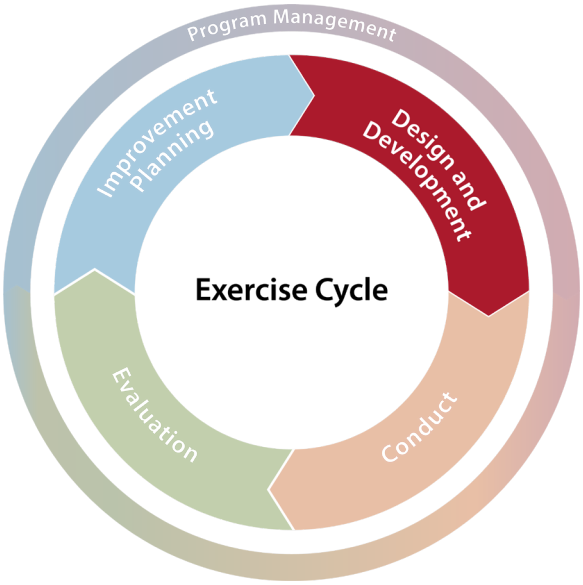
Key Points

- The components of the Integrated Preparedness Cycle provide a foundation for identifying Exercise Program Priorities and how they are used in HSEEP Program Management.
- The importance of engaging Senior Leaders in identifying priority capabilities to be addressed through a comprehensive and integrated series of preparedness activities and exercises.
- The purpose of an Integrated Preparedness Planning Workshop (IPPW) and how stakeholders work together for development of the Integrated Preparedness Plan (IPP) and multi-year schedule of preparedness activities.

Module 3: Exercise Design and Development

Visual 1: Module 3: Exercise Design and Development

Lesson 1: Exercise Foundation
Lesson 2: Exercise Planning Team
Lesson 3: Exercise Design
Lesson 4: Exercise Development



The HSEEP Exercise Cycle

Key Points

In the design and development phase of HSEEP, exercise practitioners use the intent and guidance provided by the sponsoring jurisdiction's/organization's senior leaders, elected and/or appointed officials, the exercise program priorities, and the existing Integrated Preparedness Plan when designing individual exercises. Exercise planning teams apply guidance from senior leaders to shape the major concepts and planning considerations for an individual exercise or series of exercises.

The steps of exercise design and development are discussed throughout the following lessons:

Lesson 1 will highlight the exercise foundation and planning activities most useful when designing and developing your exercise

Lesson 2 will discuss the considerations of an exercise planning team and a possible organizational structure

Lesson 3 will describe the major components of exercise design

Lesson 4 will identify components of exercise development which includes logistics, facilitation, and control

Exercise planners apply and adapt the HSEEP doctrine to exercise design and development to meet specific needs.

Visual 2: Lesson 1: Exercise Foundation

Exercise Foundation is:

- Set of components that drive the exercise design and development process
- Preparedness Priorities are developed from the Integrated Preparedness Cycle

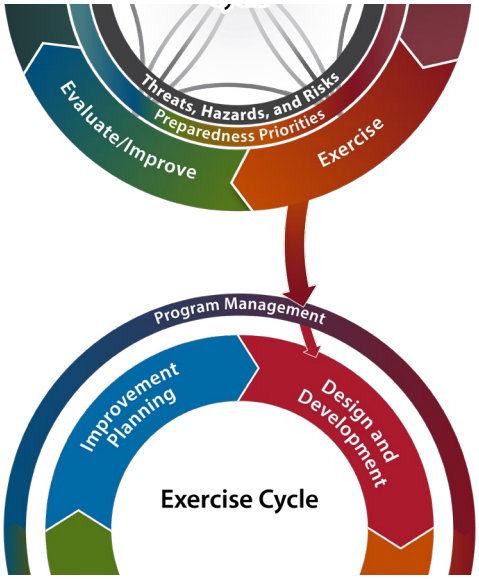


Figure 3.1: Individual Exercise Design and Development Process, pg. 3-1

Key Points

The exercise foundation is a set of components that drive the exercise design and development process. The program manager considers the preparedness priorities from the Integrated Preparedness Cycle as outlined in the Integrated Preparedness Plan to design and develop individual, or a series of, exercises.

This figure shows how the preparedness priorities from the Integrated Preparedness Cycle feed into the Program Management piece of the Exercise Cycle and then further into the design and development of individual exercise.

Prior to the beginning of its design, exercise program managers should review and consider the following key items to set the foundation for an individual exercise:

- Senior leader intent and guidance
- Integrated Preparedness Plan (IPP)
- Jurisdiction's/Organization's existing plans, policies, and procedures
- THIRA or other risk, threat and hazard assessments
- Stakeholder Preparedness Review or other capability assessments
- Program reports from the exercise program manager
- Any relevant AAR/IPs from real-world incidents and exercises
- Grant or cooperative agreement requirements

By reviewing these items, exercise program managers can ensure the exercise is aligned with the preparedness priorities and is built using the POETE elements to sustain a

jurisdiction's/organization's capabilities while taking prior lessons learned into account in the exercise design process.

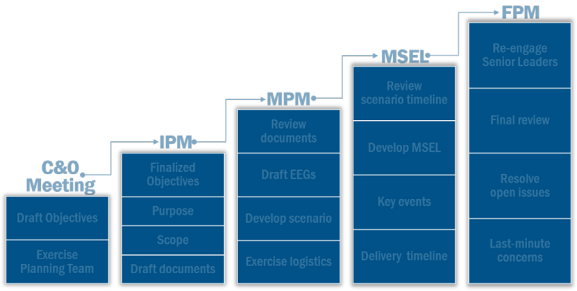
Once the planning team has been selected and convened, they will begin the design process with a review of information collected during the foundational phase. This is done to ensure each exercise adheres to the progressive approach and is designed with the appropriate level of scope and complexity within the range of exercises described in the Integrated Preparedness Plan (IPP).

Senior leaders should be engaged as necessary throughout the design process to clarify and validate the exercise plan aligns with their intent and guidance.

Reference: Figure 3.1: Individual Exercise Design and Development Process, HSEEP Doctrine January 2020, pg. 3-1.

Visual 3: Exercise Planning Activities

- Exercise planning activities contribute to the development of each exercise.
- These activities include the different types of planning meetings and their associated tasks.



C&O, IPM, MPM, MSEL, FPM Meetings

Key Points

Exercise planning activities contribute to the development of each exercise. The activities include the different type of planning meetings and the tasks associated with each. Planning Meetings are held to discuss, review, or develop exercise content. They are structured events or forums for completing the major milestones of exercise design and development. They are typically face-to-face meetings and are crucial in both the initial and final stages of exercise development yet not all meetings may be used for every exercise.

Developing an exercise is an intensive process, so these planning meetings are important for discussing, reviewing, or developing content. Not all the work of developing an exercise can be done during these meetings, but these are a good place to assess progress, assign responsibilities, review completed work and establish deadlines.

Typically, the exercise planning team is formed following the Concept and Objectives (C&O) Meeting. At that time, the exercise planning team collaborate to facilitate the exercise planning process. Face-to-face meetings are a forum for coordination and collaboration among participating agencies, jurisdictions/organizations, and leaders. It often brings together partners who have never worked together, but by the end of the exercise, relationships may have developed which are important not only for planning a successful, engaging exercise, but also for increasing the ongoing coordination and collaboration among these participating agencies, jurisdictions/organizations, and senior leaders.

Exercise Planning Teams are encouraged to apply and adapt HSEEP doctrine to meet their specific exercise needs. HSEEP does not specify planning timelines, and planning team members must determine what timeframes are best to meet their specific needs.

Suggested Practice: You can use the Master Task List found on PrepToolkit as the basis of the exercise timeline-it makes it easier to assign responsibilities to team members without forgetting any of the critical design and development.

Reference: Master Task List in FEMA's Preparedness Toolkit: https://preptoolkit.fema.gov/web/hseep-resources/design-and-development

Visual 4: Concept and Objectives (C&O) Meeting

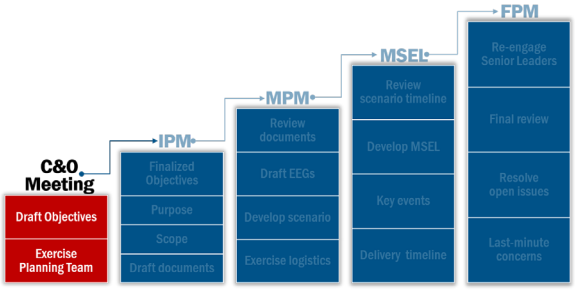


Table 3.1: Concepts & Objectives (C&O) Meeting, pg. 3-2

Key Points

The Concept and Objectives (C&O) Meeting, when held, marks the formal beginning of the planning process.

The C&O Meeting should be held BEFORE the IPM whenever the scope dictates, such as for large-scale exercises, complex full-scale exercises (FSEs), or any high-profile exercise where high level support from executives or authorities is needed. For less complex exercises and for jurisdictions/organizations with limited resources, the C&O Meeting can be conducted in conjunction with the Initial Planning Meeting (IPM) which will be discussed next.

Participants for the C&O Meeting will typically include senior leaders, representatives of the sponsoring jurisdiction/organization, any participating jurisdictions/organizations, and the Exercise Planning Team Lead.

Elements of the C&O Meeting include items such as:

- Discussion Points which include defining the exercise scope, developing draft objectives and aligning them to capabilities, and talking through exercise logistics.
- The tools for the C&O Meeting include providing an agenda and a C&O Meeting brief to highlight the background information for the exercise.
- Some of the outcomes from the meeting should include the exercise concept, exercise timeline, and additional meeting dates.

As with all planning meetings, you should follow-up with all participants and provide a copy of the meeting minutes, information about any upcoming timelines, and any documentation that was developed.

In-Progress Reviews (IPR) can take place between each of the planning meetings as needed. Frequent and productive coordination within the Exercise Planning Team in the time between planning meetings is critical to successful project management and can help the next meeting run more efficiently. The Planning Team Lead should encourage direct and continual contact among all team members and request periodic progress reports to identify outstanding information that may be required, ensure that all tasks and assignments are on track for future planning meetings, and confirm that all deadlines for documents and any other requirements are going to be met.

During this period, the exercise planning team members prepare their assigned draft exercise documents and presentations. To ensure productivity during the next planning meeting, team members should distribute their assigned document drafts to the team in advance of the next meeting so members can review and come prepared to provide comments and recommendations.

This table can be used to set the ground rules for the meeting as well as a checklist to ensure that needed information is addressed.

Meeting graphics are a high level representation and do not include all activities conducted during the meetings.

Reference: Table 3.1: Concepts & Objectives (C&O) Meeting, HSEEP Doctrine January 2020, pg. 3-2.

Visual 5: Initial Planning Meeting (IPM)

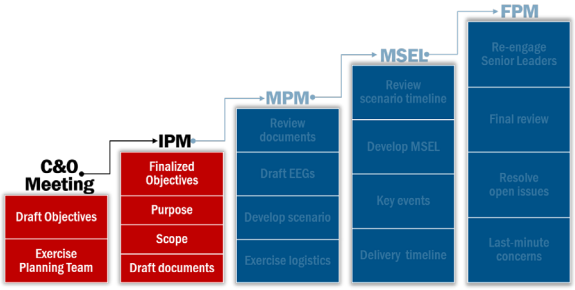


Table 3.2: Initial Planning Meeting (IPM), pg. 3-3

Key Points

The Initial Planning Meeting (IPM) marks the beginning of the exercise design process and focuses on refining the scope and the objectives for the exercise. For less complex exercises and for jurisdictions/organizations with limited resources, the C&O Meeting can be conducted in conjunction with the IPM.

The IPM develops/refines the exercise scope and objectives by getting intent and direction from senior leaders and gathering input from the exercise planning team. The IPM also identifies exercise design requirements and conditions (e.g., assumptions and artificialities), participant extent of play, and scenario variables (e.g., time, location, hazard selection).

Elements of the IPM include:

- Discussion Points like clearly defining objectives and aligned capabilities, evaluation requirements, scenario, and any discussion points typically covered during a C&O Meeting if one was not conducted.
- The tools for the IPM are items such as a Read-Ahead Packet (agenda, capabilities, hazard and risk assessments, etc.) and an IPM brief to present an overview of the exercise and meeting discussion points.
- Typical outcomes from the IPM will include items such as scenario variables (threat, scope, venue, conditions), clearly defined objectives, and a refined exercise planning timeline.

Because face-to-face time at the planning meetings is limited, providing meeting minutes and additional materials ahead of time gives participants a chance to formulate ideas and come prepared to contribute to the effort, thus increasing productivity of the time available during face-to-face sessions.

Reference: Table 3.2: Initial Planning Meeting (IPM), HSEEP Doctrine January 2020, pg. 3-3.

Visual 6: Midterm Planning Meeting (MPM)

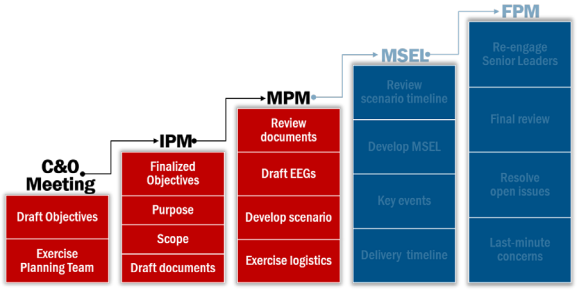


Table 3.3: Midterm Planning Meeting (MPM), pg. 3-4.

Key Points

MPMs provide additional opportunities to re-engage senior leaders and to settle logistical and organizational issues that may arise during exercise planning. It is a continuation of exercise development and ensures alignment with Senior Leader guidance and intent.

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 Master Scenario Events List (MSEL), as needed. See the next section, MSEL Meeting, for more information.

Participants for the MPM will typically include senior leaders, representatives of the sponsoring jurisdiction/organization, any participating jurisdictions/organizations, and the exercise planning team.

Elements of the MPM include:

- Discussion Points which include constructing the scenario timeline, identifying venue artificialities and/or limitations, review of the draft documentation, and agreement on final logistical items.
- The tools for the MPM include providing an agenda, minutes from the IPM, draft documentation, and a brief to highlight background information for the exercise.
- Some of the outcomes from the meeting should include revised exercise documentation, well-developed scenario and timeline, any logistics, and additional meeting dates and times.

Reference: Table 3.3: Midterm Planning Meeting (MPM), HSEEP Doctrine January 2020, pg. 3-4.

Visual 7: Master Scenario Events List (MSEL) Meeting

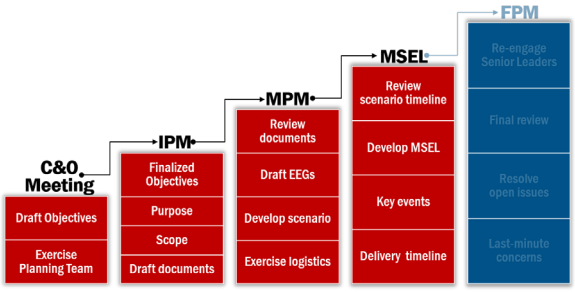


Table 3.4: Master Scenario Events List (MSEL) Meeting, pg. 3-5

Key Points

The MSEL Meeting focuses on developing the MSEL, which is a chronological list that supplements the exercise scenario. The MSEL includes an event synopses, expected participant responses, objectives and capabilities to be addressed and the responsible person to implement the inject(s).

The MSEL also includes specific scenario events (injects, contingency injects, or expected player actions) 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 the injects (e.g., phone call, radio call, e-mail).

For more complex exercises, one or more additional planning meetings—or MSEL Meetings—may be held to review the scenario timeline and build the MSEL. The MSEL is used to replicate those jurisdictions/organizations, agencies, or departments that cannot participate during the exercise. If not held separately, topics typically covered in a separate MSEL Meeting can be incorporated into the MPM and/or FPM.

Elements of the MSEL Meeting include:

- Discussion Points, which identify the tasks, conditions, and standards required to meet objectives, key events and critical tasks, and what type of MSEL events are needed to drive exercise play.
- The tools for the MSEL Meeting include providing an agenda, previous meeting minutes, draft exercise documentation, and an agreed upon template for the MSEL.
- Some of the outcomes from the meeting include a scenario timeline and events (injects, contingency injects, or expected player actions) that prompt player actions, venue selection agreement (if necessary), and logistical planning requirements (to support the scenario).

Early identification of the MSEL template or system should be done prior to the MSEL Meeting taking place. Later in the module there is an activity on practicing MSEL development.

Reference: Examples of a MSEL template or system can be found at: https://preptoolkit.fema.gov/web/hseep-resources.

Reference: Table 3.4: Master Scenario Events List (MSEL) Meeting, HSEEP Doctrine January 2020, pg. 3-5.

Visual 8: Final Planning Meeting (FPM)

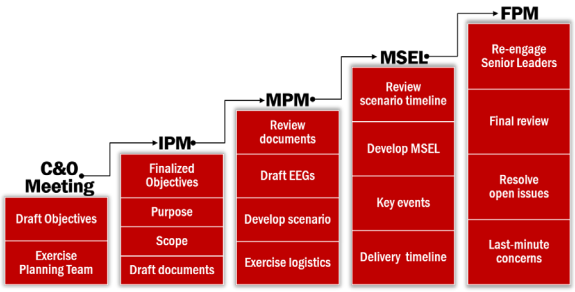


Table 3.5: Final Planning Meeting (FPM), pg. 3-6.

Key Points

The Final Planning Meeting (FPM) is the final forum for reviewing exercise processes and procedures. Both before and after the FPM, the Exercise Planning Team Lead should engage senior leaders to ensure that the exercise is aligning with their intent, address any questions, and receive any last-minute guidance.

An FPM should be conducted for all exercise 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 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.

Elements of the FPM include:

- Discussion Points which include but not limited to conducting a comprehensive final review, approve all remaining draft documents, and resolve and open planning issues.
- The tools for the FPM include providing an agenda; meeting minutes from the C&O Meeting, IPM, MPM, and MSEL Meeting (if one was conducted); draft exercise documentation, and any previously finalized documents.
- Some of the outcomes include final approval of exercise documents, identified issues resolved, task assignments, and logistical elements for the exercise.

Prior to conduct of the exercise, the Exercise Planning Team ensure that logistics are confirmed, and all exercise products are ready for printing.

Reference: Table 3.5: Final Planning Meeting (FPM), HSEEP Doctrine January 2020, pg. 3-6.

Visual 9: Lesson 2: Exercise Planning Teams

The Exercise Planning Team:

- Responsible for exercise design, development, conduct, and evaluation
- Manageable size
- Representation of participating stakeholders

Key Points

For each exercise offering, the design and development process is initiated with selection of the Exercise Planning Team.

The exercise planning team manages and is responsible for exercise design, development, conduct, and evaluation of an exercise. The membership of an exercise planning team fits the type and scope of an exercise and is a manageable size yet represent the full range of participating jurisdictions/organizations as well as other relevant stakeholders.

For multi-jurisdictional/organizational exercises, planning team members should include representatives from each jurisdiction's/organization's functional areas or relevant disciplines and who would normally be involved in the focus area activities to be evaluated during the exercise.

When selecting team members, it is important to incorporate Whole Community stakeholders, including support jurisdiction/organizations, advocates for children, seniors, individuals with disabilities, those with access and functional needs, diverse communities, and people with limited English language proficiency. In doing so, exercise planners incorporate a broad set of perspectives and promote early understanding of roles, responsibilities, and planning assumptions.

Subject Matter Experts (SMEs) can be called upon to fulfill any of the roles in the exercise planning team structure. SMEs add expertise to the planning team and provide functional knowledge for player-specific tasks to be evaluated. They help make the scenario realistic and

plausible and ensure appropriate evaluation of capabilities. SMEs may also provide local insights to make the scenario come alive for participants and to make sure the exercise remains within reasonable and realistic scope based on local response capabilities.

For example, a biological exercise would have a large role for hospitals and public health departments, but care must be taken not to overwhelm these assets when these entities are asked to participate in a full-scale exercise (FSE). This is one of the reasons early engagement of private sector organizations typically involved in real-world incidents is important to the exercise planning process and design of the exercise.

Depending on the exercise type, some SMEs may be called upon to play a more active role in designing the exercise and planning the scope and conduct than others. For example, Public Health SMEs would provide functional knowledge necessary for creating scenario and event injects for a natural disaster.

Since every exercise is designed as a testing process intended to validate the selected capability, it is important that every member of the Exercise Planning Team understands their role as a "**Trusted Agent".** Typically, planning team members are not exercise players. With limited resources, exercise planning team members may act as both planners and players but must be careful not to divulge sensitive information.

As a Trusted Agent, each member is expected to maintain the integrity and confidentiality of the intended evaluation process for the exercise. Team members must not reveal details or provide insights into the scenario to players or other personnel who are not members of the planning team.

Visual 10: Exercise Planning Team

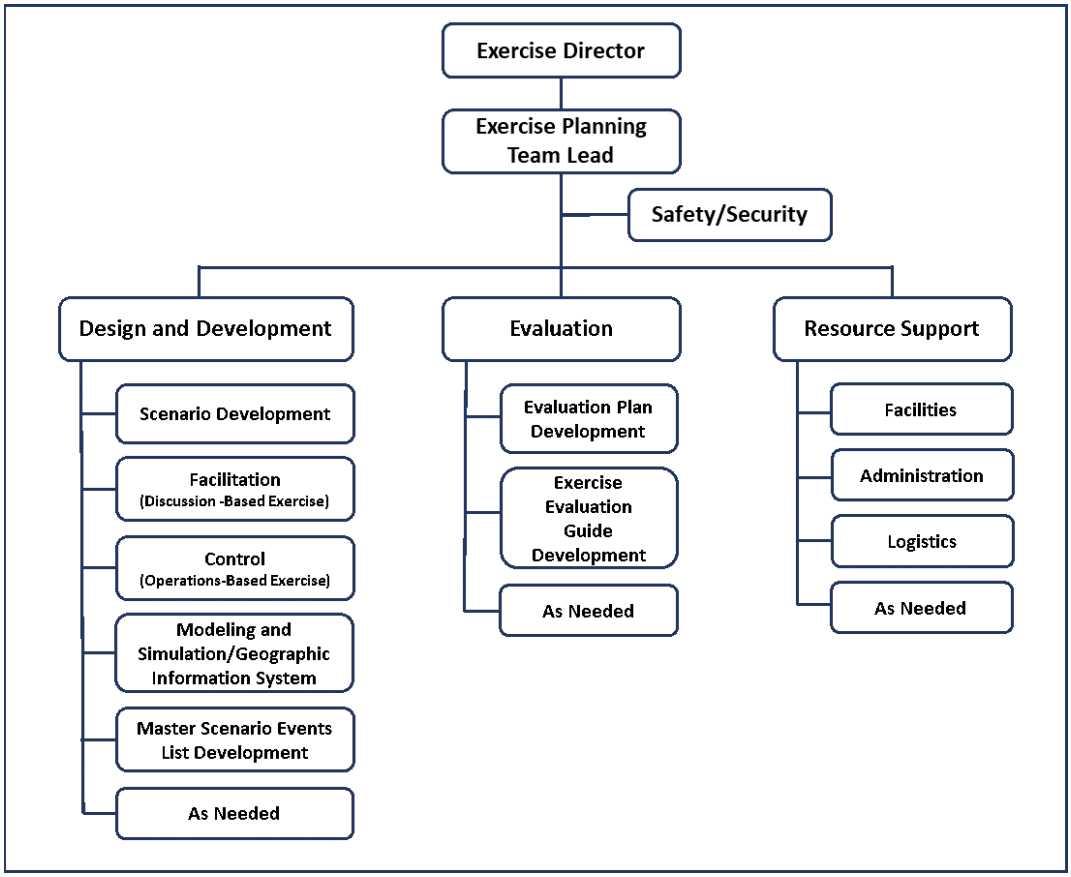


Figure 3.2: Example of a Functional Organizational Structure for an Exercise Planning Team, pg. 3-8

Key Points

Regardless of the scale and complexity of an exercise, an Exercise Planning Team is most effective when it adheres to a coherent organizational structure that clearly delineates roles, responsibilities and functional requirements for each role/position on the planning team. An Exercise Director provides strategic oversight and direction to the Exercise Planning Team Lead. The Exercise Planning Team Lead manages the exercise planning team.

In developing a structure, the Exercise Director considers adequate span of control and requirements needed for the exercise type. The same personnel may fulfill multiple roles, depending on available resources. One way to support exercise functions is the organizational structure shown which can vary to reflect the scope of the exercise and the available resources and personnel available to support the design and development, conduct, and evaluation of the exercise.

The Design and Development function is responsible for compiling and developing all exercise background and facilitation/control, scenario development, simulation construct, and MSEL development.

The Evaluation Function leads the development of all requirements for evaluation of the exercise. The Lead Evaluator is assigned as part of the Exercise Planning Team and will work with the Exercise Planning Team Lead to determine all aspects of evaluation. Any additional members of the evaluation team will support by developing all evaluation documentation and the selecting and training of evaluators during conduct of the exercise.

The Resource Support Function is responsible for all things logistics, finance, and administrative. This function is responsible for all exercise document development, venue locations for planning meetings and exercises, and budgeting.

Using the exercise program priorities and guidance from senior leaders, the team conducts a series of planning meetings to determine the exercise objectives and capabilities that will be assessed during exercise play. To design and develop exercises most effectively, exercise planning teams:

- Identify and understand the desired objectives and associated capabilities for the exercise
- Adhere to a clear organizational structure with roles and responsibilities
- Use proven project management practices, processes, and tools (project plans and timelines, status reports, etc.)
- Incorporate evaluation planning and SMEs during design and development
- Use SMES to develop realistic and challenging scenarios
- Identify the type of security clearance levels needed (if required)

The Exercise Planning Team must develop Exercise Evaluation Guides (EEGs) to assess a jurisdiction's/organization's ability to meet its capability targets. EEGs provide a consistent tool to guide exercise observations and data collection.

Reference: Figure 3.2: Example of a Functional Organizational Structure for an Exercise Planning Team and Table 3.6: Functions of an Exercise Planning Team in HSEEP Doctrine January 2020, pg. 3-8 and 3-9.

Visual 11: Lesson 3: Exercise Design

The exercise design process is used to:

- Select the exercise type based on the purpose and scope
- Develop exercise objectives
- Identify specific tasks and performance criteria for objectives
- Develop a scenario and its supporting elements

Key Points

The core components of exercise design include identifying the exercise type by clarifying the purpose and scope, developing the exercise objectives, identifying the evaluation parameters and specific tasks to be validated, creating a scenario and supporting documentation, and determining media and public affairs guidance. The exercise planning meetings serve as the principal mechanism for completing the major steps of exercise design.

The purpose of the exercise derives from a set of key factors determined from:

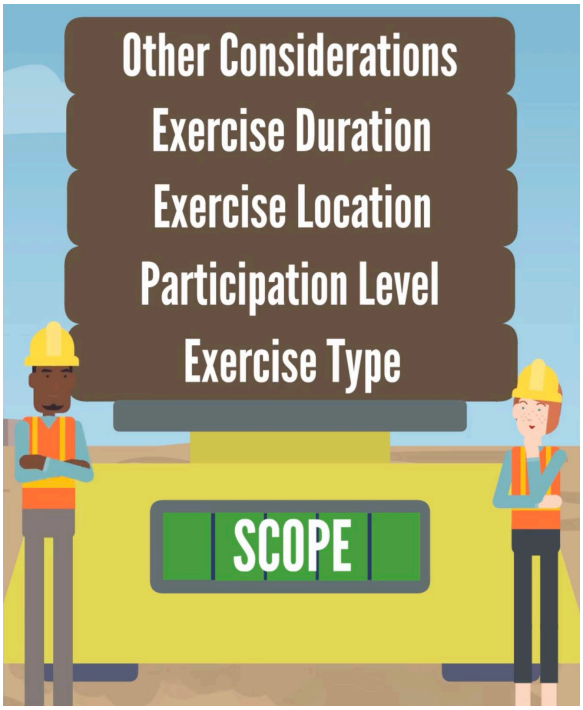
- The Integrated Preparedness Plan
- Any existing plans, policies, and procedures
- THIRA or other threat, hazard, or risk assessments
- Any past exercise or real-world After-Action Reports/Improvement Plans (AAR/IP)
- Any grant or cooperative agreement requirements

A review of the factors ensures the exercise builds and sustains a jurisdiction's/organization's capabilities while taking prior circumstances into consideration during the exercise design process. Once the review is complete, each exercise is designed to meet the intent of the exercises within the Integrated Preparedness Plan (IPP).

Visual 12: Scope

Scope involves elements such as:

- Exercise type
- Duration
- Location
- Other considerations



Key Points

Determining exercise scope enables planners to "right-size" an exercise to meet the objectives while staying within the resource and personnel constraints of the participating jurisdictions/organizations. Key elements in defining exercise scope include exercise type, participation level, exercise duration, exercise location, and other considerations. 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 planners select the **exercise type** that is appropriate to the targeted capability process. A comprehensive, integrated exercise program will utilize a progression of exercise types chosen so that when done in series they address program priorities by assessing the full range of preparedness activities for each focus area—from underlying procedural concepts through full mobilization of stakeholder organizations.

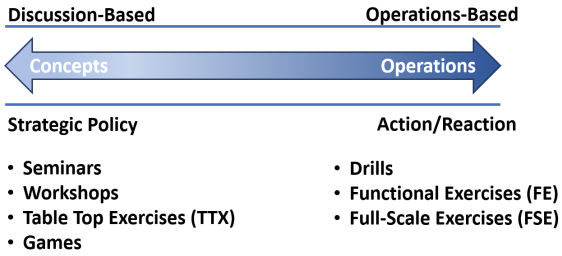
Participation level refers to the jurisdictions/organizations and level of personnel (e.g., tactical operators, line supervisors, agency directors) participating in the exercise, as well as the general number of personnel also participating.

Duration should be determined by how long it will take to address the exercise objectives effectively. Resource constraints, including the opportunity cost of having employees away from their primary roles, should be factored into determining duration.

Locations suitable for the exercise should be discussed and decided on as the location chosen can necessitate limiting the scope or defining artificialities required to simulate real-world events.

The **other considerations** describe the activities that will be included in the exercise in order to meet planning and training requirements. These describe the scope of exercise activities that will keep the exercise to a manageable and realistic level.

Visual 13: Exercise Types



Discussion-Based and Operations-Based Exercises

Key Points

As we discussed in Module 2, the IPPW is where the foundation for the planning, conduct, and evaluation of individual exercises is established. Once an individual exercise is ready for design, the 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, skills and abilities in implementing a plan, policy, or set of procedures, an FE or FSE may be appropriate.

Exercise planners select the exercise type that is appropriate to the capabilities and risks that will be the focus of the exercise. A comprehensive, integrated exercise program will utilize a progression of exercise types chosen so that when done in series they address program priorities by assessing the full range of preparedness activities for each mission area—from underlying procedural concepts through full mobilization of stakeholder organizations.

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

Operations-based exercises are characterized by actual reaction to an exercise scenario designed to simulate a real-world event and may involve actual mobilization of personnel and resources. Operations-based exercises include drills, functional exercises (FEs), and full-scale exercises (FSEs). These are used to validate functional response actions where plans, policies, agreements, and procedures are implemented "as if" responding to actual incident. They are used to validate appropriateness of player actions based on assigned roles and responsibilities and are used to identify resource gaps across the scope of response—including the policy and planning basis that sets forth standard operating procedures followed during response activities.

As you may expect, due to their scope and complexity the level of support and time needed to plan, design, develop and conduct operation-based exercises is considerably greater than those required for discussion-based exercises.

Visual 14: Exercise Participation Level

Defined by:

- Jurisdictions/Organizations and levels of personnel required to address identified objectives
- Available resources and positions of personnel participating
- Right size and duration to meet objectives
- Compatible with venue location

Key Points

Active participation by appropriate entities and key leaders is paramount to meeting the exercise objectives successfully. Participation level refers to the jurisdictions/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.

At times, scheduling conflicts, real-world events, or other competing requirements will limit an jurisdiction's/organization's or key players' ability to participate in an exercise. In this case, exercise designers need to simulate the decisions and actions of those participants through an exercise SimCell.

An Extent of Play Agreement (XPA) is a good way to define the level of participation.

Visual 15: Extent of Play Agreement (XPA)

The Extent of Play Agreement (XPA) is used to identify the conditions that will be used to develop, conduct, control, and evaluate the exercise.

A written agreement amongst the participating jurisdictions/organizations and the Exercise Director.

Key Points

Extent of Play Agreements (XPA) are used to define the jurisdictions/organizations participating in the exercise as well as their extent of play (e.g., one fire station for eight hours, county 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.

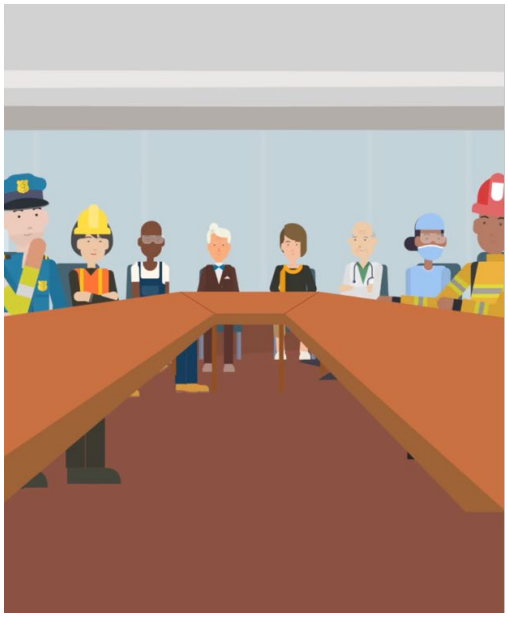
XPAs are not legal binding documents, they reflect the commitment of a participating jurisdiction/organization and their willingness and to what level they are agreeing to play in the exercise.

XPAs provide the exercise planning team the information needed to determine the amount of logistics needed for an exercise, how many evaluators will be needed based on the number of venues, the development of the MSEL, and the timeline for the exercise. The more participants involved, the more complex the exercise is and how much planning will be required.

Reference: See the example of an Extent of Play Agreement (XPA) in Appendix B.

Visual 16: Exercise Locations

The exercise location will vary depending on the exercise type.



Key Points

The exercise location is based on the exercise type. For discussion-based exercises, the location is typically a building with one or more rooms available to hold a plenary session as well as break-out rooms should they be needed.

Operations-based exercises will require more room for personnel to implement their response actions based on the exercise scenario. A Full-Scale Exercise (FSE) may require multiple venues based on the type and number of jurisdictions/organizations participating in the exercise. Operations-based exercises can be staged in an actual environment or simulated if the environment is too dangerous to stage. For example, responding to an anhydrous ammonia spill would be simulated to protect all involved.

Exercise areas for operations-based exercises need to be clearly defined, with exercises taking place within the designated areas. For instance, Functional Exercises (FE) typically take place in a command or control center. Any additional activity for an FE is simulated by staff in the SimCell.

Visual 17: Exercise Duration

Exercise duration is based on how long the exercise planning team determines it will take to address the exercise objectives.

Other considerations may influence the exercise.

Key Points

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.

Other considerations to consider are establishing exercise parameters which assist planners in identifying 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 to meet diverse planning and training requirements. While these activities may be useful to an organization or jurisdiction, 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.

Visual 18: Exercise Objectives

- A description of the performance expected from participants.
- Specifically conveys how the exercise should achieve its purpose.

Figure 3.3: Priorities, Objectives, and Capabilities, pg. 3-11

Suggested Practice: Limit the number of objectives to those that can be reasonably addressed and evaluated during exercise conduct.

Key Points

Exercise objectives are the distinct outcomes a jurisdiction/organization wishes to achieve during an exercise. An exercise objective is a description of the performance expected from participants and specifically conveys how the exercise should achieve its purpose. Objectives are driven by the exercise program priorities and establish the cornerstone of scenario design, development, conduct, and evaluation.

Based on direction from senior leaders, 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. Exercise objectives should incorporate senior leaders' intent and guidance; exercise participants' plans, policies, and procedures; operating environment; corrective actions from previous exercises and real-world events; 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.

As the figure shows, objectives are aligned to a common set of capabilities which enables:

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

In order to tie objectives to the capability targeted by your exercise, you should:

- Select/identify the capability based on the type and scope of the intended exercise - the capability that your jurisdiction decided to focus on at the Initial Planning Meeting (IPM)
- Identify the associated activities, capability targets, necessary to address the capability
- For each activity, identify the critical tasks that must be successfully undertaken to demonstrate the capability

- For each of these tasks, identify the condition, actions that demonstrate task proficiency and incorporate any jurisdiction-specific action or SOP - these provide the observation keys evaluators would focus on in order to determine successful completion of the tasks
- Identify the performance standard that defines the measure or criteria used to create a performance statement describing how the task/activity is to be demonstrated and evaluated

Capability targets are the performance thresholds for each capability addressed during the exercise. They provide a benchmark for the whole community to track progress over time. Critical tasks are the actions needed to achieve the capability target. More about Capability Targets and Critical Tasks is cover in Module 5: Evaluation.

This analysis provides the information required to develop objectives that meet the characteristics of SMART objectives described next.

Suggested Practice: Limit the number of objectives to enable exercise conduct, facilitate reasonable scenario design, and adequately support successful completion of exercise goals.

Reference: Figure 3.3: Priorities, Objectives, and Capabilities, HSEEP Doctrine January 2020, pg. 3-11

Visual 19: SMART Exercise Objectives

SMART is an acronym used to identify the characteristics of good objectives.

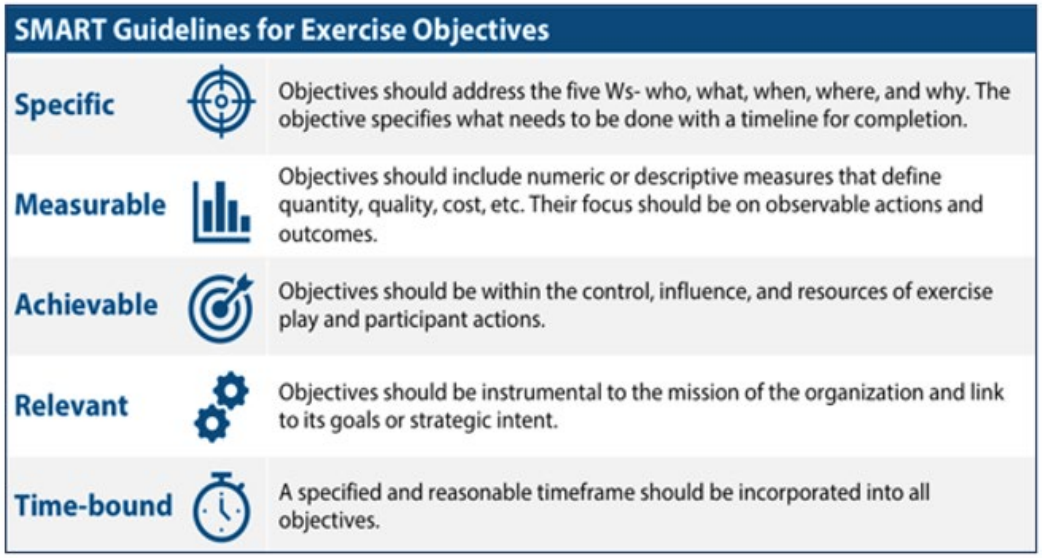


Figure 3.4: SMART Guidelines for Exercise Objectives, pg. 3-12

Key Points

An objective should state who should do what under what conditions, according to which standards. The **SMART** acronym can be used to create objectives.

The SMART Model for development of objectives stands for:

- **Specific—**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.
- **Measurable—**Objectives should include numeric or descriptive measures that define quantity, quality, cost, etc. Their focus should be on observable actions and outcomes.
- **Achievable—**Objectives should be within the control, influence, and resources of exercise play and participant actions.
- **Relevant—**Objectives should be instrumental to the mission of the organization and link to its goals or strategic intent.
- **Time-Bound—**Objectives must include specified and reasonable timeframes where appropriate for completion of associated task(s) that will determine satisfactorily completion.

Performance objectives should describe what players should know or do under specific conditions in response to an event, real-world or within an exercise scenario. Each objective should support the overall purpose of the planned exercise.

As previously mentioned, limit the number of objectives to those that can be reasonably addressed and evaluated during the exercise.

Reference: Figure 3.4: SMART Guidelines for Exercise Objectives, HSEEP Doctrine January 2020, pg. 3-12

Visual 20: Creation of Objectives

The elements of a good SMART objective include:

- An action statement to describe the tasks to be performed
- A condition by which the tasks must be performed
- A performance statement that lists what must be accomplished
- A criteria statement which measures the achievement of the objective

Key Points

When developing objectives, it helps to first consider the **specific tasks related to the capability to be tested** and determine an **observable action verb** that describes each task. Examples of action verbs for objectives are demonstrate, identify, assess, or validate.

In keeping with the specific aspect of SMART objectives, the next item to identify is the **condition** by which the task must be performed. This establishes the **expected skill,** knowledge, tool, or SOP the player/responder is expected to demonstrate knowledge of in performance of the task.

The **performance statement** describes what the player/responder must be able to accomplish overall by using the knowledge/skill and task actions required to meet the objective.

The **criteria statement** describes the particular criteria within the performance of the tasks that is used to measure the achievement of the overall objective. It's often not enough simply to know how to do a task; it's often critical to know ***"how well"*** or within ***"what timeframe"*** the task must be completed to fulfill the objective.

After each of these elements have been identified, the performance objectives can be created -- usually starting with the **performance statement** that identifies the ultimate goal of the objective -- and using each identified element, creating an objective that specifically describes the observable and measurable tasks, conditions and criteria required to successfully fulfill the objective.

Let's take a look at a few examples of discussion-based and operations-based objectives.

Visuals 21 & 22: Discussion-Based Exercise Objectives

Examples:

Assess Central City's existing response plan for incident command activation of essential HazMat personnel during a chemical incident to ensure alignment with NIMS and HazMat Response criteria.

Review and analyze the Central City EOC's current activation levels for a Category 4 Hurricane event in accordance with the Central City Basic Emergency Operations Plan.

Assess participant's knowledge of Central City's Basic Emergency Operations Plan's linkage to community healthcare surge capacity plans.

Key Points

These examples are SMART objectives created for a discussion-based exercise which focus on strategic plans, or policy-oriented issues. Many discussion-based objectives do not have the "Time-Bound" element of SMART to them. Discussion-based objectives focus on developing or assessing/reviewing plans and they do not have tasks associate with them.

It is important when designing a discussion-based exercise to be sure NOT to select objectives that can only be evaluated during operations-based exercises and require meeting tactical standards such as response times and proper use of equipment.

Visuals 23 & 24: Operations-Based Exercise Objectives

Examples:

Demonstrate the ability of Central City's staff to receive, develop, and disseminate a public alert utilizing Central City's notification system regarding a HAZMAT spill within 15 minutes of initial notification, in accordance with the Communications Annex in the Emergency Operations Plan (EOP).

Demonstrate the ability of Central City/Liberty County Emergency Operations Center (EOC) to coordinate transportation options and routes for the evacuation of citizens, to include those with access and functional needs, to the reunification center, within the first operational period of receiving the initial notification, according to the Central City/Liberty County Emergency Operations Plan (EOP).

Demonstrate Central City/Liberty County EOC process to identify and request resources from private sector partners to support ongoing response operations within the first operational period of receiving the initial notification in accordance with the Central City/Liberty County EOP.

Key Points

Objectives for operations-bases exercises typically focus on integration of multiple entities systems and tactical-level issues.

These are examples of SMART operations-based objectives.

Visual 25: Activity 3: Develop SMART Objectives

Objective: Develop 2 discussion-based and 2 operations-based SMART objectives that identify the specific actions/tasks, and measurement criteria or performance standard designed to demonstrate a capability identified in your IPPW (Activity 2).

These objectives will be used in follow-on activities.

Time: 30 minutes(video, workgroup and report)

Instructions:

- Watch video
- Take core capabilities from Activity 2 - IPPW
- Determine what you want players to do (using jurisdictional data)
- Develop two discussion-based and two operations-based SMART Objectives

Video Link:

Start with Smart Exercise Planning Video

Activity 3: Develop Objectives Video Transcript

This video will highlight three core components of exercise design and planning: establishing the purpose, defining the scope, and setting objectives.

Let's take a look at Ben and Sarah as they begin the planning for an upcoming exercise.

To establish the purpose of an exercise, they will need to review:

- Senior leadership guidance
- Their Integrated Preparedness Plan (IPP)
- Any existing plans, policies, and procedures
- Threat, hazard, or risk assessments
- Related After-Action Reports (AAR)and Improvement Plans (IP); and
- Any grant or cooperative agreement requirements.

By establishing a clear purpose in the beginning, Sarah and Ben provide a clear direction for the exercise planning team to start the design and development process. Exercise planning begins with the Concept & Objectives (C&O) Meeting, where the exercise planning team sets the foundation for the exercise by using the purpose and scope to write draft exercise objectives.

The exercise planning meetings serve as the principal mechanism for completing the major steps of exercise design.

To customize an exercise to meet the objectives while staying within any resource and personnel constraints. Elements they will need to consider while defining scope include:

- Exercise Type
- Participation Level
- Exercise Location
- Exercise Duration
- Other Considerations

Clearly defining the exercise scope early in the design process will help keep the exercise to a manageable and realistic level.

The team will now need to draft exercise objectives. Objectives are specific to each exercise and are the cornerstone of scenario design, development, conduct, and evaluation.

Exercise objectives are outcomes that a jurisdiction/organization wishes to achieve during an exercise. They are informed by preparedness priorities, exercise purpose, and exercise scope.

The key is for the exercise planning team to select a reasonable number of objectives to facilitate effective scenario design, exercise conduct, and evaluation. All objectives Sarah and Ben develop should be specific, measurable, achievable, relevant, and time-bound, or SMART. Let's break this down:

Specific: Objectives should address the five W's—who, what, when, where, and why. The objective specifies what needs to be done with a timeline for completion.

Measurable: Objectives should include numeric or descriptive measures that define quantity, quality, cost, etc. Their focus should be on observable actions and outcomes.

Achievable: Objectives should be within the control, influence, and resources of exercise play and participant actions.

Relevant: Objectives should be instrumental to the mission of the organization and link to its goals or strategic intent.

Time-bound: A specified, and reasonable timeframe should be incorporated into all objectives.

Now that we've seen the guidelines for developing SMART objectives, let's check out an example from Central City!

"Demonstrate the ability of Central City staff to receive, develop, and disseminate a public alert utilizing Central City's notification system regarding a HAZMAT spill within 15 minutes of initial notification, in accordance with the Communications Annex in the Emergency Operations Plan."

Ask yourself: Does the example above answer the 5 W's? Is it measurable? Can the participants achieve it? Is it relevant to Center City responsibilities? Finally, does it have specified timeframes?

With this information you are now well equipped to define the purpose and scope of an exercise and craft your own SMART objectives. Good luck!

Visual 26: Evaluation Parameters

- Developed early in Exercise Design process
- Guide development of scenario and discussion and/or MSEL
- Ties objectives to the exercise program priorities and
- Identifies the **capability targets** and **critical tasks** related to each capability identified as an exercise program priority

Key Points

It is important to develop exercise evaluation requirements early in the design process, as they will guide development of the exercise scenario, discussion questions or event timeline, evaluation documentation, and/or MSEL. Evaluation requirements clearly articulate what will be evaluated during the exercise and how exercise play will be assessed. The objectives that have been developed for the exercise are a key piece in determining those evaluation requirements. This information is documented in the EEGs.

Once the exercise planning team aligns objectives to capabilities, it identifies which capability targets and critical tasks for each capability are being addressed by the exercise.

Capability targets are the performance thresholds for each capability; they state the exact amount of capability that players aim to achieve. Generally, these targets are based on targets identified as part of a jurisdiction's/organization's THIRA or other threat and hazard identification or risk assessment process. Evaluators use these performance thresholds to validate successful completion of critical tasks associated with each capability.

Capability targets establish benchmarks that allow the whole community to track progress over time.

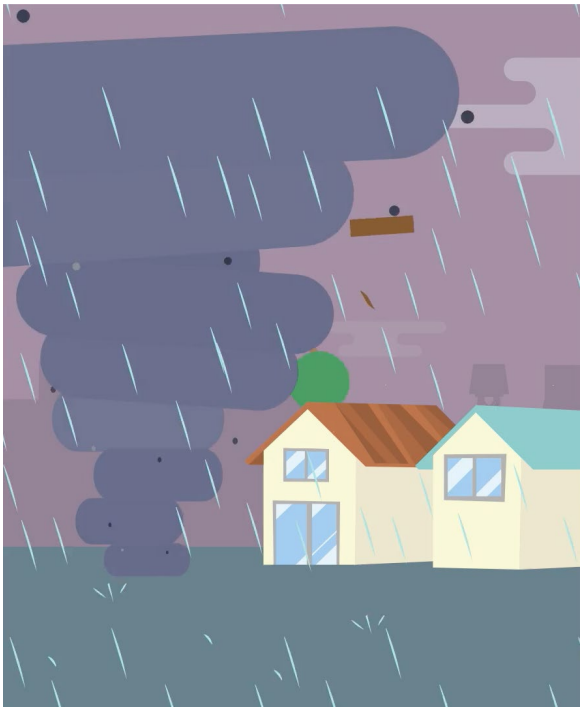
Critical tasks are the distinct elements required to perform a capability. Critical tasks may be derived from a jurisdiction's/organization's operations plans, standard operating procedures, or discipline-specific standards. When determining critical tasks, it is helpful to have SMEs that are familiar with the plans, procedures, or standards identify which tasks need assessed.

The Exercise Planning Team will develop Exercise Evaluation Guides (EEGs) for use by Exercise Evaluators during the exercise. The EEGs are specifically aligned to exercise objectives and capabilities, list the relevant capability targets and critical tasks, and the standards used as a basis for the performance thresholds. Development of EEGs will be covered in Module 5, which describes the Evaluation process in greater detail.

Reference: Chapter 5: Evaluation, HSEEP Doctrine January 2020, pgs. 5-1 through 5-10.

Visual 27: The Exercise Scenario

- Mechanism for meeting exercise objectives
- Can be written as a narrative or depicted by an event timeline
- Scenario should be developed after the scope and objectives have been defined



Key Points

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 and storyline 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 capabilities. All scenarios should be realistic, plausible, and challenging; however, designers must ensure the scenario is not so complicated that it overwhelms players.

Scenarios contain **three basic elements:**

- The general **context or comprehensive story** of the incident event
- **Conditions** that will allow players to demonstrate proficiency and competency in demonstrating the core capabilities and meeting objectives
- **Technical details** necessary to accurately depict scenario conditions and events—including timelines of events that occur across the exercise.

The focus during development is to ensure that the scenario facilitates meeting the exercise objectives. 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 be constructed to avoid any sensitivity that may arise, such as the use of real names of terrorist groups or sensitive venues.

To support the development of the scenario, the exercise planning team should use the Ground Truth document. The Ground Truth is comprised of detailed elements that must remain consistent during development and conduct to ensure that realism is maintained, and objectives can be achieved. For example, 2500 personnel need sheltering due to tornado damage.

Visual 28: Developing an Exercise Scenario

- A story of a credible threat or hazard on which the exercise will focus
- Based on organization's threat/hazard risk assessment
- Identifies focus area(s) targeted and provides exercise context
- May be supported by modeling and simulation
- Supports the ability for the exercise participant to meet exercise objectives

Key Points

The scenario is developed to address the type of threat or hazard selected as the target for the exercise during the design phase. The scenario should be realistic and based on the threat/hazard identified.

Each type of emergency has its own strengths and weaknesses when it comes to evaluating different aspects of preparedness. The exercise planning team should select the scenario topic that best assesses the objectives and capabilities the exercise will focus on.

Utilizing 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 support 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 non-participating 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 the effects a hurricane may have on coastal communities.

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.

The level of detail provided in the scenario should reflect real-world uncertainty and be designed to ensure that the scope of the exercise remains within an appropriate **scope or magnitude** so it can be implemented without overwhelming (or failing to challenge and sufficiently test) local response assets.

The narrative should present the response story by describing the:

- Probable threat/hazard which provides the context within which responders must operate.
- Response objectives developed to demonstrate the capability that describes the activities required to satisfy the capability requirements.

- Expected actions describing the specific tasks related to each objective necessary that would demonstrate proficiency in the related task.
- Technical details that define the requirements or standard by which the evaluation will be made, which will be described in detail in the MSEL.

These identify player activities and decision-making opportunities and are those which must occur to accomplish each objective in order to adequately evaluate the capability.

So, for operational tasks associated with each objective you need to consider:

- What is the action?
- Who is responsible for the action?
- When should the action take place?
- How long should the action take and how much time is actually available?
- What has to happen before?
- What happens after?
- What resources does the person/entity performing the action need?

In other words, work through the scenario in advance to make sure it accomplishes what you want it to and actually tests and validates the intended objectives.

Visual 29: Activity 4: Developing an Exercise Scenario

Objective: Develop a realistic scenario of local significance tied to the SMART objectives developed in Activity 3.

Time: 30 minutes (video, workgroup and report)

Instructions:

- Watch video
- Using the questions on the Scenario Development worksheet to guide your discussion, develop a draft exercise scenario
- Record your responses on the worksheet
- Identify and record jurisdiction-specific information

Video Link:

Setting the Stage: Exercise Scenario

Setting the Stage: Exercise Scenario Video Transcript

In the design and development phase of exercise planning, once the purpose, scope, and objectives have been established, the exercise scenario is developed.

This video will discuss what scenarios are and what role they play in exercise planning.

Scenarios

A scenario is the simulated sequence of events or storyline unique to each exercise. It's the creative situation that sets the scene and allows objectives to be tested and measured. Exercises are scenario-based events. A scenario drives participant discussion or actions and ensures that an exercise is focused and well-defined. Scenarios should be based on the threats, hazards, and risks facing a community to provide realistic and necessary context for participants to test their capabilities.

A scenario can be presented either as a written narrative or depicted by an event timeline and should be realistic, plausible, and challenging, without overwhelming players.

Every exercise scenario should consist of:

- A general context or comprehensive narrative
- The conditions within which players will operate; and
- The technical details necessary to accurately depict scenario conditions and events, such as the date and time of the event

For discussion-based exercises, scenarios are typically written narratives located within the Situation Manual. These set the stage for participants to drive discussion.

For an operations-based exercise, the scenario provides a storyline for exercise players to act within. Scenario information is included in appropriate exercise documentation such as the Exercise Plan, C/E Handbook, and Ground Truth document, and specific events are located in the Master Scenario Events List or (MSEL) *pronounced measle*.

Modeling and simulation can be used by exercise planners to make scenarios more realistic, while also remaining cost-effective. Models are a representation of a real-world system at a point in time or space, intended to increase the understanding of that system.

Simulations are the method of implementing the model.

Modeling and simulation may apply to situations where achieving reality is difficult, such as demonstrating the damage of a tornado track or the path of a hurricane.

Further, through the Simulation Cell, exercise players can interact with organizations who are not directly participating in the exercise.

A well put-together exercise scenario provides the necessary parameters to focus an exercise and ensure that the specific objectives are met.

With this information you are now well equipped to develop an effective exercise scenario.

Good luck!

Visual 30: Exercise Documentation

- Critical to ensure an accurate account of the exercise
- Maintain control and distribution
- Additional considerations to ensure it is accessible to everyone (i.e., closed captioning, sign language, ADA compliant)

Key Points

Comprehensive, organized exercise documentation is critical to ensure an accurate account of the exercise is preserved. This in turn allows jurisdictions/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 planning team to determine security requirements related to sensitive documents including:

- Identification and marking rules and requirements
- Access and dissemination
- Storage
- Disposal
- Incident reporting

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.

HSEEP Sample Materials include templates to assist exercise planners and planning teams in the production of exercise documents.

Reference: Sample Materials, visit: https://preptoolkit.fema.gov/web/hseep-resources.

Visual 31: Exercise Documentation (Discussion-Based)

- Situation Manual (SitMan)
- Player Handout
- Placemats
- Facilitator Guide
- Presentation
- Exercise Evaluation Guides (EEGs)
- Participant Feedback Forms

Key Points

Situational Manual (SitMan)

SitMan 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 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 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
- A list of reference terms or agent

Player Handout

Used to supplement the SitMan and/or presentation by providing players with a quick-reference guide. This is sometimes referred to as a "Placemat"

Placemats

Placemats provide information similar to what you would find in the SitMan. This document is developed to be one- or two-sided with information such as an overview of the exercise, the exercise objectives, the exercise agenda, participants, discussion-questions, and any other information that might be important for the exercise.

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.

Due to the information contained, the Facilitator Guide is not to be distributed to anyone outside the Exercise Planning Team.

Presentation

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 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 Evaluation Guides (EEGs)

EEGs are intended to help evaluators collect relevant exercise observations. These documents are aligned to objectives and documents the related capability, capability target(s), and critical tasks. More information on EEGs will be provided in Module 5: Exercise 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 jurisdiction's/organization's plans, policies, and procedures
- 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 Hotwash 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.

Reference: Table 3.8: Discussion-Based Exercise Documentation in HSEEP Doctrine January 2020, pg. 3-13.

Reference: Sample Materials, visit: https://preptoolkit.fema.gov/web/hseep-resources.

Visual 32: Exercise Documentation (Operations-Based)

- Exercise Plan (ExPlan)
- Player Handout
- Controller/Evaluator (C/E) Handbook
- Evaluation Plan (EvalPlan)
- Master Scenario Events List (MSEL)
- Exercise Evaluation Guides (EEGs)
- Control Staff Instruction (COSIN)
- Participant Feedback Form

Key Points

Exercise Plan (ExPlan)

ExPlans are provided for operations-based exercises to provide 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. 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.

An ExPlan typically contains the following sections:

- Exercise scope, objectives, and 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 ExPlan by providing a quick reference guide to logistics, agenda or schedule, and key contact data for players.

Controller and Evaluator (C/E) 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 stand-alone 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 stand-alone 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)** which is used for large exercises, 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.

Evaluation Plan (EvalPlan)

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. This can be a standalone document for larger scale and scope exercises.

Master Scenario Events List (MSEL)

The MSEL is the chronological timeline of scripted events and expected actions on non-playing entities that are injected into exercise play by controllers to generate or prompt player activity. MSEL links simulation to action.

Exercise Evaluation Guides (EEGs)

EEGs are intended to help evaluators collect relevant exercise observations. These documents are aligned to objectives and documents the related capability, capability target(s), and critical tasks. More information on EEGs will be provided in Module 5: Exercise 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 jurisdiction's/organization's plans, policies, and procedures
- 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 Hotwash 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.

Other documents for operations-based exercises include:

- Ground Truth
- Evaluation Plan (Eval Plan)
- Extent of Play Agreement (XPA)

Reference: Table 3.9: Operations-Based Exercise Documentation, HSEEP Doctrine January 2020, pg. 3-14.

Reference: Sample Materials, visit: https://preptoolkit.fema.gov/web/hseep-resources.

Visual 33: Other Exercise Documentation

- Liability Waiver Form
- Photo Consent Form
- Weapons and Safety Policy
- Table Tents
- Name Badges
- Press Release
- Symptomology Cards

Key Points

Additional exercise documentation that can be used during an exercise where applicable includes:

- Table Tents
- Name Badges
- Liability Waiver Forms
- Photo Consent Form
- Weapons and Safety Policy
- Symptomology Card
- Press Release

Further explanation for these documents is found in the HSEEP doctrine.

Reference: Table 3.10: Other Exercise Documentation in HSEEP Doctrine January 2020, pg. 3-15.

Visual 34: Media and Public Affairs Guidance

- Media and Public Affairs Guidance informs the public of preparedness activities
- Media participation/notification is determined by sponsoring jurisdiction/organization
- Members of the media have the unique ability to fulfill an important function before, during, and after an exercise

CAUTION: *DO NOT* release detailed scenario information prior to the exercise and protect potentially sensitive information

Key Points

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.

The agency or jurisdiction/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 (PIO) 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 representatives who may be observing the exercise.

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, senior leaders, 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.

Visual 35: Lesson 4: Exercise Development

Exercise development involves planning for critical elements of exercise conduct:

- Logistics
- Control
- Evaluation

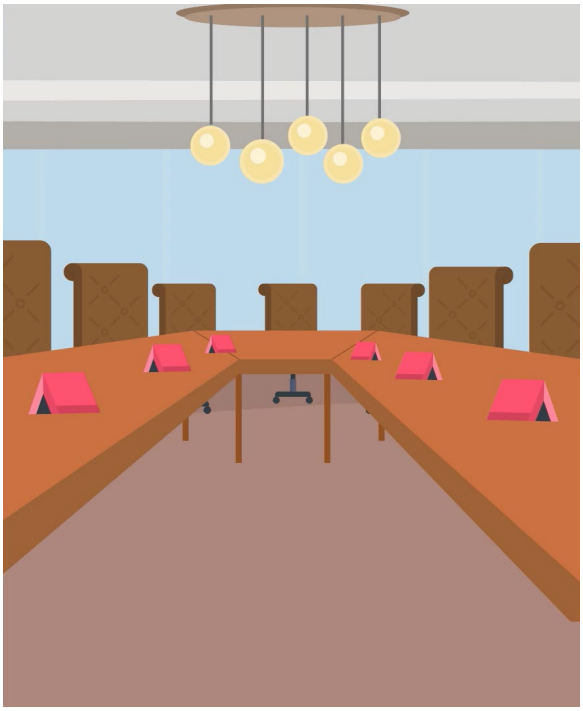
Key Points

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

Logistical details are important, but often overlooked, aspects of an exercise. Logistics drive exercise development and can be a factor in deterring the scope of operations-based exercises. Logistics can make the difference between a smooth, seamless exercise and on that is confusing or event unsafe.

Visual 36: Discussion-Based Logistics Planning

- Facility and room organization
- Audio/Visual requirements
- Supplies, food, and refreshments (if applicable)
- Registration and badging
- Table and breakout identification
- Parking Media, Public Affairs, and VIPs



Key Points

Logistical details are important, but often overlooked, aspects of an exercise. Logistics drive exercise development and can be a factor in determining the scope of an exercise. Logistics can make the difference between a smooth, seamless exercise and one that is confusing or even unsafe.

Logistics for discussion-based exercises include:

Facility and Room

Meetings, briefings, and exercises should be conducted in facilities that are appropriate for the exercise scope and attendance. 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 table and chairs for every relevant participant - the facility selected should have rooms available that are large enough to accommodate all participants and be free from outside distractions - if participants are uncomfortable, distracted, or cannot hear the facilitator or each other, they will not be productive. Check with facilities management to determine what kinds of other meetings are being held at the same location to determine if there may be activities that would be a distraction to participants. To further reduce distractions, you may want to ask participants to turn off mobile devices before they enter the exercise room.

- Arrange tables to best suit the meeting or exercise (e.g., U-shaped layout for exercises requiring facilitation and participant interaction) - make sure sound checks are performed at various locations around the room to ensure participants will be able to hear the facilitator - obtain an amplified sound system to use at the venue if necessary.
- Select a facility with room acoustics that facilitate ease of discussion - the layout of tables for group activities and presenter area will be determined by the type and purpose of the exercise.

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, policies, 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 disruptions to play.

Badging and Identification

For security purposes, all exercise participants should wear some form of identification. Although some players may wear their uniform, badges are typically used to identify each exercise participant by name and organization. Where appropriate, name tents should be place on tab les prior to StartEx to ensure organizational or functional areas seated at that table.

Registration and Table/Breakout Identification

Participants register upon arrival, for both identification and security reasons. Each participant should, at a minimum, provide their name, organizations, 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, certificates of completion, copies of the AAR/IP, and invitations to future planning meetings and exercises.

Parking

Established parking areas should be clearly marked for use by participants arriving in personal vehicles.

Media, Public Affairs, and VIPs

Media, public affairs, and VIP personnel should always have an escort. identify a designated location for these personnel prior to StartEx.

Looking back to the Organizational Structure for the Exercise Planning Team, the Resource Group is responsible for the logistics of an exercise. As the logistics of the exercise are being worked out, it is important to conduct a walk-through prior to the start of the exercise. This ensure that everything is ready and that all roles and responsibilities are understood.

Visual 37: Discussion-Based Exercise Facilitation Planning

- Staffing
- Determining the facilitation organizational structure

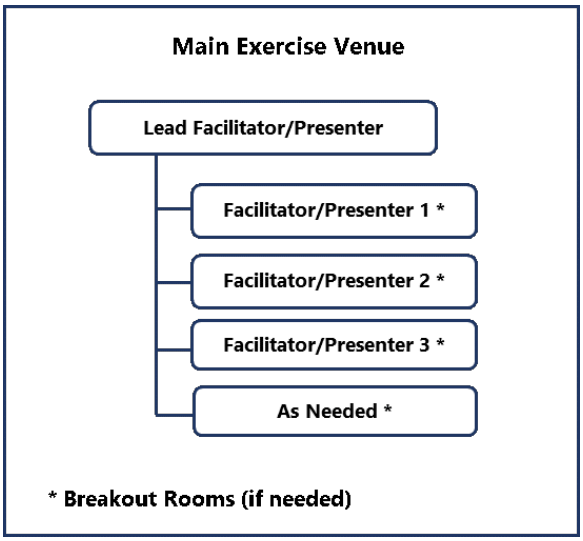


Figure 3.5: Example of a Discussion-Based Exercise Facilitation Structure, pg. 3-19

Key Points

During discussion-based exercises, the exercise planning team identifies the number of facilitators/presenters needed for exercise conduct. If participants divide into breakout groups for part of conduct, a facilitator/presenter is assigned to each group. The facilitators/presenters deliver scenario information, maintain a focused discussion, and ensures that the objectives of the exercise are being met.

Configuration for the breakouts (if needed) can be either by functional areas or organizational areas. Functional areas are personnel that have the same subject matter expertise in a specific field (law enforcement, fire and rescue, etc.), and organizational areas are personnel that have a particular purpose (public safety, emergency management, etc.). Facilitators/presenters that may be required for these breakout areas should have some knowledge in the groups that they are leading.

The facilitation structure is the framework that allows facilitators/presenters to coordinate amongst one another. The Lead Facilitator/Presenter is responsible for any additional facilitators/presenters that may be needed for conduct of the exercise. This structure becomes part of a larger organizational structure during conduct. The Lead Facilitator/Presenter would report to the Exercise Planning Team Lead as part of the larger organizational structure.

When developing the control structure, exercise planners should consider their resource environment. In exercises involving a mix of classified and unclassified information, it may be required to separate into different plenary sessions with two Lead Facilitators/Presenters with appropriate security set up to handle classified and unclassified discussion.

Facilitation for a Virtual Table-Top Exercise (VTTX) is a little different than the above figure. A VTTX uses some form of an IT platform to reach community-based training audiences and provide a virtual forum for disaster training. A VTTX involves key personnel discussing a set of pre-packaged exercise material against a simulated disaster scenario.

The hosting jurisdiction/organization will provide the facilitator and all participants will join in to provide their perspective and practices facing a similar situation. Similar to a TTX, the facilitator's role for a VTTX is to manage the discussion process. Virtual breakout rooms may be used for a VTTX, so ensure that you have enough facilitators/presenters available to engage with each breakout room.

Reference: Figure 3.5: Example of a Discussion-Based Exercise Facilitation Structure and Table 3.11: Positions of an Exercise Facilitation Structure in HSEEP Doctrine January 2020, pg. 3-19.

Visual 38: Operations-Based Logistics Planning

- Facilities and exercise areas
- Audio/Visual requirements
- Registration and badging
- Parking and transportation
- Actors, media, public affairs, and VIPs

Key Points

Like discussion-based exercises, logistical details are just as important for operations-based exercises. Looking back to the Organizational Structure for the Exercise Planning Team, the Resource Group is responsible for the logistics of an exercise. As the logistics of the exercise are being worked out, it is important to conduct a walk-through prior to the start of the exercise. This ensures that everything is ready and that all roles and responsibilities are understood.

Venues:

Facilities and Exercise Areas

Operations-based exercises often have several areas for exercise conduct. Ensure any special needs requirements are considered when determining locations. Designated exercise areas should be clearly marked, and can include:

- **Exercise Assembly Area.** Sometimes referred to as the Staging 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.
- **Emergency Medical Services Area.** This is a designated area for real-world response support, such as treatment sector areas, ambulance staging, and transportation coordination points.
- **Exercise Play Area**. Location where player activities and tasks are demonstrated during an exercise.

Audio/Visual Requirements

Identify audio/visual requirements early, 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. Obtain any supplies (e.g.,, vests, clipboards, signage, writing utensils, notepads, etc.) before the exercise conduct and ensure they are provided to participants. Hydration and relief stations are an important logistical aspect of an operations-based exercise.

Registration and Badging

Participants should register upon arrival and for security purposes should wear a form of identification such as uniforms or badges with name and organization.

Parking, Transportation, and Designated Areas

Established parking areas should be clearly labeled for use by participants arriving in personal 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. Transportation should be provided for participants and actors if parking is not available at their designated venue.

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

Media, Public Affairs, and VIPs

Media, public affairs, and VIP personnel should always have an escort. Identify a designated location for the media prior to StartEx.

Visual 39: Operations-Based Exercise Control Planning

Exercise Control maintains scope, pace, and integrity during conduct.

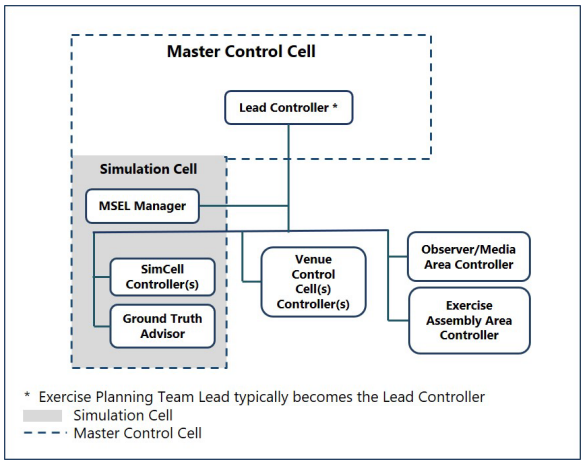


Figure 3.6: Example of an Operations-Based Exercise Control Structure, pg. 3-22.

Key Points

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.

A complex multijurisdictional FSE 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.

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 (MCC)**. When an exercise does require establishment of multiple control cells, it is important to define their roles and relationships, including their decision-making hierarchy.

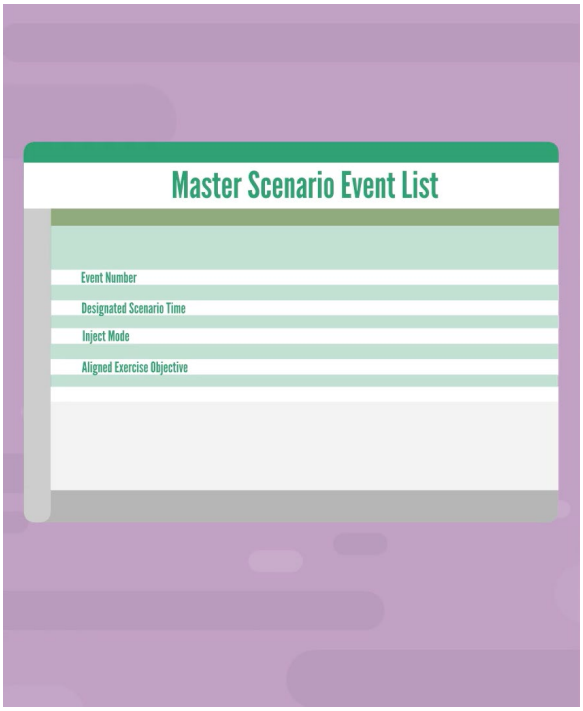
A ***SimCell*** is a location from which controllers deliver injects, receive player responses, and provide information in place of nonparticipating organizations that would likely participate actively if exercise events were real. Physically, the SimCell is a working location for a number of qualified 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.

Reference: Figure 3.6: Example of an Operations-Based Exercise Control Structure and Table 3.13: Positions of an Operations-Based Exercise Control Structure in HSEEP Doctrine January 2020, pg. 3-22.

Visual 40: Master Scenario Events List (MSEL)

- A MSEL is a chronological list of events that drives exercise play and tracks expected actions.
- It represents non-playing (simulated) entities to the exercise.
- It supports exercise objectives and drives exercise evaluation.



Key Points

A MSEL is typically used during operations-based or complex discussion-based exercises and contains a chronological listing of the events that drives exercise play and tracks expected actions during the exercise. The MSEL links non-playing (simulated) entities to the exercise, and helps support the exercise objectives and drives exercise evaluation.

At a minimum each MSEL entry should contain the following:

- Event number
- 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)
- Message
- Expected player action (i.e., player response expected upon inject delivery)
- Objective, 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. Prior to StartEx, the mechanism 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.

There are three types of descriptive MSEL events that support/facilitate exercise play:

Injects 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 develop an alert and warning message for the community to shelter-in-place due to a HAZMAT spill within the area.

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 an alert and warning message was to be disseminated to the community concerning a HAZMAT spill but was not received, a controller may want to prompt an actor to approach a player and ask if a message will be sent to the areas affected by the spill. This should prompt the responder to contact someone who will work to determine if and when a message will be sent.

Expected action events reserve a place in the MSEL timeline and notify controllers when a response action would typically take place. For example, once the alert and warning message is sent out to players, law enforcement should see shelter-in-place activities taking place.

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.

Large, more complex exercises may use a Procedural Flow, which differs from a MSEL, and contains only expected player actions or events.

The Ground Truth is used as the basis for MSEL development. It includes the scenario timeline, the exercise environment, and simulated risk.

Reference: Table 3.14: MSEL Event Types in HSEEP Doctrine January 2020, pgs. 3-23 and 3-24.

Visual 41: Developing Injects for the MSEL

Injects are representative actions and scenario elements that drive exercise play.

There are fundamental elements of an inject to use when developing them for an exercise.

Injects should tie back to exercise objectives in order to support evaluation.

Suggested Practice: When delivering injects Simulators should use realistic emotional tone typical of real-world incidents.

Key Points

Injects are representative actions and scenario elements that drive the exercise play. The injects do three things:

- Link simulation to action
- Enhance exercise experiences for players
- Reflect an incident or activity that will prompt players to implement the policy or procedure being tested.

There are fundamental elements that should be included when developing an inject:

- **Event number -** designator for each event
- **Designated scenario time—**when the event should take place. If the activity occurs sooner than the time designated, controllers and evaluators note the time it occurred as "actual," but play should not be interrupted.
- **Event synopsis/description—**what will occur?
- **Inject mode -** method in which the inject will be delivered (email, phone, text, etc.)
- **Controller responsible for delivering inject—**and what means are used to stimulate the behavior (e.g., course of play, telephone call, actor, video)?
- **Intended player—**who should receive and act on the inject
- **Message (Inject) -** the event that is initiating some action or response
- **Expected action—**what action will the players take—identify **the SMART elements** set forth by each exercise objective (as determined during the IPM). These actions are the injects or decisions that you want participants to carry out to demonstrate competence.
- **Objective to be demonstrated—**which objective does this inject satisfy?
- **Notes section—**blank space for the controllers to enter notes.

If scenario conditions do not stimulate the appropriate behavior, the Controller must attempt to use a contingency inject to try to move play forward in a manner that will permit Evaluators to determine if tasks were completed successfully.

Injects are used to tie back the exercise to the objectives which supports evaluation. Messages should be scripted carefully to ensure that the messages get the planned results. Determining what should be evaluated will help focus on what the messages will be and allow the evaluation to focus on whether the participants respond appropriately.

Visual 42: How to Develop a MSEL

- Review capabilities
- Identify chronology of key actions
- Anticipate player action
- Identify information resource
- Compile all MSEL events into a single list
- Refine selected events

Key Points

It is best to think of MSEL events as a storyboard that provides a timeline and location of all expected actions during the exercise. The MSEL events are merely line items in the MSEL format that you use. Each event should be scripted carefully to ensure that the messages get the planned results. Your list of expected actions will enable you to write effective messages.

When developing a MSEL, consider the following:

- Review capabilities to be evaluated and validated
- Identify chronology of key actions that must occur prior to a planned event occurrence–how one event would drive follow-on events–for realism
- Anticipate Player actions–Identify information resources Controller will need to provide for players to act
- Compile all events into single list–vet with exercise planning team
- Refine selected events–create detailed long version.

One method in developing a MSEL is to use a whiteboard, easel pages, or cards taped to a wall showing the exercise timeline. You can do this by:

- Creating the exercise timeline that represents each hour and segment of hour
- Identifying each event, decision point and event action across the exercise scenario
- Writing each event, decision point or action on post-it notes or index cards
- Organizing these by placing each card under the timeline where they are expected to occur

Note: Using separate color notes to represent each jurisdiction/organizations involved in the response can help in providing a visual representation of the activities and who takes action in response to each scenario event.

Once the MSEL is drafted, the Exercise Planning Team should coordinate and sequence entries and resolve any conflicts between events, thus forming a credible and challenging MSEL that will enhance the exercise experience for the players.

It is essential that the final MSEL be reviewed with quality assurance procedures in mind.

Visual 43: Activity 5: Developing a MSEL

Objective: Understand what information a MSEL contains and practice developing a MSEL

Time: 30 minutes (video, workgroup and report)

Instructions:

- Watch video
- Familiarize yourself with format used for MSEL events
- Develop four MSEL events (two injects and two contingency injects with expected player actions) for your exercise
- Base events on the scenario and exercise objectives that have been developed in previous activities

Video Link:

Managing Exercise Play

Driving Exercise Activities with Injects Video Transcript

Based on the exercise needs of an individual community, exercise participants can choose to conduct either discussion-Based Exercises or operations-based exercises. Each presents unique challenges for managing exercise play.

This video will discuss how exercise planners manage exercise play and activity to ensure that the objectives are met, and the exercise unfolds according to plan.

In discussion-based exercises, facilitators or presenters lead the discussion and deliver scenario information. The Facilitator begins the discussion by presenting the scenario and keeping the discussion on track. Their job is to maintain a focused discussion and keep participants moving towards meeting the exercise objectives within the allotted time.

In operations-based exercises, player actions are unscripted and unfold in real time. This makes it hard for exercise planners to predict how participants might react during exercise play.

To drive operations-based exercise play, exercise planners use a Master Scenario Events List (MSEL). A MSEL is a document or system that provides a chronological timeline of expected actions and scripted injects. These injects are then delivered by exercise controllers to generate or prompt player activity.

The MSEL links simulation to action, enhances the exercise experience for players, and reflects an incident or activity meant to prompt players to action. It drives exercise play by ensuring that necessary events happen so that all objectives have the opportunity to be met.

There are three types of events that lay the ground-work for the exercise

- Injects
- Expected Actions
- Contingency injects

Let’s explore these further.

Injects

Injects are events introduced to a player by the control staff, representing non-playing entities, to build the exercise environment and to drive operations-based exercise play.

If the exercise was testing a community's response to a Hazmat explosion, for example, an inject could represent the explosion occurring or a call from a bystander reporting the incident.

Expected Actions

Expected actions are events that represent an anticipated action to be taken by a player during the exercise.

These are derived from existing plans, policies, and procedures of a community. In the explosion scenario from earlier, an expected action could be the arrival of police, fire department and emergency management services at the scene of the incident.

Including expected actions in the MSEL helps the exercise control staff monitor the progression of actions and timing in the exercise.

Contingency Injects

Exercises are safe no-fault learning environments, which means sometimes exercise players might not complete the expected actions as planned. Contingency Injects are events introduced to a player by the control staff when an expected action by a key player did not occur. It is designed to provide an additional opportunity to meet an exercise objective, or to redirect exercise play back to the expected course.

For example, if the exercises players failed to properly identify the hazardous material or chemical and implement proper protocols accordingly, a contingency inject can provide the players with information about the chemical.

Creating the MSEL is the responsibility of the exercise planning team in collaboration with subject matter experts.

Managing injects during the exercise is then the responsibility of the MSEL Manager and Lead Controller who work together to oversee the delivery of the injects and all simulated actions. The Simulation Cell, or SimCell, is a location from which these simulation controllers deliver scenario messages representing actions, activities, and conversations of participants not participating in the exercise.

Together, these individuals allow an exercise to unfold effectively and for objectives to be met.

With this understanding, you are now prepared to work with your exercise planning team to develop draft injects for your future exercises.

Good luck!

Visual 44: Operations-Based Exercise Control Planning (Continued)

- Controller Training
- Communications Plan
- Safety and Security

Key Points

Controller Training

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.

Controllers, from either the Exercise Planning Team or recruited from other organizations, require controller training to set expectations, and roles and responsibilities.

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 Control Staff Instruction (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 can 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.

Visual 45: Planning for Exercise Evaluation

- Developed early in the exercise design process
- Guide development of scenario, discussion, and/or MSEL
- Identifies the capability targets and critical tasks

Exercise Evaluation Planning

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.

Once the exercise planning team aligns objectives to capabilities, it identifies which capability targets and critical tasks for each capability are being addressed by the exercise. Capability targets and critical tasks are furthered explained in Module 5: Exercise Evaluation.

The exercise planning team will develop EEGs for use by exercise evaluators during the exercise. The EEGs will identify the specific and/or critical tasks associated with each capability target and the standards used as a basis for the performance thresholds. Development and information about EEGs in explained in great detail in Module 5: Exercise Evaluation.

Visual 46: Preparing for Exercise Conduct

The exercise planning team finalizes all aspects of the exercise to prepare for conduct.

Preparations include:

- Finalizing materials
- Rehearsing presentations and briefs
- Training participants
- Contingency Plan

Key Points

The exercise planning team finalizes all aspects of the exercise to prepare for conduct.

Preparations for exercise conduct include:

- Finalizing materials such as the SitMan, ExPlan, EvalPlan, MSEL, etc.
- Rehearsing presentation and briefs
- Training participants (controllers and evaluators)
- Walkthrough or ROC (Rehearsal of Concept) Drill

Prior to the exercise, the appropriate personnel receive documentation and additional instructions needed for conduct (i.e., the C/E Handbook only goes to the controllers and evaluators).

It is a best practice to make sure any presentations and/or briefs are finalized and rehearsed prior to conduct of the exercise. This would also include any audio/video equipment that may be needed to support the presentation.

Ensure that all controllers and evaluators have had the training necessary to support the exercise and have a plan in place on how to train any last minute personnel.

To prevent jeopardizing mission performance in response to real-world incidents, the exercise planning team should develop a contingency process to halt, postpone, or cancel and exercise as necessary. If the conduct of the exercise is put at risk, the Exercise Director and exercise planning team should convene and determine the appropriate course of action. Following a decision, the course of action should be communicated to all exercise planners, participants, and other key stakeholders through formal communication mechanisms.

Visual 47: Module 3: Summary

In this module, we have discussed:

- Exercise Foundation
- Selection of Exercise Planning Teams
- Exercise Design
- Exercise Development

In Module 4, you will learn about HSEEP Exercise Conduct.

Key Points

In this module we learned about the importance of exercising, HSEEP fundamentals, common methodology and HSEEP Doctrine.

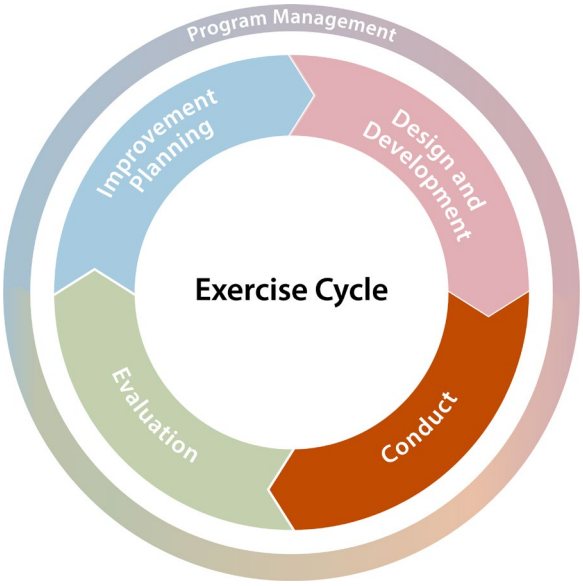
Module 4: Exercise Conduct

Visual 1: Module 4: Exercise Conduct

Lesson 1: Discussion-based exercise conduct

Lesson 2: Operations-based exercise conduct

Lesson 3: Exercise briefs and wrap-up activities



The HSEEP Exercise Cycle

Key Points

After design and development activities are complete, the exercise is ready to take place.

Exercise conduct involves activities such as preparing for exercise play, managing exercise, play, and conducting immediate exercise wrap-up activities. Throughout the exercise conduct process, the engagement of senior leaders confirms the exercise is consistent with the original guidance and intent.

This module will talk about exercise conduct in the following lessons:

Lesson 1 will discuss preparation and conduct for discussion-based exercises

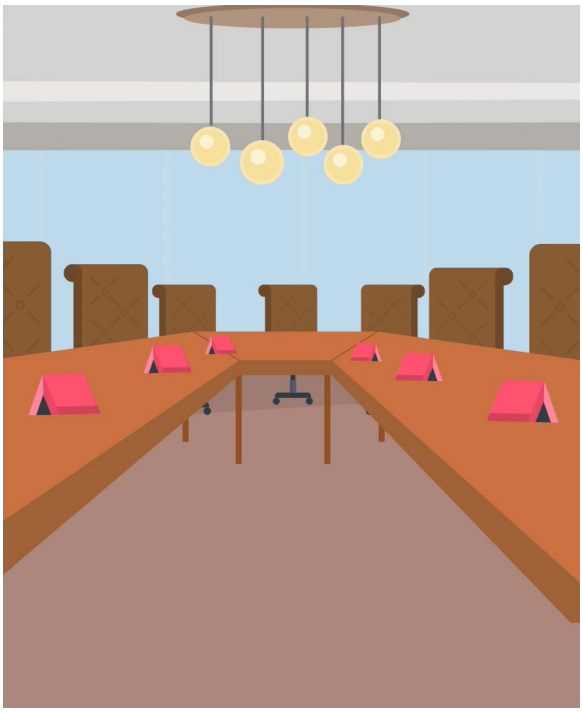
Lesson 2 will discuss preparation and conduct for operations-based exercises

Lesson 3 will discuss exercise briefs and wrap-up activities

Visual 2: Lesson 1: Discussion-Based Exercise Preparation

Preparation includes:

- Arranging the room
- Setting up and testing audio/visual equipment
- Printing exercise written materials
- Identifying additional areas needed



Key Points

Preparation is the first step before conduct of a discussion-based exercise and important to the success of your exercise. Set-up for an exercise include items that will need to be taken care of prior to the start of the exercise.

Items that should be completed include:

- Printing exercise written materials
- Arranging the room
- Setting up and testing the audio/visual equipment
- Designating any other areas needed for the exercise (sign-in location, refreshments, breakout rooms, etc.)

On the day of the exercise, the exercise planning team members should arrive several hours before StartEx to ensure the room is configured correctly, set up the registration table, sign-in sheets are out, re-test the presentation equipment, and put out the refreshments (if provided).

The exercise planning team also delivers the necessary exercise materials which may include:

- SitMans or other written materials
- Presentation
- Table tents for each table
- Name tents for each participant

- Identification badges for participants
- Sign-in sheets
- Location for refreshments (if provided)
- Participant Feedback Forms

A rehearsal of the exercise structure and presentations helps to ensure an understanding of facilitator and evaluator roles and responsibilities, event timing, audio/visual equipment, and location-specific details, including access and security.

Visual 3: Discussion-Based Conduct

- A facilitator generally presents a presentation to the participants that describes the scenario and then poses questions to lead the discussion
- The facilitator ensures that the discussion stays on track and that all objectives are met

Key Points

For a discussion-based exercise, conduct entails a facilitated discussion based on a scenario, objectives, or goals.

Presentation

The 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 senior leaders 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 presentation, 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 functions 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
- The ability to listen well and summarize player discussions.

If feasible and/or appropriate, additional facilitators who are knowledgeable about local issues, plans, and procedures may assist the lead facilitator. Also, designating a note taker allows the facilitator to focus on key discussion issues.

Exercise Data Collection

During discussion-based exercises, facilitators help evaluators collect useful data by keeping discussions focused on exercise objectives, capabilities, capability targets, and critical tasks.

Visual 4: Discussion-Based Control Structure

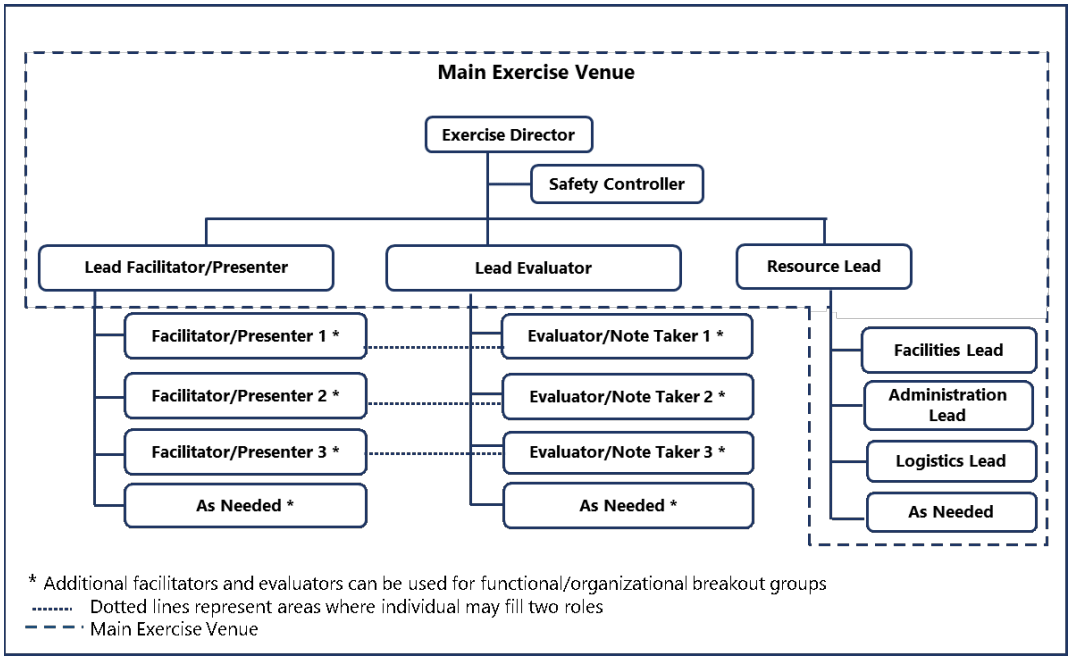


Figure 4.1: Example of a Discussion-Based Control Structure, pg. 4-2.

Key Points

During exercise play, participants accomplish various roles and responsibilities aimed at achieving exercise objectives and demonstrating capabilities. The number of players involved in an exercise is ultimately based on design of the scenario and the capability-based objectives to be validated through exercise conduct. Discussion-based exercises usually require participation of Senior Leaders.

During the design and development process, the Exercise Planning Team identifies the facilitator, note takers, and evaluator(s) who will oversee the exercise discussion. The sponsoring jurisdiction(s)/organization(s) identify and assign players who will take part in the exercise.

The positions of the Exercise Planning Team for a discussion-based exercise should be similar to the above organizational chart and include:

The **Exercise Director**, who is responsible to ensure that the exercise is conducted based on the senior leaders' intent and the strategic oversight and direction of the exercise. The Exercise Director usually provides opening statements to the participants and welcomes them to the exercise.

If the exercise requires a **Safety Controller**, that person is responsible to ensure that the exercise is conducted in a safe and secure environment. They monitor exercise safety during exercise setup, conduct, and wrap-up and report directly to the Exercise Director. They make sure that

items such as walkways are clear of tripping hazards and easily maneuverable for emergency evacuations.

The **Lead Facilitator/Presenter** oversees all facets of the facilitation process and/or presentation(s). They are responsible to recruit additional facilitators or presenters should they be needed and report to the Exercise Director.

The **Lead Evaluator** oversees all facets of the evaluation process and is part of the original Exercise Planning Team. The Lead Evaluator will recruit, assign, and train and additional evaluators that may be needed and reports to the Exercise Director.

The **Resource Lead** is responsible for all facility/venue items, administrative items (sign-in sheets, printed materials, supplies, etc.), logistics, and providing support for media and VIP observers. The Resource Lead reports to the Exercise Director.

Planners must strive to ensure that the players invited to participate will actually have a role in the exercise. It causes a great deal of frustration when an agency sends a representative and their role is minimal in the discussion taking place.

Reference: Table 4.1: Positions of a Discussion-Based Exercise Control Structure, HSEEP Doctrine January 2020, pg. 4-2.

Visual 5: Activity 6: Discussion-Based Exercises

Objective: Discuss the best practices of discussion-based exercise design and development.

Time: 15 minutes (video and discussion)

Instructions:

- Watch video
- Discuss the best practices on the video
- Discuss what best practices you have noticed/observed in your exercises

Video Link:

Conducting a Discussion-Based Exercise Video

Conducting a Discussion-Based Exercise Video Transcript

Discussion-based exercises will have specific considerations that exercise planners will need to address prior to and during exercise conduct.

This video will review:

- The types of discussion-based exercises, and
- Key considerations for preparing for and conducting a discussion-based exercise

Discussion-based exercises are designed to create an environment where players can present key concepts, create products, familiarize themselves with plans, policies, or procedures, and apply strategies. They are typically led by a facilitator or presenter.

Discussion-based exercises include:

- Seminars,
- Workshops,
- Tabletop exercises, and
- Games

Let's explore these four exercise types further.

A **seminar** is a discussion-based exercise that orients participants to plans, policies, or procedures. Seminars can be lectures, panels, or discussions to present concepts and ideas.

Workshops are discussion-based exercises used to develop plans, policies, or procedures. These interactive sessions allow players to collaborate to create a new or updated product.

Tabletops are discussion-based exercises that drive player dialogue about a specific scenario. They are intended to facilitate a conceptual understanding, identify strengths and areas for improvement, or validate plans, policies, or procedures.

Finally, **games** are discussion-based exercises designed for individuals or teams in a competitive or noncompetitive environment. They are guided by clear rules, data, and procedures. Games can be used to reinforce training, stimulate team building, or enhance operational and tactical capabilities.

The type of discussion-based exercise a community chooses to conduct will depend on their specific objectives, resources, and needs.

Conducting a successful discussion-based exercise will require logistical considerations while preparing for exercise play, managing exercise play, and completing evaluation and wrap-up activities. These best practices have proven successful in previous exercises and can help you conduct a successful exercise, too!

For discussion-based exercise preparation, planners will need to:

- Arrange the room and ensure it fits all participants comfortably
- Test audio/visual equipment to address any issues early
- Provide exercise materials such as the Situation Manual and name tents or badges
- Designate locations with proper signage, such as a registration table, breakout rooms, or VIP area
- Validate location-specific details such as access and security
- Ensure parking is readily available and labeled,
- Identify escorts for any media, public affairs, or VIPs who will be in attendance, and

Prepare refreshments, if available

Discussion-based exercises are typically led by a knowledgeable facilitator or presenter.

Presenters are common for seminars, while workshops, tabletops, and games are typically led by a facilitator.

The Facilitator is responsible for:

- Keeping the discussion focused on the exercise objectives
- Making sure all issues are explored within the time allotted; and
- Listening well to summarize player discussion

A facilitator should have experience leading group discussions and an awareness of the appropriate plans, policies, and procedures.

Depending on the size of the exercise, breakout sessions with additional facilitators and note-takers can offer more intimate settings for focused discussion.

Measuring success for a discussion-based exercise will vary slightly depending on the exercise type.

- Seminars may use pre- and post- conduct assessments, or feedback forms to ensure participants understood what was shared.
- Workshops result in a product being developed. As such, they can be evaluated by how well the goals of the session are met.
- tabletops should use Exercise Evaluation Guides to assess whether specific objectives and capability targets are achieved.
- Finally, a game's success should be evaluated based on how well the players met the intent of the game.

For all exercises, it is important that the Lead Evaluator coordinate closely with the exercise planning team.

With this video, you now have a stronger understanding of how to conduct a discussion-based exercise. Good luck!

Visual 6: Lesson 2: Operations-Based Exercise Preparation

Preparation includes:

- Set-up venues
- Printing exercise written materials
- Conduct required exercise briefs
- Communications check
- Walk-through of venues
- Safety checks

Key Points

Just like a discussion-based exercise, preparation is the first step before conduct of an operations-based exercise. There are items that will need to be taken care of before the day of the exercise and some that will happen early the day of and prior to StartEx.

The appropriate Exercise Planning Team members should begin setup of the venues as many days prior to the exercise as possible.

Setup entails:

- Arranging briefing rooms
- Testing A/V equipment
- Placing props and effects
- Marking the appropriate exercise venues and the perimeters
- Checking for potential safety issues
- Conducting needed exercise briefs
- Conducting a communication check and rehearsal

The rehearsal for an operations-based exercise is vital to ensure an understanding of controller and evaluator responsibilities, transportation, event timing, audio/visual and communications equipment, and location-specific details, including access and security.

Safety is the most important item during conduct of an operations-based exercise. With many participants, it is important to stress that safety is the responsibility of everyone involved.

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. items such as delivering exercise control documents, set-up any registration areas, conducting Actor, Player, and Observer Briefs, and testing communication equipment.

A communications check is highly recommended to be conducted prior to the start of an operations-based exercise. To ensure that the exercise runs smoothly, it is important that all controllers, evaluators, and the exercise planning team have good communications to ensure consistent play.

Prior to StartEx, rules for exercise play should be disseminated to all participants.

Visual 7: Operations-Based Conduct

- Realistic representation of capabilities to be examined
- Actual or simulated environment
- Functional performance
- Exercise data collection
- Contingency process

Key Points

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. We will discuss these more as we go over the Player Brief.

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.

A key location for an FSE or drill is the assembly area. 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, explained on the next slide, must be informed about any updates to the exercise that may require changes to the deployment timetable, and he/she should update the deployment timetable accordingly.

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.

Exercise Data Collection

During the exercise, each evaluator should use note pads or other note taking material to record information and key elements within the EEGs for capabilities, capability targets, and critical tasks, as assigned to them 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. This process should be reviewed with all participants and stakeholders participating in the exercise during exercise briefings.

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 senior leaders 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.

Visual 8: Operations-Based Control

- Describes how controllers communicate and coordinate
- Simulation Cell (SimCell) importance
- Site controllers
- Safety and security

Key Points

During conduct of operations-based exercises, the Exercise Planning Team Lead normally serves in the senior control staff. Controllers and evaluators report key activities to the senior controller, who 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.

In the design and development phase, the Exercise Planning Team identifies facilitators, controllers, players, actors, and evaluators who will oversee the exercise play. The planning team should work to ensure there will be enough controllers and evaluators to reasonably monitor all player actions during the exercise.

The Simulation Cell (SimCell) is particularly important during a Functional Exercise (FE). Due to 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 Master Control Cell (MCC). Site Controllers should advise the MCC on the pace of exercise play, and request more or fewer injects as necessary to maintain an appropriate pace.

During Full-Scale Exercises (FSE) and drills, the exercise assembly area controller plays a key role. The Assembly Area Controller remains in close communications with other controllers throughout the exercise to ensure safe and realistic deployment of personnel. When a unit arrives at the assembly area, the 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.

Visual 9: Operations-Based Control Structure

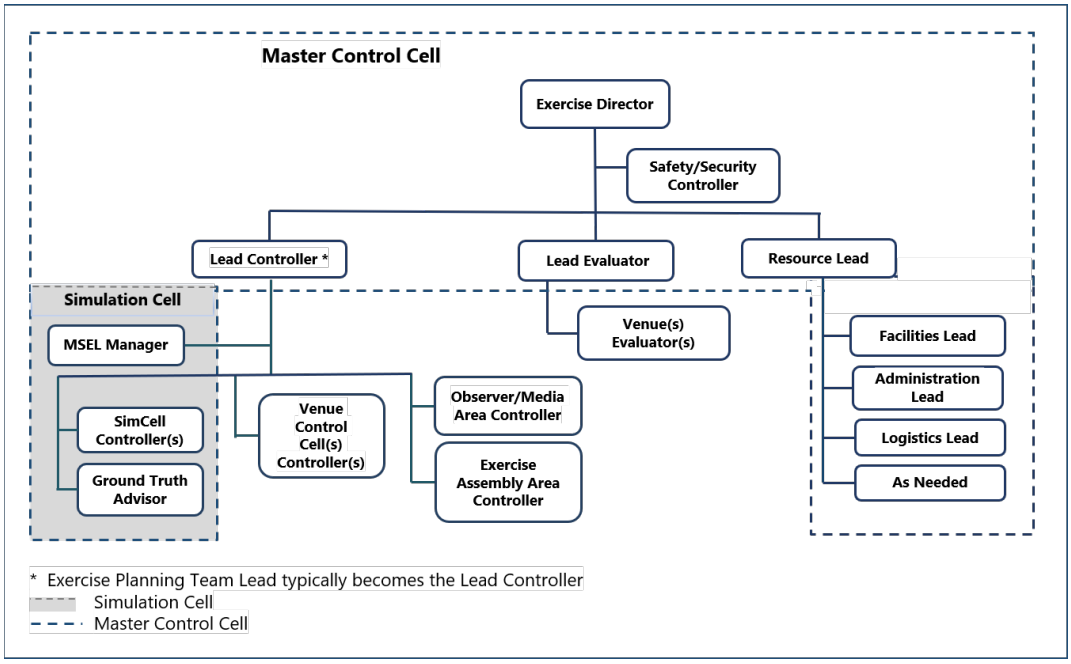


Figure 4.2: Example of an Operations-Based Exercise Control Structure, pg. 4-4

Key Points

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.

The positions of the Exercise Planning Team for an operations-based exercise could be similar to the above organizational chart and include:

The **Exercise Director** who is responsible for the overall conduct of the exercise based on senior leader's intent.

The **Safety and Security Controllers** who report to the Exercise Director and ensure that the exercise is conducted is a safe and secure environment. All participants are responsible for safety during the exercise and additional law enforcement may be used to ensure a secure environment for all venue locations.

The **Lead Controller** is responsible for the Simulation Cell, Venue Controllers, Assembly Area Controllers, and the Observer and Media Area Controllers. All controllers at these multiple sites will report issues to the Lead Controller who will then work directly with the Exercise Director to resolve.

The **Lead Evaluator** is responsible for all venue evaluators. The Lead Evaluator works directly with the Exercise Director for evaluation of the exercise.

The **Resource Lead** is responsible for all facilities, administrative, logistics, and any other items that are deemed necessary for the conduct of the exercise. The Resource Lead reports directly to the Exercise Director on all relevant issues.

Planners must strive to ensure that the players invited to participate will actually have a role in the exercise. It causes a great deal of frustration when an agency sends a representative and their role is minimal in the event. This also can cause confusion at venue locations due to participants with little to no role interfering in the exercise.

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 players and/or actor safety, such as heat stress and other health issues.

Reference: Table 4.2: Positions of an Operations-Based Exercise Control Structure, HSEEP Doctrine January 2020, pg. 4-4

Visual 10: Activity 7: Operations-Based Exercises

Objective: Discuss the best practices of operations-based exercise design and development.

Time: 15 minutes (video and discussion)

Instructions:

- Watch video.
- Discuss best practices on the video
- Discuss what best practices you have noticed/observed in your exercises.

Video Link:

Conducting an Operations-Based Exercise Video

Conducting an Operations-Based Exercise Video Transcript

Operations-based exercises have specific considerations that exercise planners will need to address prior to and during exercise conduct.

This video will review:

The types of operations-based exercises, and

Key considerations for preparing for and conducting an operations-based exercise

Operations-based exercises allow players to validate plans, policies, and procedures, clarify roles and responsibilities and identify resource gaps in real time.

These exercises include:

- Drills
- Functional Exercises
- Full-Scale Exercises

Let's explore these three exercise types further.

Drills are operations-based exercises used to validate a single operation or function, such as evaluating a new piece of equipment or verifying new procedures.

Functional exercises are operations-based exercises designed to assess and evaluate capabilities and functions in a realistic, real-time environment.

The movement of resources and personnel in these exercises is typically simulated.

Finally, **full-scale exercises** are operations-based exercises that are the most complex and resource-intensive of the exercise types. They often involve multiple agencies, jurisdictions/organizations and real-time movement of resources and people

These exercises are distinguished by their realistic environment intended to mirror a real and complex incident response.

The type of operations-based exercise a community chooses to conduct will depend on their specific objectives, resources, and needs.

Conducting a successful operations-based exercise will require logistical considerations while preparing for exercise play, managing the exercise, and completing evaluation and wrap-up

activities. These best practices have proven successful in previous exercises and can help you conduct a successful exercise, too!

For an operations-based exercise, preparation includes:

- Providing exercise materials, such as the Exercise Plan, Controller/Evaluator Handbook, and Exercise Evaluation Guides
- Setting up the exercise play venues by placing props and effects.
- Marking the appropriate exercise areas with signage such as the Simulation Cell and Assembly Area
- Ensuring all potential safety and access issues are identified and addressed
- Checking communications between exercise staff

Controllers should perform a walk through or dry-run prior to an exercise to ensure all exercise staff understand their roles and responsibilities and all equipment is properly working.

On the day of the exercise, staff should:

- Arrive early to address any last-minute logistics and set up the registration table.
- Provide players with the rules for exercise play, which describe appropriate exercise behavior and help prevent harm or damage to property
- Conduct necessary pre-briefs to educate participant groups about their roles and responsibilities

Exercise briefs should be held with:

- Senior Leaders,
- Controllers and Evaluators
- Actors,
- Players, and
- Observers

Safety is the most important item during operations-based exercise conduct. It is important to stress that safety is the responsibility of everyone involved.

In the event of a real-world incident, it is critical that the exercise planners have a **contingency process** in place to pause, postpone, or cancel the exercise if needed.

This plan should be shared with all participants and stakeholders prior to the exercise.

Communication is key when it comes to an operations-based exercise. All exercise staff should be in close communication—particularly, the Master Control Cell, the Simulation Cell, venue controllers, and MSEL manager—to ensure the exercise activities unfold as intended.

To avoid confusion with real-world operations, all communications must be clearly identified as exercise related. All materials should be labeled, and verbal communications should begin with the phrase “This is an exercise”.

Immediately following the exercise, the exercise controllers should conduct debriefs with players and staff. These meetings support data collection and evaluation by discussing any perceived strengths, areas for improvement, and overall satisfaction with the exercise.

With this video, you now have a stronger understanding of how to conduct an operations-based exercise. Good luck!

Visual 11: Lesson 3: Exercise Briefs

- Senior Leader Brief
- Controller/Evaluator Brief
- Actor Brief
- Player Brief
- Observer Brief

Key Points

Held before each exercise, **Exercise Briefs** educate each participant group about their unique roles and responsibilities during exercise play. By scheduling separate briefings for senior leaders, controllers and evaluators, actors, players, and observers, Exercise Planning Team members can avoid giving extraneous material to different groups.

Regardless of their role in the exercise conduct, all individuals participating in the exercise are expected to attend these briefings. Participants must understand that attendance is mandatory in order to ensure the success of the exercise and the safety of all participants. It's important to explain to participants that because each exercise is unique, targets different capabilities, and may involve different players, attending the Exercise Brief for one exercise does not mean a participant does not need to attend these briefings for future exercises.

The **Senior Leaders** who were engaged early in the design and development should periodically be consulted to ensure the exercise aligns with their intent. Prior to conduct, the Exercise Planning Team will work with Senior Leaders to determine the decision processes that will be used to end the exercise prematurely in the event of a real-world emergency where players must respond to maintain the sponsor organization's mission response capabilities.

Controller and Evaluator Briefs ensure that those serving as controllers and evaluators conduct their responsibilities in a uniform manner; this consistency contributes to the accuracy of the evaluation process. The contingency process identified for use in the event of a real world emergency must also be fully understood by controllers who will be responsible for implementing the contingency process.

Controller Briefs provide an overview of the exercise, the specifics for their assigned location and the schedule of events and MSEL injects they are expected to deliver at each point in the scenario, the control concept chosen for the exercise, the controller's oversight responsibilities, and the contingency process that is to be followed in event of real-world emergency.

Evaluator Briefs provide an overview of the evaluation plan, methodology and objectives and evaluation materials. The brief should include instructions on how evaluators are expected to use the materials in the Evaluator Handbook to observe the exercise including: what to look for, what to record, how to use Exercise Evaluation Guides (EEGs), and how they will use the collected data to conduct an analysis of exercise outcomes. Evaluators need to understand the exercise methodology and objectives and know the agenda or schedule.

To ensure evaluators are fully prepared to evaluate exercise play, they should be provided advanced copies of the evaluation materials. Exercise planners should ensure sufficient time is

allocated for evaluators to prepare in advance during the exercise planning phase, specifically by studying the appropriate exercise documents and reference materials.

Because each exercise is unique it is important that Controllers and Evaluators understand that *attending an Exercise Brief for one exercise does not mean they would not need to attend this brief for future exercises.* **Attendance is very important** to ensure the success of the exercise, the consistency of the evaluation process, and the safety of all participants.

Shortly before the start of the exercise, controllers assigned to oversee each participant group conduct a brief for their assigned participant group:

The Actor Controller leads the **Actor Brief**, providing actors with an overview of the exercise and their expected response behaviors as "victims" during the exercise to add to the realism of the exercise for players.

The Exercise Assembly Area Controller conducts a **Player Brief** to address their roles and responsibilities, the exercise parameters, safety, security badges, and any logistical exercise concerns or questions from players. The rules of play are established before the exercise to prevent physical harm and property damage. Because operations-based exercises—with the exception of functional exercises—do involve the use of real equipment, resources, and responders, the exercise rules must be established and reviewed well in advance to ensure proper precautions are taken. The rules should be followed to ensure a safe and productive exercise.

The Lead Controller or the Controller assigned to the Observer/Media Area conducts an **Observer Brief** to inform observers and VIPs about the background of the exercise program, the type of scenario that will be played out during the exercise, the exercise schedule of events, observer limitations and restrictions, and any other miscellaneous information.

Reference: Table 4.3: Types of Exercise Briefs, HSEEP Doctrine January 2020, pg. 4-6

Visual 12: Exercise Wrap-Up Activities

Exercise wrap-up activities ensures that all relevant data is collected to support effective evaluation and improvement planning.

- Debriefs (evaluators, planning team)
- Player Hotwash
- Controller/Evaluator Debrief
- Data Collection

Key Points

Wrap-up Activities

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

Debriefs

Immediately following the exercise, a short debrief should be conducted with the 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 debrief notes.

Player Hotwash

A Hotwash provides an opportunity for exercise participants to discuss exercise strengths and areas for improvement immediately following the conduct of an exercise. The Hotwash should be led by an experienced facilitator who can ensure that the discussion remains brief and constructive. The information gathered during a Hotwash can be used during the AAR/IP process and exercise suggestions can be used to improve future exercises.

A Hotwash provides an opportunity to distribute Participant Feedback Forms, which, when completed by players, can be used to provide input in the development of the AAR/IP.

For operations-based exercises, a Hotwash 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 venues or in other functional areas.

Controller/Evaluator Debrief

The C/E Debrief provides a forum for functional area controllers and evaluators to review the exercise. The exercise planning team lead facilitates this debrief, 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 debrief, controllers and evaluators complete and submit their Participant Feedback Forms. Debrief results are captured and may be included in the AAR/IP.

Similarly, for discussion-based exercises, a Facilitator/Evaluator Debrief is held to review exercise conduct. This debrief can be facilitated by the exercise planning team lead and provides

a forum for facilitators and evaluators to discuss strengths, areas for improvement, and progress in completing exercise objectives.

Data Collection

At the end of exercise conduct and following Debriefs and Hotwashes, the exercise planning team should collect all exercise documentation that can be used to support evaluation and development of the AAR/IP.

Visual 13: Module 4: Summary

In Module 4, we discussed:

- Discussion-Based Exercise Preparation and Conduct
- Operations-Based Exercise Preparation and Conduct
- Exercise Briefs and Wrap-Up Activities

In Module 5, you will learn about HSEEP Exercise Evaluation.

Module 4: Summary - Key Points

Exercise conduct involves many activities such as preparing for exercise play, managing exercise play, and conducting immediate exercise wrap-up activities.

Module 5: Exercise Evaluation

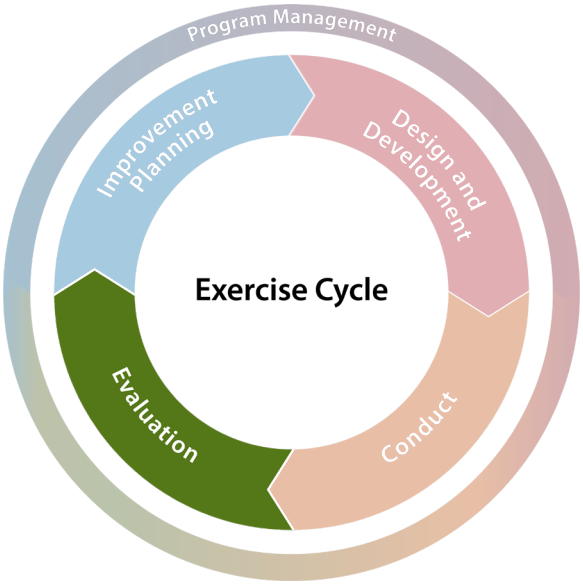
Visual 1: Module 5: Exercise Evaluation

Lesson 1: Evaluation Planning

Lesson 2: Observations and Data Collection

Lesson 3: Data Analysis

Lesson 4: After-Action Report (AAR) and After-Action Meeting (AAM)



The HSEEP Exercise Cycle

Key Points

Exercise evaluation maintains the fundamental link between the exercise and improvement planning. Through exercise evaluation, jurisdictions/organizations assess the capabilities needed to accomplish a mission, function, or objective. Evaluation ties objectives to priorities, assesses the performance of capability targets and critical tasks, and documents strengths and areas for improvement.

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
- Reporting exercise outcomes in a draft AAR
- Conducting an AAM

The evaluation process is used to identify performance and resource gaps or other issues that may need to be addressed in order for your jurisdiction/organizations to meet the capabilities from the focus areas assessed by the exercise.

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

This module will provide information on exercise evaluation in the following 4 lessons:

Lesson 1 will discuss how evaluation planning identifies clear evaluation requirements for an exercise

Lesson 2 will highlight the processes and products for observations and data collection

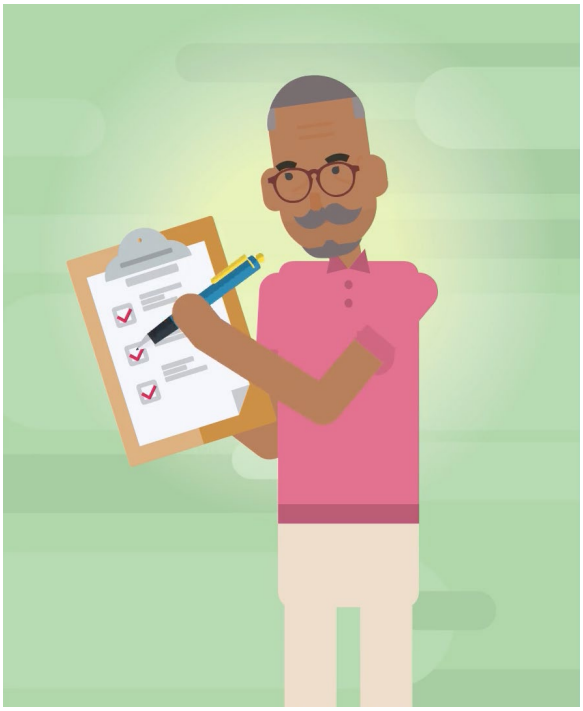
Lesson 3 will cover data analysis and the processes used to determine what happened

Lesson 4 will discuss the After-Action Report (AAR) and how the draft AAR is reviewed during the After-Action Meeting (AAM)

Visual 2: Lesson 1: Evaluation Planning

Initial planning for evaluation includes:

- Engaging senior leaders to identify specific evaluation requirements
- Identifying clear evaluation requirements early in the planning phase
- Ensuring consistency in evaluation methods



Key Points

Exercise planners should collaborate to ensure a consistent approach for evaluating capabilities during an exercise, and senior leaders should be engaged early in evaluation planning in order to identify any focus areas, potential concerns, and specific evaluation requirements. Identifying clear evaluation requirements early in the planning process will ensure that the design, development, and conduct of the exercise best support an effective and consistent evaluation.

Planning for exercise evaluation includes:

- Identifying the evaluation team requirements
- Developing and finalizing the evaluation documentation and methodology
- Developing the Exercise Evaluation Guides (EEGs)

Visual 3: Exercise Evaluation Team Structure

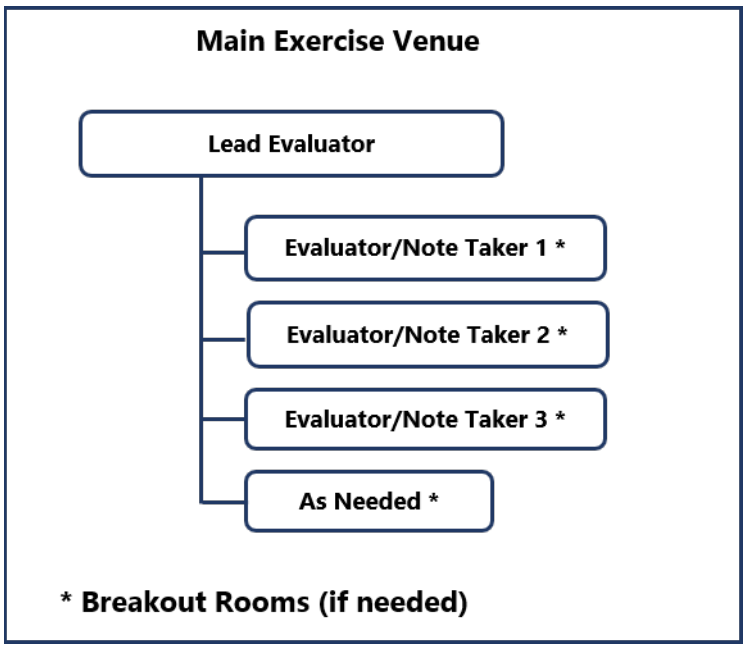


Figure 5.2: Example of an Exercise Evaluation Team, pg. 5-2.

Key Points

Early in the exercise planning process, the Exercise Planning Team Lead should appoint a Lead Evaluator to oversee all facets of the evaluation process. The **Lead Evaluator** determines the structure of the Exercise Evaluation Team based on the scope of the exercise, the exercise objectives, associated capabilities, capability targets, and critical tasks that will be evaluated during the exercise.

For both discussion-based and operations-based exercises, all evaluators report to the Lead Evaluator. If evaluators are not needed, additional note-takers may be used to provide information back to the Lead Evaluator. The number of evaluators or note-takers will depend on the number of breakout rooms or venues that an exercise requires. Typically, operations-based exercises will have evaluators responsible for specific venues since multiple sites will be used. Breakout rooms for either discussion-based or operations-based exercise may or may not be used.

For both discussion-based and operations-based exercises, the Lead Evaluator takes charge of planning the evaluation and works with the planning team members throughout the exercise planning process to determine the tools and documentation needed. One example is the development of a separate Evaluation Plan (EvalPlan) to accompany the Evaluator Handbook and provide guidance to the exercise planning team when conducting the analysis of all the exercise data and feedback obtained from participants.

In general, the development of the EvalPlan involves the following tasks:

- Define evaluation requirements - determine what needs to be evaluated and how information will be collected
- Prepare a plan for evaluating the exercise - prepare the complete package of information on the evaluation process
- Select or develop the evaluation forms - used to capture information during exercise observation and data analysis
- Finalize the plan for evaluation - complete the activities necessary to organize the evaluation and prepare evaluation packets for use in exercise conduct

The EvalPlan includes:

- Exercise-specific information: The scenario or a summary of the scenario, the functional groups for the exercise, and the exercise schedule of events (including the evaluation schedule)
- Plan, policies, procedures, and agreements: Copies of, or references to, the jurisdiction's/organization's applicable plans, policies, procedures, and agreements that would be expected to be discussed ruing discussion-based exercises and utilized/implemented during an operations-based exercise
- Evaluator requirements and assignments: Number of evaluators needed, the background or subject matter expertise required, and the functional group or discipline that each will observe
- Evaluator instructions: Instructions on what evaluators should do before they arrive (e.g., review exercise materials, jurisdictional/organizational plans, policies, and procedures, the EvalPlan/process), their roles and responsibilities throughout the exercise, and required deliverables following the exercise
- Evaluation tools: Include the data collection instruments and jurisdiction/organization specific Exercise Evaluation Guides (EEGs)

Specific security clearance levels may be required for some exercise play or locations. Exercises that involve multiple jurisdictions/organizations and/or multiple venues should consider assigning evaluator/note takers to each of the venue locations, as illustrated by the example provided in this graphic. A venue 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.

Consideration should be given to an exercise’s scope and objectives when selecting the number of individuals needed to support the evaluation process. For exercises of limited scope and having objectives with fewer 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.

Reference: Figure 5.2: Example of an Exercise Evaluation Team, HSEEP Doctrine January 2020, pg. 5-2

Visual 4: Evaluation Team Responsibilities

- Be familiar with the focus areas, capabilities, plans, policies, and procedures
- Determine the structure of the evaluation team
- Determine the tools and documentation needed
- Conduct a Facilitator/Evaluator (F/E) and/or Controller/Evaluator (C/E) Brief and Debrief
- Train evaluators

Key Points

Responsible for the evaluation of the exercise, 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 also 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 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 focus areas and capabilities associated with the exercise; plans, policies, and procedures of the participating jurisdictions/organizations; and decision-making processes.

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 Facilitator/Evaluator (F/E) Handbook or the Controller/Evaluator (C/E) Handbook. The Lead Evaluator also identifies data collection methods to ensure that information specific to examining capabilities for the individual exercise is recorded.

Members of the evaluation team should:

- Be familiar with the focus areas, objectives, capabilities, plans, policies and procedures to be examined, and what observations to look for
- Determine the structure of the evaluation team
- Determine the tools and documentation needed to support the evaluation
- Conduct a pre-exercise F/E and/or C/E Brief
- Conduct a post-exercise F/E and/or C/E Debrief
- Train evaluators

When seeking commitments from those recruited to serve as evaluators, it is important that they understand the significant commitment of time required to support the entire scope of the exercise evaluation process. Evaluator's subject matter expertise may aid in the scenario development to ensure realism and critical focus elements for the evaluation, so it is important that those chosen are aware of the critical role they play toward the success of the exercise. When selected early in the planning process, they may lend their expertise to the development of the EvalPlan to ensure the validity of the evaluation process.

In addition to the early planning activities, they also need to be available for:

- Pre-exercise training
- Brief and/or site visit

- The exercise itself
- Post-exercise Hotwash
- Evaluators will assist the exercise planning team in drafting the AAR by providing the information they collected during their exercise observations
- After-Action Meeting (AAM)

Visual 5: Additional Evaluators

- May be recruited from participating or non-participating organizations
- Identified early in planning process
- Assigned based on knowledge of functional area(s) and plans, policies, procedures, and agreements
- Trained on use of exercise documentation tools
- What to look for and record during observation

Key Points

Once evaluation requirements have been defined by the Exercise Planning Team, the Lead Evaluator determines the necessary qualifications of the evaluators, identifies appropriate individuals to serve in these roles, and oversees recruiting, assigning, and training these evaluators.

Whenever possible, evaluators should have experience and subject matter expertise in their assigned functional area. Those chosen should be familiar with the plans, policies, procedures, and agreements between local agencies and jurisdictions.

The goal of the evaluation process is to obtain objective evaluations, and members of a participating agency may have pressures to favor outcomes for their agency. For this reason it is best to recruit evaluators from local nonparticipating agencies either within or from outside of the jurisdiction.

Evaluator assignments should be communicated to evaluators prior to exercise conduct so that they may focus on the specific functional tasks identified in the EvalPlan to be observed at their assigned location.

As discussed earlier, all evaluators receive a pre-exercise brief to ensure that they have a shared understanding of key data to be collected and how that data will contribute to the evaluation of the exercise.

Pre-Exercise Evaluator Brief

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 Brief 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 brief may be done in conjunction with exercise controllers, as a Controller/Evaluator Brief. Depending on the exercise organization, it may be necessary to conduct briefs at more than one exercise site.

Post-Exercise Evaluator Debrief

Following exercise play, the Lead Evaluator should meet with all evaluators and conduct a debrief. The debrief is for controllers and evaluators to assemble after the exercise to discuss observations and provide information to create a shared understanding of the exercise. It is also an opportunity to provide feedback through the Participant Feedback Forms.

Visual 6: Evaluation Documentation and Tools

- Facilitator/Evaluator Handbook (Discussion-Based)
- Controller/Evaluator Handbook (Operations-Based)
- Evaluation Plan (large exercises)
- Participant Feedback Form
- Exercise Evaluation Guide (EEG)

Key Points

The Exercise Planning Team and the Lead Evaluator should determine the tools, data collection methods, and documentation needed based on the level of complexity and scope of the exercise.

The types of Evaluation Documentation include:

Facilitator/Evaluator (F/E) Handbook: Provides specific exercise information and guidance for facilitators/presenters and evaluators/note takers for a discussion-based exercise.

Controller/Evaluator (C/E) Handbook: Provides specific exercise information and guidance for controllers and evaluators/note takers for an operations-based exercise. This can be a standalone document or supplement to the Exercise Plan (ExPlan). It is important that only the controller and evaluators receive the C/E Handbook, this is not to be given to the exercise players as part of the ExPlan

Evaluation Plan: Provides guidance, instructions, and structure on evaluating and observing an exercise. It provides essential materials required to perform functions for evaluators/note takers. Information in an EvalPlan includes:

- **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.
- **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 Hotwash templates.

Participant Feedback Form: Used to collect observed strengths, areas for improvement, and input about exercise conduct and logistics from participants.

One of the most used evaluation tools is the **Exercise Evaluation Guide (EEG)** which is further described in the next slide.

Reference: Table 5.2: Evaluation Documentation, HSEEP Doctrine January 2020, pg. 5-3.

Visual 7: Exercise Evaluation Guides (EEGs)

Exercise Evaluation Guides (EEGs) are consistent tools to guide exercise observations and data collection

EEGs are aligned to exercise objectives

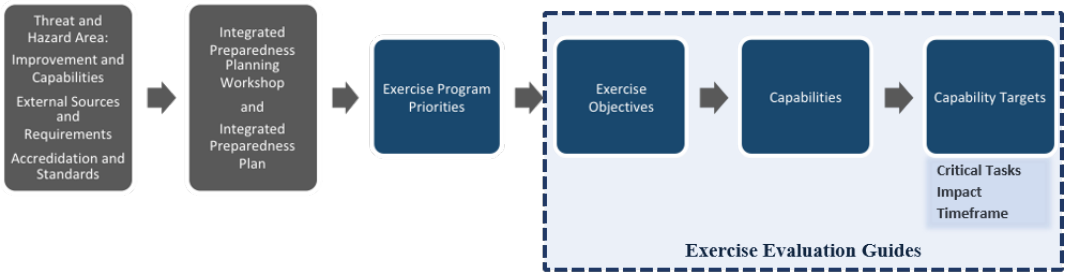


Figure 5.3: Development of an Exercise Evaluation Guide (EEG), pg. 5-4.

Key Points

EEGs provide a consistent tool to guide exercise observation and data collection. EEGs are aligned to exercise objectives and capabilities and list the relevant capability targets and critical tasks. Capability targets are the performance thresholds established by the jurisdiction/organization for each capability. Identified targets are part of a jurisdiction's/organization's Threat and Hazard Identification and Risk Assessment (THIRA) or other threat and hazard identification or risk assessment processes.

The figure shows the relationship between the threat and hazard risk assessments which are used during the Integrated Preparedness Planning Workshop to determine the exercise program priorities. These priorities are then used to develop the exercise objectives focused on capabilities and the capability targets. The exercise objectives, capabilities, and capability targets are used to develop the Exercise Evaluation Guides (EEGs).

EEGs are designed to accomplish several goals:

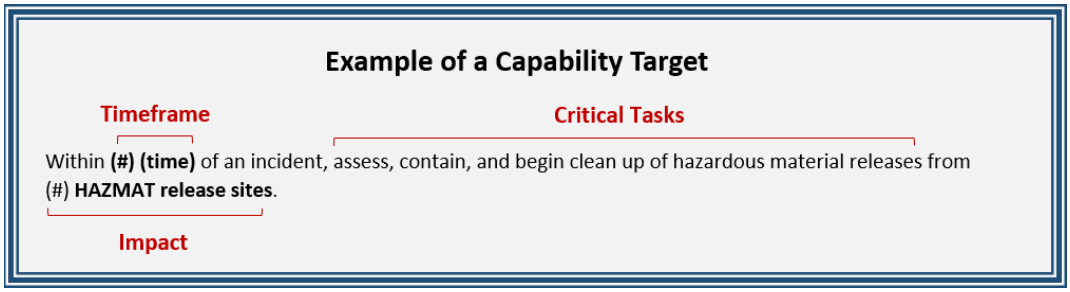
- Streamline data collection
- Enable thorough assessments of the participant jurisdiction's/organization's capabilities
- Support development of the AAR
- Provide a consistent process for assessing preparedness through exercises
- Help jurisdictions/organizations map exercise results to exercise objectives, capabilities, capability targets, and critical tasks for further analysis and assessment.

Reference: Figure 5.3: Development of an Exercise Evaluation Guide (EEG), HSEEP Doctrine January 2020, pg. 5-4.

Visual 8: Exercise Capability Targets

Parts of a Capability Target:

- Critical Task
- Impact
- Timeframe



Example of a Capability Target, pg. 5-5

Key Points

Capability targets, when incorporated into planning and used as exercise evaluation criteria, can measure how effectively a plan meets the goals and how well the participants perform the tasks in the plan. The after-action and continuous improvement process can validate current capabilities already in place and describe areas for improvement.

Capability targets are composed of three parts:

- **Critical task** represents the specific action needed to achieve the capability target
- **Impact** represents the size of the capability requirement
- **Timeframe** represents the time in which the action must be performed

The example provides how to write a good capability target for use in the EEG.

Reference: Example of a Capability Target, HSEEP Doctrine January 2020, pg. 5-5

Visual 9: EEG Development

Document **who, what, where, when**, and **how** tasks were completed

Evaluators focus their observations on the capability targets and critical tasks listed in the EEG

Key Points

The EEG format is designed to present the following evaluation requirements to exercise evaluators:

- **Objectives:** The distinct outcomes that an jurisdiction/organization wishes to achieve during the exercise. Each EEG will focus on one specific objective.
- **Capabilities:** The distinct critical elements necessary to achieve a specific mission area (e.g., prevention). To assess both capacity and gaps, each capability includes capability targets.
- **Capability target(s):** The performance thresholds for each capability; they state the exact amount of capability that players aim to achieve. Capability targets are typically written as quantitative or qualitative statements.
- **Critical tasks:** The distinct elements required to perform a capability; they describe how the capability target will be met. Critical tasks generally include the activities, resources, and responsibilities required to fulfill capability targets. Capability targets and critical tasks are based on operational plans, policies, and procedures to be exercised and tested during the exercise.
- **Performance ratings:** The summary description of performance against target levels. Performance ratings include both Target Ratings, describing how exercise participants performed relative to each capability target, and Core Capability Ratings, describing overall performance relative to entire the core capability.

For each EEG, evaluators provide a target rating, observation notes including an explanation of the target rating, and a final capability rating. In order to efficiently complete these sections of the EEG, evaluators focus their observations on the capability targets and critical tasks listed in the EEG.

Note: HSEEP now has a Blank EEG template to support those agencies/organizations that do not reference the mission areas or the capabilities that most of the EEG templates are formatted after.

Reference: Example of an EEG in Module 8 of HSEEP 0146.

Visual 10: Activity 8: Develop an EEG

Objective: Develop an Exercise Evaluation Guide (EEG) for use during your exercise evaluation.

Time: 30 minutes (video, workgroup and report)

Instructions:

- Watch video
- Develop an EEG with customized capability targets and critical tasks

Evaluating an Exercise Video

Evaluating an Exercise Video Transcript

Exercise evaluation and observation are critical components of conducting an exercise

This video will discuss how evaluation is integrated throughout the exercise design and development process and will provide an overview of how Exercise Evaluation Guides, or EEGs, are developed.

Evaluation refers to observing an exercise and assessing how plans, policies, and procedures were applied toward meeting exercise objectives.

This allows a jurisdiction or organization to assess the capabilities needed to accomplish a mission or function.

Evaluation should be integrated early in the exercise planning process.

Exercise evaluation involves:

- Planning an approach and determining evaluation tools and requirements
- Observing an exercise to collect data
- Analyzing collected data, and
- Reporting outcomes

Evaluation ties exercise objectives to a jurisdiction or organization's priorities as part of the overall Integrated Preparedness Cycle.

Exercise evaluation planning is led by the Lead Evaluator.

The Lead Evaluator determines the tools, data collection methods, evaluation criteria, and documentation needed for effective exercise evaluation. They collect ideas from the exercise planning team and oversee the assembly, structure, and training of the evaluation team.

There are many tools and documents that a Lead Evaluator can use. The ones selected depend on the type and complexity of an exercise.

This video will focus specifically on the development of an Exercise Evaluation Guide, or EEG.

EEGs provide a consistent structure to guide observation and data collection during an exercise.

They are used to capture who, what, when, where, how, and to what level the expected player tasks were achieved.

Since each community has unique targets and tasks, EEGs are developed specific to their plans, policies, and procedures.

EEGs should contain four elements:

- Exercise objectives,
- The capability associated with those objectives,
- A capability target, and
- The critical tasks needed to meet the capability target

Capability targets are the performance thresholds for each capability that an organization aspires to meet. The capability targets establish a benchmark that the whole community can use to track progress over time.

These targets translate the impacts of events identified in the threat and hazard identification and risk assessment process into goals for strengthening a community's capabilities.

Capability targets are composed of three parts:

- Critical task(s);
- An impact; and
- A timeframe

Critical tasks are the specific actions needed to achieve a capability target. They reflect the types of activities organizations plan for and can apply to a wide range of threats and hazards. These can be found in a community's plans, policies, and procedures.

The impact and timeframe are used to define the scope of the capability target. Impact refers to the level of capability required to address the impact while timeframe represents the time in which the critical task must be performed.

Let's look at an example of a capability target:

Within 1 hour of an incident, assess, contain, and begin clean-up of hazardous material releases from 1 HAZMAT release site.

With this information you are now well-equipped to plan for evaluation and develop an Exercise Evaluation Guide. Good luck!

Visual 11: Lesson 2: Observation and Data Collection

- Can differ between discussion-based exercises and operations-based exercises
- Forms the analytic basis for determining if critical tasks were successfully demonstrated and capability targets were met

Key Points

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, typically on an EEG.

Operations-based exercises focus on issues affecting the operational execution of capabilities and critical tasks and implementation of plans, policies, and procedures. 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.

Exercise evaluators should observe exercise activities in a non-attribution environment, in accordance with the evaluation training, EvalPlan, and EEGs. Evaluators will generally be able to observe the following items related to execution of capabilities and task examined during the exercise:

- Activation or implementation of plans, policies, and procedures related to capabilities
- Implementation of legal authorities
- Understanding and assignment of roles and responsibilities of participating organizations and players
- Decision-making processes used
- Activation and implementation of processes and procedures
- How and what information is shared among participating jurisdictions/organizations and the public

The EEG Observations Section allows exercise evaluators to record general exercise events, specific actions deserving special recognition, particular challenges or concerns, and where areas needing improvement occurred. The information recorded in the EEG is used to develop the AAR/IP.

The standard sources, such as EEGs, are not the only sources of information, and all attempts should be made to gather as much information as possible.

Observations from exercises can come from a variety of sources, such as:

- Event logs
- Video or audio recordings
- Evaluator notes
- Photographs
- EEGs

For operations-based exercises, the Evaluator should be given a format that suits the environment.

Visual 12: Recording Observations

Observations should include:

- Actual time required to complete the critical task(s)
- How the target was or was not met
- Decisions made and information gathered
- Requests made and how they were implemented
- Resources utilized
- Plans, policies, procedures, or legislative authorities used or implemented
- Any other factors

Key Points

Observation notes include if and how quantitative or qualitative targets were met. For example, a capability target might state, *"Within 4 hours of the incident…."* Observation notes on that target should include the actual time required for exercise players to complete the critical task(s). Additionally, observations should include:

- ***Actual time required*** for exercise players to complete the critical task(s)
- ***How*** the target was or was not met
- ***Decisions*** made and information gathered
- ***Requests*** made and how they were implemented
- ***Resources*** utilized
- ***Plans, policies, procedures, or legislative authorities*** used or implemented
- Any ***other factors*** contributed to the outcomes.

Based on their observations, evaluators assign a target rating for each capability target listed on the EEG. Evaluators then consider all target ratings for the capability and assign an overall capability rating. The rating scale includes four ratings:

- **Performed without Challenge (P):** The targets and critical tasks associated with the capability were completed in a manner that achieved the objective(s) and did not negatively impact the performance of other activities. Performance did not contribute to additional health and/or safety risks for the public or for emergency workers, and it was conducted in accordance with applicable plans, policies, procedures, regulations, and laws.
- **Performed with Some Challenges (S):** The targets and critical tasks associated with the capability were completed in a manner that achieved the objective(s) and did not negatively impact the performance of other activities. Performance of this activity did not contribute to additional health and/or safety risks for the public or for emergency workers, and it was conducted in accordance with applicable plans, policies, procedures, regulations, and laws. However, opportunities to enhance effectiveness and/or efficiency were identified.
- **Performed with Major Challenges (M):** The targets and critical task associated with the capability were completed in a manner that achieved the objective(s), but some or all of the following were observed: demonstrated performance had a negative impact on the

performance of other activities; contributed to additional health and/or safety risks for the public or for emergency workers; and/or was not conducted in accordance with applicable plans, policies, procedures, regulations, and laws.

- **Unable to be Performed (U):** The targets and critical tasks associated with the capability were not performed in a manner that achieved the objective(s).

Visual 13: Data Collection

Supports continuous improvement and AAR development by capturing:

- Decisions and recommendations
- Roles and responsibilities
- Coordination and cooperation
- Supplemental data/written records

Evaluators should not be a distraction or interfere with exercise play.

Key Points

Data collection is critical to providing an overall understanding of the exercise. Collecting data using a variety of methods, tools, and techniques provides the information needed for continuous improvement activities and resourcing decisions, rather than relying on assumptions.

Data collection supports data analysis by providing a fact-based record of what actions were taken, what key decisions were made, and the outcomes of those actions and decisions.

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, 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 collection does not only come from evaluators, it can also come from observers, controllers, safety personnel, etc. Data provides the empirical evidence for continuous improvement and activities and resourcing decision, rather than relying on assumptions.

In addition to EEGs, evaluators can use a variety of data collection methods as part of their EvalPlan.

- **Direct Observations** offer real-time data collection but does require large resources to observe multiple venues simultaneously

- **Documentation Review** serves as authoritative record of activities but can be time-consuming and labor intensive to review and synthesize
- **Feedback Forms and Surveys** are easy to administer and provide firsthand information from participants
- **Open-Ended Feedback** often varies in specificity and quality and offers limited opportunity for follow-up
- **Interviews** (individual or group) enables in-depth discussion of key issues, often involving Subject Matter Experts (SMEs). These can be difficult to schedule during or immediately following an exercise or incident
- **Hotwash and Debriefs** enable group discussion with participants and is led by an individual to ensure open, collaborative discussions

Reference: Table 5.3: Data Collection Methods, HSEEP Doctrine January 2020, pg. 5-6.

Visual 14: Activity 9: Making Observations

Objective: : Discuss the use of an EEG and the importance of a Hotwash.

Time: 15 minutes (video and discussion)

Instructions:

- Discuss filling out EEG during exercise conduct
- Discuss the role of the evaluator and rating the exercise
- Discuss developing exercise observations (describe some best practices and challenges)
- Discuss the importance of an exercise Hotwash

Video Link:

Observing an Exercise and Collecting Data Video

Observing an Exercise and Collecting Data Transcript

Evaluation is a critical component of the HSEEP exercise cycle.

Once evaluation planning is complete and evaluation documents are prepared, a jurisdiction or organization can move on to conducting and observing an exercise to collect data.

This video will discuss the components of exercise observation and how data is collected during an exercise.

Observations and data collection play an important role during exercise evaluation by capturing information related to capability targets and critical tasks identified in the Exercise Evaluation Guides for each exercise objective.

The Lead Evaluator and Evaluation team oversee data collection and observation efforts. That said, data collection is a team effort. Data can be provided by facilitators or controllers, safety personnel, and even players!

During the Exercise Conduct phase, evaluators and note takers should observe exercise activity in accordance with the exercise's evaluation plan, and criteria developed during the design and development phase.

The methods for the collection of exercise data may differ based on the type of exercise being conducted.

Discussion-Based exercises focus on players talking about their plans, policies, and procedures. Observations of these types of exercises may be captured by an evaluator or a note-taker listening to facilitated discussions during exercise conduct. In Discussion-Based Exercises what is said counts as a player action.

Operations-Based exercises, on the other hand, involve the actual implementation of plans, policies, and procedures. in a learning environment. During these exercises, evaluators must observe and capture player actions occurring in real time.

Regardless of the type of exercise, evaluators and note takers should be able to observe key information related to exercise objectives. This may include info on resources, decision-making

processes, communications, roles and responsibilities, and the implementation of plans, policies, and procedures.

All observations should be non-attributional, meaning the names of the specific exercise participants should not be recorded.

Data collection provides raw content and information for evaluators to analyze an exercise during the Evaluation phase. There are several methods that can be used to capture information, such as:

- Direct Observation, which captures actions and activities in real-time
- Interviews, where evaluators can meet with exercise participants either individually or in groups to gain additional insights
- Hotwash, or post-exercise session to collect information from players before they depart
- Feedback forms and surveys, which gather written comments about the exercise; and
- Exercise debriefs, which are post-exercise meetings with exercise staff to collect additional information

The Evaluation Team can use a combination of these methods to create a fact-based record of the exercise.

After the exercise during the Evaluation phase, the Evaluation Team analyzes the outcomes of an exercise in accordance with the Exercise Evaluation Guide, or EEG.

The EEG structure informs data collection and provides a consistent process for assessing preparedness.

Prior to an exercise, the Evaluation Team works with subject matter experts to pre-populate the EEG with objectives, capabilities, capability targets, and critical tasks. Then after an exercise, evaluators add their refined observation notes and assign a rating.

The observation notes and ratings from the EEG contribute to the After-Action Report by providing insights into strengths and areas for improvement.

In this way, evaluation is integrated throughout the exercise process at all exercise phases.

With this information, you are well-equipped to support observation and data collection efforts during an exercise. Good luck!

Visual 15: Lesson 3: Data Analysis

- Consolidation of data
- Examine and compare performance against targets
- Identify strengths and areas for improvement
- Conduct analysis

Key Points

The goal of data analysis is to evaluate the ability of exercise participants to perform capabilities and to determine if exercise objectives were met.

During data analysis, the exercise evaluation team first 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 capabilities. Additionally, the exercise evaluation team documents strengths and areas for improvement over the course of exercise play. This provides the evaluators with not only what happened, but why events happened.

After evaluators identify discrepancies between what happened and what was supposed to happen (the issues), they explore the source of these issues. After identifying issues and analyzing the data, it is then compiled into the draft After-Action Report/Improvement Plan (AAR/IP).

Visual 16: Determining What Happened

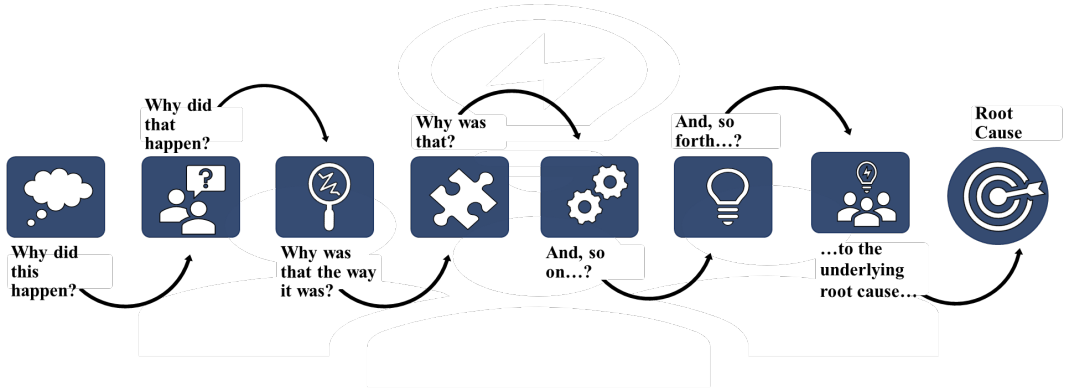


Figure 5.4: Example of a Root Cause Analysis, pg. 5-8.

Key Points

In both discussion-based and operations-based exercises, evaluators identify issue by comparing exercise objectives to actual performance. Through this comparison, evaluators identify which capabilities (and their associated activities, performance measures, and tasks) were successfully demonstrated in the exercise. They will also identify which capabilities need improvement.

After evaluators identify discrepancies between what happened and what was supposed to happen (the issues), they explore the source of these issues.

Evaluators and exercise program managers can use a variety of analysis techniques to support improvement planning for each individual exercise as well as the overall exercise program.

The type of techniques include:

Data Synthesis: The process of compiling and reviewing data from multiple sources to identify issues and support analysis. This allows analysts to collate and analyze large amounts of information, identify potential issues requiring resolution, and examine the strength of evidence (or remaining gaps) for each issue.

Event Reconstruction: The consolidation of information from multiple sources into a single, fact-based account of what happened, including key decisions, actions, and communications. During Event Reconstruction, analysts try to identify the who, what, when, where, and how and are not concerned with understanding the why of a specific action.

Trend Analysis: This process identifies patterns in strengths, areas for improvement, and major changes in observations over time. Trends of various threat/hazard and capability topics guide planning, training, exercise design and development, and future disaster-related efforts.

Root Cause Analysis: This process focuses on identifying the most basic causal factor for why an expected action did not occur or was not performed as expected. The above diagram shows the understanding that each step is a symptom (or effect) of the next item and a cause of the previous item.

Data analysis may also require the review and evaluation of an organization's plans, policies, and procedures.

When conducting analysis, evaluators should consider the following questions:

- Were the objectives for each critical task met? If not, what factors contributed to this result?
- What happened? What was supposed to happen based on current plans, policies, and procedures?
- Was there a difference? What was supposed to happen?
- Were the consequences of the action (or inaction/decision) positive, negative, or neutral?
- Do current plans, policies, and procedures support the performance of the critical tasks? Are participants familiar with these documents?
- Are personnel trained to perform the critical tasks? If not, what personnel may require additional training?
- Do personnel from multiple agencies or jurisdictions need to work together to perform the tasks? If so, are agreements or relationships in place to support the performance of the tasks?
- What are strengths and areas for improvement to remedy deficiencies?

Reference: Figure 5.4: Example of a Root Cause Analysis, HSEEP Doctrine January 2020, pg. 5-8

Visual 17: Lesson 4: After-Action Report (AAR)

- Summarize key information related to evaluation
- Overview of performance related to each exercise objective and associated capability
- Length, format, and development timeframe of the AAR depends on the exercise type and scope

Key Points

The Evaluation Team takes the lead in the development of the AAR draft document.

The AAR is the document that summarizes key information related to evaluation and includes an overview and analysis of capabilities. It provides feedback to participating jurisdictions/organizations on their performance during an exercise. The AAR also provides a record of what happened during the exercise and is used to recommend changes directed at improving a jurisdictional/organizational capabilities.

The length, format, and development timeframe of the AAR depends on the exercise type and scope. These parameters should be determined by the Exercise Planning Team based on the expectations of senior leaders as they develop the evaluation requirements in the design and development process.

The AAR should include an overview of performance related to each exercise objectives and associated 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 jurisdiction's/organization's ability to meet exercise objectives and demonstrate capabilities.

Generally, AARs include basic exercise information, such as the exercise name, type of exercise, dates, location(s), participating organizations, focus areas, specific threat(s) or hazard(s), a brief scenario description, and the name of the exercise sponsor and POC.

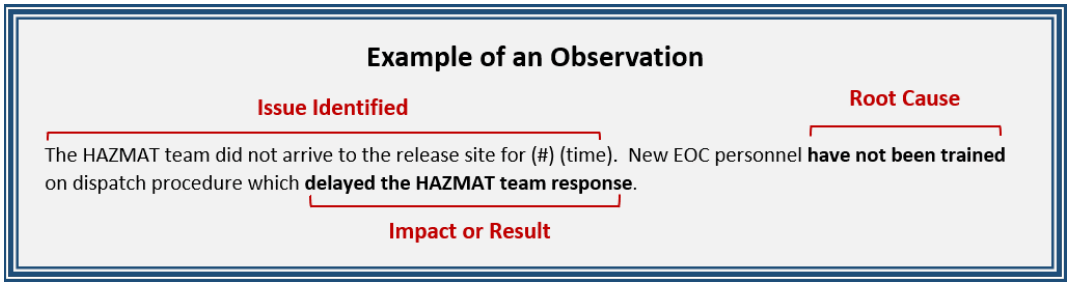
Appendices that are typically added to the AAR include:

- Improvements Plan which provides a list of corrective actions based on the areas identified for improvement
- Participant List showing everyone that was involved in the exercise

Corrective actions, further explained in Module 6, are listed in the Improvement Plan which is attached to the ARR as an Appendix.

Visual 18: AAR Observation

AAR Observations should be categorized as either a strength or an area for improvement.



Example of an Observation, pg. 5-9

Key Points

Observations developed for the AAR should be categorized as either strengths or areas for improvement.

Strengths are actions that went exceptionally well given the circumstances, had a positive impact on desired or expected outcomes, and are activities that yielded better results than could have been expected.

Areas for Improvement did not meet expectations or intent, had a negative impact of actual performance on desired or expected outcomes, and contributed to the inability to meet critical tasks, capability targets, or desired outcomes.

Observations do not have to be lengthy to be impactful. A strongly written observation includes a clear and direct statement of the issue identified, a brief description of the analysis, and the impact or result of the issue.

Tips to consider when organizing your observations into the AAR include:

- Focus on issues that are critical to the success of a mission or represent a trend.
- Observations help guide corrective action planning by focusing time and resources on issue that have the greatest impact on preparedness. If possible, include data on consequences and likelihood of reoccurrences or what would happen if no action were taken.
- A draft AAR should include the observations, but the AAM will give leadership a chance to further organize the observations and order the development of action plans.

Reference: Example of an Observation, HSEEP Doctrine January 2020, pg. 5-9

Visual 19: AAR and the AAM

- The Exercise Planning Team provides the draft AAR
- The draft AAR is discussed during the After-Action Meeting (AAM)

Key Points

Once the draft AAR is developed, the evaluation team provides it to the exercise sponsor, who distributes it to participating organizations. Senior leaders or their designees review and confirm observations, strengths, and areas for improvement identified in the draft AAR, and determine which areas for improvement require further action. Areas for improvement are those that will continue to seriously impede capability performance if left unresolved.

Distributing the draft AAR allows the jurisdiction/organization to review and confirm areas for improvement identified as their responsibility. It also affords them the opportunity to become familiar with the content and prepare them to discuss exercise results. Once the jurisdiction's/organization's reviewer has confirmed the draft areas for improvement and identified initial corrective actions, they take this information along with the draft AAR to the After-Action Meeting (AAM).

The AAM serves as a forum to review the revised draft AAR and is an interactive session providing attendees the opportunity to discuss and validate the analytical findings and corrective actions identified. 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. AAM participants should develop concrete deadlines for implementation of corrective actions and identify specific corrective action owners/assignees. Participant jurisdictions/organizations are responsible for developing implementation processes and timelines, while keeping their senior leaders informed of the implementation status.

As part of the improvement planning process, corrective actions bring areas for improvement to resolution by the identified organization responsible for those actions. This process is further described in Module 6: Improvement Planning.

Reference: Table 5.5: After-Action Meeting, HSEEP Doctrine January 2020, pg. 5-10.

Visual 20: Module 5: Evaluation Summary

In this module we learned the processes used for exercise evaluation planning, exercise observations and data collection, data analysis, development of an AAR, and conducting an AAM.

In Module 6, you will learn about HSEEP Exercise Improvement Planning.

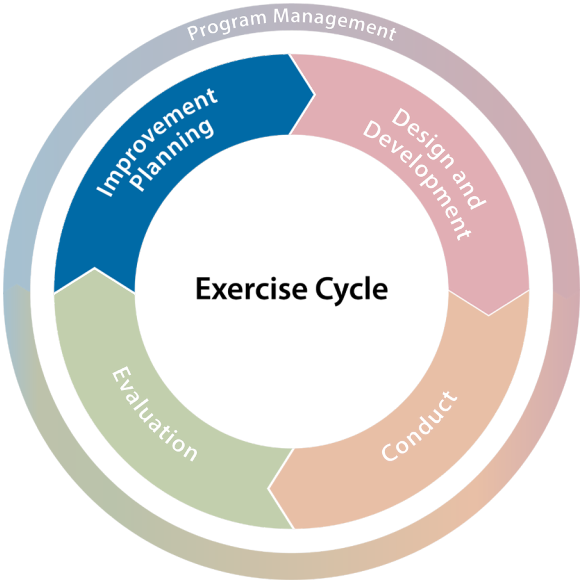
Key Points

Evaluation is the keystone of the exercise process where exercise planners use documentation of exercise conduct to determine the actual capability of their jurisdiction/organization in the areas that were tested.

Module 6: Improvement Planning

Visual 1: Module 6: Improvement Planning

- Improvement Planning
- SMART Corrective Actions
- Using Improvement Plans (IP) to Support Continuous Improvement



The HSEEP Exercise Cycle

Key Points

This module will describe HSEEP Improvement Planning.

This part of the planning process supports the overall assessment process by identifying the existing state of the capabilities within the given jurisdiction/organization, and the areas that require additional improvements following exercise conduct.

After the evaluation phase concludes, jurisdictions/organizations should reach consensus on identified areas for improvement and develop corrective actions that directly addresses capability gaps and shortfalls. This information is recorded in the AAR/IP and resolved through the implementation of concrete SMART corrective actions, which are prioritized, tracked until completion, and validated. This process constitutes the improvement planning phase and final step in conducting an exercise.

Visual 2: Improvement Planning

- Effective Improvement Planning serves as an important tool throughout the Integrated Preparedness Cycle
- Improvement Planning activities can help shape preparedness priorities and support continuous improvement

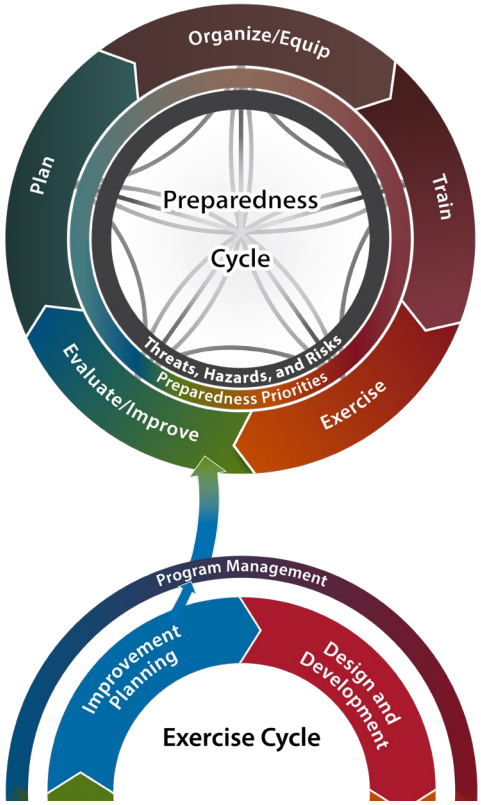


Figure 6.1: Exiting the HSEEP Cycle and Entering the Integrated Preparedness Cycle, pg. 6-1

Key Points

Improvement Planning is a process by which the areas for improvement from the exercise are turned into concrete, measurable corrective actions that strengthen capabilities. In this way, Improvement Planning activities can help shape a jurisdiction's/organization's preparedness priorities and support continuous improvement. The improvement planning activities that are identified in the HSEEP Cycle transition back into the Integrated Preparedness Cycle.

Actions identified during Improvement Planning help to strengthen elements of a jurisdiction's/organization's capability to plan, organize/equip, train, and exercise. This transition is shown in the figure above.

Effective Improvement Planning serves as an important tool throughout the Integrated Preparedness Cycle by:

- Prioritizing corrective actions identified from individual exercises
- Providing valuable input into strategy development and program priorities
- Initiating a review or new development of plan, policies, and procedures

- Identifying and obtaining needed training, equipment, and other resources

Reference: Figure 6.1: Exiting the HSEEP Cycle and Entering the Integrated Preparedness Cycle, HSEEP Doctrine January 2020, pg. 6-1

Visual 3: SMART Corrective Actions

A new concept following the Specific, Measurable, Achievable, Relevant, and Time-Bound (SMART) guidelines.

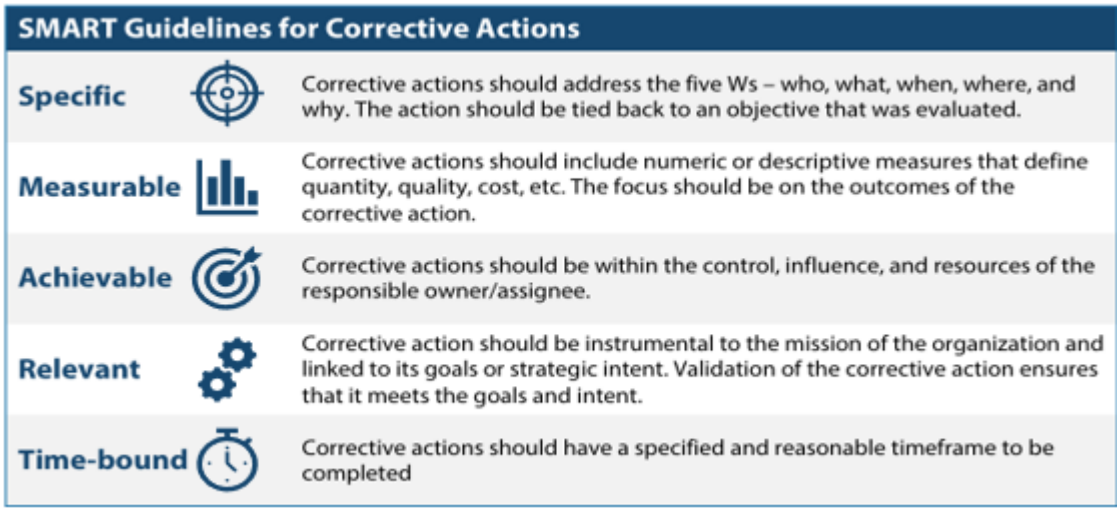


Figure 6.2: SMART Guidelines for Corrective Actions, pg. 6-2.

Key Points

Specific, Measurable, Achievable, Relevant, and Time-Bound (SMART) Corrective Actions is the same concept used in the development of SMART Objectives. All corrective actions should have clear outputs and may include changes to plans, policies, and/or procedures; organizational structures; management processes; or determine if additional training, equipment, or resources are needed. By applying the SMART concept, corrective actions will now be developed into concrete, actionable steps for the observations taken during evaluation, which will support the resolution of capability gaps and shortfalls identified during exercise and real-world incidents.

Corrective actions should have clear alignment to the root cause(s) identified and should attempt to be comprehensive in nature. For example, writing a new policy by itself will not address a capability gap if that policy does not also result in updated training material/offerings, related equipment, and drill to exercise the new capability.

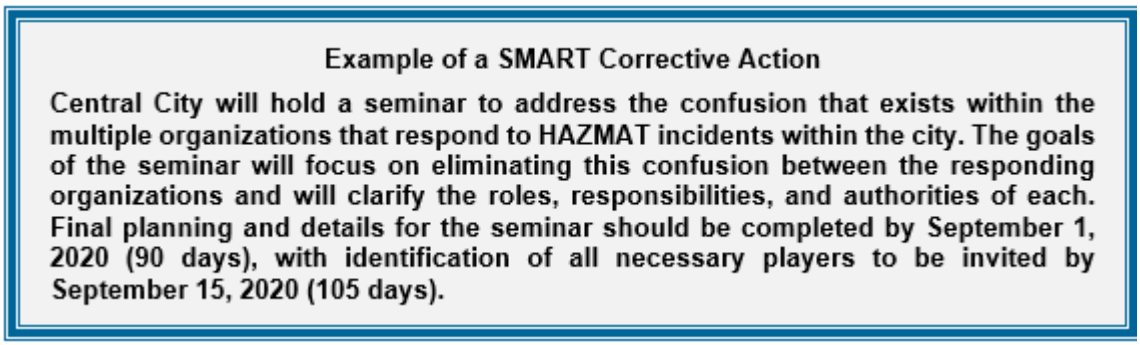
Participating jurisdictions/organizations are responsible for generating corrective actions. Once exercise data is analyzed, jurisdictions/organizations should perform an additional qualitative assessment to identify potential corrective actions. During this process, exercise planners/evaluators may assist but they are not responsible for doing it.

More complex corrective actions may require multiple milestones and streams of activities.

Reference: SMART Guidelines for Corrective Actions, HSEEP Doctrine January 2020, pg. 6-2

Visual 4: SMART Corrective Action Example

Corrective actions should be assigned to the jurisdiction(s)/organization(s) best qualified to execute them.



Example of a SMART Corrective Action, pg. 6-2

Key Points

Corrective actions should be assigned to the jurisdiction/organization best qualified to execute them. To the extent possible, there should only be one stakeholder per corrective action, with potentially multiple supporting stakeholders. Each stakeholder should have a single point of contact (POC) responsible for tracking or reporting on progress or to answer questions. As turnover occurs, POCs should be updated and briefed accordingly as to the status of current corrective actions being tracked.

In developing corrective actions, senior leaders or their designees should first review 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 issues identified are the observations that evaluators take during the evaluation of an exercise (as shown in Module 5, Lesson 2 - Observations). These observations are what will drive the development of individual corrective actions.

Once the observations are reviewed, then each jurisdiction/organization will identify which issues fall within their authority, and assume responsibility for taking action on those issues. Once all observations are reviewed, the POC for each jurisdiction/organization will then determine an initial list of appropriate corrective actions to be resolved.

The jurisdiction's/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 (P) to improve performance?
- What changes need to be made to organizational structures (O) to improve performance?
- What changes to equipment (E) or resources are needed to improve performance?
- What training (T) is needed to improve performance?
- What exercises (E) are needed to test or validate any plans, capabilities, training, etc.?

- What changes need to be made to management processes to improve performance?

Corrective Actions identified provide valuable input into the program priorities developed during the Integrated Preparedness Planning Workshop (IPPW). The corrective actions developed help to strengthen elements of a jurisdiction's/organization's capability to plan, organize, equip, train, and exercise (POETE).

Corrective actions go into the final AAR/IP for senior leaders and those responsible to implement, track, and report their status of.

Reference: Example of a SMART Corrective Action, HSEEP Doctrine January 2020, pg. 6-2

Visual 5: Using Improvement Plans (IP) to Support Continuous Improvement

- Consistent approach toward strengthening Whole Community preparedness
- Builds capabilities as part of a larger continuous improvement process
- Proven method of issue resolutions and information sharing
- Application supports the Integrated Preparedness Cycle

Key Points

Continuous improvement is a method in which capabilities are periodically examined to make sure they are sufficient, accurate, and effective to handle the threats, hazards, and risks a jurisdiction/organization may face. By continually examining the implementation of corrective actions, jurisdictions/organizations can identify capability gaps and determine what corrective actions require validation through exercises.

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

The principles of continuous improvement are:

Consistent Approach

Jurisdictions/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 a jurisdiction's/organization’s components.

Supporting Preparedness

By conducting continuous improvement activities, jurisdictions/organizations support the development and sustainment of capabilities across the Whole Community. Continuous improvement activities also ensure that jurisdictions/organizations are able to support assessments of preparedness in a timely, actionable, and meaningful way.

Effective Issue Resolution and Information Sharing

Through Improvement Planning, jurisdictions/organizations complete continuous improvement action items at the lowest level possible while facilitating the sharing of strengths and areas for improvement.

Application of the above principles and the conduct of Improvement Planning ultimately supports the Integrated Preparedness Cycle and provides the answer to the question posed in Module 1 of this course.

Reference: Improvement Plan in Appendix B.

Visual 6: Activity 10: SMART Corrective Actions and the AAR/IP

Objective: Discuss SMART Corrective Actions and writing an AAR/IP

Time: 30 minutes (workgroup and report)

Instructions:

- Review 10 Exercise Observations provided
- Develop five SMART Corrective Actions and align them to the Exercise Observations provided
- Enter these in the SMART Corrective Actions and Writing an AAR/IP worksheet
- Discuss how the SMART Corrective Actions fit into the AAR/IP

Visual 7: Why Exercise?

Exercises bring together and strengthen preparedness across the Whole Community.

Key Points

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

The HSEEP Cycle describes processes that can be followed by any size community or jurisdiction/organization to improve their resilience in addressing identified risks.

Visual 8: Activity 11: Why Exercise?

Objective: Discuss the AAR/IP, the AAM, and answer the question "Why Exercise?"

Time: 15 minutes (video and discussion)

Instructions:

- Watch Video
- Answer the question and discuss the importance of the AAR/IP and conducting the AAM
- Answer the question and discuss "Why Exercise"

Video Link:

Developing an After-Action Report and Improvement Plan Video

Developing an After-Action Report and Improvement Plan Video Transcript

Once an exercise has ended and data has been collected, the evaluation team will need to analyze the data, identify strengths and areas for improvement, and develop the After-Action Report and Improvement Plan.

This video will review how exercise staff:

- Conduct data analysis
- Compile the After-Action Report and Improvement Plan

Develop corrective actions

Data Analysis

After the exercise, the evaluation team has a challenging task ahead.

In both discussion-based and operations-based exercises, the evaluation team consolidates all data and observations collected during the exercise and reviews them to identify strengths and areas for improvement.

By comparing the actual performance of exercise participants against the exercise objectives, capability targets, and critical tasks, evaluators can identify which capabilities were successfully demonstrated, and which capabilities still need improvement.

Evaluators should consider:

- What happened? What was supposed to happen based on plans, policies, and procedures?
- Were players familiar with these documents?
- Was there a difference between intended and actual outcomes? If so, was the impact positive, negative, or neutral?

When reviewing data, evaluators should not just recount what happened during an exercise but explore *why* events happened.

The Lead Evaluator and Evaluation Team can use a variety of analysis techniques to develop and support future integrated planning, including:

- Data Synthesis—which consists of compiling and reviewing data from multiple sources

- Event Reconstruction—or creating a single, fact-based account of what happened
- Trend Analysis—which refers to identifying patterns in strengths, areas for improvement, and major changes in observations over time; and
- Root Cause Analysis—which focuses on identifying the most basic causal factor for why an expected action was not performed as anticipated

Thorough data analysis is critical for developing an After-Action Report and Improvement Plan that allows a community to build and sustain capabilities over time.

The After-Action Report and Improvement Plan summarize the outcomes of an exercise and generally includes an overview of the exercise, observations, analysis of capabilities, and a list of corrective actions.

The AAR also provides a historical record of actions taken toward improving capabilities and offers opportunities to share preparedness insights and potential best practices with other jurisdictions to assist in their own preparedness actions.

The After-Action Meeting is an interactive session intended for senior leadership and key program managers from the community to review and finalize the After-Action Report and Improvement Plan.

Participants come together to:

- Validate the analytical findings of the After-Action Report
- Finalize the corrective actions listed in the Improvement Plan
- Assign corrective actions with concrete deadlines for implementation

Let's focus a bit more on Corrective Actions.

Corrective actions are actionable steps to resolve capability gaps and shortcomings identified in the exercise.

They should have clear outputs that improve performance, and may result in changes to:

- Plans, policies and procedures
- Organizational structures
- Equipment or resources
- Training
- Future exercises

Corrective actions should be specific, measurable, achievable, relevant, and time-bound, or SMART!

Let's break this down:

- Specific – They should address the five W's: who, what, when, where, and why
- Measurable –They should include numeric or descriptive measures such as quantity, quality or cost
- Achievable – They should be within the control, influence, and resources of the responsible owner
- Relevant – They should be instrumental to the mission of the jurisdiction or organization
- Time-bound—They should have a specified and reasonable timeframe for completion

By turning areas for improvement into concrete, measurable corrective steps and actions, a community can strengthen their capabilities. Corrective actions provide the foundation for Improvement Planning

Continuous Improvement

Once the After-Action Meeting is complete and the After-Action Report and Improvement Plan is agreed to, there is a hand-off of responsibilities from the exercise team to senior leaders and the parties responsible for corrective actions.

Continuous improvement allows a community to periodically review their capabilities to ensure they are sufficient to handle the threats, hazards, and risks they may face.

By identifying strengths, areas for improvement, and corrective actions that result from an exercise, a community can build and sustain their capabilities over time.

With this information, you are now well equipped to analyze exercise data and develop the After-Action Report and Improvement Plan. Good luck!

Visual 9: Module 6: Summary

In this module, we have discussed:

- Improvement Planning
- SMART Corrective Actions
- Using Improvement Plans (IP) to Support Continuous Improvement

Key Points

In Module 6, we have discussed how the problems identified in the AAR are translated into Improvement Plans (IP) and future planning. Without a valid IP, jurisdictions/organizations are subject to repeating previous errors, not only in future exercise activities, but also in real-world incidents where the price paid can be much higher.

This module described the improvement planning phase and how it supports program management and the Integrated Preparedness Cycle including:

- The process used to identify SMART corrective actions for creation of Improvement Plans
- Using IPs to support continuous improvement

We hope this material has helped you understand the importance of the HSEEP Exercise Program Management process. Remember that you can find additional guidance as well as templates and tools to support your exercise program on the HSEEP website.

Visual 10: Course Evaluation Form and Posttest

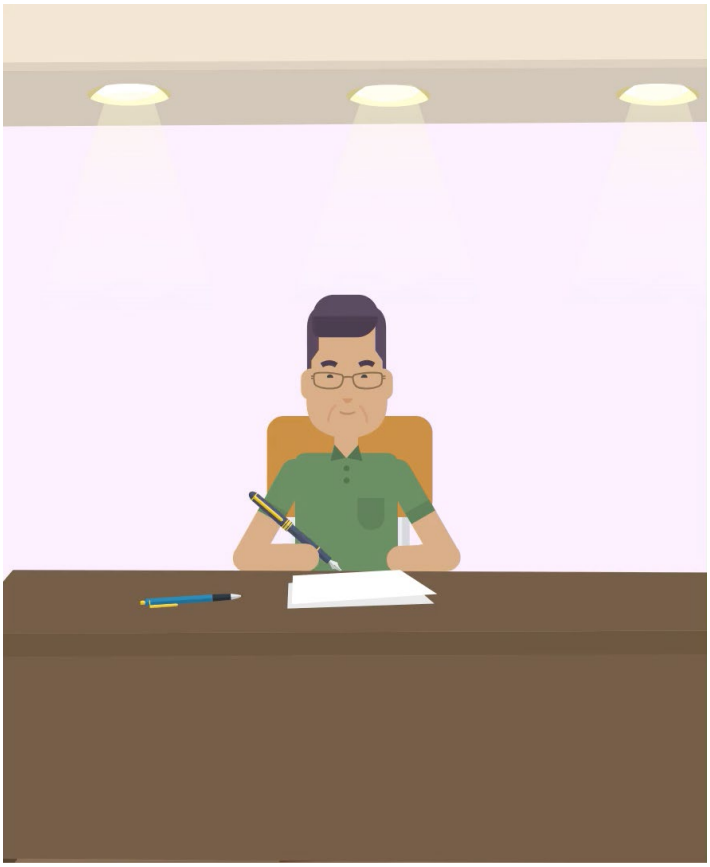
Students will now complete the course Evaluation Form.

- Your feedback is valuable to us
- Please complete your course Evaluation Form and return to your Instructor/Facilitator
- Reference the "State Code Sheet" for completing Block #3

Students will now complete the course Posttest.

- Need your Student Identification Number (SID)

Open book, self-paced, need 75% to pass



Visual 11:

Thank you for attending!

Key Points

This brings us to the end of our training. **Thank you for attending!**

Your feedback is important to the success of this course and the ongoing evaluation and improvement of the training. When you receive the evaluation forms from Instructor/Facilitator , please take the time to complete and return it.