



isps

DRILLS & EXERCISES WORKSHOP

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- 3 Plan, Conduct, Evaluate
- 4 Reference 1: Maritime Security Guidelines
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- 8 Your Notes

Port Moresby, Papua New Guinea
27 November – 1 December 2006

workshop SCHEDULE

<p>MONDAY 1300-1600</p>	<ul style="list-style-type: none"> • Introductions and Course Overview • ISPS Requirements 	
<p>TUESDAY 0800-1600</p>	<ul style="list-style-type: none"> • Roleplay: Security Drill • Planning Security Drills 	
<p>WEDNESDAY 0800-1600</p>	<ul style="list-style-type: none"> • Conducting Security Drills • Evaluating Security Drills • Roleplay: Security Exercise 	<p>Morning Break 1000-1030</p>
<p>THURSDAY 0800-1600</p>	<ul style="list-style-type: none"> • Planning a Security Exercise • Conducting a Security Exercise 	<p>Lunch Break 1200-1300</p>
<p>FRIDAY 0800-1600</p>	<ul style="list-style-type: none"> • Security Exercise continues • Evaluating a Security Exercise • Workshop Summary and Evaluation 	<p>Afternoon Break 1430-1500</p>

workshop OVERVIEW

Welcome to the ISPS Drills and Exercises Workshop! Ahead of us is a week of challenging work as we learn about planning, conducting and evaluating port facility security drills and exercises.

The workshop is designed for port personnel who have maritime security responsibilities under the ISPS Code. The objective is to give you hands-on experience in planning, conducting and evaluating drills and exercises in compliance with the code.

To this end, workshop activities shall mainly involve a practical application of knowledge and skills learned, and everybody in class will be expected to participate actively in discussions and group work.

Don't expect to sit back and just listen—it will be your job to work out practical ways of planning, conducting and evaluating drills and exercises that are appropriate for your particular port facility.

BE READY TO:

- ➔ Ask questions
- ➔ Share your insights and experiences on what works and what doesn't
- ➔ Recommend what you have found to be good practices

workshop OBJECTIVES

On completion of the workshop, you should be able to:

- Demonstrate a good understanding of the requirements of the ISPS Code with regards to port facility security drills and exercises
- Plan, conduct and evaluate port facility security drills and exercises

To help you achieve these objectives, we shall apply a 3-step process:

PREPARE FOR THE WORK

1. Examine ISPS requirements for drills and exercises.
2. Learn the steps involved in planning, conducting and evaluate drills and exercises.
3. Understand the requirements of a sample Port Facility Security Plan.

DO THE WORK

1. Plan drills, conduct them, and evaluate their effectiveness.
2. Plan exercises, implement them, and evaluate their effectiveness.

EVALUATE YOUR WORK

1. Assess the effectiveness of your drills and exercises, as well as the process you followed for planning, conducting and evaluating them.
2. Recommend ways to improve the planning, implementation and evaluation of drills and exercises.

THE NEXT STEP?

Apply what you have learned in your port facility.

workshop RESOURCES

WORKSHOP GUIDE

This Workshop Guide is your primary source of workshop information and guidance. It is designed to help you achieve the workshop objectives.

The initial sections (1-3) provide study notes on ISPS requirements and the processes involved in planning, conducting and evaluating port facility drills and exercises.

The next sections (4-6) are your primary reference documents to support your study. They include the full text of the ISPS Code, your country's maritime security legislation, and relevant IMO implementation guidelines. Please find the time to go over them.

Section 7 is for practical activities which will be progressively distributed to you during the workshop. The final section (8) is for your own note taking.

YOU AND YOUR COLLEAGUES IN THE WORKSHOP

There is a wealth of experience and expertise in your group that is waiting to be tapped, so we strongly encourage you to share insights and experiences. Let us all aim to learn from one another.

WORKSHOP FACILITATORS

Dr Jeff Hawkins, Managing Director of the Asia Pacific Maritime Institute (APMI) will lead the workshop. He will be assisted by Phil Price, Director, Maritime Security, Department of Transport, PNG, and Stephen Burnett and Terry O'Connor of the Maritime Security Branch of the Office of Transport Security, DOTARS, Australia.

Your workshop facilitators have extensive experience in maritime security so please take the opportunity to get the most you can from them.



Section 1

ISPS REQUIREMENTS

- 1 Overview
 - 2 Drills and Exercises - General Requirements
 - 3 Definitions
 - 4 Progressive Exercise Continuum
 - 5 The Context of Security Drills and Exercises
 - 6 The Bottom Line
 - 7 Test Yourself
-

ISPS requirements

1.1 OVERVIEW

This first section introduces you to the requirements of the ISPS Code that relate to port facility security drills and exercises. It defines the terms ‘drills’ and ‘exercises’ and explains the context against which drills and exercises should be planned, conducted and evaluated.

Figure 1.1 below illustrates the key areas covered in this section. As the figure shows, drills and exercises should adequately address the following elements of the Port Facility Security Plan (PFSP):

- Security duties of port facility personnel
- Port security measures
- Risks to port security

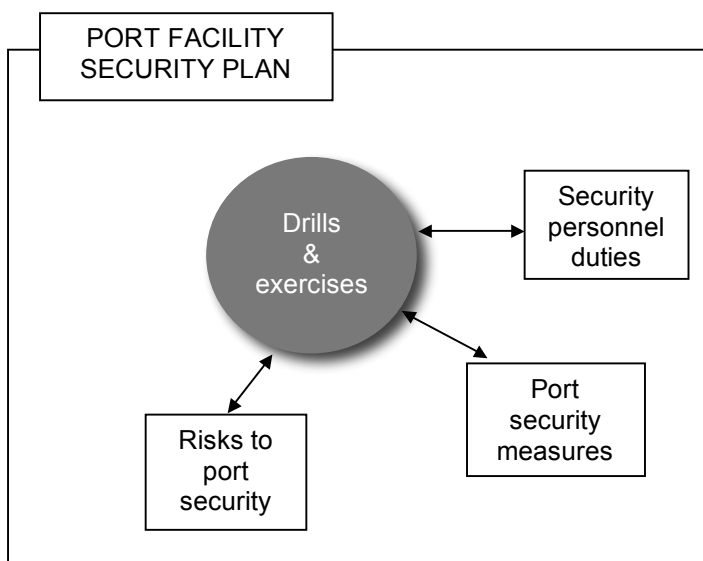


Figure 1.1
Areas to address by drills
and exercises

1.2 DRILLS AND EXERCISES – GENERAL REQUIREMENTS

Table 1.1 below summarizes the requirements of the ISPS Code (Parts A and B) that relate to port facility security drills and exercises. The full text of the code is in Reference 1, and you are strongly recommended to study (or review) it. A thorough understanding of code requirements is essential to effective drill and exercise planning.

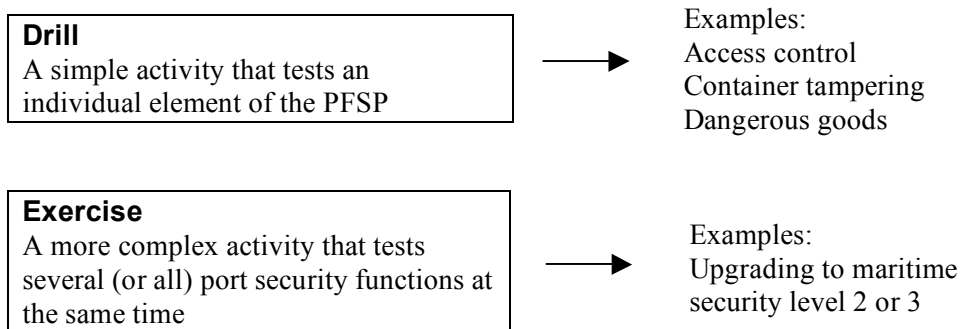
Table 1.1
ISPS requirements on port facility security drills and exercises

Requirement	ISPS Reference No
Scope	
☞ Drills and exercises must take into account Part B of the ISPS Code	A18.3, A18.4
Objectives of drills and exercises	
☞ To test the effective implementation of the PFSP	A18.3, A18.4
☞ To test how well port security personnel can do their jobs at all security levels and identify any security-related deficiencies which need to be addressed	B18.4
Responsibilities of security personnel	
☞ The PFSO must ensure that drills and exercises are carried out at appropriate intervals	A18.3, A18.4
☞ The PFSO must participate in exercises	A18.4
☞ Port personnel with security responsibilities must be familiar with the PFSP and adequately trained in the processes and procedures to be tested	A17.2, A18.1, A18.2 B18.1, B18.2
Drills	
☞ Frequency: To be conducted at least every 3 months (or if warranted by circumstances)	B18.5
☞ Focus: Address individual elements of the PFSP (including security threats)	B18.5
☞ Take into account the types of port facility operations, port facility personnel changes, vessel types serviced and other relevant circumstances	A18.3
Exercises	
☞ Frequency: To be conducted at least once a calendar year with no more than 18 months between exercises	B18.6
☞ Focus: should test communication, coordination, resource availability and response	B18.6
☞ Various types of exercises should be carried out	B18.6
☞ May include inter-agency participation	B18.6

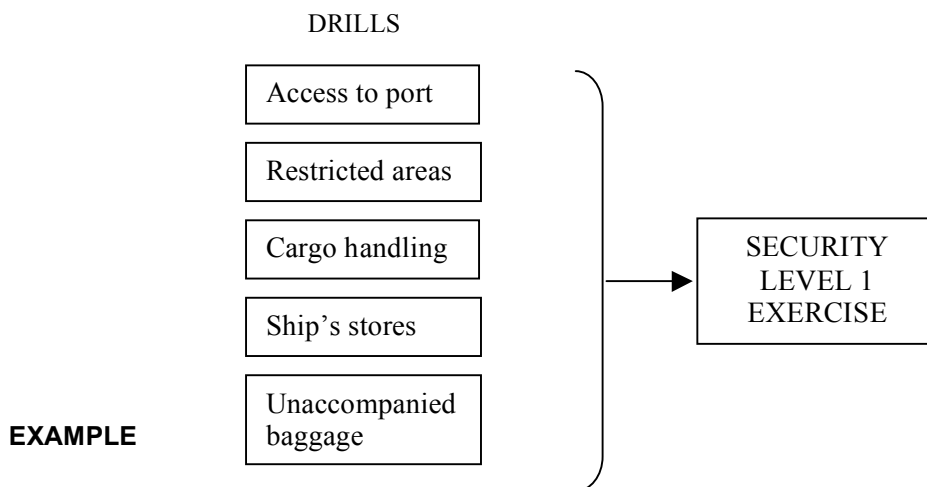
1.3 DEFINITIONS

The ISPS Code does not define the terms ‘drill’ and ‘exercise’, and as you may have already noticed when reading the newspaper or surfing the internet, the terms tend to be used loosely. The same activity may be called a ‘drill’ by some and an ‘exercise’ by others. In other instances, a drill may refer to a single activity in a single port (eg a search drill) or to a nationwide interagency activity (eg national military drill).

To ensure that we are talking the same language, it is important to clarify what we mean by the terms ‘drill’ and ‘exercise’.

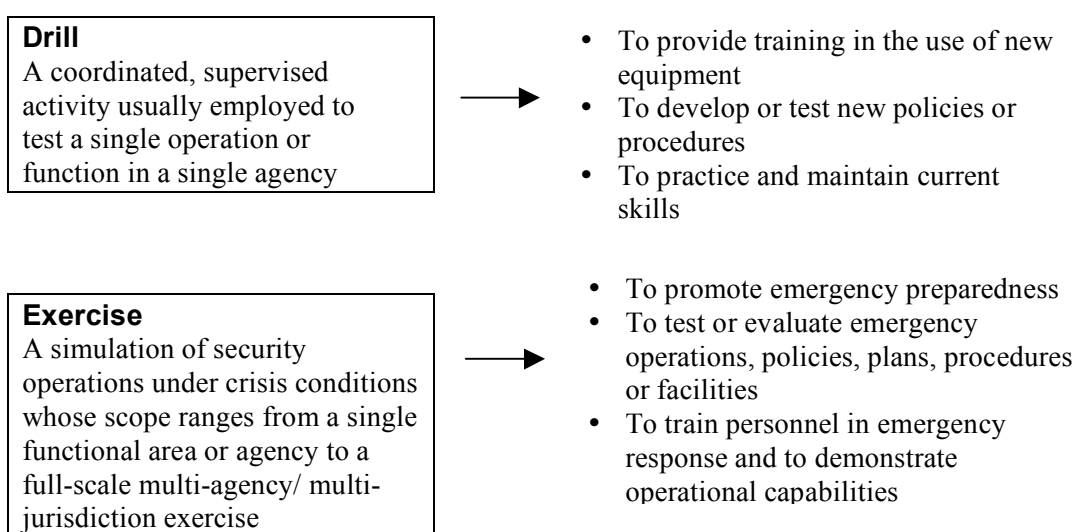


By focusing on specific elements of port security, drills help prepare port security personnel for the more complex exercises. An example of the progression from drills to exercises is shown below. Drills on individual security functions identified in the PFSP are conducted at least every 3 months, and at least every calendar year, an exercise covering some or all of these functions is conducted.



1.4 PROGRESSIVE EXERCISE CONTINUUM

To clarify the use of drills and exercises, the US Home Security Exercise and Evaluation Program (HSEEP) has developed what is called a progressive exercise continuum that includes 7 types of exercises ranging from the simplest to the most complex. Based on this continuum, drills and exercises can be defined as follows:



Exercises are further classified into two: functional exercises and full scale exercises.

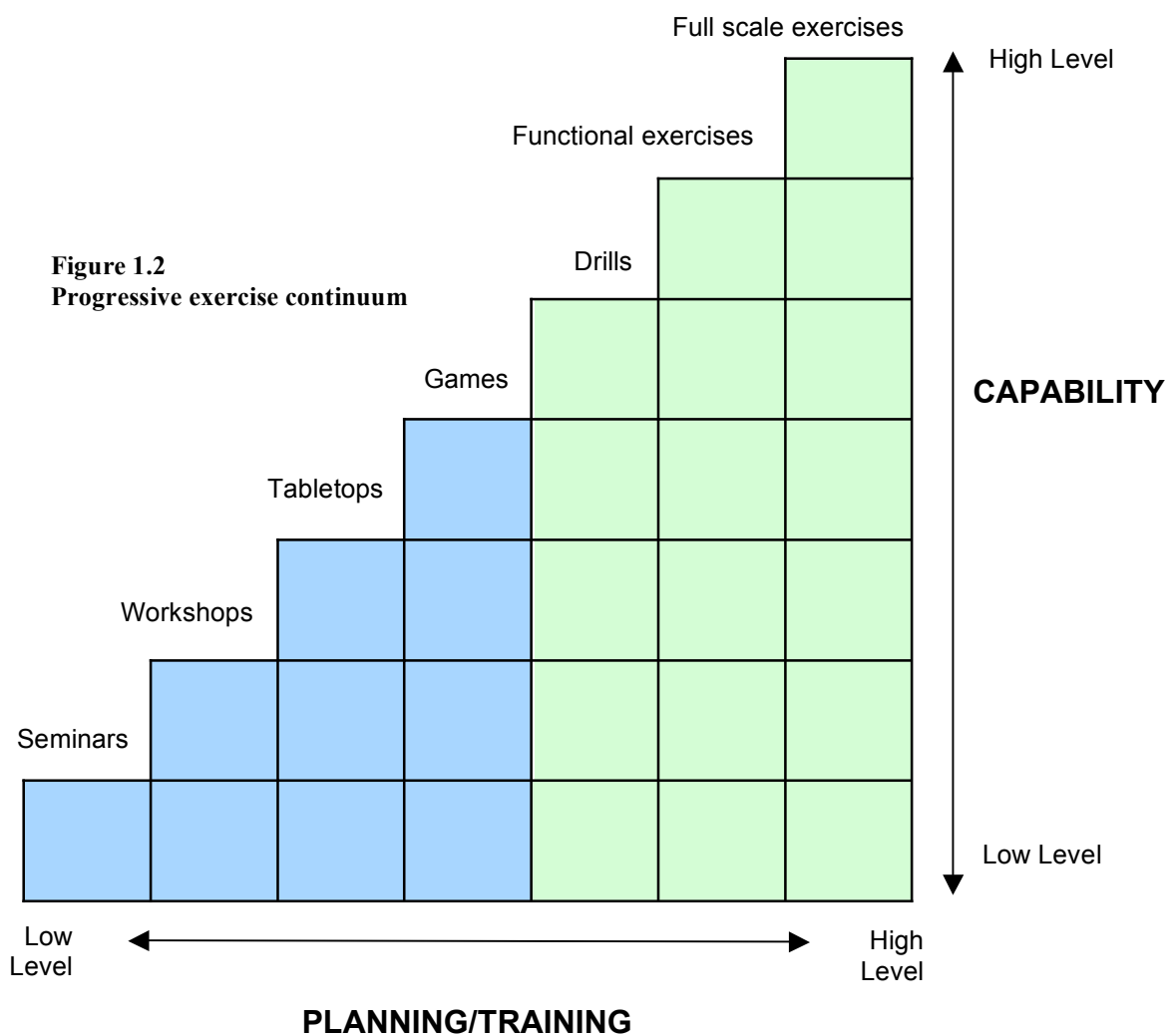
Functional exercise

An activity that simulates the reality of operations in a functional area by presenting complex and realistic problems that require rapid and effective responses by trained personnel in a highly stressful environment. It is used to test and evaluate individual capabilities, multiple functional areas, multiple activities within a functional area, or related groups of functional areas under crisis conditions.. Movement of equipment and personnel is simulated.

Full scale exercise

A large scale operation where response elements are required to actually mobilize and deploy to a designated site in response to a simulated attack, generally for an extended period. It is used to evaluate the operational (communication, coordination, resource available, response) capabilities of systems under field conditions. It is the largest, most costly and most complex exercise type and may involve participation at local, state and federal levels. Although it follows a scenario script, the way the exercise goes depends on player actions and decisions.

The progressive exercise continuum is shown in Figure 1.2 below.



As you move from left to right of the continuum, the level of planning and training required increases. As you move upward, the level of effort and capability required also increases.

Seminars and workshops require the least amount of planning, training and capability. Functional and full scale exercises are the most complex, requiring a high level of planning, training and capability.

The key points about the seven exercise types are summarized in Table 1.2 below. As the table shows, exercises can be grouped into two:

- ➊ **discussion based**, which include seminars, workshops, tabletop exercises, and games, and tend to be policy oriented
- ➋ **operations based**, which include drills, functional exercises and full scale exercises

Table 1.2
Features of exercise types

	Type	General Objectives	Specific Features
Discussion-based (TALK)	Seminar	Assess the adequacy of, and familiarity with, strategies, plans, procedures, resources and inter-agency/inter-jurisdiction relationships.	Lecture based format with limited feedback or interaction from participants <i>Examples:</i> familiarization sessions, meetings to review existing systems, sessions to review interagency agreements
	Workshop		Focus on information exchange and developing a product <i>Examples:</i> planning program or exercise objectives, exercise scenarios, evaluation of security elements and performance standards
	Tabletops	Tend to focus on policy-oriented issues.	Use of simulation to enhance general awareness, stimulate discussion on relevant issues, validate plans and procedures, and identify strengths and weaknesses.
	Game		A simulation involving 2 or more teams, usually in a competitive environment, designed to depict an actual or real life situation without use of actual resources
Operations-based (DO)	Drill	Observe and assess performance at three levels:	Supervised activity to test a single operation or function in a single agency. Used to provide training in the use of a new equipment, develop or test new policies or procedures, practice and maintain current skills.
	Functional exercise	<ol style="list-style-type: none"> 1. task level 2. function/agency level 3. multi-agency/multi-jurisdiction level 	Based on an emergency scenario. Simulates operations in a functional area or at agency level by presenting complex and realistic problems that require rapid and effective responses by trained personnel in a highly stressful environment. May be specific to agency or include inter-agency participation.
	Full scale exercise	Involve actual response and mobilization of resources and personnel.	Multi-agency and multi-jurisdictional exercises that test many facets of emergency response and recovery. Real time and highly stressful environment that closely mirrors a real incident. Complex site logistics.

Source: Adapted from the US HSEEP 2006

1.5 THE CONTEXT OF DRILLS AND EXERCISES

The relevance and effectiveness of drills and exercises depend primarily on the port facility’s ability to target key security areas identified in its Port Facility Security Plan (PFSP). Table 1.3 summarizes ISPS Code requirements on what should go into a PFSP.

Table 1.3
Areas covered by a PFSP

General Provisions	
<p style="text-align: center;">Key Elements of a PFSP</p> <ol style="list-style-type: none"> 1. Organizational requirements <ol style="list-style-type: none"> a. Role and structure b. Security links c. Communication systems 	<p>Key Questions to Address:</p> <ul style="list-style-type: none"> ➤ How well do security personnel perform their security duties? ➤ How effective are the security measures in protecting the port facility particularly from security threats or incidents? ➤ How effective is the entire security system?
<ol style="list-style-type: none"> 2. Security personnel <ol style="list-style-type: none"> a. Duties and responsibilities b. Training requirements c. Performance measures 	
<ol style="list-style-type: none"> 3. Security measures <ol style="list-style-type: none"> a. Ensure security performance b. Control access c. Monitor port facility d. Monitor restricted areas e. Supervise cargo handling f. Supervise handling ship’s stores g. Ensure security communication is readily available 	
<ol style="list-style-type: none"> 4. Monitoring and control of PFSP <ol style="list-style-type: none"> a. Review/audit/amendment b. Document control c. Reporting to government d. Implementation timetable 	
Implementation of the PFSP	<p>Most of these elements, particularly those that deal with organizational requirements, security personnel duties, and security measures must be adequately addressed by drills and exercises.</p>
	<p>Security threats identified by the Port Facility Security Assessment must also be addressed.</p>

Security personnel duties and security threats are summarized in Tables 1.4 and 1.5 below. We shall discuss them in more depth in Section 2 (Planning, Conducting and Evaluating Drills and Exercises) when we flesh out security measures.

Table 1.4
Security duties of port facility security personnel

KNOW
<ul style="list-style-type: none"> ➤ Current security threats and patterns ➤ Techniques used to avoid or get round security measures
RECOGNIZE AND DETECT
<ul style="list-style-type: none"> ➤ Weapons, and dangerous substances and devices ➤ Characteristics and behaviour of persons who are likely to threaten security
USE
<ul style="list-style-type: none"> ➤ Crowd management and control techniques ➤ Security-related communications protocols ➤ Security equipment and systems (operation, testing, calibration and maintenance) ➤ Inspection, control and monitoring techniques ➤ Methods of physical searches of persons, personal effects, baggage, cargo and ship's stores

Table 1.5
Security threats

1	Damage or destruction to the port facility or ship (eg by explosives, arson, sabotage, vandalism)
2	Hijacking or seizure of a ship and persons on board
3	Tampering with cargo, essential ship equipment of systems, or ship's stores
4	Unauthorized access or use (including stowaways)
5	Smuggling weapons of equipment (including WMD)
6	Use of ship to carry those intending to cause a security incident or their equipment
7	Use of ship as a weapon or means to cause damage or destruction
8	Blockage of port entrances, locks, approaches, etc
9	Nuclear, biological or chemical attack

1.6 THE BOTTOM LINE

Before we leave this section, there are three things that are worth stressing:

Use drills and exercises often enough so that **EMERGENCY RESPONSE** becomes **AUTOMATIC**, where personnel **RESPOND IMMEDIATELY** when the real thing happens, instead of having to think about it first, going back to manuals for guidance, or at worst, panicking and losing control.

Drills and exercises help the port facility:

- know if port facility security personnel can effectively perform their security duties
- know if the system is working well or what needs to be improved
- learn from mistakes
- give people both in and outside the port facility the confidence that the system will respond in case of an actual security threat or incident.

When done well, drills and exercises can effectively prepare the port facility to respond to a security threat or incident.

1.7 TEST YOURSELF

Must Know Items

What is a drill?	
Give 2 examples of a drill. Explain what happens in each drill.	
What is an exercise?	
What is a functional exercise?	
Give an example of a functional exercise. Explain what happens.	
What is a full-scale exercise?	
Give an example of a full-scale exercise. Explain what happens.	
What should be used as the basis for drills and exercises?	

Good to Know Items

What are the 7 types of exercise in the progressive exercise continuum?	
Which exercise types are discussion based?	
Which are operations based?	
What are the features of discussion based exercises?	
What are the features of operations based exercises?	



Section 2 PLAN, CONDUCT, EVALUATE

- 1 Overview
 - 2 The Planning Process
 - 3 Conducting Drills and Exercises
 - 4 Evaluating Drills and Exercises
 - 5 Challenge Yourself – Be Creative in Your Approach
 - 6 Test Yourself
-

Plan, Conduct, Evaluate

2.1 OVERVIEW

We now come to the hard work. In this section you will be expected to systematically plan, conduct and evaluate port facility drills and exercises. The objective is to give you a practical framework which you can use in your own port facilities, even well and truly after this workshop is over.

We shall apply what we call the PCE Process: Plan, Conduct, Evaluate. You would have applied this process many times during your career, and although the functional areas and systems may differ, the underlying process is the same.

The PCE Process includes three stages:

PLAN	Decide what you want to do
CONDUCT	Put it into action
EVALUATE	Find out how well (or how badly) you have done

This is a very simplistic picture of the process, but we shall put more meat on each step as we go along. To ensure you learn the process well, you will be expected to work in teams and do your own planning, conducting and evaluating. There is no better way to learn than actually doing it.

We learn best by doing.

2.2 THE PLANNING PROCESS

Figure 2.1 illustrates the steps in the planning process, including the key questions that must be answered at each step.

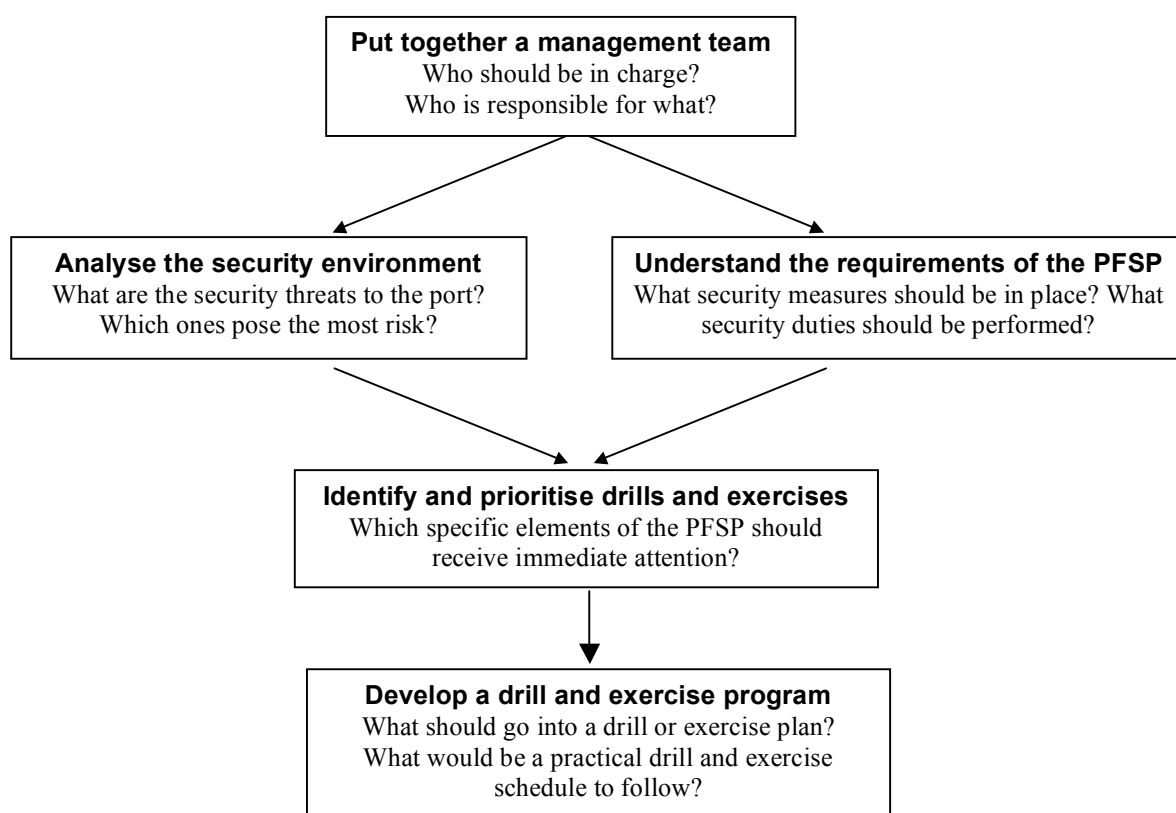


Figure 2.1
Steps in the planning process

As the diagram shows, the planning process requires three things:

- ➊ people to manage the process
- ➋ a full understanding of the requirements of the PFSP and current security conditions to determine which security functions should be given priority
- ➌ an implementation program to ensure drills and exercises test the adequacy and effectiveness of security functions

Planning Step 1: Put together a management team

Who should be in charge of drills and exercises at the port facility? Under the ISPS Code (and by extension the PFSP), the answer is easy—the PFSO. However, being a lone ranger is never easy and particularly in the case of security, it is not desirable either.

- 1 As a first step, the PFSO should put together a small team (2-3 people) who will manage the planning, implementation and evaluation of drills and exercises.
- 2 Determine who can serve as advisers. At the very least, make sure you obtain input from all functional areas of the port facility and gain their support.
- 3 Identify the various parties both within and outside the port facility that must be involved in drills and exercises.
- 4 Make sure you have systems and procedures in place for coordinating and communicating with them.
- 5 Ensure appropriate resources are available to support drills and exercises.

Planning Step 2a: Analyse the security environment

Once management responsibilities are established, the next step is for the team to analyse the port facility's current security conditions.

- 1 What are the security threats facing the port facility? For answers, check the results of the most recent Port Facility Security Assessment (PFSA).
- 2 Examine current security developments at the local and national levels (eg new techniques used by terrorists, new ways of combating terrorist activities, no additional security funding, etc). What are their implications to the port facility?
- 3 Based on the results of your analysis, prioritise the threats you have identified. Which ones pose the most serious risk to the port facility and require greatest preparation?

Planning Step 2b: Understand the requirements of the PFSP

This step goes hand in hand with the analysis of the security environment. Here, the objective is to fully understand the requirements of the PFSP. What security measures does it require at which security level? What security duties must be performed by security personnel?

Planning Step 3: Identify and prioritise drills and exercises

Given the priority ranking you have given to security threats, identify the corresponding functional areas in the PFSP that must be given priority for drills and exercises.

Planning Step 4: Develop a drills and exercises program

Once drills and exercises have been identified, develop a drills and exercises program. The program should:

- 1 Include a timetable for drills and exercises (eg for one calendar year)
- 2 Require the maintenance of a drills and exercises log to keep track of what drills and exercises have been completed (this will help systematize planning)
- 3 Provide a rationale for the selection of security functions to be tested
- 4 Identify the objectives and outcomes of each drill or exercise
- 5 Provide a detailed plan for conducting and evaluating a particular drill or exercise

What should go into a drill or exercise plan? Drills are typically easier to deal with because they focus on a single function or process, whereas the complexity of exercises can vary considerably. Nonetheless, all should include at least the following elements:

- ➊ The purpose and nature of the drill or exercise
- ➋ The people who will be involved and in what capacity
- ➌ Resources required
- ➍ The security functions to be tested
- ➎ The security conditions under which these functions are to be tested

Key elements of a drill or exercise plan are outlined in Table 2.2.

Table 2.2
Key elements of a drill or exercise plan

Exercise type	State what type of exercise is to be conducted (drill, functional exercise, full-scale exercise).
Objective	State the purpose of the drill or exercise.
Scenario	Describe the security threat or incident that must be addressed. Provide background information for the emergency to make the drill or exercise more realistic.
Scope	Describe participants, dates, locations, hours of operations, etc. Describe the briefing that will start the drill or exercise.
Rules	Describe the rules on how a drill or exercise will be conducted. Describe any limitations to real-time activities (eg the word of a participant may be taken as fact in place of documentation, weather conditions will be assumed to be rainy even if it is sunny, etc).
Management	Describe who will be responsible for the overall planning, conduct and evaluation of the drill or exercise.
Support Requirements	Describe the administrative and logistical support required by the drill or exercise (people, equipment, facilities, transport, etc).
Evaluation & Reporting	Describe the performance measures and procedures that will be used to assess the effectiveness of the drill or exercise and report evaluation results, including lessons learned.

***Keep people involved when planning drills and exercises.
This will heighten their interest in and support for the project.***

2.3 CONDUCTING DRILLS AND EXERCISES

After planning comes implementation. This is when you mobilize people and resources to make things happen. At this stage, it is important to pay particular attention to the following:

- **Communication.** Make sure people know what to do and what to expect. Talk with people, conduct briefings, distribute relevant documentation, etc. The objective is to ensure that everybody involved knows what to do and what is involved. If there are questions, doubts or concerns, make sure they are adequately addressed.
- **Coordination.** Are all the operational, administrative and logistical support systems in place? Make sure people know who is in charge of what, who to contact for what purpose, etc. As the saying goes, make sure the left hand knows what the right hand is doing.
- **Training Strategies.** Consider the people who are doing the drill or exercise, and find the best way to drum the message into them. Some may require detailed guidance and practice; others may require less. This is particularly true for drills where individual capabilities of personnel are tested. Help people learn better by talking at their level.
- **Performance Evaluation.** The purpose of the drill or exercise is to test the effectiveness of the security system and the proficiency of security personnel. Who is evaluating performance? Do they have the necessary checklists and procedures to conduct the evaluation?
- **Reporting.** Once the drill or exercise is completed, evaluation results will need to be reported. Reports should identify lessons learned as these will be the building blocks for the next round of drills and exercises.

A word about lessons learned:

- Lessons learned can highlight either strengths or weaknesses. It is important that they are identified to help the port facility continually improve itself.
- Strengths make people feel proud of their system. They should be identified as part of the port's BEST PRACTICE.
- Weaknesses prevent the port facility from protecting itself from security threats or incidents. They must be identified so they can be corrected.

2.4 EVALUATING DRILLS AND EXERCISES

In stage 2, we looked at evaluation from the point of view of the management team, who is responsible for ensuring all aspects of the drill or exercise work according to plan.

In this final stage, we will examine evaluation from the point of view of the evaluator. If you were the person evaluating the exercise, what steps should you take to ensure you produce reliable results?

PFSO as Evaluator

With drills, the PFSO normally evaluates the performance of security personnel undertaking the drills. Because such drills are designed to train people to provide an automatic (and correct!) response to any given security emergency, it is essential for the PFSO to see first hand how individual personnel perform.

Under these circumstances, the evaluation process is pretty straightforward. Based on the security duties of the individual personnel and the security function covered by a drill, the PFSO will:

- Observe what the person does
- Evaluate the person's performance against the performance measures established during the planning stage
- Provide the person with feedback on what went well, what didn't, and what more needs to be done to improve the person's competence
- Make a record of the results of the evaluation.

Such an evaluation may or may not involve the participation of independent evaluators (that is, evaluators with no security responsibility at the port facility) and/or observers (can be from senior management, government authorities, funding bodies, etc).

Independent Evaluators

For independent evaluators, here are some guidelines to follow:

- Familiarize yourself with the details of the drill or exercise. From talks with the PFSO (and the rest of the management team), the drill/exercise plan, and any other pertinent documentation, determine:
 - The objectives of the drill/exercise
 - The objectives for which you as evaluator are responsible
 - The exercise scenario and exercise rules
- Understand the requirements of the PFSP upon which the drill or exercise is based.
- Understand the local environment and the culture in place (that is, how people do things in the port and in the community).
- Observe actions as the drill/exercise is conducted. Observe activities of participants, listen to what is said, make notes, collect copies of records produced during the drill/exercise (logs, messages, report, press release, etc).
- You are there in an observer capacity, so listen, watch, pay attention to what goes on, and **do not** give your opinions or offer suggestions during the drill/exercise.
- If you have questions to ask, ask them **after** the drill/exercise. Arrange to interview people immediately following the exercise. Experience has shown that many participants evaluate their own performance during a drill/exercise, so encourage participants to share their views and insights.
- Present your results to the relevant senior port facility personnel (PFSO and management team, port facility manager) before leaving the drill/exercise site. Identify strengths and weaknesses. If part of your brief, offer recommendations for improvement.
- Write your report and submit it to the designated port facility personnel (PFSO, port facility manager).

2.5 CHALLENGE YOURSELF – BE CREATIVE IN YOUR APPROACH

As the preceding sections show, planning, conducting and evaluating drills and exercises requires a systematic and methodical approach. However, this does not mean that you should follow the same rules and use the same techniques over and over again, without change, to the point of monotony and irrelevance.

Drills and Exercises as Real-time Training Tools

Instead, look at drills and exercises as real-time training tools that you can use to get your security personnel—and yourself—working to desired standards. As you plan drills and exercises, keep challenging yourself. Be creative in the way you develop scenarios and rules. Keep a close watch on security developments in your area and overseas, and use them to enrich your drills and exercises.

Appropriateness as Your Benchmark

Always develop drills and exercises that are appropriate for the needs and requirements of your port facility and that comply with the requirements of your PFSP and the ISPS Code. You will find many fancy (and complex) ways of running drills and exercises, but they may not necessarily be good for your system. Use appropriateness to the port facility as your primary benchmark for selecting your approach to drills and exercises.

5Ps of Planning

Finally, even as you try new approaches, always rely on good planning. Remember the 5Ps of Planning:

- P** roper
- P** lanning
- P** revents
- P** oor
- P** erformance

1. Keep a log of drills and exercises conducted.
2. Review results of evaluations, particularly of lessons learned.
3. Use the information and feedback gathered to improve the next round of drills and exercises.
4. Maintain a close watch on changes in your security environment.
5. Review priorities as conditions and requirements change, and amend accordingly.

2.6 TEST YOURSELF

Under the ISPS Code, who has primary responsibility for drills and exercises?	
Briefly explain the steps in the planning process.	
Why is it important to understand the security environment?	
What should go into a drill or exercise plan?	
What key factors must be considered when conducting drills and exercises?	

<p>Why do we need to highlight lessons learned from a drill or exercise?</p>	
<p>What steps should you take when evaluating people's performance?</p>	
<p>People say you can take a horse near the water but you can't make it drink if it doesn't want to. Prove them wrong. What can you do to get the horse to drink? Be creative, but do not harm the horse.</p>	

HANDOUTS
PRACTICAL GUIDANCE NOTES

- 1 Practical Guidance on Planning, Conducting and Evaluating Port Facility Exercises
 - 2 Port Facility Security Exercise Evaluation and Improvement Framework
-

PRACTICAL GUIDANCE ON PLANNING, CONDUCTING AND EVALUATING PORT FACILITY SECURITY EXERCISES

1 SETTING EXERCISE OBJECTIVES

Exercise objectives are the foundation of design and development. Exercise objectives define specific goals, provide a framework for the development of the scenario, guide development of individual organizational objectives, and provide evaluation focus for the exercise.

Generally, the number of exercise objectives will be limited by planners to

- Enable timely execution of the exercise,
- Facilitate design of a reasonable scenario, and
- Adequately support the successful completion of exercise goals.

More complex exercises typically have both major and supporting objectives. A major objective contributes to development of general events to present to participants for action. Supporting objectives help planners to ensure that all participants receive an adequate opportunity to assess specific capabilities.

The performance addressed by the objective should have observable and measurable indicators to aid in identifying evaluation criteria. The SMART System is a good checklist for ensuring the completeness and accuracy of objectives.

Simple	A good objective is simply and clearly phrased. It is brief and easy to understand.
Measurable	The objective sets the level of performance so that results are observable and you can tell when an objective has been reached
Achievable	The objective is not too tough to achieve. It is reasonable in its commitment of resources
Realistic	An objective is not only achievable, but also realistic for the exercise.
Task Oriented	The objective focuses on a behaviour or a procedure. With respect to exercise design, each objective should focus on an individual emergency function.

2 SCENARIO DEVELOPMENT

A scenario provides the backdrop and storyline that drive an exercise.

- 1 The first step in designing the scenario is determining the type of threat or risk (e.g., chemical, biological, radiological, nuclear, explosive, cyber, or other).

Create a scenario that involves local incidents and local facilities and is based on exercise objectives derived from risk and vulnerability assessments conducted at the port facility.

Each type of threat/risk has its own strengths and weaknesses for evaluating different aspects of prevention, response, and recovery and is applicable to different exercise objectives.

- 2 The next step is to determine the venue that the scenario will affect. Base your selection on the type of threat used.

The table below describes the characteristics of a good scenario.

Characteristic	Description
Appropriate	The scenario must fit the: <ul style="list-style-type: none"> ➤ Exercise objectives (for both the port facility and participating external agencies) ➤ Targeted incident location, in terms of geography and logical functioning of transportation operations ➤ Emergency response organization's makeup and capabilities
Realistic	The scenario must be plausible in terms of <ul style="list-style-type: none"> ➤ Threat and vulnerability assessment performed by the port facility ➤ Credible conditions and environmental challenges
Robust	The scenario must be broad enough to <ul style="list-style-type: none"> ➤ Support all the envisioned exercise activities ➤ Provide the opportunity for all organizations to meet their objectives
Engaging	The scenario must <ul style="list-style-type: none"> ➤ Move participants to act with a high degree of involvement ➤ Be challenging and raise responders' adrenaline level

3 PARTICIPANTS

PLAYERS - are exercise participants who actively participate in an exercise role by performing their regular roles and functions in response to situations presented. Players make decisions and respond to scenario events in as realistic a manner as possible.

CONTROLLERS - are those persons who direct and control the exercise. They ensure that the exercise objectives are sufficiently carried out to permit evaluation, that the level of activity keeps players occupied and challenged, and that the pace of the exercise proceeds according to the scenario. They are the only participants who will provide information or direction to players.

EVALUATORS - are those persons assigned to each major playing element to observe the exercise and gather data. Their primary role is to observe actions taken by players and to record their observations. The evaluators' efforts provide the major portion of the documentation necessary to critique the exercise and produce an exercise report. The evaluators may also assist the controllers in keeping the exercise on track, but will not interfere with the players in the performance of their duties.

SIMULATORS – play the role of persons or organizations not participating in the exercise but whose involvement is needed during the exercise. Simulators respond to questions directed to the non-participating person or organization.

ACTORS – volunteers who pretend to be victims of the emergency event. For realism, they may wear makeup and 'act' injured, unconscious, hysterical or dead.

OBSERVERS - are typically part of an audience who are spectators only.

4 DOCUMENTATION

➤ Exercise Plan

This provides an overview of the exercise and is published and distributed prior to the start of the exercise. It states exercise objectives and scope and assigns tasks and responsibilities for successful exercise execution. This document is distributed to exercise players and observers.

➤ Exercise Administration Guide

This contains more detailed information about the scenario and how the exercise is to be administered. Its level of detail depends on the complexity level of the exercise. It may range from a simple list of instructions to controllers and evaluators to a full-blown handbook that can include (but is not limited to) the following:

- Exercise overview
- Exercise control organization
- Protocols for handling messages (for information or direction)
- Controllers roles and responsibilities
- List of key exercise events
- Timeline for introducing planned scenario events
- Instructions on evaluating the exercise

➤ Exercise Rules or Protocols

These will govern the actions of key participants during the exercise. A sample list of protocols is provided below.

Role	Rules
Players	• Move participants to act with a high degree of involvement.
	• Monitor your actions. Ensure you keep yourself safe.
	• Follow all instructions from controllers unless the instructions place you in danger.
	• Say out loud what you are thinking. Evaluators are not mind readers.
	• Speak loudly so evaluators can hear what you are saying.
	• If you have questions on what you are observing or information that was provided, ask the controller. Evaluators are directed not to speak to you.
	• Always state "This is an exercise" when making radio and telephone calls.
	• If non-players get in your way, tell the controller.
Controllers	• Participate in the post-exercise critique.
	• Ensure exercise safety—this is your primary duty.
	• Do not give clues to players. For example, "Who did you notify?" is a better question than "Did you notify the media?" The latter question tells the responder that the media has to be notified.
	• Be responsible for suspending, restarting, and terminating. Follow the instructions from the senior controller.
	• Inform the evaluator when you issue a contingency message.
Evaluators	• Facilitate the responder critique immediately after the exercise. You may explain why things happened or the responder expectations, but do not comment on performance.
	• Assist the controllers with monitoring safety.
	• Position yourself to observe and hear the players' performance, but do not be in the players' way.
	• If you have a question for players, go through the controller.
	• Evaluate performance against the responder's plans and procedures
	• Attend the post-exercise critique. Take notes regarding what is said, and use the debrief to understand the rationale for why specific actions were performed.
• Do not comment on performance during the critique.	

Role	Rules
Simulators	<ul style="list-style-type: none">• Play the role of non-participating individuals or organizations
	<ul style="list-style-type: none">• Respond to questions from players addressed to the non-participating individual or organization
Actors	<ul style="list-style-type: none">• Play the role of mock victims and simulate specific roles to add realism to the exercise
	<ul style="list-style-type: none">• Limit participation to what is given in the instructions
Observers	<ul style="list-style-type: none">• Do not ask questions of players, evaluators, or controllers. All questions will be addressed through your escort.
	<ul style="list-style-type: none">• Stay out of the way of players.
	<ul style="list-style-type: none">• Remain quiet. Do not critique or prompt player performance.
	<ul style="list-style-type: none">• Keep a professional bearing. Remember that the first people to be kicked out due to space restrictions are the observers.
	<ul style="list-style-type: none">• When in doubt, ask your escort.

6 EXERCISE CONDUCT

➤ Set-up

On the day prior to the exercise, the planning team should set up the exercise site. On the day of the exercise, they should arrive several hours before the scheduled start time to handle any set-up matters.

➤ Briefings

Briefings may be conducted for controllers, evaluators, players and observers before the exercise commences. The purpose is to distribute exercise documentation, provide necessary instructions and administrative information and answer any questions.

➤ Exercise control and facilitation

Controllers manage the exercise, ensuring continuity is maintained and objectives met. They also have the responsibility of suspending or terminating the exercise if the safety of participants is compromised. If there are several controllers, all should report to a senior controller.

Controllers are the only participants who should provide information (through action messages) or direction (through control messages) to players. Controllers must ensure they do not disrupt the exercise flow when communicating with players.

➤ Exercise evaluation

Evaluators observe actions during the exercise and evaluate them against set performance measures.

7 EXERCISE EVALUATION

As evaluated practice activities, operations-based exercises provide a process for continuous improvement. Evaluation is the cornerstone of exercises; it documents strengths and opportunities or improvement in a port facility's preparedness and is the first step in the improvement process.

Evaluation should address each exercise objective to answer the following questions:

- Was the exercise objective met?
- If yes, what were the results?
- If not, what changes are necessary to achieve the objective?

Determining how the exercise objectives were met allows evaluators to answer the following important questions about the port facility's performance:

- Are parts of the plan in need of revision?
- Is current equipment adequate?
- Is additional training required?
- Are additional resources necessary?
- Are staffing levels adequate?
- Is the communication system vulnerable to overload?
- How effectively did independent agencies cooperate to resolve the problem?

Exercise evaluation refers to the act of observing and recording exercise activity or conduct; applying the behaviour or activity against exercise objectives; and noting strengths, weaknesses, deficiencies, or other observations.

Evaluators record what they observe during the exercise, the hot wash sessions, and the after action review. Their objective is to describe what happened, compare it with what was supposed to happen, and explain why any differences between the two occurred. Evaluators also take the lead in drafting recommendations and lessons learned from the exercise.

For most operations-based exercises, evaluation involves the following activities:

- Plan the evaluation
- Conduct the evaluation
- Conduct debriefings on termination of the exercise
- Prepare the evaluation report

8 IMPROVEMENT PLANNING

This takes place after the exercise. It involves:

- Analysing the recommendations and lessons learned highlighted by the evaluation report
- Identifying which actions should be implemented by whom and in what timeframe
- Ensuring each action item is tracked, and periodically reviewed, until it is completed

The review process should allow the assessment of progress on enhancing security preparedness and the inclusion of the information into the port facility's security planning process.

These guidance notes are based on TCRP86/NCHRP525, Transportation Security, 2006

PORT FACILITY SECURITY EXERCISE EVALUATION AND IMPROVEMENT FRAMEWORK

The Port Facility Security Exercise Evaluation and Improvement Framework provides an overall structure within which we can view the role of evaluation in improving port facility security.

The term **EXERCISE**, as used here, covers all seven exercise types included in the Progressive Exercise Continuum (seminars, workshops, tabletops, games, drills, functional exercises, full-scale exercises). An explanation of the Progressive Exercise Continuum is in Attachment A.

1 Goal: Evaluate to Improve

Exercise evaluation has two goals:

- To establish the strengths in a port facility's security system
- To identify areas for improvement

Exercise evaluation is not meant to punish those who make mistakes. Rather, it is meant to help the port facility learn from these mistakes. The approach is not to dwell on the negatives, but to use them as opportunities for improving a port facility's capability to prevent, respond to, or recover from a security threat/incident.

To encourage this way of thinking, it is important to link evaluation to improvement, as the process in Figure 1 shows:

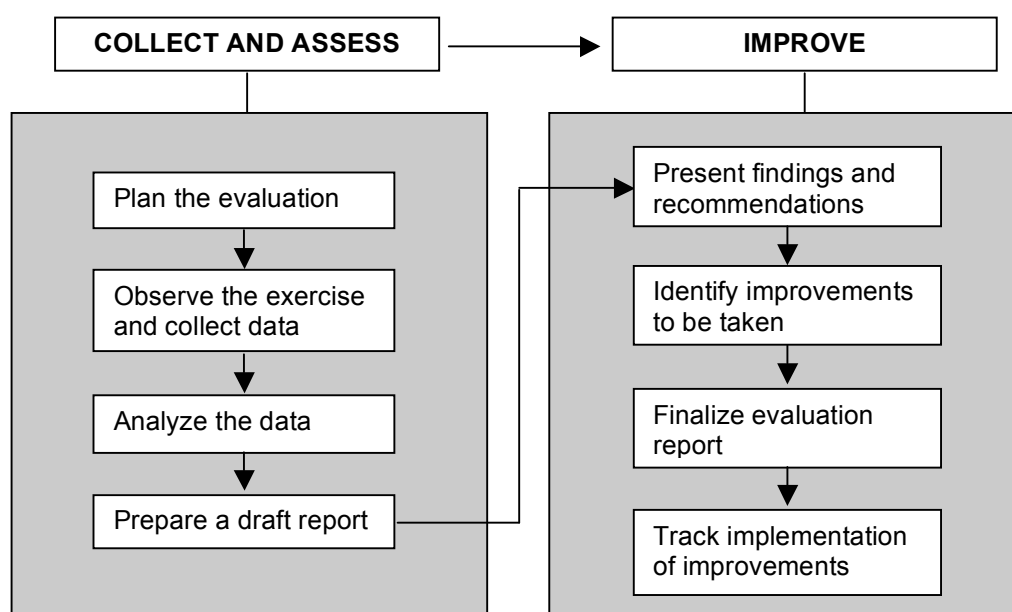


Figure 1
Evaluation and improvement process

2 Focus: Security Performance

The exercise and improvement process focuses on performance:

- For discussion-based exercises (seminars, workshops, tabletops, drills), evaluation focuses on:
 - whether the plans, policies, procedures, resources, and inter-agency/inter-jurisdictional relationships are adequate to support the performance of security tasks, and
 - whether participants are familiar with these plans, policies, procedures, resources, and inter-agency/inter-jurisdictional relationships.
- For operations-based exercises (drills, functional exercises, full-scale exercises), evaluation focuses on actual performance in preventing or responding to a simulated security emergency.

3 Performance Levels

For a port facility, performance can be assessed at three levels:

- **Task level:** the ability of individuals or teams within the port facility to perform a required task during an exercise
- **Organizational level:** the ability of functional units/departments (or the entire port facility itself) to achieve expected outcomes
- **Community level:** the overall ability of various parties involved in the exercise (port facility, ships in port, police, search and rescue, etc) to achieve expected outcomes

Table 1 highlights the key features of these three performance levels.

Table 1
Task, organizational and community levels: key features

Performance Level	Focus	Key Question(s)	Purpose
Task	The ability to perform individual prevention and response tasks. A drill may focus on one or several tasks. A full-scale exercise will require the effective performance of many tasks that contribute to effective prevention or response.	Did the person or team do the right thing the right way at the right time?	To determine whether personnel, training, and equipment are sufficient for the individuals/teams to do their job.
Organizational	Performance of specific units within the port facility, and of the port facility as a whole	Did the port facility perform the duties correctly in accordance with approved plans, policies, procedures and agreements?	To assess such issues as advanced planning and preparation, how members from various units work together, how well teams communicate with one another
Community	Overall performance of various parties involved in the exercise (port facility, ships in port, police, search & rescue, etc)	How prepared is the community to prevent or respond to and recover from a security threat/incident?	To assess whether community-level action has resulted in expected outcomes (eg whether casualties were minimised, the bomb threat contained, etc)

4 TYPES OF OUTCOMES

Outcomes can be classified into eight groups:

- **Prevention/deterrence:** ability to prevent or deter a security incident (eg terrorist attack)
- **Emergency assessment:** The ability to detect an event, determine its impact, classify the event, monitor the environment, and notify relevant agencies and organizations
- **Emergency management:** The ability to direct, control, and coordinate a response, provide emergency public information to people at risk and to the general population
- **Incident/risk mitigation:** The ability to control, collect, and contain an incident at its source and to lessen its impact
- **Public protection:** The ability to provide initial warnings to people, notify people to shelter in place, evacuate people at risk, provide evacuee support (eg transportation for evacuees, reception centres and shelters), protect schools and special populations, and manage traffic flow and access to the affected area
- **Victim care:** The ability to treat victims at the scene, transport patients, treat patients at a medical treatment facility, track patients, and handle and track human remains

- **Investigation/arrest:** The ability to investigate the cause and source of the security incident, prevent secondary attacks, and identify and arrest those responsible
- **Recovery/remediation:** The ability to restore essential services, restore businesses and commerce, clean up the environment and render the affected area safe, compensate victims, provide long-term mental health and other services to victims and the public, and restore a sense of well-being to the community

Typically, these outcomes are expected at the community level, where various agencies and organizations work together to address a security event. However, at the port facility (organizational) level, many of these outcomes also apply (eg preventing or deterring a security incident, detecting a security event and assessing its impact, managing emergency response, controlling the event and lessening its impact, warning the public, investigating the cause and source of the incident, restoring essential services).

5 KEY EVALUATION QUESTIONS

Whether we evaluate task, organizational or community level performance, the same key questions must be asked:

- What happened?
- What was supposed to happen?
- If there is a difference, why?
- What is the effect of the difference?
- What should be learned from this?
- What improvements should be made?
- What exemplary practices should be adopted?

Figure 2 illustrates the purpose of these questions: we need to compare expected outcomes from actual performance so that if there are any differences (gaps) between the two, we can identify areas for improvement.

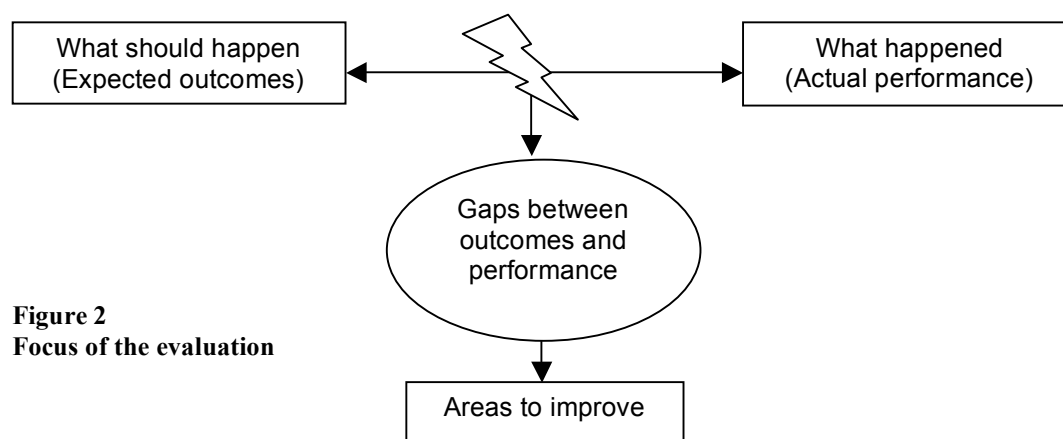
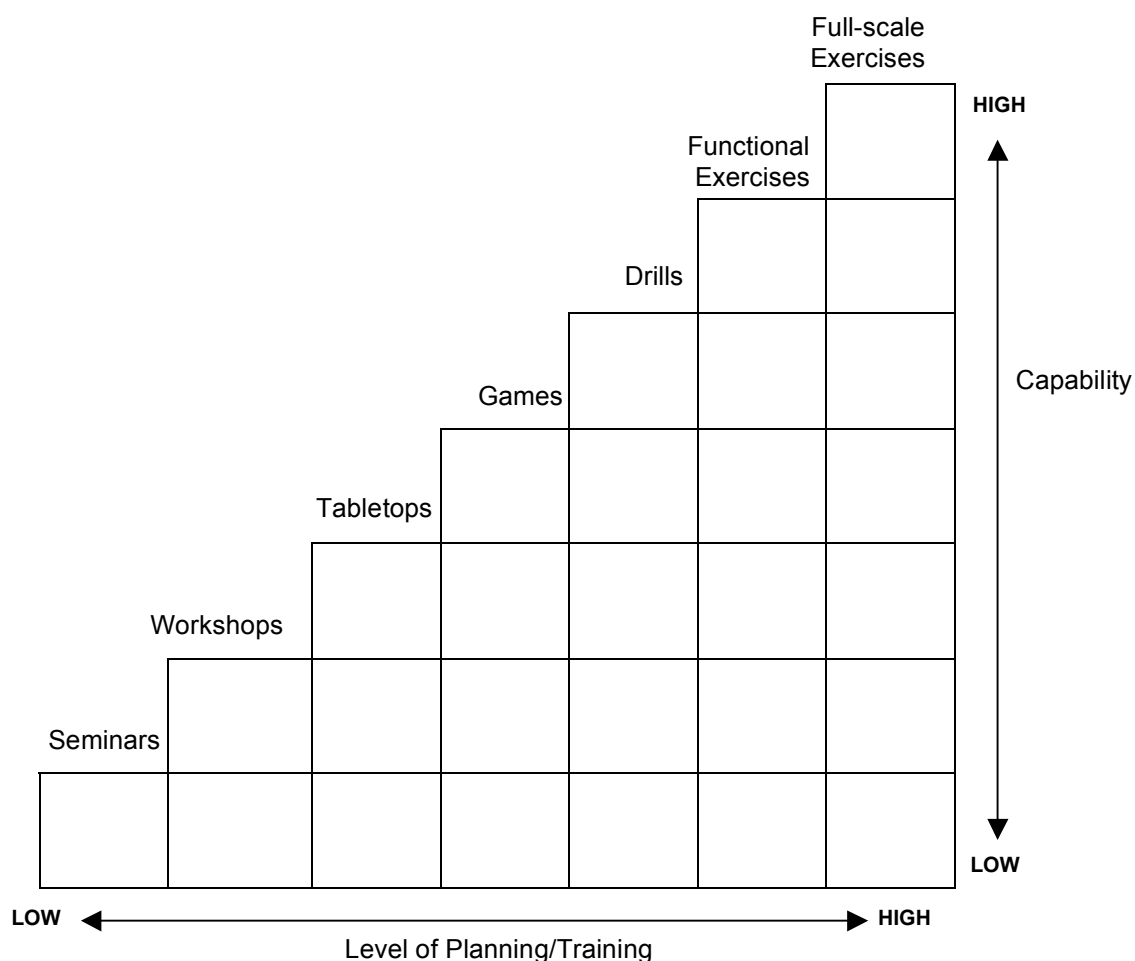


Figure 2
Focus of the evaluation

Attachment A Progressive Exercise Continuum



- A continuum means a **RANGE**, with one end representing the most basic or simplest level (Low) and the other end the most complex or difficult level (High).
- The continuum is described as **PROGRESSIVE** because as people move from the Low to the High end, the exercises they undertake become more difficult and more complex.
- There are seven types of exercises in the Progressive Exercise Continuum: seminars, workshops, tabletops, games, drills, functional exercises, and full-scale exercises.
- The first four (seminars, workshops, tabletops, games) are discussion based: they require participants to discuss what happens rather than actually do them.
- The last three (drills, functional exercises, full-scale exercises) are operations based: in these exercises, people and equipment are mobilized to respond to a simulated emergency.
- Seminars require the least amount of planning, training and capabilities, while full-scale exercises require the most.

The features of all seven exercise types are summarized below.

	Type	General Objectives	Specific Features
Discussion-based (TALK)	Seminar	<p>Assess the adequacy of, and familiarity with, strategies, plans, procedures, resources and inter-agency/inter-jurisdiction relationships.</p> <p>Tend to focus on policy-oriented issues.</p>	Lecture based format with limited feedback or interaction from participants <i>Examples:</i> familiarization sessions, meetings to review existing systems, sessions to review interagency agreements
	Workshop		Focus on information exchange and developing a product <i>Examples:</i> planning program or exercise objectives, exercise scenarios, evaluation of security elements and performance standards
	Tabletops		Use of simulation to enhance general awareness, stimulate discussion on relevant issues, validate plans and procedures, and identify strengths and weaknesses.
	Game		A simulation involving 2 or more teams, usually in a competitive environment, designed to depict an actual or real life situation without use of actual resources
Operations-based (DO)	Drill	<p>Observe and assess performance at three levels:</p> <ol style="list-style-type: none"> 1. task level 2. function/agency level 3. multi-agency/multi-jurisdiction level 	Supervised activity to test a single operation or function in a single agency. Used to provide training in the use of a new equipment, develop or test new policies or procedures, practice and maintain current skills.
	Functional exercise	Involve actual response and mobilization of resources and personnel.	Based on an emergency scenario. Simulates operations in a functional area or at agency level by presenting complex and realistic problems that require rapid and effective responses by trained personnel in a highly stressful environment. May be specific to agency or include inter-agency participation.
	Full scale exercise		Multi-agency and multi-jurisdictional exercises that test many facets of emergency response and recovery. Real time and highly stressful environment that closely mirrors a real incident. Complex site logistics.

Source: Adapted from the US HSEEP 2006

ISPS Drills & Exercises Workshop

Workshop Summary

ISPS Drills & Exercises Workshop
Port Moresby 2006

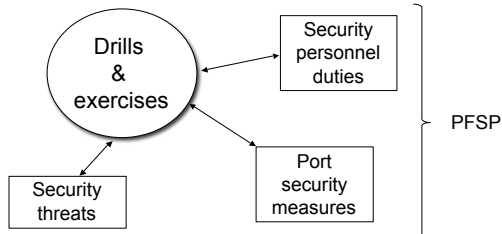


Workshop objectives

- Understand the requirements of the ISPS Code with regards to security drills and exercises
- Plan, conduct and evaluate security drills and exercises



ISPS requirements PARTS A & B



ISPS Drills & Exercises Workshop

Purpose of drills and exercises

To test how well port security personnel can:

- do their jobs at all security levels, and
- identify any security-related deficiencies which need to be addressed

To test the effective implementation of the PFSP



PFSP's responsibility

Drills

- A simple activity that tests an individual element of the PFSP (single task, procedure, function)
- Must be supervised by PFSP
- Conducted at least every 3 months (or whenever warranted)



Purposes of drills

- To provide training in use of new equipment
- To develop or test new policies or procedures
- To practice and maintain current skills



ISPS Drills & Exercises Workshop

Exercises

- A more complex activity that tests several (or all) port security functions in the following areas:
 - Communication
 - Coordination
 - Resource availability
 - Response



Exercises

- Conducted at least once a year (with no more than 18 months between exercises)
- May be limited to the port or may involve inter-agency participation (police, search & rescue, hazardous material unit, fire, medical, etc)



Purpose of exercises

- To promote emergency preparedness
- To test or evaluate emergency operations, policies, plans, procedures or facilities
- To train personnel in emergency response and to demonstrate operational capabilities



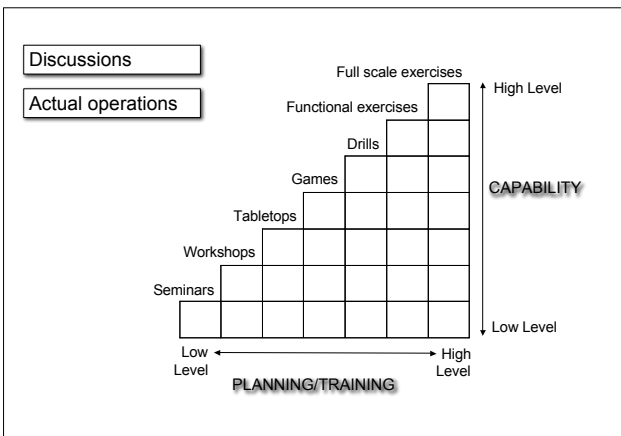
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Progressive exercise continuum

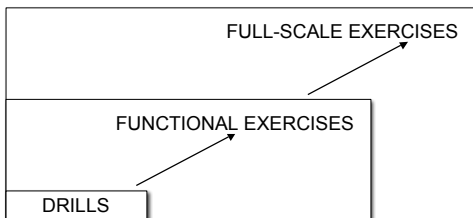
Look at drills and exercises as parts of a progressive exercise continuum

A series of exercises that advances from most simple to most complex to enable people to gradually build their competence in preventing or responding to security threats/incidents





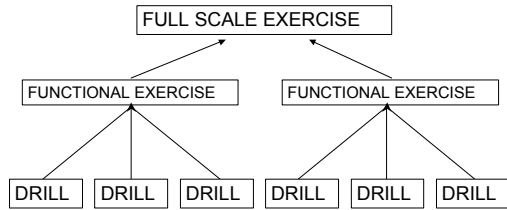
Operations-based exercises



Drills are the building blocks of more complex exercises

ISPS Drills & Exercises Workshop

Building capabilities



Security capabilities should be systematically & progressively developed. At each level, begin from simple exercises and progressively introduce complexity.

Key questions to address

- How well do security personnel perform their duties?
- How effective are the security measures in protecting the port facility from security threats?
- How effective is the entire security system?



Security personnel duties

KNOW

- ✦ Current security threats and patterns
- ✦ Techniques used to avoid security measures

RECOGNIZE & DETECT

- ✦ Weapons, and dangerous substances and devices
- ✦ Characteristics and behaviour of persons who are likely to threaten security

USE

- ✦ Crowd management and control techniques
- ✦ Security-related communications
- ✦ Security equipment and systems (operation, testing, calibration, maintenance)
- ✦ Inspection, control and monitoring techniques
- ✦ Methods of physical searches



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Security threats

- Port/ship damage or destruction
- Hijacking
- Tampering with cargo, stores, equipment
- Ship as terrorist vessel
- Ship as terrorist weapon
- Unauthorized access
- Smuggling
- Port blockage
- Nuclear, biological and chemical attack



Which threats are the greatest risks to the port?

Security measures

- Ensure security performance
- Control access to the port facility
- Monitor the port facility
- Monitor restricted areas
- Supervise cargo handling
- Supervise handling of ship's stores
- Ensure availability of security communication



How well do security measures protect the port from security threats?

The bottom line

Use drills and exercises often enough so that **emergency response** becomes **automatic**, where personnel **respond immediately** when the real thing happens, instead of having to think about it first, or going back to manuals for guidance, or panicking and losing control



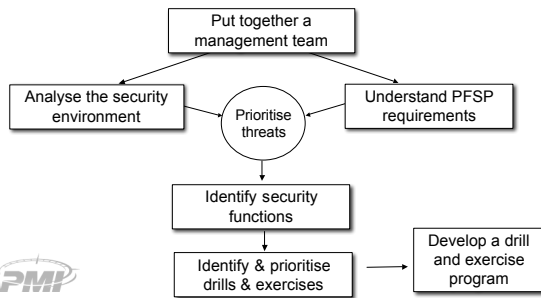
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Managing drills & exercises

- Plan** Plan drills & exercises
- Conduct** Put your plan into action
- Evaluate** Identify strengths
Identify areas for improvement
- Improve** Decide on changes
Track implementation of changes



STEP 1 Plan drills & exercises



Drill & exercise program

Timetable for drills & exercises	✓
Drills & exercises log	✓
Rationale for selection of security measures to be tested	✓
Objectives and outcomes of each drill or exercise	✓
Individual drill or exercise plan	✓



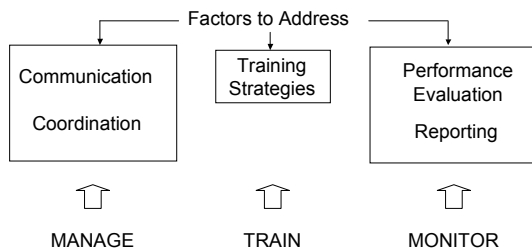
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Individual drill/exercise plan

Exercise type	eg drill, functional exercise, full scale exercise	✓
Objective	purpose of drill/exercise, link to threat & function	✓
Scenario	security conditions under which the drill/exercise will be conducted	✓
Scope	participants, locations, dates, etc.	✓
Rules	rules to follow during the drill/exercise	✓
Management	people who will manage & coordinate the activity	✓
Support	people, equipment, facilities, transport	✓
Evaluation & reporting	performance measures & procedures to assess effectiveness of the drill/exercise	✓



STEP 2 Conduct drills & exercises



Highlight lessons learned. Use them to improve the system.

STEP 3 Evaluate performance

Two goals of evaluation:

- Identify strengths
- Identify areas for improvement

Methods:

- Observe actions during exercise
- Interview people
- Examine documentation used



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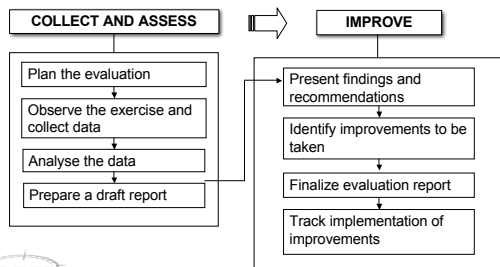
Evaluation roles & duties

	PFSO	IND*
Observe actions	✓	✓
Ask questions after drill/exercise	✓	✓
Provide feedback to participant	✓	✓
Present results to management	✓	✓
Recommend further action	✓	✓
<i>In addition, independent evaluators should:</i>		
Learn details of drill/exercise		✓
Understand PFSP requirements		✓
Understand local environment & culture		✓



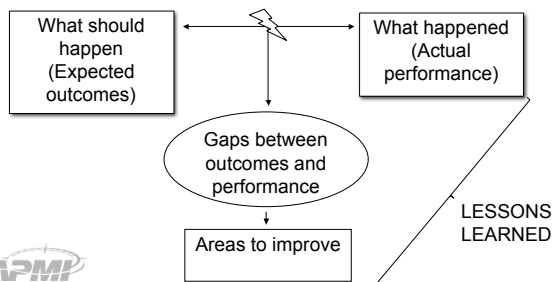
*independent evaluator

Goal: evaluate to improve



Exercise Evaluation and Improvement Framework

Focus of the evaluation



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Performance levels

COMMUNITY

Ability of various parties involved in the exercise to achieve expected outcomes (port facility, police, etc)



ORGANIZATIONAL

Ability of functional areas in port facility to achieve expected outcomes



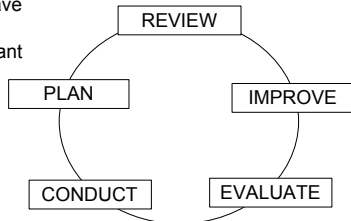
TASK

Ability of individuals or teams in port facility to perform a required task



Final Step: Review

- Review where you have been
- Review where you want to go next



Continuous Improvement Cycle