Course Introduction

Through the use of this course, exercise program managers can learn to develop, execute, and evaluate exercises that address the priorities established by an organization's leaders. These priorities are based on the National Preparedness Goal, strategy documents, threat and hazard identification/risk assessment processes, capability assessments, and the results from previous exercises and real-world events. These priorities guide the overall direction of a progressive exercise program, where individual exercises are anchored to a common set of priorities or objectives and build toward an increasing level of complexity over time.

Accordingly, these priorities guide the design and development of individual exercises, as planners identify exercise objectives and align them to core capabilities for evaluation during the exercise. Exercise evaluation assesses the ability to meet exercise objectives and capabilities by documenting strengths, areas for improvement, core capability performance, and corrective actions in an After-Action Report/Improvement Plan (AAR/IP). Through improvement planning, organizations take the corrective actions needed to improve plans, build and sustain capabilities, and maintain readiness.

The use of the Homeland Security Exercise and Evaluation Program (HSEEP)—in line with the National Preparedness Goal and the National Preparedness System—supports efforts across the whole community that improve our national capacity to build, sustain, and deliver core capabilities.

This course is designed to introduce you to the fundamentals of exercise design and to prepare you to design and conduct exercises consistent with the Homeland Security Exercise and Evaluation Program (HSEEP) doctrine.

The prerequisite for this course is IS 120.c Introduction to Exercises.

Course Overview

This course contains six lessons.

- **Lesson 1, Exercise Design Considerations**, discusses the overall design considerations including the basic components of an exercise program, a well as the types and characteristics of both discussion-based and operations-based exercises.
- **Lesson 2, Exercise Planning Team**, explains the different considerations needed when selecting the members of a design team; including the specific roles of planning team members and how they relate to the elements of an exercise scope.
- **Lesson 3, Capability-Based Exercise Objective Development**, concentrates on the objectives of an exercise and how they impact the core capabilities.
- **Lesson 4, Scenario and Master Scenario Events List Development**, explains the basic elements and functions of a scenario and how to create a Master Scenario Events List (MSEL).
- **Lesson 5, Exercise Documentation**, describes the audience and purpose of the key exercise design and development documents.
- **Lesson 6, Additional Enhancements**, explains the purpose and types of exercise enhancements, as well as what considerations are to be taken when selecting specific enhancements.

Course Objectives

After completing this course, you will be able to:

- Define reasons to design and complete exercises.
- Identify the members of an exercise design team.
- Compile exercise objectives.
- Determine evaluation elements of the exercise.
- Understand how to develop exercise scenarios.
- Identify the correct documents for the exercise.

Receiving Credit

Each lesson takes a variable amount of time to complete. If you are unable to complete the course in its entirety, you may close the window and reopen the course at any time. However, depending on the system used to take the course, it is possible you may have to repeat a portion of the last lesson you were studying.

Course Objectives Navigation start

Lesson List

→ Course Overview and Navigation

• Exercise Design Considerations

• Exercise Planning Team

• Capability-Based Exercise Objective Development

• Scenario and Master Scenario Events List Development

• Exercise Documentation

• Additional Enhancements

• Course Summary

[2011 Tuscaloosa Tornado Discussion with Mayor Walter Maddox - Video Transcript](#)

Summary

Having completed this section, you are able to:

- Navigate the course correctly.
- Understand course objectives.
- Understand receiving credit for the course.

Lesson List

✓ Course Overview and Navigation

→ Exercise Design Considerations

• Exercise Planning Team

• Capability-Based Exercise Objective Development

• Scenario and Master Scenario Events List Development

• Exercise Documentation

• Additional Enhancements

• Course Summary

Lesson 1 Objectives

At the end of this lesson you will be able to:

- Identify the basic components of an exercise program.
- Identify the types of exercises as defined by HSEEP.

Progressive Exercising

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

- Progressive exercising is a scalable approach, where exercises that build upon each other are developed.

  - Functional exercises require:

    - Participants
    - Simulators/Controllers
    - Evaluators

- A community or an organization engages in a progressive exercise when the goal requires a comprehensive approach from every type of responding agency (e.g. police, fire, hospitals).
- Participants are determined based on the exercise needs and jurisdiction. Exercises might scale up to engage the whole community, or the population might be limited down to just key stakeholders.

Careful Planning

- Clearly-defined goals set the tone for the careful planning of design and development. Those goals help set the priorities and focus on figuring out what works and what requires improvement when it comes to emergency operations.
- The scale of complexity with exercises starts with the least-complex discussion-based exercises such as seminars and tabletop exercises (TTX). Discussion-based exercises serve to inform participants of (or help develop) plans, policies, agreements, and procedures.
- Medium complexity starts with operational exercises such as workshops.
- The most-complex exercises are typically full-scale exercises (FSEs). Medium and high complexity is used when validating functional response actions where plans, policies, agreements, and procedures are implemented as if responding to an actual incident.
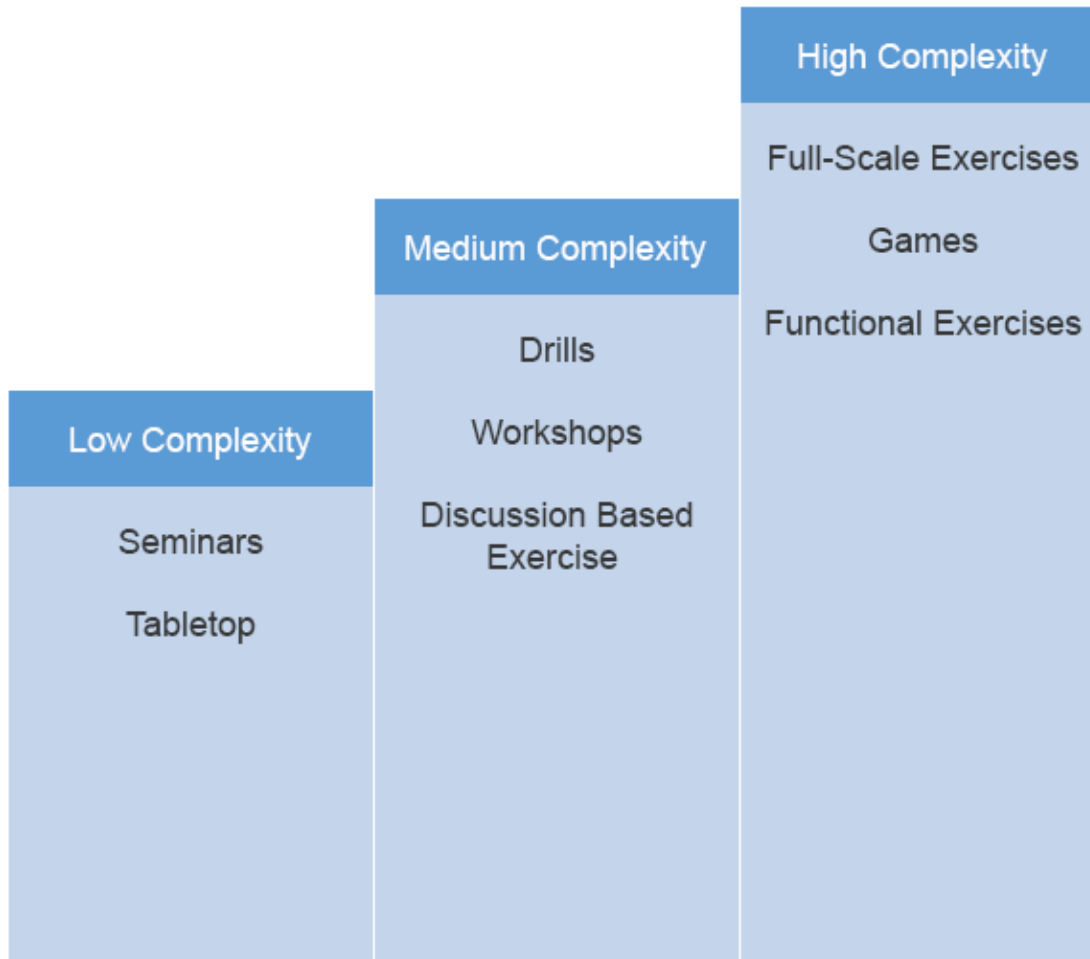
Success Breeds Success

- As each progressive exercise shows success, this ensures:

- Officials/stakeholders trust and are willing to commit resources.
- Personnel regards future exercises positively.
- The confidence of the organization and community builds.
- Operating skills improve.

Exercise Complexity

There are various types of exercises that can be employed to prepare for real-world scenarios and emergencies. Exercises can be low, medium, or high complexity.

High Complexity

Full-Scale Exercises

Games

Functional Exercises

Medium Complexity

Drills

Workshops

Discussion Based Exercise

Low Complexity

Seminars

Tabletop

C&O Meeting - Tools and Outcomes

The primary tool for a C&O meeting is a read-ahead packet for participants. This packet usually includes the agenda and background briefing.

Outcomes from a C&O Meeting include:

- Exercise concept
- Exercise timeframe
- Extent of participation

- Identification of planning team members
- Planning timeline, milestones, and meeting dates

As a follow-up, meeting minutes should be compiled and sent to each participant within four working days of the meeting conclusion.

Why the planning Team Structure is important.

The Exercise Planning Team manages and is responsible for these aspect of an exercise:

- Design
- Development
- Conduct
- Evaluation

The size of the team will vary depending on the type and scale of the exercise. Exercise planners may elect to use the Incident Command System (ICS) structure when establishing the structure and organization of the planning team (see organization chart).

A team consists of a Lead Exercise Planner and planning team members. The team lead has complete management responsibility, assigning tasks to team members and ensuring the successful execution of the exercise.

The team size should:

- Be kept manageable but represent a full range of participating organizations and other relevant stakeholders.
- Include whole community stakeholders such as:

    - First responders/support agencies
    - Advocacy groups
    - Those with limited English language proficiency

In addition, Subject Matter Experts (SMEs) bring functional knowledge from their area of expertise.
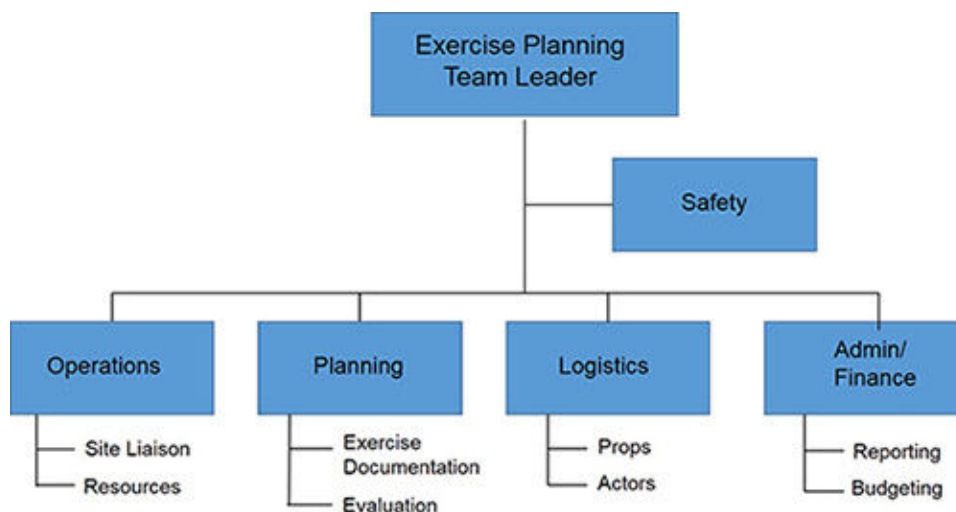
Planning Team flowchart. At the top is the Exercise Planning Team Leader, who is responsible for all planning team functions. The team is broken into sub-teams on which to focus. The purpose of these sub-teams is to divide the exercise functions and are all on the same level. They are Operations, which includes Site Liaison and Resources, Planning, which

The Incident Command System (ICS) structure includes the Exercise Planning Team Leader, or Command level, Operations, Planning, Logistics, and Administrative functional areas. The Safety Officer ensure safety procedures and safe practices are followed.

includes Exercise Documentation and Evaluation, Logistics, which includes Props and Actors, and Admin/Finance, which includes Reporting and Budgeting. A safety officer or team is always needed for operations-based exercises and falls under the purview of the Exercise Planning Team Leader as well.

Planning Team Responsibilities

The exercise planning team size should be kept manageable but represent a full range of participating organizations and other relevant stakeholders. It is important to include whole community stakeholders, such as first responders/support agencies, advocacy groups, and those with limited English language proficiency. In addition, **Subject Matter Experts (SMEs)** bring functional knowledge from their area of expertise.

The Exercise Planning Team responsibilities include:

- Determine exercise objectives, evaluation plan, and control, and simulation systems
- Design, develop, conduct and evaluate results of exercise
- Develop scenario, Exercise Evaluation Guides (EEGs), and other exercise documentation
- Plan logistics for exercise conduct
- Identify, create, and distributes pre-exercise materials

Subject Matter Experts (SMEs) and Trusted Agents

SMEs contribute to the exercise planning team by:

- Adding expertise to the exercise planning team
- Providing functional knowledge for player-specific tasks evaluated through objectives
- Helping make the scenario realistic and plausible
- Ensuring appropriate evaluation of capabilities

Trusted agents:

- Are individuals who understand that confidentiality must be preserved to maintain the integrity of the exercise.
- All members of the exercise planning team are trusted agents.
- Team members must not reveal details or share insight in order to protect the integrity and confidentiality of the exercise and evaluation process.
- This is especially important to those team members who may also serve as controllers or evaluators during exercise conduct.

Successful Planning Teams and Planning Team Roles and Responsibilities

Successful Planning Teams

Regardless of the size or scope of an exercise, an exercise planning team performs best with a clear organizational structure which clearly defines roles, responsibilities, and functional requirements for each role or position on the planning team.

Tips for creating a successful planning team:

- Define roles, responsibilities, and functional requirements
- Engage elected and appointed officials and whole community leadership in exercise planning
- Use project management principles
- Follow standardized process
- Organize the team using NIMS Incident Command System (ICS) or other structure that defines support roles for each team member

Planning Team Roles and Responsibilities

Exercise planning team members are responsible for the exercise design and development, conduct of the exercise, and exercise evaluation. Based on elected and appointed officials' guidance and program priorities, the team will establish exercise objectives and determine the core capabilities to be assessed during exercise play. Next, the team is responsible for creating a realistic scenario to assess the identified capabilities and objectives. As mentioned earlier, SMEs play a big role in creating plausible scenarios. The team develops supporting documentation for the exercise as well as process documentation, control and simulation documentation, and customized evaluation packets for participants. Team members also help with building and distributing pre-exercise materials and conducting exercise planning meetings, briefings, and training sessions. Keep in mind that being part of an exercise planning team is usually a collateral duty. It is very important to ensure candidates can make the commitment to actively participate throughout the process.

Exercise Program: Why it is important

- Planning at the program level is required to ensure successful exercise process implementation.
- Segmenting requirements by task level help visualize exercise and program components.
- Exercise process is organized by task sequece, task categories and phases provide clarification.

Exercise Program: Basic Components

- Initial Planning Meeting (IPM)
- Identify Costs and Liabilities
- Gain Senior Leader Support
- Exercise Planning Team
- Execute the Exercise Process

Exercise Foundation Key Documentation

- Threat and Hazard Identification and Risk Assessment (THIRA)
- Rolling Summary Report
- Multiyear Training Exercise Plan (TEP)
- After Action Report

Exercise Foundation Key Documentation: THIRA

- Threat and Hazard Identification and Risk Assessment (THIRA)

  - A tool used to assess an organization or jurisdiction's objectives against performance thresholds to validate successful completion of critical tasks associated with targeted core capabilities.

Exercise Foundation Key Documentation: Multiyear Exercise Plan (TEP)

- Based on a set of strategic, high-level priorities selected by Organization's elected and appointed officials
- Priorities guide the development of exercise objectives
- Training and exercise program actions are implemented as Discussion-based and Functional exercises

See HSEEP Document here.

Exercise Foundation Key Documentation: After Action Report

- Qualitative summary designed to identify potential corrective actions in exercises or real-world events.
- The AAR is a draft improvement plan (IP) which is developed for an After Action Meeting (AAM).
- A final AAR is created once participants reach final consensus strengths and areas to improve.

Concept and Objectives (C&O) Meeting

The Concept and Objectives (C&O) meeting marks the formal beginning of the exercise planning process.

Elected and appointed officials, representatives from all supporting organizations, and the exercise planning team leader attend the C&O meeting. Based on guidance from elected/appointed officials, exercise program priorities are defined and objectives are determined and aligned to core capabilities. In addition, the remainder of the exercise planning team members is identified.

Meeting Focus	Discussion Points	Exercise Tools	Exercise Outcomes	Follow-up
• Formal beginning of the planning process • Identify the scope and objectives of the exercise	• Exercise scope • Proposed exercise objectives and their aligned core capabilities • Proposed exercise location, date, and duration • Participants and anticipated extent of play for exercise participants • Exercise planning team • Exercise assumptions and artificialities • Exercise control and evaluation concepts • Exercise security organizations and structure • Available exercise resources • Exercise logistics • Exercise planning timeline and milestones • Local issues, concerns, and sensitivities	• Meeting agenda • Background briefing	• Exercise concept • Exercise timeline (group consensus) • Extent of participant play • Identification of planning team members • Planning timeline, milestones, and meeting dates	• Meeting minutes compiled and sent to participants within four (4) days

Initial Planning Meeting (IPM)

The Initial Planning Meeting (IPM) marks the formal beginning of the exercise development phase. Its purpose is to determine exercise scope by getting intent and direction from elected and appointed officials, and gathering input from the exercise planning team; and to identify exercise design requirements and conditions (e.g., assumptions and artificialities), exercise objectives, participant extent of play, and scenario variables (e.g., time, location, hazard selection). The IPM is also used to develop exercise documentation by obtaining the planning team's input on exercise location, schedule, duration, and other relevant details.

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

Meeting Focus	Discussion Points	Exercise Tools	Exercise Outcomes	Follow-up
• Formal beginning of the development phase • Identify the scope and objectives of the exercise	• Clearly defined exercise objectives and aligned core capabilities • Evaluation requirements, including EEG capability targets and critical tasks • Relevant plans, policies, and procedures to be evaluated in the exercise • Exercise scenario • Modeling and simulation planning • Extent of play for each participating organization • Optimum duration of the exercise • Exercise planners' roles and responsibilities • Decision to record exercise proceedings (audio or video) • Local issues, concerns, or sensitivities • Any discussion points typically covered during a C&O Meeting if a C&O Meeting was not	These items should be provided at least five (5) days prior to the scheduled meeting: • Read-ahead packet • The meeting agenda • Core capabilities • Hazard and threat information (where applicable to the exercise) • For discussion-based exercises: the proposed room layout • For operations-based exercises: a map of the proposed exercise venue, including a description of the local environment • A copy of the proposed project timeline and milestones	• Any outcomes from the C&O meeting • Clearly defined exercise objectives and aligned core capabilities • Initial capability targets and critical tasks, which will be reviewed and confirmed prior to the next meeting • Identified exercise scenario variables (e.g., threat scenario, scope of hazard, venue, conditions) • A list of participating exercise organizations and anticipated organizational extent of play • Draft SitMan or ExPlan • Identification and availability of all source documents (e.g., policies, plans, procedures) needed to draft exercise documents	• Compile and distribute the IPM meeting minutes, including the next meeting date, time, and location • Between meetings: Planning Team collaborates on assignments and prepares draft of exercise documentation • Distribute draft documentation prior to the next scheduled meeting

	conducted • Consensus regarding the date, time, and location for the next meeting.	for exercise design and development • Copies of the presentation briefing to be used at the meeting	and presentations • A refined exercise planning timeline with milestones • Identification and availability of SMEs, as necessary, for scenario vetting and/or expert evaluation • Determination of preferred communication methods among the exercise planning team • Clearly identified and assigned responsibility for exercise logistical issues • A list of tasks to be accomplished by the next planning meeting with established dates for completion and responsible planning team members identified • An agreed-upon date, time, and location for the next planning meeting and the actual exercise	

IPM - Discussion Points

Discussion Points:

- Exercise objectives and core capabilities
- Evaluation requirements, including Exercise Evaluation Guides (EEGs)
- Relevant plans, policies, and procedures
- Exercise scenario
- Modeling and simulation planning
- Extent of play (time, date, and location)

Midterm Planning Meeting (MPM)

Midterm Planning Meetings (MPMs) provide additional opportunities to engage elected and appointed officials and to settle logistical and organizational issues that may arise during exercise planning. A walkthrough of the exercise site or venue will be conducted during this meeting.

If only three planning meetings are held (i.e., IPM, MPM, and Final Planning Meeting [FPM]), a portion of the MPM should be devoted to developing the Master Scenario Exercise List (MSEL).

Meeting Focus	Discussion Points	Exercise Tools	Exercise Outcomes	Follow-up
- Re-engage elected and appointed officials (prior to the meeting) - This allows the planning team leader to keep officials up to date with progress to date, answer any questions they may have, and ensure alignment	- Comments on draft exercise documentation - Construction of the scenario timeline—usually the MSEL—if an additional MSEL Planning Meeting will not be held - Identification of exercise venue artificialities and/or limitations - Agreement on final logistical items - Assignment of additional responsibilities	As with all meetings, a read-ahead packet should be delivered to all participants at least five (5) days prior to the MPM. Tools included in the packet include, but are not limited to: - A meeting agenda - IPM meeting minutes - Draft scenario timeline - Draft documentation (ExPlan, Controller/Evaluator [C/E] Handbook) - Other selected documentation needed to illustrate exercise concepts and provide	- Reviewed or final exercise documentation (as applicable) - Draft Facilitator Guide or C/E Handbook, including the EEGs - Well-developed scenario to include injects (if no MSEL Planning Meeting is scheduled) - Agreement on the exercise site - Identified logistics planning requirements - Finalization of	- Compile and distribute the MPM meeting minutes, including the next meeting date, time, and location - Between meetings: Planning Team collaborates on assignments and prepares draft of exercise documentation - Distribute draft documentation prior to the next scheduled meeting

		planning guidance	date, time, and location on the MSEL Planning Meeting and/or Final Planning Meeting	
with guidance and intent • Exercise organization • Scenario and timeline development • Logistics and administrative requirements				

IPM - Tools

Tools are necessary to guide the IPM. Most importantly, read-ahead materials and the meeting agenda should be provided to all meeting participants at least five days prior to the meeting.

Read-ahead packets should include the following items:

- The meeting agenda
- A list of capabilities and tasks from the Exercise Evaluation Guides (EEGs) or copies of the EEGs that pertain to the capabilities to be validated
- Hazard information (where applicable to the exercise)
- For discussion-based exercises: the proposed room layout
- For operations-based exercises: a map of the proposed exercise venue, including a description of the local environment
- A copy of the proposed project timeline for exercise design and development
- Copies of the presentation briefing to be used at the meeting

Providing these materials in advance sets a pro-active stance for this and possibly other meetings that may follow. Team members can review, take notes, and formulate ideas and arrive prepared to contribute to the effort, making the most of the face-to-face meeting time available.

IPM - Meeting Outcomes

At the completion of the IPM, the desired outcomes are:

- Any outcomes listed in the C&O meeting section if a C&O meeting was not conducted.
- Clearly defined exercise objectives and aligned core capabilities.
- Initial capability targets and critical tasks (These tasks will be reviewed and confirmed prior to the next planning meeting).
- Identified exercise scenario variables, such as threat scenario, scope of hazard, venue, or conditions.
- A list of participating exercise organizations and anticipated organizational extent of play.
- Draft Situation Manual (SitMan) or Exercise Plan (ExPlan).
- Identification and availability of all source documents (e.g., policies, plans, procedures) needed to

draft exercise documents and presentations.

- A refined exercise planning timeline with milestones.
- Identification and availability of SMEs, as necessary, for scenario vetting and/or expert evaluation.
- Determination of preferred communication methods among the exercise planning team.
- Clearly identified and assigned responsibility for exercise logistical issues.
- A list of tasks to be accomplished by the next planning meeting with established dates for completion and responsible planning team members identified.
- An agreed-upon date, time, and location for the next planning meeting and the actual exercise.

IPM Meeting - Follow-up

Follow-up activities:

- Compile and distribute the IPM meeting minutes, including the next meeting date, time, and location
- Between meetings: Planning Team collaborates on assignments and prepares draft of exercise documentation
- Distribute draft documentation prior to the next scheduled meeting

Exercise Program: Master Scenario Events List Meeting

- For more complex exercises, one or more additional planning meetings—or MSEL Meetings—may be held to review the scenario timeline. If not held separately, topics typically covered in a separate MSEL Meeting can be incorporated into the MPM and FPM.
- The MSEL Meeting focuses on developing the MSEL—a chronological list that supplements the exercise scenario with:

  - Event synopses.
  - Expected participant responses.
  - Objectives and core capabilities to be addressed.
  - Responsible personnel.

- It includes specific scenario events (or injects) that prompt players to implement the plans, policies, procedures, and protocols and records the methods that will be used to provide the injects (e.g., phone call, radio call, e-mail).

Final Planning Meeting

- The Final Planning Meeting (FPM) is the final forum for reviewing exercise processes and procedures.
- Both before and after the FPM, the exercise team leader should engage elected and appointed officials to ensure that the exercise is aligning with their intent, address any questions, and receive any last-minute guidance.
- The FPM ensures that all logistical requirements have been met, outstanding issues have been identified and resolved, and exercise products are ready for printing.

Gain Leader Support

Involve the highest possible official in exercise planning early on to establish authority.

- Gain support for the entire exercise program
- Protect the organization
- "Sell" the process Announce the exercise

Exercise Program Guidelines

- Establish a base

    - Define the exercise scope and identify limitations

- Address the costs and liabilities

    - Funding
    - Human Resources
    - Organizational liabilities

Lesson 1 Summary: Objectives

You should now be able to:

- Identify the basic components of an exercise program.
- Identify the types of exercises as defined by HSEEP.

Key Points Summary

- Progressive exercising, where exercises are built to support each other and increase in complexity from low to high, is the preferred method of building an exercise plan. This method helps build trust with stakeholders and officials while avoiding the rush into more time and resource-intensive exercises.
- Lower-complexity exercises include discussion-based exercises such as seminars, workshops, tabletop exercises (TTX), and games. Higher-complexity exercises tend to be operations-based ones such as drills, functional exercises, and full-scale exercises. The exercise process starts with the Initial Planning Meeting (IPM) where goals and objectives are set and aligned to core capabilities.
- The Exercise Planning Team is selected based on the needs of the exercise which includes SMEs, and Emergency Manager/appointee, and a key participant from each department involved. An exercise schedule is set to help all stakeholders view and monitor tasks and resources while costs and liabilities are considered. The evaluation critiques and guidelines are set up and key documentation is consulted and maintained such as THIRA, Rolling Summary Report, Multi-Year Exercise Plan, and After-Action Report.

Lesson List

✓ Course Overview and Navigation

✓ Exercise Design Considerations

→ Exercise Planning Team

• Capability-Based Exercise Objective Development

• Scenario and Master Scenario Events List Development

• Exercise Documentation

• Additional Enhancements

• Course Summary

Lesson 2 Objectives

At the end of this lesson you will be able to:

- Indicate considerations when selecting members of the design team.
- Associate the roles and responsibilities of specific exercise planning team members.
- Identify the elements of an exercise scope.

Lesson List

✓ Course Overview and Navigation

✓ Exercise Design Considerations

→ Exercise Planning Team

• Capability-Based Exercise Objective Development

• Scenario and Master Scenario Events List Development

• Exercise Documentation

• Additional Enhancements

• Course Summary

Assembling a Design Team

Planning Team Structure

The exercise planning team manages and is responsible for exercise design, development, conduct, and evaluation of an exercise. The size of the team will vary depending on the type and scale of the exercise. Exercise planners may elect to use the Incident Command System (ICS) structure when establishing the structure and organization of the planning team (see organization chart).

A team consists of a **Lead Exercise Planner, or exercise director**, and **planning team members**. The Exercise Director should be a person that has been given the authority to make decisions for the sponsoring organization. Furthermore, the exercise director provides direction and oversight of the planning team members. The Lead Exercise Planner has complete management responsibility, assigning tasks to team members and ensuring the successful execution of the exercise.
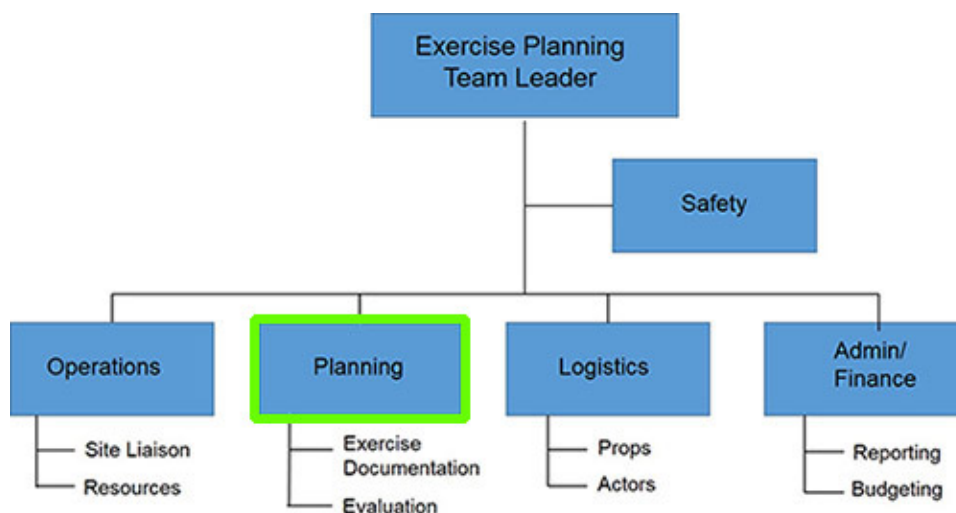
Lead Exercise Planner

- Devotes significant time throughout an exercise cycle.
- Is experienced and capable.
- Is familiar with the emergency plan.
- Has a sound understanding of response participating organizations.
- Is not a key member of any participating organization.

Exercise Planning Team Members

- Other candidates within the design team include at least one representative from each participating jurisdiction and each key department.
- Member backgrounds should vary to help with coordination and stimulate creativity with exercise development.

Exercise Planning Team Members' Responsibilities

- To assist the team leader in developing content and procedures for the exercise.
- To determine exercise objectives.
- To tailor the scenario to the needs of each department.
- To develop a sequence of events and the associated messages.
- To assist in development and distribution of pre-exercise materials.
- To help conduct pre-exercise training sessions.
- To act as potential simulators and/or controllers within each exercise.

Scheduling Tool: Gantt Chart

One way to organize the schedule among team members is to have a Gantt chart, exhibiting deliverables, the timeframe to develop them, and when they are due. This ensures team communication and proper planning for exercise material development.

Scope

When the scope is defined, it informs the team's decisions. A scope consists of: the audience, number (or range) of individuals acting, those who are affected, the hazard(s) involved, and the resources required.

Keeping the Scope Realistic

When defining the scope, the design team must keep it realistic. They must be able to clearly define the problem and set priorities for the exercise. For example, an organization might exhibit weaknesses in communicating emergency evacuation procedures, and therefore the exercise might prioritize communication systems within the scope to keep it realistic. This type of focus informs the team's choices in all aspects of exercise design and development.

Lesson 2 Summary: Objectives

Now you should be able to:

- Indicate considerations when selecting members of the design team.
- Associate the roles and responsibilities of specific exercise planning team members.
- Identify the elements of an exercise scope.

Key Points Summary

- An exercise design team consists of a team leader, either the Emergency Manager or a representative, and representatives from each participating organization.
- The team is responsible for determining the exercise objectives, developing and tailoring the sequence of events and associated messages within the scenario, logistics, assisting in the development and distribution of pre-exercise training sessions.
- To ensure success, the design team needs to establish clear goals and lines of communication. They should reach a consensus on a realistic milestone schedule and meet regularly to monitor progress.
- When clearly defining the scope, the team must start with the requirements that guide the exercise,

set priorities and make choices based on those priorities. The team must examine what resources are available pertaining to staffing, monetary, schedule, skill and experience of those on the team, and the capability of the exercise to address the problem as defined.

- Scope requires the type of emergency, location, functions involved, participants, and the exercise type.

Lesson List

✓ Course Overview and Navigation

✓ Exercise Design Considerations

→ Exercise Planning Team

- Capability-Based Exercise Objective Development

- Scenario and Master Scenario Events List Development

- Exercise Documentation

- Additional Enhancements

- Course Summary

Lesson 3 Objectives

At the end of this lesson you will be able to:

- Develop exercise objectives utilizing SMART guidelines.
- Identify the SMART components of exercise objectives.
- Explain which core capability each objective impacts.

Lesson List

✓ Course Overview and Navigation

✓ Exercise Design Considerations

✓ Exercise Planning Team

→ Capability-Based Exercise Objective Development

• Scenario and Master Scenario Events List Development

• Exercise Documentation

• Additional Enhancements

• Course Summary

Exercise Objectives

There are two types of objectives:

- **Exercise objectives:** Distinct outcomes that an organization wishes to achieve during an exercise.

    - The exercise planning team chooses one or more exercise program priorities on which to focus an exercise

        - These priorities are selected based on guidance from elected and appointed officials and from the results of a needs assessment

    - Using the exercise program priorities, the planning team creates exercise objectives

- **Performance objectives:** Describes what players should know or do under specific conditions in response to an event: real-world or within an exercise scenario.

    - Each performance objective should support the overall objectives of the planned exercise.

The 5 W's of Smart Objectives.

Information from a purpose statement

Who	What	When	Where	Why
City and County Government, Volunteer Organizations, and	Alert and Warning, Evacuation and	July 15th	SW Mail Road near SW	Test and Evaluate Effectiveness of Alert and Warning Evacuation and Shelter/Mass Annexes and to enhance

Private Industry	Shelter/Mass Annexes		Johnston Boulevard	interagency coordination

Example objectives from the information within the purpose statement might be:

- By the end of this exercise, you will be able to:
    - Determine the effectiveness of alert and Warning Evacuation procedures.
    - Enhance interagency coordination of procedures and communication among city and county government, volunteer organizations, and private Industry

SMART Objectives

The following are guidelines for developing SMART objectives:

- **S**pecific - 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.

- **M**easurable - Objectives should include numeric or descriptive measures that define quantity, quality, cost, etc. Their focus should be on observable actions and outcomes.

- **A**chievable - Objectives should be within the control, influence, and resources of exercise play and participant actions.

- **R**elevant - Objectives should be within the control, influence, and resources of exercise play and participant actions.

- **T**ime-Bound - A specified and reasonable timeframe should be incorporated into all objectives.

Word Choice

Use concrete words.

One way to avoid vagueness is to use concrete words. Pay particular attention to the verb that describes participant performance.

Word Choice

Use action words, such as:

- Assess

- Clarify

- Examine

- Explain

- Operate

- Prepare

- Define

- Determine

- Identify

- Inspect

- Record

- Report

- Demonstrate

- List

- Notify

- Show

- Establish

- Test

Avoid vague verbs and phrases, such as:

- Know

- Understand

- Appreciate

- Be aware of

Alignment to Core Capabilities

Once you have identified your core capabilities, develop objectives to align with the capabilities you are planning to evaluate.

Core Capabilities

Prevention	Protection	Mitigation	Response	Recovery
Planning				
Public Information and Warning				
Operational Coordination				
Intelligence and Information Sharing		Community Resilience	Infrastructure Systems	
Interdiction and Disruption		Long-Term Vulnerability Reduction	Critical Transportation	Economic Recovery
Screening, Search, and Detection		Risk and Disaster Resilience Assessment	Environmental Response/Health and Safety	Health and Social Services
Forensics and Attribution	Access Control and Identity Verification	Threats and Hazards Identification	Fatality Management Services	Housing
	Cybersecurity		Fire Management and Suppression	Natural and Cultural Resources
	Physical Protective Measures		Logistics and Supply Chain Management	
	Risk Management for Protection Programs and Activities		Mass Care Services	
	Supply Chain Integrity and Security		Mass Search and Rescue Operations	
			On-Scene Security, Protection, and Law Enforcement	
			Operational Communications	

| | | | Public Health, Healthcare, and Emergency Medical Services

Situational Assessment | |
|---|---|---|---|---|
| | | | | |

Lesson 3 Summary: Objectives

Now you will be able to:

- Develop exercise objectives utilizing SMART guidelines.

- Explain which core capability each objective impacts.

Key Points

- There are two types of objectives:

  - Exercise objectives: Distinct outcomes that an organization wishes to achieve during an exercise.
  - Performance objectives: Describe what players should know or do under specific conditions in response to an event: real-world or within an exercise scenario Each performance objective should support the overall objectives of the planned exercise.

- Specific Objectives should address the five **Ws**- **w**ho, **w**hat, **w**hen, **w**here, and **w**hy.
- Measurable Objectives should include numeric or descriptive measures that define quantity, quality, cost, etc.
- Achievable Objectives should be within the control, influence, and resources of exercise play and participant actions.
- Relevant Objectives should be within the control, influence, and resources of exercise play and participant actions.
- Once you have identified your core capabilities, develop objectives to align with the capabilities yourare planning to evaluate.
- Use actionable, concrete verbs to describe who or what is being assessed

Lesson List

✓ Course Overview and Navigation

✓ Exercise Design Considerations

✓ Exercise Planning Team

✓ Capability-Based Exercise Objective Development

→ Scenario and Master Scenario Events List Development

• Exercise Documentation

• Additional Enhancements

• Course Summary

Lesson 4 Objectives

At the end of this lesson you will be able to:

- Identify the three basic elements of an exercise scenario.
- Recognize the functions of a scenario narrative.
- Define the components of MSEL development.

Lesson List

✓ Course Overview and Navigation

✓ Exercise Design Considerations

✓ Exercise Planning Team

✓ Capability-Based Exercise Objective Development

→ Scenario and Master Scenario Events List Development

• Exercise Documentation

• Additional Enhancements

• Course Summary

The Exercise Scenario and Ground Truth

An **Exercise 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.

For operations-based exercises, a scenario provides background information and a storyline about the incident catalyst(s) of the exercise—the overall scenario is provided in the Controller/Evaluator Handbook (C/E Handbook), and specific scenario events are contained in the Master Scenario Events List (MSEL).

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

The **Ground Truth** is comprised of the detailed elements of a prevention exercise scenario that must remain consistent during exercise development and conduct to ensure that realism is maintained and objectives may be met in the unscripted move-countermove exercise environment. The ground truth includes the scenario timeline, local threat environment, simulated threat group, and individual adversary profiles and relationships. Once composed, the ground truth is used as the basis for MSEL development and red team operations planning, if applicable.

Exercise Scenario

You can outline a narrative by jotting down short responses (one or two words) to the following questions:

- What event?
- How fast, strong, deep, dangerous?
- How did you find out?
- What response has been made?
- What damage has been reported?
- What is the sequence of events?
- What time?
- Was there an advance warning?
- Where does it take place?
- What are the relevant weather conditions?
- What other factors influence emergency procedures?
- What is predicted for the future?

When you're ready to write the text of the narrative, just take each of the keywords and turn it into a brief sentence.

Two exercise narratives are provided on the following pages. As you read the narratives, notice where the questions listed above are answered.

Sample Narrative: Hurricane

The National Weather Service's National Hurricane Center issues news on the formation of Tropical Storm Anne off the southern U.S. coast that appears to have hurricane potential. Tropical storm Anne is upgraded to Hurricane Anne and NWS issues a Hurricane Watch for a three-state area along the U.S. coast. Wind

velocity and northwest movement over the last day have decreased, but an overnight change in direction to a steady northwest line calls for an immediate Hurricane Warning for five coastal counties of the state. Winds of 120 m.p.h. are predicted during the incoming tide, with high water expected to reach 12–15 feet over high tide. Low lying, newly developed resort areas and a heavy influx of visiting weekend campers have been advised to evacuate the area. Access bridges to barrier islands are narrow and could become impassable with 15-foot water heights.

Hurricane Anne, considered a very dangerous hurricane with high winds and an accompanying storm surge, will hit the coastal communities along Stevens Bay and farther inland, a population area of between 5,000 and 25,000.

Following the hurricane watch, emergency service personnel notified elected officials and agency heads within the watch area. News media were also alerted and encouraged to broadcast the notice. When the warning of landfall within 24 hours was given, the Emergency Manager placed her staff on alert but did not activate the EOC. She has asked all appropriate emergency service personnel to meet at 07:30, approximately four hours after the warning was given. On its present course, the hurricane will make landfall at approximately 23:30. Flood stage from rising tides and tidal surge could, however, impact bridges by 16:00. All appropriate staff and emergency personnel are now gathered in the EOC.

Notice where these questions are answered in the narrative :

- What event?
- How fast, strong, deep, dangerous?
- How did you find out?
- What response has been made?
- What damage has been reported?
- What is the sequence of events?
- What time?
- Was there an advance warning?
- Where does it take place?
- What are the relevant weather conditions?
- What other factors influence emergency procedures?
- What is predicted for the future?

Sample Narrative: Air Crash

A Boeing 747, en route from Panama to San Francisco, is experiencing in-flight engine problems and will have to make an emergency landing. Plans have been made to land at a large airport 200 miles north. However, the latest communication with the pilot indicates that the plane has lost engine power and is losing altitude too quickly to reach the large airport. Even though your city airport is too small to handle a 747, you are the only hope for the 350 passengers and 10 crew members.

Conditions at your airport are clear, and the surrounding area is dry. A hot, dry wind is blowing from the north.

The main runway lies along a relatively unpopulated suburban area. However, the likelihood of the pilots being able to control the huge plane and stay within the landing space is slim. The approach passes over populated suburban housing developments.

The airport control tower alerts its own Crash/Fire Rescue units and requests that the local emergency services provide backup assistance in fire, police, medical, welfare, and search and rescue capabilities.

Notice where these questions are answered in the narrative :

- What event?
- How fast, strong, deep, dangerous?
- How did you find out?
- What response has been made?
- What damage has been reported?
- What is the sequence of events?
- What time?
- Was there an advance warning?
- Where does it take place?
- What are the relevant weather conditions?
- What other factors influence emergency procedures?
- What is predicted for the future?

Master Scenario Events List (MSEL)

In more complex exercises (operations-based or complex discussion-based exercises), a Master Scenario Events List (MSEL) provides a timeline and location for all expected exercise events and injects (actions that push the scenario forward). It is important that all evaluators have a copy of the MSEL. It keeps evaluators on track, in their expected locations and observing actions, as assigned.

Evaluators can refer to the MSEL to help determine the times at which specific evaluators should be at certain locations. For discussion-based exercises, the assignment of evaluators depends on the number of players, the organization of the players and discussion, and the exercise objectives.

Components of the MSEL

The MSEL should contain:

- Chronological listing that supplements exercise scenario
- Scenario time
- Event synopses
- All injects, including the controller responsible for the inject, as well as all evaluator special instructions
- Intended player (agency or individual player)
- Expected participant responses – when developing storyboards, be sure to add a quick note which clarifies that expected participant responses are what evaluators are evaluating (expected responses vs. actual responses)
- Objectives and core capabilities
- Notes section with special instructions

Advance to the next screen to review an image of the Master Senario Events List (MSEL).

(MSEL) Injects

There are two types of MSEL injects that facilitate exercise play. Click each type to see a description:

- Contextual injects
- Contingency injects

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

MSEL Example

This table is a recreation of an MSEL example (E 900 All Hazards Functional Exercise; Day 1 - Tuesday).

Inject No.	Delivery Time	From	To (User)	Means Inject Method	Description	Expected Player Action	Threads
1a	14:45	WEMI News	All	WEMI TV	This is (NAME) for WEMI weather. It looks like the rain Liberty County and Central City have been having will stay around for a little while longer. We have a large cold front approaching from the West, which will collide with the low pressure currently situated over our viewing area. The cold front will move to the East and bring severe thunderstorms throughout the day carrying with it the potential for tornadic conditions and activity. The winds will be out of the southwest to the northeast. The high is expected to be around 82 with the temperature dropping to the 60s tonight as the front moves through our area. Now let's look at all the flooding we have been having. (Continue below with 1B)	EOC Director activates the EOC and begins support operations of the first responders.	Weather Scene setter
1b	14:45	WEMI News	All	WEMI TV	The area of low pressure that stalled over the State resulted in an above normal	EOC Director activates	Weather Scene setter

						rainfall. Since Wednesday of last week, Liberty County has had 12 to 15 inches of rain with 20 inches in Bayport, 18 inches in Central City, and 15 inches in Blue Water. This rain has brought the worst flooding since 1997 and has resulted in flooding over the past 24 hours along the Roaring River, Turtle River, and East Lake River. Flood stage is at 19 feet and Roaring River is at 26 feet at Blue Water; Turtle River is at 28 feet at Deep River; and East Lake River is at 28 feet and rising. We do not expect the water to start receding until Friday around noon. The weekend is looking brighter and dryer. There is no rain in the forecast for the weekend or for next week. So we will be able to dry out a little. Stay tuned throughout the day and WEMI will bring you all the breaking news on the approaching bad weather. This is (NAME) for WEMI weather.	the EOC and begins support operations of the first responders.	

MSEL Development : Types of Actions

There are four types of actions that the participants may carry out:

- Verification: Gather or verify information.
- Consideration: Consider information, discuss among players, negotiate, consult plan.
- Deferral: Defer action to later, put action on a priority list.
- Decision: Deploy or deny resources.

How do you know what actions are appropriate in response to a given event? Refer to the emergency plan.

MSEL Development: Expected Actions

Expected actions are the injects or decisions that you want participants to carry out to demonstrate competence. It is necessary to identify expected actions to:

- The MSEL is the document and an inject is merely a line item on the document.
- Write messages. Because the point of the exercise is to get the participants to think and react in certain ways, the script must be carefully developed to ensure that the messages get the planned results. Your list of expected actions will enable you to write effective messages.
- Determine what should be evaluated. The exercise evaluation will focus on whether the participants respond appropriately to an emergency. The list of actions will become the core of that evaluation.

MSEL Development: Relationship to Objectives

Expected actions are closely tied to objectives. Objectives state general, desired actions. Expected actions are a breakdown of objectives, the actions that would be taken by an organization or an individual to meet the objective. The following example illustrates this relationship.

Example: Objective and Expected Actions

Function : Coordination and communication among the airport and the jurisdiction's emergency systems.

Objective: Upon notification that a crash is imminent, response units will stage within 3 minutes, according to SOPs.

Event : Landing of disabled aircraft is imminent.

Expected Actions: Airport Control Tower:

- Notify police, fire, medical personnel to proceed to the airport. □
- Alert hospitals of potential mass casualty incident.

    Dispatch Center:

- Alert police, fire, and medical supervisors.

     Hospital:

- Notify other medical facilities as appropriate.

     Crash Fire Rescue:

- Initiate Incident Command System. □
- Notify dispatch of the command post and staging locations.

Generally speaking, every detailed event results in one or more expected actions from various organizations. When you prepare a list of expected actions:

- List only those that involve the participating organizations (those identified in the exercise scope and statement of purpose).
- List expected actions for all exercise participants. (It is not necessary that each detailed event generate responses from all participants.)

Modeling/Simulation

When incorporated into the development of the scenario and overall exercise design, modeling and simulation can bring versatility, cost savings, and fidelity to exercises. A model is a representation of a system at a point in time or space intended to expand an understanding of the real system. Simulation is a method of implementing the performance of a model, or combination of models, over time. Modeling and simulation 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 nonparticipating entities.

An example of a computer-based simulation could include wind damage and storm surge forecasting models developed by the National Oceanic and Atmospheric Administration, which enable simulation of a hurricane's effects on coastal communities. Modeling and simulation can also be applied in situations where reality cannot be achieved. For example, for safety reasons, a bioterrorism exercise cannot be conducted by releasing a deadly virus into the environment. However, it is still important to exercise the capabilities necessary to respond to this type of scenario. The use of modeling and simulation can realistically replicate variables such as disease propagation, radiation, and chemical attacks.

Exercise Control Structure

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.

Lesson 4 Summary: Objectives

Now you should be able to:

- Identify the three basic elements of an exercise scenario.
- Recognize the functions of a scenario narrative.
- Define the components of MSEL development.

Key Points

- A narrative is an important part of a scenario. It sets the mood for participants and sets the stage for later action.
- You must ask some key questions like what is the event?, How did you find out?, What response has been made? What is the sequence of events, where does it take place etc; when developing

Key Points (cont.)

Expected actions are closely tied to objectives.

- Messages are used to communicate detailed events to participants.
- Messages are transmitted by various means like electronic, in person, using social media etc.
- Messages have four MSEL elements

  - From
  - Transmission method
  - Message content
  - Recipient

- Most messages are pre-scripted
- During development it is important to anticipate changes and provide

an outline of the scenario.

- Expected actions are the actions or decisions that you want participants to carry out to demonstrate competence.
- Its necessary to identify actions to
- Write messages
- Determine what should be evaluated.

Types of actions include:

- Verification
- Consideration
- Deferral
- Decision

controllers with a list of contingencies and handling suggestions.

Lesson List

✓ Course Overview and Navigation

✓ Exercise Design Considerations

✓ Exercise Planning Team

✓ Capability-Based Exercise Objective Development

✓ Scenario and Master Scenario Events List Development

→ Exercise Documentation

- Additional Enhancements

- Course Summary

Lesson 5 Objectives

At the end of this lesson you will be able to:

- Describe the audience and purpose of the key exercise design and development documents.

Lesson List

✓ Course Overview and Navigation

✓ Exercise Design Considerations

✓ Exercise Planning Team

✓ Capability-Based Exercise Objective Development

✓ Scenario and Master Scenario Events List Development

→ Exercise Documentation

• Additional Enhancements

• Course Summary

Exercise Documentation

Comprehensive, organized exercise documentation is critical to ensure an accurate account of the exercise.

Security and accessibility are important when developing documentation. Exercise documentation ensures that an accurate account of the exercise is preserved, which allows organizations to leverage past documentation to support future exercises. Consideration should be given to the accessibility of presentations and documents, such as making information available in alternative formats (e.g., large print, compact disc, Braille, and closed captioning).

Exercise Design and Development Documents

Document Title	Exercise Type	Distribution Audience
Situation Manual (SitMan)	Seminar (Optional), Workshop (Optional), TTX, Game	All Participants
Facilitator Guide	Seminar (Optional), Workshop (Optional), TTX, Game	Facilitators
Multimedia Presentation	Seminar (Optional), Workshop (Optional), TTX, Game	All Participants
Exercise Plan (ExPlan)	Drill, FE, FSE	Players and Observers
Controller and Evaluator (C/E) Handbook	Drill, FE, FSE	Controllers and Evaluators
Master Scenario Events List (MSEL)	Drill, FE, FSE, Complex TTX (Optional), Game (Optional)	Controllers, Evaluators, and Simulators

Extent of Play Agreement (XPA)	FE, FSE	Exercise Planning Team
Exercise Evaluation Guides (EEGs)	TTX, Game, Drill, FE, FSE	Evaluators
Participant Feedback Form	All Exercises	All Participants

Exercise Plan (ExPlan)

Exercise Plans, or 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 the 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.

Multimedia Presentation

Multimedia presentations are often used to illustrate the general scenario for participants. This helps focus and drive the exercise as well as add realism. Audio/visual (A/V) enhancements to a presentation include video or sounds that convey information to participants.

Presentations 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 divided into distinct, chronologically segmented modules that, when combined, create the entire scenario.

This presentation typically contains the following information:

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

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.

The Controller/Evaluator (C/E) Handbook

The Controller/Evaluator Handbook (C/E Handbook) is the primary evaluation documentation for the exercise. It is used as an instructional manual for controllers and evaluators and is sometimes called the Evaluation Plan. Because the C/E Handbook contains information about the scenario and about exercise administration, it is only distributed to individuals designated as controllers or evaluators.

- The controller portion of the handbook, also known as the Control Staff Instructions (COSIN), provides guidelines for control and simulation support and establishes a management structure for the activities.
- The evaluator portion of the handbook, sometimes known as the EvalPlan, provides evaluation staff with guidance and instruction on evaluation or observation methodology, as well as essential materials required to perform their specific functions.

The C/E Handbook may be a standalone document or a supplement to the Exercise Plan (ExPlan). When used as a supplement, it points readers to the ExPlan for general exercise information. When used as a standalone document, it should instead include the exercise information. The C/E Handbook may also be broken into separate controller and evaluator versions.

Additional Exercise Documentation

Additional exercise documents include:

Extent of Play Agreements (XPAs) - XPAs are agreements formed between the exercise sponsor and participating organizations. Specific details of participant involvement are identified, such as, one fire company, with two ambulances for 5 hours. These agreements can be vital to exercise planning, evaluator recruitment, and development of support requirements.

Exercise Evaluation Guides (EEGs) - Exercise Evaluation Guides (EEGs) provide evaluators with a checklist of critical tasks to be completed by participants during an exercise. EEGs contain the information to be discussed by participants, space to record evaluator observations, and questions to consider after the exercise.

Participant feedback form - The participant feedback form should be given to participants during exercise wrap-up. At a minimum, ask participants for feedback on the strengths and opportunities for improvement based on the organization's plans, policies, SOPs and their impressions on the exercise conduct and logistics.

Waiver forms - All actors should receive a waiver form prior to the exercise. Once signed, these forms waive liability for all exercise planners and participants. Volunteers under the age of 18 must be signed by parental or legal guardian.

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

Lesson 5 Summary: Objectives

Having completed this lesson, you are able to:

- Describe the audience and purpose of the key exercise design and development documents.

Key Points

- Comprehensive, organized exercise documentation is critical to ensure an accurate account of the exercise.
- Exercise Plans, or ExPlans, are provided for operations-based exercises to provide participants with a synopsis of the exercise.
- Multimedia presentations are often used to illustrate the general scenario for participants.

  - This presentation typically contains the following information:

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

- A Facilitator Guide is designed to help facilitators manage a discussion-based exercise.
- The Controller/Evaluator Handbook (C/E Handbook) is the primary evaluation documentation for the exercise.
- Additional exercise documents include:

  - Extent of Play Agreements (XPAs)
  - Exercise Evaluation Guides (EEGs)
  - Participant feedback form
  - Waiver forms
  - Weapons and Safety Policy

Lesson List

✓ **Course Overview and Navigation**

✓ **Exercise Design Considerations**

✓ **Exercise Planning Team**

✓ **Capability-Based Exercise Objective Development**

✓ **Scenario and Master Scenario Events List Development**

✓ **Exercise Documentation**

➜ **Additional Enhancements**

• **Course Summary**

Lesson 6 Objectives

At the end of this lesson, you will be able to:

- Define the purpose of exercise enhancements.

- Identify the different types of exercise enhancements.

- Identify considerations to be taken when selecting specific exercise enhancement techniques.

Lesson List

✓ Course Overview and Navigation

✓ Exercise Design Considerations

✓ Exercise Planning Team

✓ Capability-Based Exercise Objective Development

✓ Scenario and Master Scenario Events List Development

→ Exercise Documentation

• Additional Enhancements

• Course Summary

Why are Exercise Enhancements Important?

- A variety of exercise enhancements helps to achieve a realistic environment

- Increases participant engagement and experiential learning

Exercise Enhancements: Creativity

Creativity is key to good enhancements:

- Videotaped simulated "News Broadcasts"

- Victim Interviews

- Audiotapes

- Make-up props to simulate injuries

- Computers to chart plumes and provide data on river flows

- Simulated telephone system malfunctions

- Using back-up generators to simulate a power outage

Exercise Enhancements: Communications Equipment

- Used to communicate a narrative and advance the scenario

- Used to transmit some of the messages from simulators

- Should ideally try to transmit messages as you would in a real emergency

Communications Equipment: Examples

- Phones
    - Cell
    - Landlines
    - Hotline dedicated
    - Military
    - Radio phones/handheld radios

- Computerized Radio Packet

- Citizens' Bands (CB)

- Monitors/Scanners

- Fax

- Amateur Radio Emergency Service (ARES)

- Radio Amateur Civil Emergency Services (RACES)

- National Oceanic Atmospheric Administration (NOAA) Weather Radio

- National Warning System (NAWAS)

Exercise Enhancements: Visuals

- Maps

- Charts

- Status Boards

- Black or white boards

- Chart Paper

- Easels

- Videotapes

- Slides

Maps: Uses

- Provides context and detail for scenarios

- Essential to the handling of a disaster

- Necessary for all types of exercises

- Used in an orientation or a tabletop exercise

Maps: Formats

- Reproduced for individual use or displayed on a wall

- Acetate overlays are ideal for marking off areas, for monitoring points, and for reusing in future exercises.

Maps: Types

- City street

- County street

- Subdivision

- Sewer (mains/facilities)

- Water (mains/facilities)

- Electric (lines/facilities)

- Gas

- Flood Main

- Contour

- Police and fire district

- Center city (downtown)

- Facility

- Weather

Maps: Sources

- City Planning Commission

- Department of Highways

- Engineering Department

- Public Works

- US Geological Survey (USGS)

- National Flood Insurance Program

- NOAA

Charts

- Provides an organized way to share and view accumulated information

- Enables everyone to quickly comprehend what actions have been taken

- Identifies what resources and personnel are available

- The display needs vary with the nature and scope of the exercise

Chart: Types

Type of Chart	Description
Problem and Event Log	- Large events display board for posting major events - Should be available for all in the EOC (including shift-change) to review - All major problems are entered as they are received - Divided into columns: nature of problem, problem number, assignment, response, remarks
Damage Assessment Chart	Divided into columns: Areas reporting damage, time of report, extent of damage
Facility Charts and Status Boards	- Used to track facilities involved in the exercise so participants are aware of available resources - Hospitals: Beds, blood, personnel, supplies - Congregate care facilities: Red Cross or social service agencies - Space available: status of food, water, bedding, medical stocks - Law enforcement resources: numbers and locations sworn, reserve, and auxiliary personnel - Fire resources: Deployment and availability of fire units, status of fire, mutual aid forms
Organization Charts	- Used for staff as a means of anticipating what agencies should be coordinating or reporting to other agencies - Optional
Master Scenario of Events List	- Mainly for a controller's use, to keep the exercise on schedule - Should not be seen by players - Contains a detailed sequence of events developed as part of the scenario
Simulation Plotting Map	- Used by a controller and simulators - Depicts prescribed exercise input information - Coded markers may be used to depict actions taken by various organizations (police, fire, Medical /health, public works, utilities, Red Cross/voluntary agencies

Additional Visuals

Visual Type	Description
Videotapes and Slides	- Realistic presentations of emergencies that can be used to introduce narratives or to give updates - Ex.- Pre-recorded interviews with politicians and the public for realism
Computer Resources	- Communities usually have their resources on a computerized list - An inventory list should be used during exercises to track resources

Miscellaneous Equipment and Supplies	• Projector for overhead transparencies or slides • Copy machine • Portable radio • Pagers and cell phones • Public address system • Pens, pencils, and markers • Chart paper • Telephone books and directories • Local and state contact lists • EOC phone directory • List of cellular phone numbers • Name tags • Resource tags • Resource lists • Financial cost report form

People and Props: Full-scale Exercises

People/Prop	Example
People	Play the part of victims; made up to appear injured
Prop	Mannequins are used to represent the dead (or victims trapped under heavy beams)
Prop	Fake smoke
Prop	Burnt boards and beams strategically placed at the event site

Enhancement Resources: Challenges

Designers often face the challenge of how to obtain the following without breaking the budget:

- Materials

- People

- Equipment

Enhancement Resources: Considerations

- Solicit volunteers

- Solicit donations from other agencies in the community

- Consider costs (initial and hidden) for potential liability

- Hours spent to obtain and return equipment

- Potential damage or replacement costs

- Arrangements to return borrowed items or volunteers "on loan"

- Safety and liability concerns when using people or equipment

- Ensure provisions are made for liability insurance and equipment replacement

Potential Resources

- Hospitals

- Schools and colleges

- Business and industry

- Chemical Transportation Emergency Center (CHEMTREC)

- Boy and Girl Scouts

- Search and rescue volunteers

- Agencies

- Railroads

- The Salvation Army

- Public transportation

- Fire departments

- Police departments

- Chemical companies

- Amateur radio clubs

- Religious organizations

- National Guard/Military

- The American Red Cross

- Service organizations

Enhancement Logistics

In planning for exercises, be sure to ask the following logistics related questions:

- How will enhancements be used?

- Where will props be placed?

- Who will be in charge of props?

- How will people and props be picked up, transported, and returned?

- What kind of return policy can be worked out for borrowed materials and equipment?

- In what condition must equipment be returned?

- Who will clean it up?

- Is normal wear a concern?

Lesson 6 Summary: Objectives

Having completed this lesson, you are able to:

- Define the purpose of exercise enhancements.
- Identify the different types of exercise enhancements.
- Identify considerations to be taken when selecting specific exercise enhancement techniques.

Key Points:

Communications equipment:

- Used to communicate narrative and advance the scenario.
- Used to transmit some of the messages from simulators.
- Should ideally try to transmit messages as you would in a real emergency.

Some visuals are:

- Maps
- Charts
- Status Boards
- Black or white boards
- Chart Paper
- Easels

- Videotapes
- Slides

People and props are used for full-scale exercises.

Enhanced resources have potential considerations and resources.

Potential Resources are:

- Hospitals, Schools and colleges, Business and industry, Chemical Transportation Emergency Center (CHEMTREC), Boy and Girl Scouts, Search and rescue volunteers, Agencies, Railroads, The Salvation Army, Public transportation, Fire departments, Police departments, Chemical companies, Amateur radio clubs, Religious organizations, National Guard/Military, The American Red Cross, and Service organizations.

Lesson List

✓ Course Overview and Navigation

✓ Exercise Design Considerations

✓ Exercise Planning Team

✓ Capability-Based Exercise Objective Development

✓ Scenario and Master Scenario Events List Development

✓ Exercise Documentation

✓ Additional Enhancements

→ Course Summary