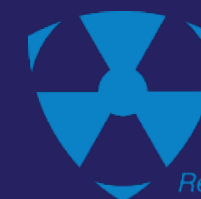




United States Department of Energy
National Nuclear Security Administration
International Nuclear Security

**Sustainability, Resources,
and Training for Performance
Evaluation Programs**



INS

International Nuclear Security
Reducing Risk of Nuclear Terrorism

Key Components Needed to Establish a Sustainable Performance Evaluation Program

- Performance evaluation is an ongoing process
- Sustainability requires an understanding of resource needs, limitations and leadership commitment
 - Human resource needs (number of people, skill requirements, training needs)
 - Equipment requirements
- Data collection and repeatability
- Budget constraints



Determining Resources: Requires an understanding of the resources needed for each test type, and the desired test frequency

What type of tests do you plan to conduct and how often?

- Limited-scope testing
 - Testing sensors, systems and operations against realistic threats, that can verify systems and equipment operate as intended
 - Alarm Response and Assessment Performance Test, timed response test
- System-wide testing (Force-on-force)
 - Evaluation site security through simulated events and exercises
- Command and control testing
 - Evaluation of crisis management teams or multi-agency handling of simulated security event



Test plans can be used to identify needed resources. Provide documentation and repeatability (1/3)

Performance Testing Coordination Form

Test Plan

Date _____

Approval Signatures

Performance Testing Approval:	_____	_____
	Signature	Date
Physical Security Approval:	_____	_____
	Signature	Date
Security Systems Approval:	_____	_____
	Signature	Date
Risk Management Approval:	_____	_____
	Signature	Date

Performance Testing Objective:

Proposed Scenario:

Test Preparation	Safety Equipment Requirements
<ul style="list-style-type: none"> <input type="checkbox"/> Review previous year's performance test <input type="checkbox"/> Review the area's security plan <input type="checkbox"/> Submit test plan for review five days prior to test date. <input type="checkbox"/> Coordinate and schedule test <input type="checkbox"/> Notify Pro Force of test prior to start 	<ul style="list-style-type: none"> <input type="checkbox"/> Safety glasses required <input type="checkbox"/> Respirator required <input type="checkbox"/> Confined Space <input type="checkbox"/> Roof access required <input type="checkbox"/> Elbow pads required <input type="checkbox"/> Knee pads required <input type="checkbox"/> Gloves required <input type="checkbox"/> Helmet required <input type="checkbox"/> Crash pad recommended <input type="checkbox"/> Padded vest recommended

Performance Testers will continually monitor the area as well as their tactics for safety issues while conducting the test. All performed tasks required to accomplish the performance test will be accomplished using appropriate safety gear. If any safety hazards are identified by the performance tester while conducting the test the test will be placed on hold till the safety issue is resolved.

Note: Performance Testing may require actions that may exceed standard safety practices, in these situations all "necessary" safety precautions will be taken.

Test plans can be used identify needed resources. Provide documentation and repeatability (2/3)

1. Test Objectives:

-
-
-
-
-

2. Test Scenario: (threat description and System/Procedure being evaluated)

3. Testing methodology and evaluation criteria:

A. Conduct of the test (state how the test will be conducted)

B. Planning: (list the steps involved in the planning process)

C. Execution: (list each step in the execution of the test)

D. Criteria

- **Performs Effectively:** The area intrusion detection system and its individual components functioned properly and there is no credible or exploitable pathway without leaving evidence of unauthorized penetration and/or intrusion detection system detection, and the area is compliant with the approved security plan. Under "Performs Effectively" there may be unique situations when the performance testing group uses professional judgment to identify a unique situation that calls for a review by the responsible Material Protection Control and Accountability manager and subject matter experts. A professional judgment call under performs effectively will be stated as a "Note" in the test report.
- **Needs Improvement:** The intrusion detection system or one or more of its components are not functioning and/or they may not be compliant with the approved security plan. The area intrusion detection system functioned properly with no credible or exploitable pathway and there is no significant weakness (vulnerability) to the security interests without leaving

Test plans can be used identify needed resources. Provide documentation and repeatability (3/3)

evidence of unauthorized penetration and/or detection by intrusion detection system. Issues under needs improvement will be assigned a significances level during the weekly Issues Management Board, and corrective actions will be taken at the discretion of the responsible Material Protection Control and Accountability manager.

- Significant Weakness: A credible and exploitable pathway exists through the area perimeter physical barriers and an adversary is able to gain access or remove security interests without intrusion detection system detection. A significant weakness constitutes vulnerability and requires that performance testing personnel remain at the location, and immediate notification is made to the area manager.
4. Test/Safety Controls: (Identify those controls to be imposed to maintain the integrity of the test yet minimize safety and security risks)
 - A. Personnel
 - B. Procedures
 - C. Equipment
 5. Resource Requirements: (list resources needed to conduct the test)
 - A. Facilities
 - B. Personnel
 - C. Equipment
 6. Test Coordination Requirements: (Identify where coordination with operational and support elements may be necessary)
 - A. Facility operations
 - B. Quality Assurance
 - C. Industrial Hygiene
 - D. Radiological Control
 7. Operational impacts of testing: (describe any operational impact that may result from the conduct of the test)
 - A. Operations
 - B. Security
 - C. Overtime
 - D. Funding



Human Resources: What Personnel and skillsets are needed?

Role (examples)

Test Director

Safety Controller

Equipment Controller

Attack Team Controller

Shadow Force Controller

Evaluator



Training needs

Sustainable Performance Evaluation Programs require qualified personnel to conduct tests. Some suggested methods of training are:

On-the-job training



Formal training



Workshops



Equipment Resources



Master schedules
list planned tests,
needed resources
and calculate cost



Summary

1. Performance evaluation is a continuous process that requires a sustainable program to be effective.
2. Budgets, personnel resources, and required equipment must be considered during planning.
3. Training needs and skillset requirements must be identified and met.



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