

# Homeland Security Exercise and Evaluation Program (HSEEP)

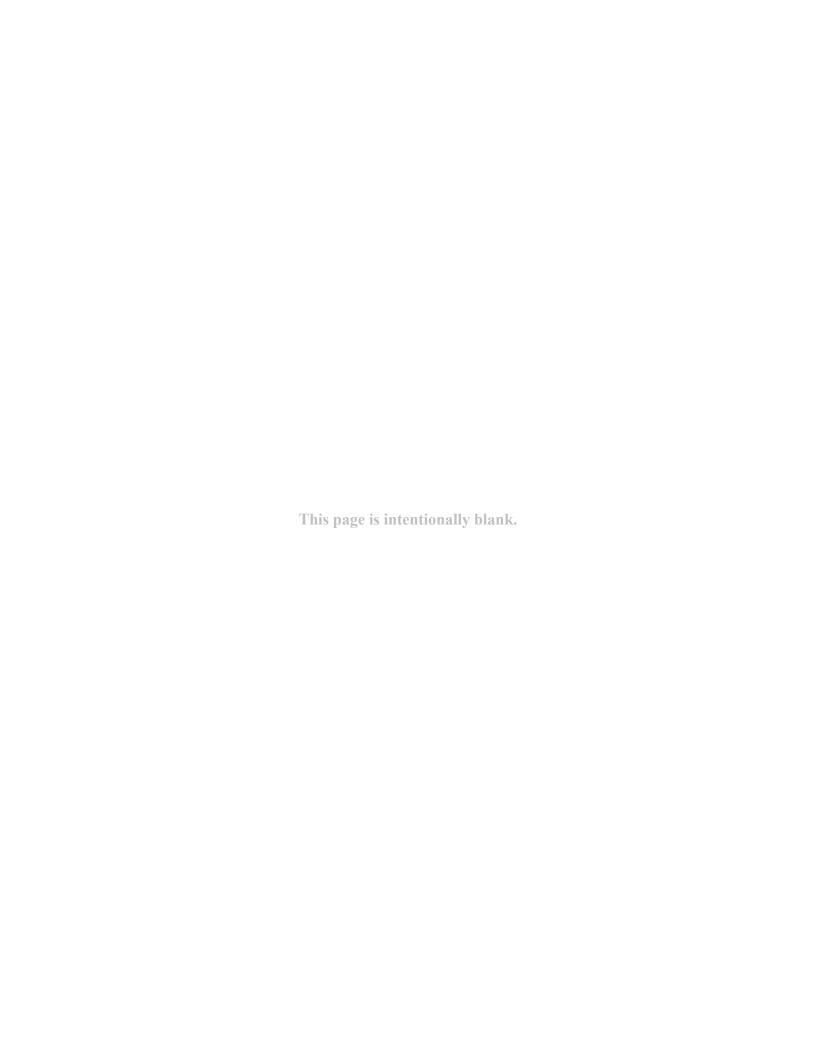
Volume III: Exercise Evaluation and Improvement Planning
February 2007



# Homeland Security Exercise and Evaluation Program

Volume III: Exercise Evaluation and Improvement Planning

Revised February 2007



# **Preface**

Homeland Security Exercise and Evaluation Program (HSEEP) Volume I was initially published in 2002 and provided an overview of the exercise design, development, conduct, evaluation, and improvement planning process as well as doctrine for U.S. Department of Homeland Security (DHS) exercises. Subsequent volumes (II–IV) provided more detailed descriptions of the planning and evaluation process as well as sample exercise materials.

Since the initial versions of the HSEEP volumes were published, the homeland security community has experienced numerous changes, including the building of a new and cohesive Federal agency and the release and adoption of the National Response Plan (NRP), National Incident Management System (NIMS), National Preparedness Goal, Universal Task List (UTL), and Target Capabilities List (TCL). This 2007 release of the HSEEP volumes represents an exercise policy and program reflective of these changes.

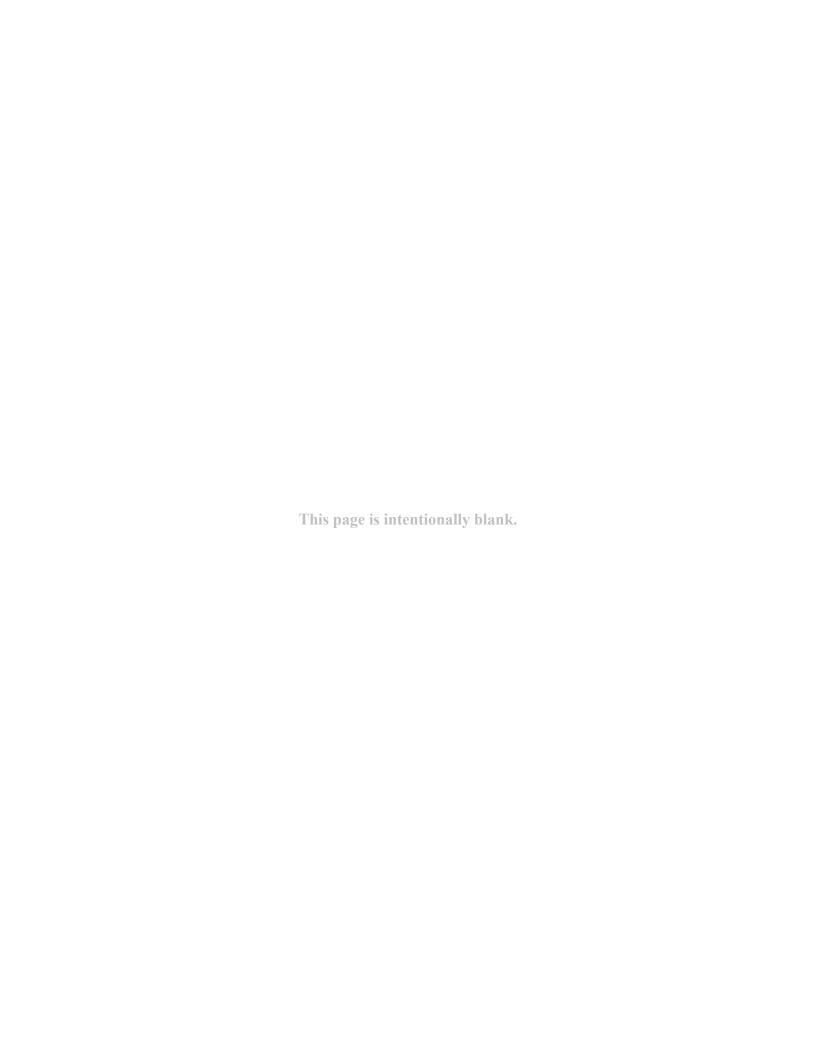
The following changes have been made:

- The volumes have been made more user-friendly and concise.
- New policies have been incorporated (e.g., NIMS, NRP, National Preparedness Goal, UTL, TCL).
- References to DHS-specific doctrinal or grant-related requirements, such as the need for terrorism-related scenarios, have been eliminated.
- Comments from the Federal Interagency, as well as several State and local stakeholders, have been incorporated so the HSEEP Policy and Guidance is more applicable to all exercises, regardless of scope, scale, scenario, or sponsoring agency.
- The order of Volumes II and III has been reversed to follow the natural progression of exercise design, development, conduct, evaluation, and improvement planning.

It is important to note that the fundamentals of the exercise design, development, planning, evaluation, and improvement planning methodologies have not changed with these volume revisions.

Developing and implementing comprehensive exercise policies is a continually evolving process. As strategies, policies, and plans evolve, future revisions will be issued.

Preface i



# Contents

PrefacePreface	i
Introduction	v
Homeland Security Exercise and Evaluation Program	v
Purpose	
Organization	v
Security Guidance	vi
Chapter 1: Evaluation and Improvement Planning Overview	1
Evaluation, Improvement Planning, and Capabilities-Based Planning	1
Exercise Evaluation Methodology	1
Task-Level Analysis	1
Activity-Level Analysis	2
Capability-Level Analysis	2
Exercise Evaluation Guides	3
After Action Report / Improvement Plan	5
Chapter 2: Exercise Evaluation, Data Collection, and Analysis (Steps 1–4)	6
Step 1: Plan and Organize the Evaluation	7
Appoint Lead Evaluator	7
Develop Evaluation Requirements	7
Exercise Scope	7
Exercise Objectives	7
Exercise Evaluation Team Organization and Structure	8
Define Evaluation Requirements	9
Recruit, Assign, and Train Evaluators	9
Recruiting Evaluators	
Assigning Evaluators	9
Training Evaluators	10
Finalize Evaluation Plan	
Conduct Controller and Evaluator Briefing	
Step 2: Observe the Exercise and Collect Data	
Discussion-Based Exercises	
Operations-Based Exercises	
Conducting a Player Hot Wash	
Collecting Supplemental Data	
Step 3: Analyze Data	
Identifying Root Cause and Developing Recommendations	
Discussion-Based Exercises	
Controller and Evaluator Debrief	15
Draft AAR Content	
Operations-Based Exercises	
Controller and Evaluator Debrief	
Draft AAR Content	
Exercise Event Timeline	16

Step 4: Develop the Draft After Action Report / Improvement Plan	17
Chapter 3: Improvement Planning (Steps 5–8)	
Step 5: Conduct After Action Conference and Refine Draft AAR	19
Step 6: Identify Corrective Actions to be Implemented	20
Step 7: Finalize AAR/IP	21
Step 8: Track Implementation	21
Event Points of Contact	
Participating Entity Points of Contact	22
Action Officers	
Continual Improvement	22
Appendix A: After Action Report / Improvement Plan Guidelines	A-1
Appendix B: After Action Quick Look Report Guidelines	
Appendix C: Exercise Evaluation Guide Sample	
Appendix D: Development of Discussion-Based Evaluation Materials	
Appendix E: Acronyms	
Figures and Tables	2
Figure 1-1: Levels of criteria for analysis	
Figure 1-2: EEG relationships	4
Figure 2-1: Data collection and analysis steps	6
Figure 2-2: Example exercise evaluation team organization	
Figure 3-1: <i>Improvement planning steps</i>	19
Figure 3-2: Flow of observations	
Table A-1: <i>Example IP</i>	A-7
Table A-2: Example Exercise Events Summary Table format	
Table A-3: Descriptions of performance ratings	
Figure D-1: Developing scenario-specific, discussion-based materials	D-2

Contents

# Introduction

# Homeland Security Exercise and Evaluation Program

Following the domestic terrorist attacks in 1993, 1995, and 2001 and the establishment of the U.S. Department of Homeland Security (DHS) in 2002, officials at all levels of government and in all types of communities have worked to prepare for, prevent, respond to, and recover from a variety of threats to public safety. Exercises play a crucial role in preparedness, providing opportunities for emergency responders and officials to practice and assess their collective capabilities.

#### **Purpose**

The purpose of the Homeland Security Exercise and Evaluation Program (HSEEP) is to provide common exercise policy and program guidance that constitutes a national standard for exercises. HSEEP includes consistent terminology that can be used by all exercise planners, regardless of the nature and composition of their sponsoring agency or organization. The volumes also provide tools to help exercise managers plan, conduct, and evaluate exercises to improve overall preparedness.

HSEEP reflects lessons learned and best practices from existing exercise programs and can be adapted to the full spectrum of hazardous scenarios and incidents (e.g., natural disasters, terrorism, technological disasters). The HSEEP reference volumes integrate language and concepts from the National Response Plan (NRP), the National Incident Management System (NIMS), the National Preparedness Goal, the Universal Task List (UTL), the Target Capabilities List (TCL), existing exercise programs, and prevention and response protocols from all levels of government. In accordance with NIMS, all efforts should be made to ensure consistent use of the terminology and processes described in HSEEP.

#### **Organization**

This document is the third of five HSEEP volumes, all of which are available at the HSEEP website (http://hseep.dhs.gov). The volumes are organized as follows:

HSEEP Volume I: HSEEP Overview and Exercise Program Management provides guidance for building and maintaining an effective exercise program and summarizes the planning and evaluation process described in further detail in Volumes II through V.

HSEEP Volume II: Exercise Planning and Conduct helps planners outline a standardized foundation, design, development, and conduct process adaptable to any type of exercise.

HSEEP Volume III: Exercise Evaluation and Improvement Planning offers proven methodology for evaluating and documenting exercises and implementing an Improvement Plan (IP).

HSEEP Volume IV: Sample Exercise Documents and Formats provides sample exercise materials referenced in HSEEP Volumes I, II, III, and V. Readers with Internet connectivity may click on exercise materials referenced in this volume to link to HSEEP Volume IV.

HSEEP Volume V: Prevention Exercises (Draft) contains guidance consistent with the HSEEP model to assist entities in designing and evaluating exercises that validate preincident capabilities such as intelligence analysis and information sharing.

This volume, *HSEEP Volume III: Exercise Evaluation and Improvement Planning*, which provides guidance for exercise evaluation and improvement planning, is organized as follows:

**Chapter 1:** Evaluation and Improvement Planning Overview

Introduction v

**Chapter 2:** Exercise Evaluation, Data Collection, and Analysis (Steps 1–4)

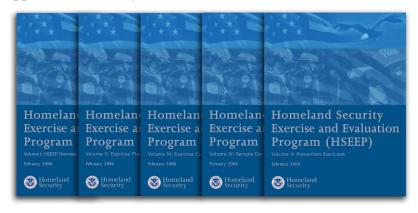
**Chapter 3:** Improvement Planning (Steps 5–8)

**Appendix A:** After Action Report / Improvement Plan Guidelines **Appendix B:** After Action Report Quick Look Report Guidelines

**Appendix C:** Exercise Evaluation Guides

**Appendix D:** Discussion-Based EEG Development Guidance

**Appendix E:** Acronyms

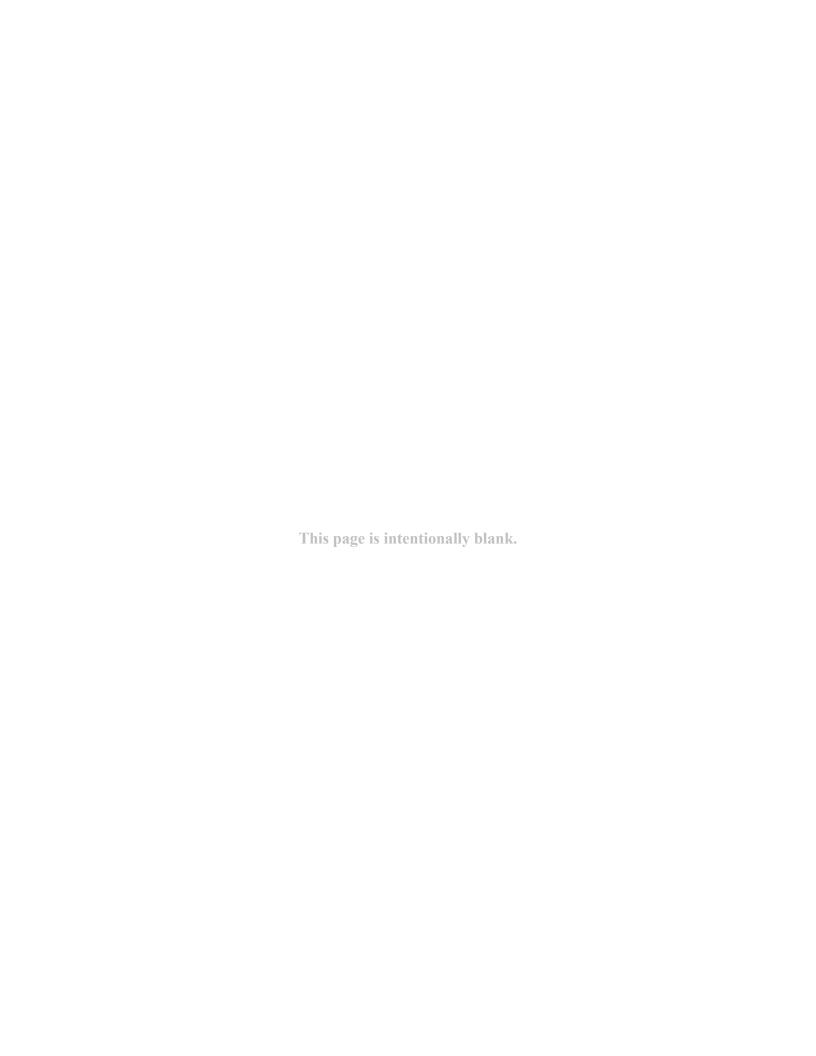


# Security Guidance

While most of the content found in HSEEP is not sensitive or classified, some HSEEP materials (e.g., scenario examples), particularly those in Volume IV, may necessitate restrictions on distribution. Exercise materials that are produced in accordance with HSEEP guidance and are deemed sensitive should be designated as *For Official Use Only* (FOUO). FOUO identifies unclassified information of a sensitive nature, not otherwise categorized by statute or regulations, of which the unauthorized disclosure could adversely impact a person's privacy or welfare, the conduct of Federal programs, or programs or operations essential to national interest. Examples of materials that may require FOUO designation include scenario information, the Master Scenario Events List (MSEL), and the After Action Report / Improvement Plan (AAR/IP). Access to FOUO information is on a need-to-know basis. FOUO information may be shared with other agencies; Federal, State, local, or tribal government; appropriate private sector representatives; and law enforcement officials, provided a specific need-to-know has been established and the information is shared in furtherance of a coordinated and official governmental activity.

Certain exercise-related information from private sector partners may require or be eligible for additional protections under the Protective Critical Infrastructure Information (PCII) Program. Established pursuant to the Critical Infrastructure Information (CII) Act of 2002, the PCII Program is an information-protection tool that enables members of the private sector to submit proprietary, confidential, or sensitive infrastructure information to DHS with the assurance that the information will be protected from public disclosure. Under the PCII Program, information that satisfies the requirements of the CII Act of 2002 is protected from public disclosure under the Freedom of Information Act (FOIA), State and local disclosure laws, and use in civil litigation. DHS and other Federal, State, and local analysts use PCII in pursuit of a more secure homeland, focusing primarily on analyzing and securing critical infrastructure and protected systems, identifying vulnerabilities and developing risk assessments, and enhancing recovery preparedness measures.

Introduction vi



# Chapter 1: Evaluation and Improvement

Planning Overview

Exercise evaluation maintains a fundamental link to improvement planning because it assesses an entity's performance in an exercise and identifies strengths and areas for improvement. Following exercise conduct, improvement planning leverages the outputs of the evaluation process by developing Improvement Plans (IPs), which assign responsibility for correcting deficiencies or shortcomings observed during a given exercise. Through this process, evaluation identifies improvement opportunities, and improvement planning provides a disciplined process for implementing corrective actions.



### Evaluation, Improvement Planning, and Capabilities-Based Planning

In accordance with Homeland Security Presidential Directive 8 (HSPD-8), the Homeland Security Exercise and Evaluation Program (HSEEP) has adopted a capabilities-based planning approach, which is a process intended to build capabilities suitable for responding to a wide range of threats and hazards. Capabilities-based planning emphasizes the need to analyze a diverse array of realistic scenarios and identify corresponding capabilities necessary for effective prevention, protection, response, and recovery efforts.

Capabilities-based planning is the basis for guidance such as the National Preparedness Goal, the Target Capabilities List (TCL), and the Universal Task List (UTL). The TCL and UTL drive the application of capabilities-based planning by identifying 37 capabilities that will prepare the Nation for terrorism, natural disasters, and other emergencies. Exercise evaluation and improvement planning play an important role in the capabilities-based planning process by assessing an entity's capabilities (based on exercise objectives) and developing IPs that enhance those capabilities. Exercise Evaluation Guides (EEGs) provide standards for assessing objectives through the execution of tasks and activities linked to each target capability. Based on areas for improvement identified using the EEGs, After Action Reports / Improvement Plans (AARs/IPs) provide concrete steps that an entity can take to remedy deficiencies or shortcomings observed during exercises. Exercises are also an opportunity to identify lessons learned and best practices that can be shared with other jurisdictions and organizations to help build the Nation's overall preparedness.

# **Exercise Evaluation Methodology**

The HSEEP evaluation methodology is an analytical process used to assess the demonstration of capabilities during exercises. According to this methodology, exercise evaluation incorporates three distinct levels of analysis: task-level analysis, activity-level analysis, and capability-level analysis.

#### Task-Level Analysis

Tasks are specific, discrete actions that individuals or groups must successfully perform or address during

operations-based and discussion-based exercises. Task-level analysis assists representatives of exercising entities in analyzing shortcomings or strengths related to these individual actions. This analysis can also help entities target plans, equipment, and training resources to improve specific task performance.

Each task is accompanied by performance measures designed to assist an exercise evaluator in assessing relevant individual or group performance pertaining to the task. For example, the "WMD/HazMat Response and Decontamination" capability EEG contains the task "Implement mass decon [decontamination] operations," which is accompanied by performance measure check boxes marked *Fully, Partially, Not*, and *Not Applicable* to designate the degree to which the task was demonstrated during the evaluation. Certain tasks may also be accompanied by a target timeframe for initiating these operations, which in the case of the example decontamination task, is "Less than 15 minutes after arrival." These performance measures are designed to prompt evaluators to capture multiple aspects of individual or group performance related to each specific task.

#### Activity-Level Analysis

Activities are groups of similar tasks that, when carried out according to plans and procedures, allow an entity to demonstrate an associated capability from the TCL/UTL. For example, the task "Implement mass decon operations" is part of the activity "Decontamination and Clean-Up/Recovery Operations." Other related decontamination tasks also fall under this same activity.

When conducting activity-level analysis, exercise evaluators seek to determine whether all activities have been performed successfully and in accordance with plans, policies, procedures, and agreements. Through this analysis, exercise evaluators gain valuable insight into broad thematic successes or challenges in performing related tasks. Awareness of such themes is key to improving the performance of individual tasks, and thus demonstrating the associated capability. Such analysis is also vital in assessing the effectiveness with which individuals worked together at the discipline or organizational level, and how well team members communicated across organizational boundaries during an exercise.

#### Capability-Level Analysis

Capabilities are combinations of elements (e.g., personnel, planning, organization and leadership, equipment and systems, training, exercises, assessments and corrective actions) that provide the means to achieve a measurable outcome.

Capability-level analysis involves assessing an entity's ability to demonstrate its priority capabilities necessary to successfully prevent, protect against, respond to, or recover from the threat or hazard simulated in the exercise scenario. When conducting capability-level analysis, exercise evaluators examine whether an entity's performance of specific tasks and activities was sufficient to demonstrate the desired capability outcome. For example, an evaluator of the "WMD/HazMat Response and Decontamination" capability would evaluate how well exercise players identified and mitigated a HazMat release; adequately performed rescue, decontamination, and treatment of exposed victims; limited the impact of the release; and effectively protected responders and at-risk populations.

Capability-level analysis is designed to assist managers and executives in developing operating plans and budgets, communicating with political officials, setting long-range training and planning goals, and developing interagency and/or inter-jurisdictional agreements.

Figure 1-1 depicts the structure of these levels of analysis. All capabilities link to the prevention, protection, response, or recovery HSEEP mission areas.

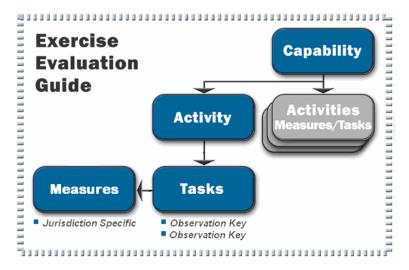


Figure 1-1: Levels of criteria for analysis

#### **Exercise Evaluation Guides**

EEGs assist exercise evaluators by providing them with consistent standards and guidelines for observation, data collection, analysis, and report writing. EEGs have been developed for capabilities in the TCL and are linked to a capability's activities, tasks, and performance measures. If necessary, the EEG template format also allows the exercise planning team to add tasks specific to the exercising entity that are not found in the TCL/UTL to the EEGs for evaluation.

EEGs accomplish several goals. They streamline data collection; enable a thorough assessment of the exercising entity's target capabilities and objectives; support development of the AAR/IP; and provide a consistent and replicable process for assessing preparedness through exercises. During the exercise planning stage, the EEGs assist the exercise planning team in developing objectives. They are also used to map exercise results to exercise objectives and elements of the TCL/UTL for further analysis and assessment. Figure 1-2 illustrates the scope of an EEG by showing the relationships between the capabilities, activities, tasks, and performance measures.



**Figure 1-2:** *EEG relationships* 

Evaluators use EEGs *before* and *during* exercise observation because they provide evaluators with the activities, tasks, and performance measures associated with a target capability. Information in the EEG is sequenced according to the typical flow of activities and tasks to be accomplished for each capability. The template is designed to allow evaluators to record the degree to which a prescribed task or performance measure was completed or met during the exercise. However, within this section of the EEG, exercise evaluators do not *rate* the entity's performance because the EEG is neither a grading tool nor a scorecard. Rather, evaluators are asked to objectively record the full, partial, or non-completion of each task. The EEG is a reference for exercise evaluators, giving a sense of when activities can be expected to occur and how those activities relate to capability completion.

In addition to information on the activities, tasks, and performance measures associated with a target capability, the EEG includes Analysis Sheets, which are designed for use *after* the exercise is complete. These sheets are broken down as follows:

- An **Observations Summary** sheet allows exercise evaluators to record a general chronological narrative of exercise player actions based on the evaluator's observations. On this sheet, evaluators record when exercise events, specific actions deserving special recognition, particular challenges or concerns, and areas needing improvement occurred. The content recorded on this form will be used to develop the AAR/IP.
- In the **Evaluator Observations** section, evaluators record and analyze at least three observed strengths and three observed areas for improvement demonstrated by the entity during the exercise. For each strength and area for improvement, evaluators should record specific observations regarding what occurred; a root cause analysis examining why events occurred; and, if necessary, specific recommendations for corrective action. The recommendations and observations that evaluators record in the Evaluator Observations section are used to develop the final observations and recommendations that are captured in the entity's AAR/IP. From the AAR/IP's observations and recommendations proposed corrective actions are generated at the After Action Conference.

Consistent EEGs facilitate the creation of effective AAR/IPs. By relating capabilities to activities, tasks, and performance measures, EEGs establish the foundation for IPs that can strategically target personnel,

planning, organization and leadership, equipment and systems, training and exercises, and assessments and corrective actions pertaining to identified shortcomings in priority capabilities.

See Appendix C for an example of the WMD/HazMat Response and Decontamination EEG.

# After Action Report / Improvement Plan

While the EEGs are important observation tools and contribute to the improvement planning process—by collecting initial observations and recommendations for improvement—they are only a reference point from which to produce the main product of the evaluation and improvement planning process: the AAR/IP. An AAR captures observations of an exercise and makes recommendations for post-exercise improvements; and an IP identifies specific corrective actions, assigns these actions to responsible parties, and establishes target dates for action completion. Because the AAR and the IP are developed through different processes and perform distinct functions, they are referred to separately at many points in this volume. However, in practice, the AAR and the IP should be printed and distributed jointly as a single AAR/IP following an exercise.

Chapter 2: Exercise Evaluation, Data Collection,

and Analysis (Steps 1–4)

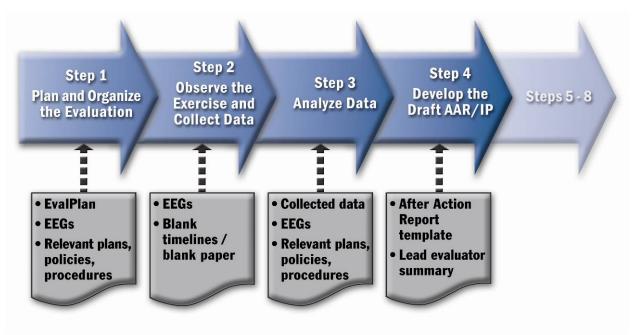
This chapter describes the first four steps in evaluation and improvement planning:

- 1. Plan and Organize the Evaluation
- 2. Observe the Exercise and Collect Data
- 3. Analyze Data
- 4. Develop the Draft After Action Report / Improvement Plan (AAR/IP)

Steps 5–8, which address how areas for improvement identified in an AAR/IP are transformed into concrete improvements, are discussed in *Chapter 3: Improvement Planning*.



Figure 2-1 illustrates the first four steps in the evaluation and improvement planning process, which is critical for determining an entity's capability strengths and areas for improvement, implementing improvements, and identifying issues that become the focus of future exercises. The process is intended to support a comprehensive exercise program with a focus on continual improvement.



**Figure 2-1:** *Data collection and analysis steps* 

The four steps discussed in this chapter span from the beginning of pre-exercise evaluation planning to the development of an AAR/IP shortly after an exercise. The steps address how exercise goals and

objectives inform a focused evaluation process, which yields an actionable AAR/IP relevant to the entity's priorities.

#### Step 1: Plan and Organize the Evaluation

Thorough planning and organization prior to an exercise is imperative to effective and successful exercise evaluation. This process should include:

- appointing a lead evaluator;
- defining evaluation requirements based on exercise objectives;
- recruiting, training, and assigning evaluators;
- finalizing an Evaluation Plan (EvalPlan); and
- conducting a controller and evaluator (C/E) briefing.

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

#### Appoint Lead Evaluator

Early in the exercise planning process, the exercise planning team leader should appoint a lead evaluator to oversee all facets of the evaluation process. The lead evaluator participates fully as a member of the exercise planning team, and should be a senior-level individual familiar with:

- prevention, protection, response, and recovery issues and objectives associated with the exercise;
- plans, policies, and procedures of the exercising entity;
- Incident Command and decision-making processes of the exercising entity; and
- interagency and/or inter-jurisdictional coordination issues relevant to the exercise.

The lead evaluator must have the management skills needed to oversee a team of evaluators during an extended process, as well as the knowledge and analytical skills to undertake a thorough and accurate analysis of all capabilities being tested during an exercise.

#### **Develop Evaluation Requirements**

Prior to assembling an evaluation team, the exercise planning team must define exercise evaluation requirements by considering exercise scope and objectives. These requirements include the tools, plans, and personnel needed to effectively observe the exercise, collect data, and analyze information.

#### **Exercise Scope**

Exercise scope consists of, but is not limited to, the days and hours of the exercise, the location/sites for exercise play, the number of exercise participants, and the type of exercise (i.e., discussion-based or operations-based). Defining the scope helps determine the number of evaluators needed and where evaluators should be placed for observation (e.g., facilities/sites, command/control centers, hospitals, on patrol).

#### **Exercise Objectives**

Exercise objectives reflect the capabilities an entity seeks to demonstrate, and therefore what activities and tasks will be observed. By identifying the exercise objectives and associated capabilities, activities, and tasks that are being evaluated, this step allows exercise planners to determine the subject-matter

expertise required of evaluators.

For discussion-based exercises, consideration of the exercise's goals and objectives helps inform the development of a Situation Manual (SitMan), which provides the exercise facilitator with suggestions for how to steer exercise discussion to the capabilities being evaluated.

Exercise Evaluation Guides (EEGs) are used to evaluate operations-based exercises. By identifying the capabilities and objectives that will be validated during the exercise, the exercise planning team can determine which EEGs are needed for evaluating an exercise. For discussion-based exercises, the exercise planning team should use the performance measures, activities, and tasks for each capability's EEG as questions to drive the exercise discussion. The HSEEP EEGs can form the basis for creating customized discussion-based evaluation forms as well as SitMan content. (For more on discussion-based evaluation forms, see *Step 2: Observe the Exercise and Collect Data*; see also Appendix C).

Sample evaluation materials and templates are available within HSEEP Volume IV, including C/E Handbooks, SitMans, AAR/IPs, EEGs, and evaluator training briefings. These documents provide additional tools to support the HSEEP exercise evaluation methodology. By considering the capabilities to be evaluated early in the exercise and evaluation planning process, the exercise planning team can determine which forms and tools to use during the evaluation and ensure evaluators are trained and prepared.

#### **Exercise Evaluation Team Organization and Structure**

The exercise planning team and lead evaluator should determine the structure of the exercise evaluation team based on the scope of the exercise; the exercise objectives; and the associated capabilities, activities, and tasks that will be validated during the exercise. Exercises that involve multiple jurisdictions and/or multiple playing locations should consider assigning jurisdiction leads or site leads, as illustrated by the example provided in Figure 2-2. These individuals support the lead evaluator and manage the activities of other evaluators assigned to that location.

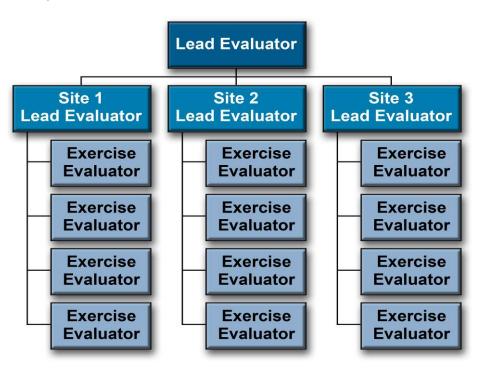


Figure 2-2: Example exercise evaluation team organization

Consideration should also be given to selecting individuals to support draft AAR development. For an exercise with a limited scope and objectives resulting in fewer capabilities, activities, and tasks, the lead evaluator may be the only person needed. However, for exercises with a large or complex scope and that will involve the demonstration of a large number of capabilities and activities, the lead evaluator may need assistance with analysis, editing, and compilation of the draft AAR and/or the final AAR/IP.

#### Define Evaluation Requirements

Evaluation team considerations allow the exercise planning team and the lead evaluator to make decisions about evaluation requirements for personnel, time commitments, evaluation tools, and subject-matter expertise. These decisions should be recorded as a preliminary template for a finalized EvalPlan.

The final step of the evaluation requirement identification process is determining the types of evaluation-planning documents required upon finalization of an EvalPlan. Discussion-based exercises may not require the same level of detail in planning documentation as operations-based exercises—a SitMan and discussion-based evaluation forms may constitute a sufficient EvalPlan for the capabilities being exercised. Conversely, because most operations-based exercises involve multiple evaluators who must work in a coordinated, collaborative fashion, such exercises often require a C/E Handbook to be distributed to all control and evaluation staff. Large-scale and otherwise complex exercises may require a dedicated EvalPlan that outlines evalutor roles and responsibilities and is distributed exclusively to evaluators.

#### Recruit, Assign, and Train Evaluators

Once evaluation requirements have been defined, the lead evaluator oversees recruiting, assigning, and training evaluators. The lead evaluator, a designated responsible individual that reports to the exercise planning team leader, may manage each of these efforts. The evaluation requirements already discussed play a critical role in determining how many evaluators must be recruited, what kind of subject-matter expertise they must possess, how they are assigned during an exercise, and what kind of training or instruction they must receive prior to the exercise.

#### **Recruiting Evaluators**

Evaluators should have experience and subject-matter expertise in the functional area they are assigned to observe (e.g., command and control, fire, law enforcement, Emergency Medical Service [EMS]).

The time commitment for evaluating discussion-based exercises is generally no longer than 2 days, including observation and analysis. The time commitment for operations-based exercise evaluators is usually 3-to-5 days—equivalent to at least 1 day prior to the exercise (for pre-exercise training); the actual exercise day(s); and at least 1 full day, or more, after the exercise (for data analysis, AAR/IP development, etc.).

When developing plans for recruiting qualified exercise evaluators, exercising entities should consider long-term strategies for developing and maintaining a cadre of trained evaluators who can regularly participate in exercise evaluation programs.

#### **Assigning Evaluators**

During operations-based exercises, evaluators should be assigned to different exercise play areas on the basis of their subject-matter expertise. For example, in an exercise using a chemical scenario, evaluators with hazardous materials (HazMat) expertise are strategically assigned to locations where they can observe decontamination and the use of personal protective equipment (PPE). An operations-based exercise Master Scenario Events List (MSEL) provides a timeline and location for all expected exercise events. Reference to a MSEL can help the lead evaluator determine the times at which specific evaluators

should be at certain locations. Evaluator assignments should be decided upon, recorded, and communicated to evaluators prior to exercise conduct. The number of evaluators assigned to each exercise play location depends on the number of capabilities (activities and tasks) being evaluated. For discussion-based exercises, the number of evaluators depends on the number of players, organization of the players and the discussion, and the exercise objectives.

#### **Training Evaluators**

Evaluator training must take place at least 1 day prior to the exercise and address all aspects of the exercise, including the exercise goals and objectives; the scenario; participants; and evaluator roles, responsibilities, and assignments. During or prior to training, evaluators should be provided with copies of the following materials to review before exercise play:

- Exercise documents, such as the SitMan for discussion-based exercises or the Exercise Plan (ExPlan), C/E Handbook, and the MSEL for operations-based exercises
- Evaluation materials, EEGs, and/or other evaluation tools; the exercise agenda and schedule; and evaluator assignments
- Appropriate plans, policies, procedures, and agreements of the exercising entity

If there are specific plans, policies, procedures, or agreements that are the focus of an exercise, the lead evaluator may decide to brief evaluators on the content of those documents.

Evaluator training should also include guidance on observing the exercise discussion or operations, what to look for, what to record, and how to use the EEGs. To promote effective observation, evaluators must be instructed to do the following:

- Be at the designated position when players arrive
- Get a good view of player actions (or player discussion) but avoid getting in the way
- Focus on observing the activities and tasks in relevant EEGs to ensure exercise objectives are accomplished
- Take legible, detailed notes, including times and sequence of events
- Remain at the assigned post at key times
- Avoid prompting players or answering player questions

For operations-based exercises, evaluators should be trained according to best practices for observing exercises and recording data, described in *Step 2: Observe the Exercise and Collect Data*. Evaluator training materials and other documents can be found in HSEEP Volume IV.

#### Finalize Evaluation Plan

Once exercise requirements have been defined and evaluation planning to meet those requirements has been completed, the lead evaluator finalizes the EvalPlan. As mentioned, most exercises will use a C/E Handbook to distribute this exercise information. In less complex discussion-based exercises, the finalized plan can be communicated orally among evaluators prior to an exercise, but for more complex exercises, the finalized EvalPlan should be documented and distributed to evaluators. Whether formally documented or not, EvalPlans should contain the following:

- Exercise-specific information: Exercise scenario, schedule of events, and evaluation schedule
- Evaluator team organization, assignments, and location: A list of evaluator locations, a map of the exercise site(s), and an evaluation team organizational chart

- Evaluator instructions: Step-by-step instructions for evaluators regarding what to do before they arrive (e.g., review exercise materials, wear appropriate clothing for assignment), as well as how to proceed upon arrival, during the exercise, and following its conclusion
- Evaluation tools: Exercise-specific EEGs and analysis forms, the MSEL, blank paper or timeline forms

#### Conduct Controller and Evaluator Briefing

Before the exercise begins, the lead evaluator should meet with the controllers and/or evaluators to verify roles, responsibilities, and assignments and to provide any significant updates (changes to the scenario, new assignments, etc.). This briefing (typically referred to as the C/E briefing) is the time for evaluators to ask questions and to ensure complete understanding of their roles and responsibilities. Exercise planners will also give evaluators any updates on changes to plans or procedures. Evaluator questions should be addressed and information clarified so that evaluators can confidently and effectively perform their assignments. For operations-based exercises, the briefing often includes a tour of the exercise site so that evaluators are familiar with the venue and know where they should position themselves to observe exercise play.

# Step 2: Observe the Exercise and Collect Data

Exercise observations and data collection (Step 2) can differ between discussion-based exercises and operations-based exercises. For this reason, the two exercise types are discussed separately in this section. Common to both types of exercises is a focus on capabilities-based evaluation. This focus ensures that a discussion-based exercise prepares participants for subsequent operations-based exercises and that all activities support development of target capabilities.

#### **Discussion-Based Exercises**

Discussion-based exercises tend to focus on higher-level capability issues involving an entity's plans, policies, and procedures. As such, many discussion-based exercises use breakout sessions and other exercise techniques different from those used in operations-based exercises. In the breakout session approach, a facilitator frames the scenario and poses discussion questions; players then break into subgroups, based on discipline or jurisdiction, to discuss the questions. In such discussion-based exercises, there must be evaluators and/or note-takers present in each breakout group. It may be desirable to assign both an evaluator and a note-taker to each breakout group so that the evaluator can focus on addressing issues related to exercise objectives and the note-taker can focus on capturing general discussion issues.

As previously noted, discussion-based exercises require the creation of customized evaluation forms that may be derived from the operations-based EEGs and customized to reflect the plans, policies, and procedures being discussed in a given exercise. During the exercise, each evaluator uses the evaluation form to record data for critical topics and subjects that the lead evaluator has assigned him/her to assess. Exercise objectives—and the associated capabilities, activities, and tasks—determine the type of evaluation form used. Since these forms are based on the exercise objectives and EEGs, the content of these forms drives the facilitated discussion and also provide evaluators with guidelines and additional space for collecting relevant data while they observe exercise discussions. Evaluation forms should include questions linked to the capabilities, activities, and tasks within the EEGs to produce an effective evaluation that supports an overall capabilities-based exercise program.

Facilitators help evaluators collect useful data by keeping discussions focused on capabilities and activities relevant to the questions provided in discussion-based versions of the EEGs. Strategies for keeping discussion focused and constructive may be recorded in a SitMan or appendix to the SitMan,

which is provided to facilitators prior to an exercise (see the earlier section, *Define Evaluation Requirements*).

Evaluators generally record the following types of information from player discussions:

- What plans, policies, and procedures would players implement to prevent, protect against, respond to, or recover from the incident described in the exercise scenario?
- Are roles and responsibilities of the various government agencies and private organizations clearly defined?
- How are various decisions made? Who has authority to make decisions?
- What information about the scenario, the hazard, the victims, and the risks to participants and the public is collected? Who collects it, and what do they do with it?
- How is information shared with other agencies and with the public? What information is shared?
- What are the roles of Federal and State agencies? How are Federal and State resources requested? Who makes the request? How are the resources distributed and controlled?
- What mutual aid agreements (MAAs) exist? How would they be activated?
- What recommendations for improvements are made by the group?
- Which issues are unresolved or require follow-up?
- What actions do players plan to take in order to address outstanding issues?

After breakout sessions take place, the entire group typically reconvenes to address any key issues, cross-disciplinary issues, or conflicting recommendations that were identified during breakout group discussions. Although individual evaluators are assigned to record discussions within a designated group, all evaluators should capture information on cross-cutting issues.

A debrief with the exercise planning team, facilitators, and evaluators should be held immediately following the exercise. The purpose of this debrief is to collect observations and thoughts about exercise conduct. The debrief also provides evaluators the opportunity to clarify points or collect any missing information. Following an exercise, evaluators may also supplement the data collected on their observation forms by collecting additional data from participants through discussions, Participant Feedback Forms, and facilitator notes. The lead evaluator should assign one or more members of the evaluation team to take detailed notes during the debrief. The debrief discussion is reflected in the preliminary analysis (see *Step 3: Analyze Data*).

#### **Operations-Based Exercises**

Whereas evaluation of discussion-based exercises focus primarily on high-level issues affecting demonstration of capabilities, evaluation of operations-based exercises requires detailed observations at the task and activity level. During operations-based exercises, evaluators are strategically pre-positioned in locations at which they can gather useful data, and must track and record participant actions carefully. After an exercise, the information recorded by evaluators is used to analyze whether or not activities and tasks were successfully performed, and capabilities were successfully demonstrated.

During exercise observation, it is critical for evaluators to keep an accurate written record of what they observe. In addition to the EEG, evaluators should also consider recording data through other systems that fit their preferences, such as notebooks or portable audio recorders (evaluation documentation such as the C/E Handbook or EvalPlan should communicate in advance any exercise policy regarding recording devices). As players make decisions and take actions, evaluators should take notes that capture the

#### following information:

- Who (by name or position) performed the action or made the decision?
- What occurred (the observed action)?
- Where (the location) did the action or decision take place?
- When (the time) was the action completed?
- Why did the action take place or why was the decision made (the trigger)?
- How was the action performed and how was decision made (the process)?

Because numerous events may be occurring simultaneously, evaluators may not be able to record all of the action. Knowing which events are important allows for manageable action recording, eliminates unnecessary information, and provides the most useful data for exercise evaluation. For this reason, prior to the exercise, evaluators must be trained how to best observe key tasks or activities found in the EEGs. This training is done during evaluator training, during the C/E briefing, or by using evaluation documents such as the C/E Handbook or the EvalPlan. Evaluators should also be trained to recognize the occurrence of the following events, as necessary:

- An inject, which is information—including directives, instructions, and decisions—provided by
  exercise controllers to exercise players in order to drive exercise play towards the achievement of
  objectives.
- A message in occurs when an individual or group receives information from someone outside of his or her physical location. Messages can be received as part of player-to-player activity or as a controlled exercise inject.
- A **message out** occurs when an individual sends information to another individual or group of players outside of his or her physical location.
- A discussion is a conversation involving several players.
- A decision occurs when an individual or group arrives at a conclusion or makes a specific determination.
- A **directive** is a specific order or direction given to one or more players.
- Movement occurs when an individual, group, or piece of equipment relocates.
- An activity is a group of tasks that, when carried out according to plans and procedures, allow an
  entity to demonstrate an associated capability from the TCL/UTL, such as conducting gross
  decontamination.
- A **task** is achieved when an individual or group performs a specific, clearly definable action or function, such as donning a HazMat suit or checking patient status.

Additional evaluator observations and notes should include the following:

- Initiation and unfolding of scenario events
- Deviations from plans or procedures
- Timeliness and other performance measures relevant to task evaluation
- Effectiveness of, or shortcomings in, command and control

- Creative player problem-solving activities
- Equipment issues that affect player efforts

Evaluators should not interfere with exercise play. However, it may be necessary for an evaluator to interact with players during the exercise if he or she has a question about something observed. Doing so may be especially important for evaluators observing play in locations where much of the activity is conducted over the phone, such as Emergency Operations Centers (EOCs) and Joint Information Centers (JICs). Because evaluators cannot hear what is happening on the opposite end of a telephone conversation, they may have to ask with whom the player spoke and what was discussed. Evaluators should not interrupt play to ask such questions but should wait until there is a break in activity. These questions must not prompt or lead players in any way, and conversation should remain brief and focused.

#### **Conducting a Player Hot Wash**

Immediately after an operations-based exercise, each evaluator (or team of evaluators and controllers) should debrief the players and controllers in his/her observed discipline, either separately or as a large group. This facilitated discussion, referred to as a hot wash, allows players to engage in a self-assessment of their exercise play and provides a general assessment of how the entity performed in the exercise. The hot wash also provides evaluators with the opportunity to clarify points or collect any missing information from players before they leave the exercise venue. The hot wash is conducted as soon as possible after the exercise, usually the same day. In exercises with several venues, separate hot washes may take place at each location. A hot wash is led by an experienced facilitator who can ensure that the discussion remains brief and constructive, and who can focus conversation on strengths and areas for improvement.

During the hot wash, evaluators distribute Participant Feedback Forms (see HSEEP Volume IV for examples of Participant Feedback Forms) to obtain information on perceptions of the exercise, how well each player thought his/her unit performed, and how well the unit integrated performance with other agencies and other exercise components. This information can provide insight into why events happened the way they did or why some expected actions did not take place. Participant Feedback Forms are collected at the end of the hot wash and reviewed by the evaluation team to augment existing information. Participant Feedback Forms also serve to solicit general feedback on exercise quality, which can be provided to the exercise planning team to help implement improvements in future exercises. A summary of Participant Feedback Forms can be included as an optional appendix within an AAR/IP.

#### **Collecting Supplemental Data**

The lead evaluator assigns one or more members of the evaluation team to collect supplemental data immediately after the exercise. Such data is critical to fill in gaps during exercise evaluation. For example, one useful source of information could be records produced by automated systems or communications networks—an action similar to preserving evidence during an actual incident. Another useful source is written records, such as duty logs and message forms. These records can help evaluators validate their observations, determine equipment status, and identify the effect of inaccurate information on operations.

Evaluators should retain their notes and recordings as historical records of the exercise. Such records may need to be referenced later in the exercise evaluation process, particularly during the development of narratives, strengths, and areas for improvement for inclusion in the draft AAR.

# Step 3: Analyze Data

During data analysis, the evaluation team consolidates the data collected during the exercise and

transforms it into narratives that address the course of exercise play, demonstrated strengths, and areas for improvement.

Operations-based exercises tend to yield higher amounts of data than discussion-based exercises. As a result, operations-based exercises require a more comprehensive data analysis phase than many discussion-based exercises. Consequently, this step addresses operations-based and discussion-based exercises separately.

#### Identifying Root Cause and Developing Recommendations

In order for the exercise evaluation process to produce an AAR/IP that makes useful recommendations for improving an entity's preparedness capabilities, it is critical for evaluators to discover not only *what* happened, but *why* events happened. Each task that is not completed as expected offers evaluators the opportunity to search for a root cause. A root cause is the source of or underlying reason behind an identified issue (as uncovered during careful analysis) toward which the evaluator can direct an improvement. To arrive at a root cause, an evaluator should attempt to trace the origin of each event back to earlier events and their respective causes. Root cause analysis may also require the review and evaluation of an entity's emergency plans; training programs; and other plans, policies, and procedures.

Uncovering root causes enables an evaluator to work with the rest of the analysis team to develop actionable solutions to improvement areas identified in the AAR. These recommendations are based on the evaluation team's experience and best judgment, although the responsibility for implementing recommendations ultimately lies with the leaders and managers of the participating entities.

#### **Discussion-Based Exercises**

As soon as possible after a discussion-based exercise, a C/E debrief takes place and preliminary analyses begins.

#### **Controller and Evaluator Debrief**

As mentioned in Step 2, a debrief with the exercise planning team, facilitators, and evaluators should be held immediately following the exercise. This debrief allows controllers and evaluators to collect observations and thoughts about the conduct of the exercise and leads to the development of preliminary analyses of exercise observations.

#### **Draft AAR Content**

Following the debrief, evaluators should review their notes of the discussion and begin to develop preliminary analyses of the exercise. Preliminary analyses involve developing a chronological narrative of relevant discussion for each capability as well as its associated activities, if possible. The lead evaluator may assign the preliminary analysis for each activity to an individual or group of evaluators with relevant functional expertise, or the evaluation team can jointly develop all required preliminary analyses. These narratives should highlight strengths and areas for improvement, and identify discussion points relevant to an entity's ability to carry out the activities and demonstrate the capabilities being exercised.

When writing preliminary analyses, evaluators should consider the following questions:

- Were the objectives of the exercise met?
- Did discussion suggest that all personnel would be able to successfully complete the tasks necessary to execute each activity? If not, why?
- What are the key decisions associated with each activity?
- Did discussion suggest that all personnel are adequately trained to complete the activities/tasks

needed to demonstrate a capability?

- Did discussion identify any resource shortcomings that could inhibit the ability to execute an activity?
- Do the current plans, policies, and procedures support performance of activities? Are players familiar with these documents?
- Do personnel from multiple agencies or jurisdictions need to work together to perform a task, activity, or capability? If so, are the agreements or relationships in place to support the coordination required?
- What should be learned from this exercise?
- What strengths were identified for each activity?
- What areas for improvement are recommended for each activity?

#### **Operations-Based Exercises**

As soon as possible following the post-exercise hot wash with exercise players, a C/E debrief takes place, preliminary analyses begin, and an exercise event timeline is created.

#### **Controller and Evaluator Debrief**

The C/E debrief gives each controller and evaluator an opportunity to provide an initial overview of the functional area they observed and to discuss strengths and areas for improvement. The lead evaluator should assign one or more members of the evaluation team to take detailed notes during the C/E debrief discussion.

#### **Draft AAR Content**

Following the C/E debrief, evaluators use the EEG Analysis Sheets, including Observation Summary sections, to develop narratives for each capability and associated activity that describes what players did during the exercise and how they performed the capability in question. Then evaluators use the Evaluator Observations section to identify strengths and areas of improvement for each capability being exercised. In developing their narratives and conducting their analyses, evaluators should make use of all available data, including: the EEG filled out during exercise play; other notes or records from the exercise; notes from the post-exercise hot wash; notes from the C/E debrief; and any other relevant materials. The EEG form provides specific instructions and criteria for developing such narratives and analyses.

#### **Exercise Event Timeline**

Next, the lead evaluator coordinates the process by using the capability-specific narratives to reconstruct a timeline of exercise events as they occurred—an approach similar to the reconstruction of events that is completed by many agencies and organizations following an actual incident. The process of developing an event-reconstruction narrative can range from hours to days or weeks and depends on the size and scale of the exercise and the amount of data collected. The final product should be a master timeline that captures all key points relevant to the capabilities being exercised.

The narratives, overall exercise timeline, and detailed analysis of observations should combine to provide the lead evaluator with the foundation needed to summarize the exercise in the AAR. If developed properly, these tools help answer the following questions, which are critical to a strong AAR:

- What did evaluators observe?
- What should evaluators have observed according to policies, plans, and procedures?

- Is there a difference? If so, why?
- What is the consequence of that difference?
- What should be learned from this difference?
- What improvements should be made or what best practices should be adopted?

# Step 4: Develop the Draft After Action Report / Improvement Plan

All discussion-based and operations-based exercises result in the development of an AAR/IP, the final exercise document that provides a description of what happened, describes any best practices or strengths, identifies areas for improvement that need to be addressed, and provides recommendations for improvement. As directed by the lead evaluator, the exercise evaluation team drafts the AAR using the evaluative products (timeline, narratives, and EEG analysis) discussed in *Step 3: Analyze Data*.

The AAR should follow the following format: (More detailed guidelines are contained in Appendix A)

- Report Cover
- Administrative Handling Instructions
- Contents
- Executive Summary
- Section 1: Exercise Overview (includes identifying information, such as the exercise name, date, duration)
- Section 2: Exercise Design Summary (includes the overarching exercise purpose; objectives, capabilities, activities, and tasks identified for validation; a summary of designed initiating event(s) / key scenario events; and exercise design issues)
- Section 3: Analysis of Capabilities
- Section 4: Conclusion
- Appendix A: Improvement Plan
- Appendix B: Lessons Learned (optional)
- Appendix C: Participant Feedback Summary (optional)
- Appendix D: Exercise Events Summary Table (optional)
- Appendix E: Performance Ratings (optional)
- Appendix F: Acronyms

AAR/IPs are required for all exercises regardless of type. However, some discussion-based exercises—such as seminars and workshops—may have an abbreviated *Analysis of Capabilities* section. Generally, such an abbreviated section will provide the following information:

- Overview of guest and keynote speaker(s) presentations
- Summary of discussion points
- Summary of results and recommendations

# Chapter 3: Improvement Planning (Steps 5–8)

Exercises afford entities the opportunity to evaluate capabilities under controlled, predetermined conditions developed by the exercise planning team. The final four steps of the evaluation and improvement planning process, described in this chapter, focus on using the information gained from exercises to implement improvements that will enhance capabilities to prevent, protect against, respond to, or recover from natural or man-made disasters.

Improvement planning is the process by which the observations and recommendations recorded in the draft After Action Report (AAR) are resolved through development of concrete corrective actions that are prioritized, tracked, and analyzed by program managers as part of a continuous Corrective Action Program (CAP).



Following completion of the draft AAR, the exercise planning team, evaluation team, and other stakeholders meet for an After Action Conference to review and refine the draft AAR. As part of the After Action Conference, attendees develop an Improvement Plan (IP) that articulates specific corrective actions by addressing issues identified in the AAR; it also provides completion dates by which the corrective action should be completed, and each corrective action is assigned to a responsible person or agency(s). The refined AAR and IP are then finalized as a combined AAR/IP, and IP corrective action items are tracked to completion through the CAP.

The IP communicates how observed areas for improvement will be remedied by concrete, measurable steps, known as corrective actions. Specifically, the IP details:

- actions necessary to address areas for improvement and the associated recommendations presented in the draft AAR;
- individuals or groups responsible for taking corrective action; and
- timelines for each corrective action's completion.

Once completed, these corrective actions should be implemented, tested, and validated through subsequent exercises or real-world events through the CAP, which drives the exercise program management cycle. Step 5: Conduct After Action Conference and Step 6: Identify Corrective Actions to be Implemented are the key steps that enable IP development. Step 7: Finalize AAR/IP and Step 8: Track Implementation are the final steps in the evaluation and improvement process and represent the opportunity to improve capabilities based on the data collected, analyzed, and summarized during the exercise and evaluation period.

Figure 3-1 summarizes the four steps in the improvement planning process. It further highlights the supporting documentation that either feeds into or is developed as part of each step.



Figure 3-1: Improvement planning steps

# Step 5: Conduct After Action Conference

As soon as possible after completion of a draft AAR, the lead evaluator, members of the evaluation team, and other members of the exercise planning team conduct an After Action Conference to present, discuss, and refine the draft AAR, and to develop an IP. This conference is a chance to present the AAR to participating entities in order to solicit feedback and make necessary changes. The After Action Conference is a critical component of the exercise planning process to ensure that exercises are results-oriented and contribute to preparedness by translating AAR/IP analyses into concrete improvements for validation in subsequent exercises.

The After Action Conference should be scheduled to occur over the course of a full day, within 1 month after exercise completion. The schedule must allow adequate time to discuss strengths, areas for improvement, recommendations, and corrective actions. The meeting is held at the exercise site or another convenient location.

Before the conference, the draft AAR should be distributed to conference participants for review. Allowing participants to see the AAR in its entirety will maximize the value of the day-long After Action Conference because key individuals will already be familiar with the format and content of the AAR and will have identified issues to discuss at the conference. Conference organizers should also ensure that key individuals (including representatives of organizations expected to be assigned corrective actions) receive invitations and attend the conference.

During the conference, the lead evaluator or designated facilitator presents salient points from the draft AAR. Such points include the exercise objectives, an account of key exercise events, differences between expected performance and actual performance, major observations, and the recommendations for improvement developed to address these observations.

The After Action Conference is interactive and provides attendees the opportunity to validate the observations and recommendations recorded in the draft AAR by contributing insight into events that might have been omitted or misinterpreted by evaluators. This validation process is particularly important for those observations nominated as potential lessons learned in the AAR. These observations should be

discussed in a general forum with exercise participants to ensure that lessons identified have truly been "learned," and should be submitted to the U.S. Department of Homeland Security (DHS) Lessons Learned Information Sharing (LLIS.gov) web portal for wider distribution, as appropriate. The draft AAR is then modified to incorporate any clarifying information from the After Action Conference—this results is the refined draft AAR.

# Step 6: Identify Corrective Actions to be Implemented

In addition to refining the draft AAR, much of the After Action Conference is devoted to discussing specific corrective actions to address the observed areas for improvement and associated recommendations identified in the draft AAR. This discussion takes place in a moderated, disciplined environment and yields the IP; a list of corrective actions that identify what should be done to address observations and recommendations; who (person or entity) is responsible; and the timeframe for implementation. (See Appendix A for an IP template.) Each participating entity must identify a point of contact (POC) responsible for reporting its progress toward implementing the corrective actions assigned to it in the IP.

A corrective action should contain enough detail to make it useful; it states what types of actions should be performed and who should perform those actions. For example, a corrective action stating, "Train on the alert and warning process," would be more useful if it read, "Train the 24-hour warning point staff on reading siren system printouts so they can better identify system failures."

Participating entities should use the following questions as a guide for developing corrective actions:

- What changes need to be made to plans and procedures to improve performance?
- What changes need to be made to organizational structures to improve performance?
- What changes need to be made to leadership and management processes to improve performance?
- What training is needed to improve performance?
- What changes to (or additional) equipment is needed to improve performance?
- What lessons can be learned that will direct how to approach a similar problem in the future?

Not all observations listed in the AAR as areas for improvement can be addressed with corrective actions during an After Action Conference. For more complex issues, the IP developed at the conference indicates the first step in the process. For example, an IP could call for creation of a working group to examine possible solutions to a complex issue, and impose a deadline for the working group to select a course of action. In some cases, areas for improvement may be consolidated upon review at the conference.

Some corrective actions require the acquisition of resources, especially to address recommendations related to personnel, organization and leadership, training, planning, equipment, exercises, evaluations, and corrective actions. The IP must be realistic and prioritize corrective actions. Some corrective actions may call for steps such as submission of an application for additional funding, or seeking an agreement to share resources with another entity. When necessary, if resources are not immediately available, exercise planners and evaluators should develop both short- and long-term solutions. Some corrective actions may be comprised of multiple steps. In such cases, the IP is considered sufficient if only the first (defined and assigned) steps are included.

Corrective actions must be written to include attainable benchmarks that gauge progress toward full implementation. Examples of benchmarks include, but are not limited to, the number of personnel trained

in a task, the percentage of equipment that is up-to-date, or the finalization of an interagency agreement within a given amount of time. These benchmarks should be defined against concrete deadlines so that gradual progress toward attainment of corrective actions can be tracked.

As discussed in HSEEP Volume I, each exercise program should have a program manager responsible for tracking corrective actions to completion. Following IP development, this individual should subsequently monitor progress toward implementation of each corrective action. The program manager should also ensure that implemented corrective actions are fed back into the exercise cycle, such that improvements are exercised, tested, and validated. This process ensures a comprehensive CAP that demonstrates continual improvement of capabilities relevant to the entity.

# Step 7: Finalize AAR/IP

Following the After Action Conference, the exercise planning and evaluation teams finalize the AAR/IP. Finalizing the AAR/IP involves incorporating the corrections, clarifications, and other feedback provided by participants at the After Action Conference. Once these inputs have been incorporated, the AAR/IP is distributed to members of the exercise planning team for validation that it is an accurate document that meets the exercise objectives. This step ensures that the AAR/IP addresses the needs of the entities participating in the exercise and serves as a useful tool to guide the following areas:

- Strategy development
- Exercise program planning
- Sharing of lessons learned with homeland security community partners
- Changes to plans, policies, and procedures
- Capability development and refinement
- Efforts to focus limited resources upon improvements in preparedness

Once the exercise planning and evaluation teams have validated the AAR/IP, the document is considered final. To protect potentially sensitive information, the exercise planning team agrees on a distribution list for the final AAR/IP, and distributes the document exclusively to individuals or entities on the distribution list. The finalized corrective actions captured in the AAR/IP should be tracked through continual updates as part of the CAP.

# Step 8: Track Implementation

To track the implementation of corrective actions identified in the final AAR/IP, exercise teams must include individuals responsible for complying with the CAP process. Exercising entities are not expected to have dedicated staff members for these positions. Rather, current homeland security exercise and emergency response personnel should be assigned these additional duties.

#### **Event Points of Contact**

As is described in HSEEP Volume I, a successful exercise program must have a designated event POC who is responsible for continuously tracking implementation of the corrective actions identified and assigned in AAR/IPs. This individual will be the central POC for exercise improvements and is responsible for compiling corrective actions, following the CAP process, and generating reports on the progress of those corrective actions.

#### Participating Entity Points of Contact

As described in Step 6, each entity participating in the exercise should identify a POC who is responsible for managing the corrective actions assigned to the entity and assigning individual action officers to complete each corrective action. The entity POC collects information from assigned action officers on the progress of corrective actions and provides regular updates on this progress to the event POC.

#### **Action Officers**

Action officers are assigned to each corrective action and are responsible for completing the prescribed action. Action officers provide regular updates to their entity's POC and program manager, who will systematically compile the updates to produce periodic progress reports on the status of all corrective actions identified in an exercise's AAR/IP. These reports track whether the benchmarks defined for corrective actions in the AAR/IP are achieved on schedule, and are distributed to participating entities. The reports highlight corrective action items for which responsible parties have not met benchmarks in order to provide a measure of accountability.

#### **Continual Improvement**

As discussed in HSEEP Volume I, exercises are one component of the preparedness cycle that also includes planning, training, equipment purchases, and personnel. The implementation of corrective actions is the mechanism by which exercises can inform and improve other preparedness cycle components.

The progress reports issued by an entity's POC and exercise program manager should illustrate a consistent trend of progress toward implementation of the corrective actions listed in an AAR/IP. Because the AAR/IP ties these corrective actions to specific capabilities, these reports ultimately demonstrate the concrete ways in which exercises enhance capabilities. Once participating entities have had time to implement post-exercise corrective actions, a new cycle of exercise activities can begin, to further test and validate these corrective actions and improve capabilities.

Steps 1 through 8 described in this volume offer entities a detailed exercise evaluation and improvement planning process, and a description of the general flow of exercise issues from their initial identification to their ultimate resolution. According to this process, an exercise evaluator may record what went right and what went wrong in an exercise using the observations section of an Exercise Evaluation Guide (EEG). Following an exercise, these observations are analyzed in order to produce broad recommendations for an entity's improvement. Next, during the After Action Conference, these broad recommendations are converted into specific, concrete, measurable corrective actions in the finalized IP. Finally, IP information is recorded and tracked in the CAP process, and the implementation of corrective actions leads to concrete improvements to an entity's preparedness capabilities. This process is detailed in Figure 3-2.

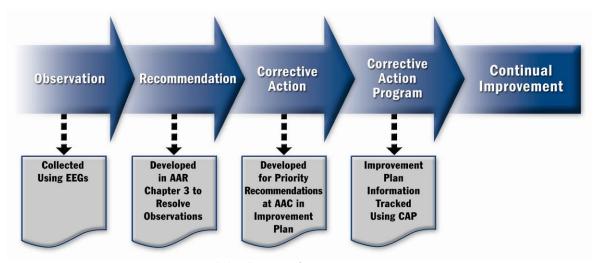


Figure 3-2: Continual improvement process

# Appendix A: After Action Report / Improvement Plan Guidelines

These After Action Report / Improvement Plan (AAR/IP) guidelines are designed to support both discussion-based and operations-based exercises and to reflect Homeland Security Presidential Directive 8 (HSPD-8) requirements for final AAR/IP production. However, due to the nature of certain discussion-based exercises (including seminars and workshops), the AAR/IP may include an abbreviated *Analysis of Capabilities* section and several additional sections, including an overview of speaker presentations and a summary of discussion points, results, and recommendations.

### Report Contents

The AAR should contain the following sections:

- Cover Page
- Administrative Handling Instructions
- Contents
- Executive Summary
- Section 1: Exercise Overview (includes identifying information, such as the exercise name, date, duration)
- Section 2: Exercise Design Summary (includes the overarching exercise purpose and goals; capabilities, activities, and tasks identified for demonstration; exercise objectives; summary of designed initiating event(s) / key scenario events; and planned simulations)
- Section 3: Analysis of Capabilities
- Section 4: Conclusion
- Appendix A: Improvement Plan
- Appendix B: Lessons Learned (optional)
- Appendix C: Participant Feedback Summary (optional)
- Appendix D: Exercise Events Summary Table (optional)
- Appendix E: Performance Ratings (optional)
- Appendix F: Acronyms

# Report Format

The draft AAR/IP must be clearly identifiable as a draft document, with *draft* written somewhere on the pages of the document (e.g., in the header or in the background using a large, centered watermark) and as part of the file name. The final AAR/IP must be clearly identifiable as a final document, with *final* appearing on the cover page and in the file name.

#### Cover Page

The report cover page should include the following information: (1) the full exercise name; (2) the words *After Action Report and Improvement Plan*; (3) the date(s) on which the exercise was conducted; and (4) the date the AAR/IP was published. Additional graphics—such as logos, pictures, and background color(s)—may be added to enhance appearance.

#### Administrative Handling Instructions

The Administrative Handling Instructions list and explain the appropriate security guidance for the report, such as For Official Use Only (FOUO), By Invitation Only (IO), or Sensitive but Unclassified (SBU).

These instructions also identify the authority for approval of dissemination (e.g., exercise planning team leader, sponsoring agency) and any additional guidance necessary regarding AAR/IP security, usage, and/or dissemination.

An AAR/IP document distribution list must be included that identifies recipients and the form in which the document is provided (e.g., paper, compact disc [CD], e-mail, Internet). All electronic distribution should be a read-only format, such as Portable Document Format (PDF).

#### Table of Contents

The table of contents (titled *Contents*) must include the title and page number for each first-level (i.e., Section) heading and second-level heading in the report. All figures and tables should be given a numbered caption and be listed in the table of contents according to category and associated page numbers.

#### **Executive Summary**

The Executive Summary should be intended as a quick review for an executive audience and as such should be two pages or less in length and provide a brief overview of the exercise and include: (1) why the exercise was conducted; (2) the exercise objectives (i.e., what the community wanted to learn by participating in the exercise); (3) what missions, capabilities, and scenario(s) were used to achieve those learning objectives; (4) a list of the most notable strengths that were learned from the exercise; and (5) a list of the key areas that require further development or improvement. In general, the major strengths and primary areas for improvement should be limited to three each to ensure the Executive Summary is high-level and concise. In addition, the Executive Summary may be used to summarize any high-level observations that cut across multiple capabilities.

#### Section 1: Exercise Overview

Information in the Exercise Overview should be "structured data"—written as a list rather than in paragraph form—in order to facilitate preparation of other parts of the AAR, maintain consistency within AAR/IPs, and facilitate the analysis of AAR/IPs for program reporting. Specifically, the Exercise Overview should contain the following information:

Exercise Name Formal name of exercise

Type of Exercise The type of exercise as described in Homeland Security Exercise Evaluation

Program (HSEEP) Volume I: seminar, workshop, drill, game, tabletop,

functional exercise, or full-scale exercise

Exercise Start Date

The month, day, and year that the exercise began

Exercise End Date

The month, day, and year that the exercise ended

Duration The total length of the exercise (in day or hours, as appropriate)

Location All applicable information regarding the specific location of the exercise,

including the city, State, Federal region, international country, military

installation, as applicable

Sponsor The Federal agency or agencies that sponsored the exercise, as well as any

co-sponsors (if applicable)

Program The name of the program from which exercise funding originated

Funding Recipient The entities (e.g., organizations, jurisdictions, agencies) that received funding

for the exercise

Mission The appropriate mission(s) of the exercise (e.g., Prevent, Protect, Response,

Recovery)

Capabilities A list of the capabilities addressed within the exercise

Scenario The exercise/event scenario (one or more of the following):

Biological

Aerosol Anthrax

Food Contamination

- Foreign Animal Disease

- Pandemic Influenza

Plague

- Other

• Chemical

Blister Agent

- Chlorine Tank Explosion

Nerve Agent

- Toxic Industrial Chemical

Other

Explosives

- Improvised Explosive Device

Other

Natural Disaster

Major Earthquake

Major Hurricane

**-** Other

Nuclear

Improvised Nuclear Device

- Other

Other

- Agriculture

- Cyber

Pollution

Radiological

- Radiological Dispersal Device

Other

**Exercise Planning Team** 

A list of exercise planning team members, including their associated organizations or agencies

Participating Agencies A list of the individual participating organizations or agencies, including

Federal, State, tribal, non-governmental organizations (NGOs), and local and

international agencies, as applicable

Number of Participants A list of the total number of each of the following exercise participants (as applicable, depending on the type of exercise and specific design needs):

Players

• Victim role players

Controllers

Evaluators

Observers

Facilitators

#### Section 2: Exercise Design Summary

The Exercise Design Summary is intended to provide a summary of the exercise design process and the planning context in which the exercise was conducted. It includes the following sections:

- 1. **Exercise Purpose and Design:** This section should be a brief (one-to-two paragraph) summation of why the exercise was conducted and what the exercise participants hoped to learn. It should also include a brief history of how the exercise was organized, designed, funded, etc., including a discussion of any major issues encountered.
  - Example: [Name of Exercise] was conducted to fulfill the XX programmatic requirement for an annual exercise. In addition, the State of J and X, Y, and Z counties wanted to demonstrate the use of a new system to share information about resource status and management among their Emergency Operations Centers (EOCs). County X wanted to demonstrate mass-casualty response procedures and mutual aid agreements (MAAs) with counties Y and Z. Federal departments/agencies A, B, and C also participated in the exercise to demonstrate their support to a mass-casualty incident.

[Name of Exercise] was funded through the 2007 XX program. Planning for the exercise began in December 2006 at the Initial Planning Conference (IPC) held at State J EOC headquarters . . .

- 2. **Exercise Objectives:** This section should be complete list of the exercise objectives. Any overarching programmatic goals should also be listed. Depending on the length and/or complexity of the exercise, individual exercise objectives and program goals may be presented in paragraph form or in a bulleted list.
  - Example: Exercise Objectives: In order to identify local vulnerabilities to a terrorism-based emergency, the exercise planning team selected the following overarching exercise objectives:
    - 1. Assess the collective ability of the intelligence community to collect, analyze, prioritize, and disseminate accurate information on a timely basis.
    - 2. Assess the ability of multiple agencies to coordinate the criminal investigation.
    - *3.* Assess the ability to effectively activate the EOCs.
- 3. Capabilities and Activities Identified for Demonstration: The purpose of this section is to align exercise design objectives with associated target capabilities, activities, and tasks. For each of the exercise objectives, the exercise planning team must decide which capabilities will be

demonstrated to achieve the objective. For each capability, the planning team then decides which activities to demonstrate. This section should include a list of the decided-upon capabilities that will be demonstrated to achieve each objective, followed by the corresponding activities and tasks, as necessary.

- Example: Objective: Exercise the relationship between the Principal Federal Official (PFO) and the Response Task Force (RTF) Commander.
  - 1. Capability and Activities: Emergency Operations Center / Multi-Agency Coordination Center / Initial Operating Facility Management (EOC/MACC/IOF Management): Gather and Provide Information; Provide EOC/MACC/IOF Connectivity; and Support and Coordinate.
  - 2. Capability and Activities: Emergency Public Information and Warning: Direct Emergency Public Information and Warning Tactical Operations; Issue Emergency Warnings; and Establish Joint Information System (JIS).
- 4. **Scenario Summary:** For an operations-based exercise, this section summarizes the scenario or situation initially presented to players, subsequent key events introduced into play, and the time in which these events occurred. For a discussion-based exercise, this section outlines the scenario used and/or modules presented to participants.
  - Example: [Name of Exercise] involved a nuclear weapons accident in XYZ. The scenario was triggered by the crash of a transport airplane carrying four nuclear weapons. The crash resulted in two low-level explosions and lead to the release of radioactive material, threatening not only the immediate vicinity of the crash site but the local community beyond XYZ as well.
- 5. **Planned Simulations:** This section summarizes the simulations (scenario injects or portrayed non-participating entities that would normally respond to an actual incident) that were identified during the design process.

#### Section 3: Analysis of Capabilities

This section analyzes players' demonstrated performance at the capability/activity-level, and therefore information is organized by capability and associated activities. Within Section 3, a sub-section should be created for each capability validated during the exercise. Each section must include a summary of the capability in question, including an overview of how that capability was performed during an operations-based exercise or addressed during a discussion-based exercise. The length of this summary depends on the scope of the exercise. Adequate detail must be included to provide the reader with an understanding of how the capability was performed or addressed.

Each capability summary is followed by a subheading for each of the capability's associated activities. Under each activity, observations that analyze how well the tasks within that activity were carried out are provided. Each observation must be identified as either a strength or an area for improvement, according to the following definitions:

- 1. **Strength:** A strength is an observed action, behavior, procedure, and/or practice that is worthy of special notice and recognition.
- 2. **Area for Improvement:** Areas for improvement are those areas in which the evaluator observed that a necessary activity was not performed or that an activity was performed but with notable problems.

The following format should be used within each capability summary and analysis:

Activity A short description of the activity (e.g., "Gather and Provide Information:

Upon establishing EOC/MACC/IOF operations, gather, organize, and document incident situation and resource information from all sources . . . ").

Observation A short, complete sentence that describes the general observation (e.g., "Area

for Improvement: Agencies lacked regular, consistent updates from the

field.").

Reference(s) Specific plans, policies, procedures, laws, or regulations that apply to the

observation may also be referenced as well as relevant task(s) from the EEG related to the observation. Also, if no references relate to the observation, it is acceptable to record "not applicable" for this section (e.g., "National

Response Plan, Emergency Support Function #5 – Emergency

Management").

Analysis A description of the behavior or actions at the core of the observation,

including a brief description of what happened; the consequence(s) of the action or behavior (positive or negative); and a root-cause analysis of the contributing factors (e.g., "Reports arrived at the operations center at erratic intervals, and often contained contradictory or inconsistent information. Some of the challenges faced in this area may be attributed to the lack of classified communications capacity available to the operations center.").

Recommendation(s) Broad recommendations to address identified areas for improvement, based

on the judgment and experience of the evaluation team (e.g., "Provide information reporting requirements to agencies during the planning phase of

the exercise.").

This process (capability summary followed by observations for each activity within the capability) should be repeated for each capability demonstrated during the exercise. However, if an observation is noted during the exercise that is cross-cutting and applies to multiple activities within the capability, the observation should be listed first, immediately following the capability summary. A reference to "related activities" would then follow the observation, which should list all of the activities to which the observation applies.

Current versions of the Target Capabilities List (TCL), the Universal Task List (UTL), and EEGs do not yet contain all the capabilities and activities that could be performed or discussed in an exercise. If a capability that is not currently in the TCL/UTL is performed during an exercise, this AAR/IP template allows the flexibility to write-in an observation and recommendation tied to a non-TCL/UTL capability—simply insert all such observations at the end of Section 3, following the TCL/UTL capability sections and using the same format.

#### Section 4: Conclusion

A brief conclusion should be provided that summarizes the exercise and includes an overview of the major strengths and primary areas for improvement identified by the evaluation team.

#### Appendix A: Improvement Plan

The initial draft IP is created during draft AAR development and finalized at the After Action Conference. (See the following example in Table A-1). In Table A-1, the contents of the *Observation Title* and the *Capability* columns are derived from the AAR, but the rest of the information in the IP is completed during the After Action Conference by the participating agencies, and updated within the AAR to provide a baseline IP to be published with the AAR.

Capability	Observation Title	Recommendation	Corrective Action Description	Capability Element	Primary Responsible Agency	Agency POC	Start Date	Completion Date
Public Safety and Security Response		1.1 Insert Recommendation 1	1.1.1 Insert Corrective Action 1	Planning	State X EMA	EMA Director	Dec 1, 2006	Sep 1, 2007
			1.1.2 Insert Corrective Action 2	Planning	State X EMS System	EMS System Director	Dec 1, 2006	Feb 1, 2007
		1.2 Insert Recommendation 2	1.2.1 Insert Corrective Action 1	Training	State X EMA	EMA Director	Dec 1, 2006	Jan 1, 2007
	2. Observation 2	2.1 Insert Recommendation 1	2.1.1 Insert Corrective Action 1	Planning	State X EMS System	EMS System Director	Dec 1, 2006	Jan 15, 2007
			2.1.2 Insert Corrective Action 2	Systems/ Equipment	State X EMA	EMA Director	Dec 1, 2006	Jan 1, 2007

**Table A-1:** Example IP

#### Appendix B: Lessons Learned (optional)

This appendix is intended to provide exercise participants the opportunity to promote observations—whether positive or negative—as lessons learned or best practices for wider distribution. The observations listed in this section can be *nominated* for inclusion on the Lessons Learned Information Sharing System (LLIS.gov) to be shared with the larger homeland security community. During the After Action Conference, exercise participants should discuss nominated observations to ensure that the lessons taken from the exercise have truly been "learned." Based on discussions at the conference, the final Lessons Learned appendix should be modified to reflect the consensus of conference participants, and the finalized list of lessons learned can be shared with LLIS.gov for further research and analysis.

If there are not any nominations, a simple statement to that effect should be included here.

To assist After Action Conference participants in the development of lessons learned, the following are the categories and definitions used in LLIS.gov for lessons learned and related content categories:

- Lesson Learned: Knowledge and experience, positive or negative, derived from actual incidents, as well as those derived from observations and historical study of operations, training, and exercises
- **Best Practices:** Exemplary, peer-validated techniques, procedures, good ideas, or solutions that work and are solidly grounded in actual operations, training, and exercise experience
- **Good Stories:** Exemplary, but non-peer-validated, initiatives (implemented by various entities) that have shown success in their specific environments and that may provide useful information to other communities and organizations
- **Practice Notes:** A brief description of innovative practices, procedures, methods, programs, or tactics that an organization uses to adapt to changing conditions or to overcome an obstacle or challenge (This LLIS.gov content category should be used, in particular, to capture exercise design best practices and lessons learned.)

#### Appendix C: Participant Feedback Summary (optional)

This section includes a summary of Participant Feedback Forms. At a minimum, the Participant Feedback Forms should address the satisfaction level exercise participants have with the exercise and the opportunity to provide input into key strengths or areas for improvement.

#### Appendix D: Exercise Events Summary Table (optional)

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

Table A-2 presents an example of the format for the Exercise Events Summary Table.

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

 Table A-2: Example Exercise Events Summary Table format

#### Appendix E: Performance Ratings (optional)

When an entity selects to use performance ratings, or when initiatives require a rating within the AAR/IP, the following approach can be used. A qualitative performance rating is assigned to each activity demonstrated within its capability area. The performance rating is based on a systematic review by the lead evaluator of exercise performance based on evaluator analysis of how well the participants achieved the capability outcome. The results should be summarized within this appendix, and based on the supporting narrative contained within the body of the AAR/IP.

The performance rating categories refer to how well the activity was performed and are detailed in Table A-3.

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

 Table A-3: Descriptions of performance ratings

#### Appendix F: Acronyms

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

# Appendix B: After Action Quick Look Report Guidelines

These guidelines are based on the After Action Report / Improvement Plan (AAR/IP) guidelines in Appendix A but are abbreviated to provide an outline for the *initial* AAR produced from an exercise—or the After Action Quick Look Report, which is a high-level, initial assessment of the exercise.

### **Quick Look Report Contents**

- Report Cover
- Administrative Handling Instructions
- Contents
- Executive Summary
- Section 1: Exercise Overview (includes identifying information, such as the exercise name, date, duration)
- Section 2: Initial Analysis of Capabilities (includes initial analysis of players' demonstrated performance at the capability level, and therefore observations are organized by capability)
- Acronyms

## Quick Look Report Format

The After Action Quick Look Report must be clearly identified as such and should clearly state that the contents are based on initial exercise evaluation feedback, and that it is not intended to serve as the official draft or final AAR/IP.

#### Report Cover

The report cover page should include the following information: (1) the full exercise name; (2) the words *After Action Quick Look Report*; (3) the date(s) on which the exercise was conducted; and (4) the date the Quick Look Report was published. Additional graphics—such as logos, pictures, and background color(s)—may be added to enhance appearance.

#### Administrative Handling Instructions

The Administrative Handling Instructions should be organized in the same manner as described in *Appendix A: After Action Report / Improvement Plan Guidelines*.

#### Table of Contents

The table of contents (titled *Contents*) should be organized in the same manner as described in *Appendix A: After Action Report / Improvement Plan Guidelines*.

#### Executive Summary

The Executive Summary should be two pages or less in length and provide a brief overview of the exercise and include: (1) why the exercise was conducted; (2) the exercise objectives (i.e., what the community wanted to learn by participating in the exercise); (3) what missions, capabilities, and scenario(s) were used to achieve those learning objectives; (4) a list of the most notable strengths that were learned from the exercise; and (5) a list of the key issues that require further development or improvement. In general, the major strengths and primary areas for improvement should be limited to three each to ensure the Executive Summary is high-level and concise. For the Quick Look Report, items (4) and (5) should be organized by the capabilities exercised—depending on exercise-specific needs, the evaluator may want to provide a breakout by capability and exercise participant.

#### Section 1: Exercise Overview

The Exercise Overview should be organized in the same manner as described in *Appendix A: After Action Report / Improvement Plan Guidelines*.

#### Section 2: Initial Analysis of Capabilities

The Initial Analysis of Capabilities section is intended to provide a summary of the major observations—including strengths and areas for improvement—from the exercise evaluation and hot wash and debrief discussions. As such, this section should be formatted as an abbreviated version of Section 3: Analysis of Capabilities in Appendix A: After Action Report / Improvement Plan Guidelines:

Capability A sub-section should be created for each capability validated during the

exercise. Each must include an initial summary of the capability in question, including an overview of how that capability was performed during an operations-based exercise or addressed during a discussion-based exercise.

Observation A short, complete sentence should be added that describes the general

observation as discussed at the hot wash or debrief (e.g., "*Area for Improvement:* Agencies lacked regular, consistent updates from the field.").

improvement i general regular, consider aparate from the field.

The analysis is a description of the discussion surrounding the observation at the debrief or hot wash. This may include a description of the behavior or actions at the core of the observation, including a brief description of what

happened; the consequence(s) of the action or behavior (positive or

negative); and a root-cause analysis of the contributing factors (e.g., "Reports arrived at the operations center at erratic intervals, and often contained contradictory or inconsistent information. Some of the challenges faced in this area may be attributed to the lack of classified communications capacity

available to the operations center.").

#### Acronyms

**Analysis** 

Any acronym used in the After Action Quick Look Report should be listed alphabetically and spelled out.

# Appendix C: Exercise Evaluation Guide Sample

The following pages of Appendix C contain sample portions of an Exercise Evaluation Guide (EEG). The EEGs are currently under revision and being mapped to the Target Capabilities List (TCL) and the Universal Task List (UTL). Finalized EEGs will be posted as they become available. Please refer to the Homeland Security Exercise and Evaluation Program (HSEEP) website, <a href="http://hseep.dhs.gov">http://hseep.dhs.gov</a> for the finalized EEGs.

#### Figure C-1 EEG cover page

# WMD/Hazardous Materials (HazMat) Response and Decontamination

Exercise Evaluation Guide

#### **Capability Description:**

Weapons of Mass Destruction (WMD)/Hazardous Materials Response and Decontamination is the capability to assess and manage the consequences of a hazardous materials release, either accidental or as part of a terrorist attack. It includes testing and identifying all likely hazardous substances onsite; ensuring that responders have protective clothing and equipment; conducting rescue operations to remove affected victims from the hazardous environment; conducting geographical survey searches of suspected sources or contamination spreads and establishing isolation perimeters; mitigating the effects of hazardous materials, decontaminating on-site victims, responders, and equipment; coordinating off-site decontamination with relevant agencies, and notifying environmental, health, and law enforcement agencies having jurisdiction for the incident to begin implementation of their standard evidence collection and investigation procedures.

#### **Capability Outcome:**

Hazardous materials release is rapidly identified and mitigated; victims exposed to the hazard are rescued, decontaminated, and treated; the impact of the release is limited; and responders and at-risk populations are effectively protected.

Jurisdiction or Organization:	Name of Exercise:		
Location:	Date:		
Evaluator:	Evaluator Contact Info:		
Note to Exercise Evaluators: Only review those activities listed below to which you have	ve been assigned		
Activity 1: Site Management and Control			
Activity Description: In response to activation, mobilize and arrive at the incident scene and	initiate response operations to manage and secure the physical layout of the incident.		
Tasks Observed (check those that were observed and provide the time of observation Note: Asterisks (*) denote Performance Measures and Performance Indicators associately	,		
Tasks/Observation Keys	Time of Observation/ Task Completion		
1.1. Conduct initial approach and positioning of responders. Res.B.1.6.3.2  — Avoid committing or positioning responders / units in a hazardous position  — Consider escape routes if conditions deteriorate quickly  — Establish staging area(s), as appropriate	Time:  Task Completed?  Fully [] Partially [] Not [] N/A []		
HSEEP Exercise Evaluation Guide, WMD/HAZMAT Response and Deconta	umination		

Figure C-2 EEG activity and task list

<b>activity Description:</b> Upon arrival on-scene, begin to identify and characterize the scope and nature of the response problem, including WMD/HM involved in the incident and victims / exposures impacted.								
	Tasks Observed (check those that were observed and provide the time of observation)							
Note:	Asterisks (*) denote Performance Measures and Performance Indicators associated with a task. Please record the o	observed indicator for each measu	ıre					
Tasks/Observation Keys		Time of Observation/ Task Completion						
2.1.	Survey the incident scene. <b>Res.B.2.5.1.1</b>	Time:						
	<ul> <li>Identify the nature and severity of the immediate problem</li> </ul>	Task Completed?						
	— If multiple problems exist, prioritize and make assignments	Fully [] Partially [] Not [] N/A []						
-	* Time to survey the incident and initially identify WMD/HM involved and nature of the problem	TARGET	ACTUAL					
		Less than 30 minutes of arrival on scene						
-	* Time to obtain preliminary estimate of number of victims impacted by problem, including victims exposed to WMD/HM and its source	TARGET Less than 1 hour of arrival on-scene	ACTUAL					
2.2.	Make offensive or defensive reconnaissance operations, as necessary, to gather intel on the situation. <b>Res.B.2.5.1.2.1</b>	Time:						
	<ul> <li>Defensive Recon – Gathering information from beyond the inner perimeter (e.g., threat assessments, physical</li> </ul>	Task Completed?						
	<ul> <li>observations, interviews, etc)</li> <li>Offensive Recon – Obtaining intel and incident information by physically entering the inner perimeter. May require joint entry operations between WMD/HM, SWAT and bomb squad personnel</li> </ul>	Fully [] Partially [] Not [] N/A []						
2.3.	Responders alert for the presence of IEDs and secondary events. Res.B.1.6.3.2	Time:						
	<ul> <li>Assess the potential / probability for IEDs and secondary devices</li> </ul>	Task Completed?						
		Fully [ ] Partially [ ] Not [ ] N/A [ ]						

#### Figure C-3 EEG analysis sheets

#### Exercise Evaluation Guide Analysis Sheets

The purpose of this section is to provide a narrative of what was observed by the evaluator/evaluation team for inclusion within the draft After Action Report/Improvement Plan. This section includes a chronological summary of what occurred during the exercise for the observed activities. This section also requests the evaluator provide key observations (strengths or areas for improvement) to provide feedback to the exercise participants to support sharing of lessons learned and best practices as well as identification of corrective actions to improve overall preparedness.

#### **Observations Summary**

Write a general chronological narrative of responder actions based on your observations during the exercise. Provide an overview of what you witnessed and, specifically, discuss how this particular Capability was carried out during the exercise, referencing specific Tasks where applicable. The narrative provided will be used in developing the exercise After-Action Report (AAR)/Improvement Plan (IP).

[Insert text electronically or on separate pages]

#### **Evaluator Observations**

Record your key observations using the structure provided below. Please try to provide a minimum of three observations for each section. There is no maximum (three templates are provided for each section; reproduce these as necessary for additional observations). Use these sections to discuss strengths and any areas requiring improvement. Please provide as much detail as possible, including references to specific Activities and/or Tasks. Document your observations with reference to plans, procedures, exercise logs, and other resources. Describe and analyze what you observed and, if applicable, make specific recommendations. Please be thorough, clear, and comprehensive, as these sections will feed directly into the drafting of the After-Action Report (AAR). Complete electronically if possible, or on separate pages if necessary.

#### Strengths

1. Observation Title:

#### Related Activity:

Record for Lesson Learned? (Check the box that applies) Yes [] No []

1) Analysis: (Include a discussion of what happened. When? Where? How? Who was involved? Also describe the root cause of the observation, including contributing factors and what led to the strength. Finally, if applicable, describe the positive consequences of the actions observed.)

[Insert text electronically or on separate pages]

2) References: (Include references to plans, policies, and procedures relevant to the observation)

[Insert text electronically or on separate pages]

HSEEP Exercise Evaluation Guide, WMD/HAZMAT Response and Decontamination

# Appendix D: Development of Discussion-Based Evaluation Materials

Discussion-based exercises range from small discussion groups to large, multi-community events. Likewise, the purpose and objectives of discussion-based exercises can vary greatly from those of operations-based exercises. In most cases, discussion-based exercises are conducted at a central location where responders and decision makers can meet to discuss plans, policies, procedures, training, equipment, and interagency and inter-jurisdictional agreements. Often a facilitator is used to keep discussions on track and maintain focus on the exercise program goals and specific exercise objectives. Exercise evaluators are specifically chosen for their overall knowledge of emergency operations among multiple specialties—they help capture important comments, agreements, and discoveries provided by exercise participants.

Following a discussion-based exercise, the exercise facilitator(s) and evaluators report on the multi-faceted discussion, agreements, strengths, and areas for improvement. Capturing these aspects of a discussion-based exercise requires the exercise planning team to pay specific attention during the design phase of the exercise; facilitators' and exercise evaluators' careful preparation; and a tool specifically formatted to ease note taking and provide an easy transition to After Action Report / Improvement Plan (AAR/IP) documentation—this tool is the facilitator and evaluator guide.

A facilitator and evaluator guide can be constructed for a discussion-based exercise using much of the information contained in the operations-based Exercise Evaluation Guides (EEGs).

#### **Exercise Facilitator**

The exercise facilitator sets the expectations for the exercise, introduces or presents the scenario and the various modules, manages the time and group reports, and facilitates discussions between groups. In order to ensure that exercise players are comfortable discussing issues with exercise evaluators present, the facilitator must explain the evaluators' role and stress that capturing key discussion points leads to improvements to local plans, policies, and procedures, which will translate into an improved level of preparedness.

#### **Exercise Evaluators**

The role of the evaluator in a discussion-based exercise is to observe and record the discussion during the exercise, participate in the data analysis, and assist with drafting the AAR/IP. In addition to the evaluator, a group note-taker should be present to supplement information gathered by the evaluator.

#### Discussion-Based Exercise Evaluation Guides

Since an entity's response requirements are as different as its location, threats, and mutual aid agreements (MAAs), each exercise planning team must develop its own list of detailed leading questions that will help the facilitator guide players' discussions toward accomplishing the overall exercise program goals and exercise objectives. Exercise evaluators can also use such questions as a tool for gathering evaluation information.

Figure D-1 depicts a preferred methodology exercise planners can use to develop facilitator and evaluator materials for discussion-based exercises. These materials may be included in a modified Controller and

Evaluator (C/E) Handbook, or as separate Facilitator Handbooks and Evaluation Plans (EvalPlans).

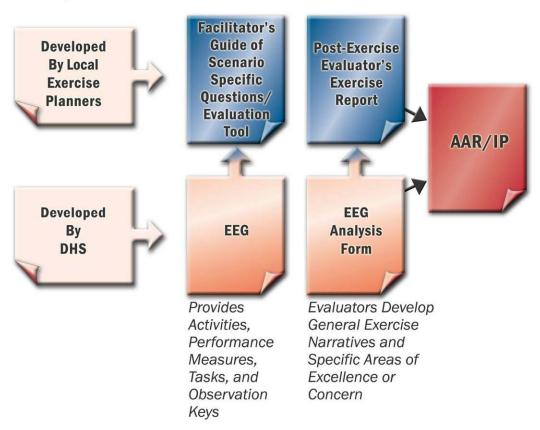


Figure D-1: Developing scenario-specific, discussion-based materials

# Developing Discussion-Based Exercise Facilitator and Evaluator Materials

The U.S. Department of Homeland Security (DHS) has already developed EEGs for use in operations-based exercises. These guides select specific capabilities and list the capabilities' associated activities, tasks, and performance measures from the Target Capabilities List (TCL) and Universal Task Line (UTL) as critical elements to monitor during an emergency exercise. As such, these task- and performance-centric EEGs are best suited for operations-based exercises, drills, and training. Discussion-based exercises provide another valuable aspect to assessing a community's preparedness capability by providing forums to discuss plans, policies, procedures, MAAs, etc.

Discussion-based exercise materials for exercise facilitators and evaluators can follow a similar design as the EEGs for operations-based exercises. The following sections discuss the discussion-based exercise evaluation materials depicted in Figure D-1.

# Using the EEG to Develop a Facilitator's Guide

The EEG lists the specific activities, tasks, and performance measures selected as the national baseline for exercise evaluation. In addition, evaluator observation keys have been developed for each task to aid evaluators in recognizing key actions responders might take. The format and content of the EEG can easily be adapted to a facilitator's guide that can be included in a C/E Handbook or Facilitator Handbook

that lists questions specific to the discussion-based exercise scenario and the emergency responders and decision makers participating in the exercise.

The local exercise planning team can adapt the EEG format by deleting activities and tasks that will not be part of the exercise and adding in tasks of more local interest. Exercise planners can then remove the observation keys and replace them with suggested questions the facilitator might use to spark discussion of topics important to exercise objectives.

## After Action Report / Improvement Plan Reporting

When developing local, discussion-based exercise evaluation tools, it is important to keep activities, performance measures, and tasks consistent within the original EEG. This helps integrate discussion-based AAR/IPs with AAR/IPs from other exercises to demonstrate improvement of capabilities throughout the preparedness cycle and within a comprehensive exercise program.

Some discussion-based exercises may have a limited area of interest and may develop several detailed questions based on only a few activities, performance measures, or tasks. However, other discussion-based exercises might focus more on interagency and inter-organizational communications and therefore select more activities, performance measures, and tasks for use in evaluation. In these cases, concrete performance measures can be substituted by process-focused measures that center on the smooth functioning of interagency communication and coordination.

#### Developing Discussion-Based Exercise Evaluation Guide Analysis Sheets

The EEG Analysis Sheets provide a format for documenting and describing the actions taken during an operations-based exercise. These sheets can be also be adapted for discussion-based exercises to document and describe the discussion, decisions, and issues that were identified during and following the exercise.

The EEG Analysis Sheets for operations-based exercises are designed to help evaluators maintain focus while developing short, descriptive narratives of exercise events—therefore reducing post-exercise workload on evaluators and evaluation team leaders. Evaluators can use these analysis sheets to build observations, analysis, and recommendations content in the draft AAR/IP *Section 3: Analysis of Capabilities*. In the same manner, discussion-based EEG Analysis Sheets enable easy incorporation of discussion-based exercise facts into the AAR/IP.

Production of discussion-based EEG Analysis Sheets requires very little alteration of the current operations-based format. The questions prompting evaluators to list exercise observations chronologically are widely applicable across exercises, regardless of type. The same is true of the Evaluator Observations section, which asks evaluators to record major areas of strength and major areas for improvement, as well as initial analyses and recommendations. Unlike operations-based exercises, the observations recorded for discussion-based exercises may not be grouped by specific activities; however, this slightly altered section of the EEGAnalysis Sheets can still prove useful following a discussion-based exercise.

# Appendix E: Acronyms

AAR/IP After Action Report/Improvement Plan

C/E controller and evaluator

DHS U.S. Department of Homeland Security

EEG Exercise Evaluation Guide

EOC Emergency Operations Center

EvalPlan Evaluation Plan ExPlan Exercise Plan

FOUO For Official Use Only HazMat hazardous materials

HSEEP Homeland Security Exercise and Evaluation Program

HSPD-8 Homeland Security Presidential Directive 8

IP Improvement Plan

JIC Joint Information Center

LLIS Lessons Learned Information Sharing

MAA mutual aid agreement

MSEL Master Scenario Events List NGO non-governmental organization

POC point of contact

SBU Secure But Unclassified

SitMan Situation Manual

TCL Target Capabilities List

UTL Universal Task List

WMD Weapons of Mass Destruction