SAND2009-4366C

Process to Create the National Nuclear Security Administration (NNSA) Annual Physical Security Technology Management Plan

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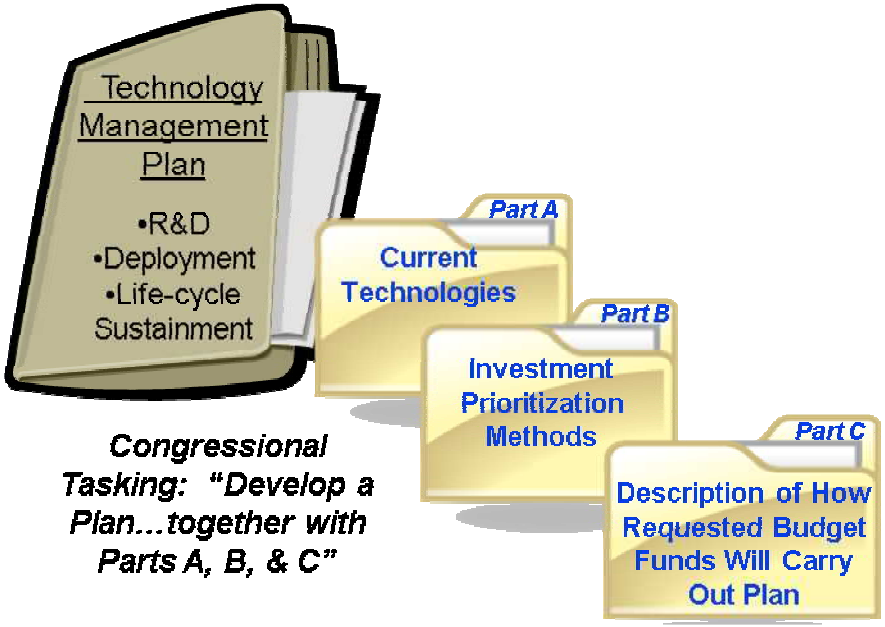
Background—Physical Security Technology Management Plan



Congressional Tasking: "Develop a Plan…together with Parts A, B, & C"

Develop a plan in consultation with the HSS for the R&D, deployment, and lifecycle sustainment of technologies within the nuclear weapons complex to address physical security threats …. , together with:

(A) A description of the technologies deployed to address the physical security threats posed at each site;

(B) The methods used to establish priorities among investments in physical security technologies; and

(C) A detailed description of how the funds identified in the FYNSP will be used to carry out the plan

Physical Security Technology Management Plan Process

Objectives:

- Develop a methodology and guiding principles
- Understand current state of technology deployed
- Analyze collected information & prioritize needs
- Make defensible data-driven investment decisions
- Use the methodology developed to produce the annual plan

Why an Annual Process?

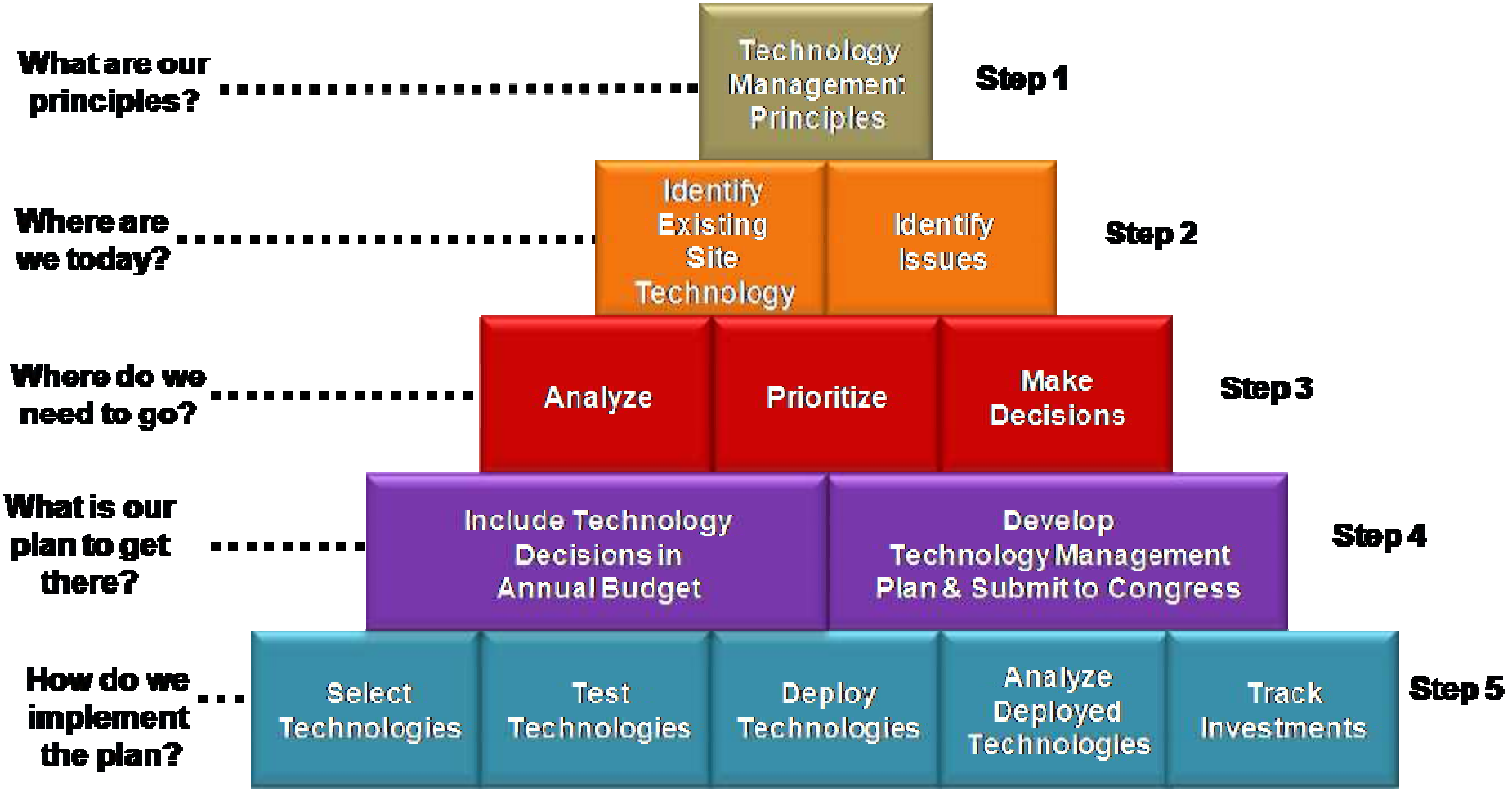
The proposed process is to build the annual Physical Security Technology Management Plan, but more importantly, to prioritize, fund, implement, and sustain physical security.

- **Technology systems require lifecycle management including:**
  - **Condition Assessment**
  - **Maintenance**
  - **Upgrades**
  - **Replacement**
- **Develops a complete database of physical security technology including:**
  - **Type of Technology and Quantity**
  - **Installation, Maintenance and Estimated Replacement Costs**
  - **Estimated Replacement Date**
  - **Anticipated Technology Upgrades or Replacements**

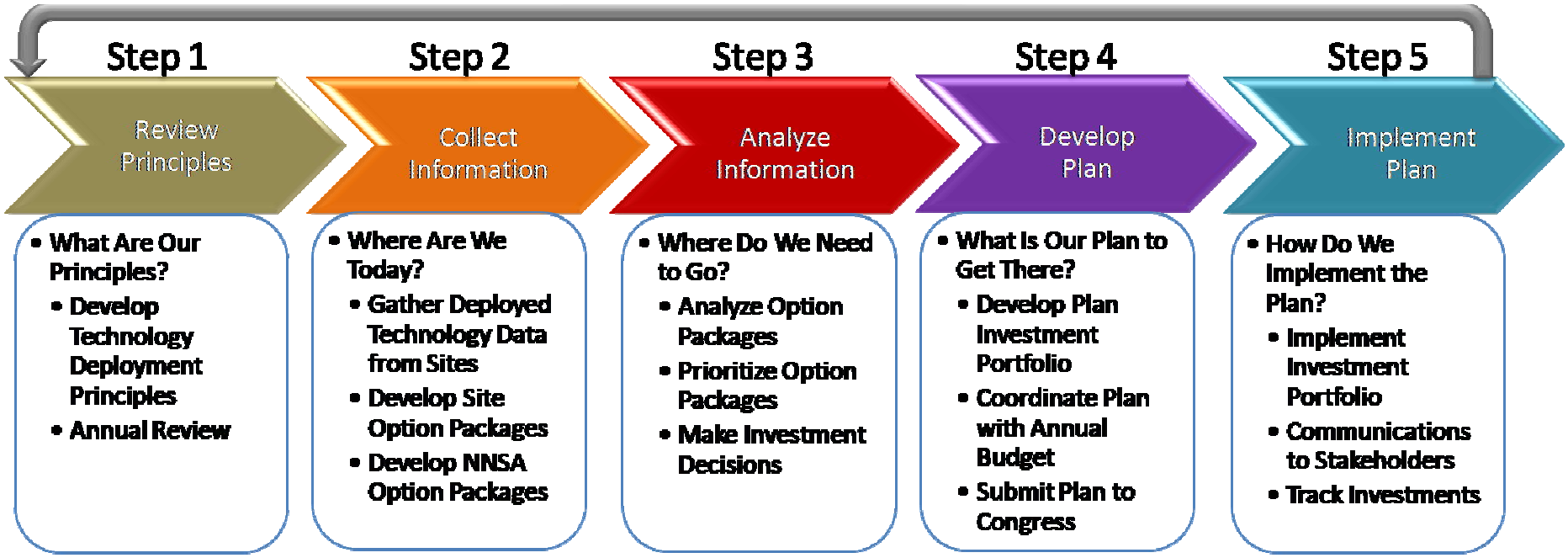
Why an Annual Process?

- Defines a process to prioritize physical security technology needs based on:
  - Degree of need
  - Degree of improvement
  - Criticality of the asset/mission
  - Total life-cycle costs
  - Synergy with other proposed projects
- Uses the prioritization method along with core guiding principles to:
  - Assist in the prioritization of annual physical security technology budgets within NNSA
  - Develop NNSA investment strategies to address near term and long term physical security issues
  - Develop the annual Physical Security Technology Management Plan

Framework


What are our principles?
Technology Management Principles
Step 1
Where are we today?
Identify Existing Site Technology
Identify Issues
Step 2
Where do we need to go?
Analyze
Prioritize
Make Decisions
Step 3
What is our plan to get there?
Include Technology Decisions in Annual Budget
Develop Technology Management Plan & Submit to Congress
Step 4
How do we implement the plan?
Select Technologies
Test Technologies
Deploy Technologies
Analyze Deployed Technologies
Track Investments
Step 5

Overall Process



Step 1. Review Principles

- **Support NNSA Missions and Strategic Plans**
- **Focus on Cost-Effective Physical Security**
- **Integrate with NNSA and Other Security Programs/Activities**
- **Demonstrate Responsive Performance**

Step 2. Sites Collect Information

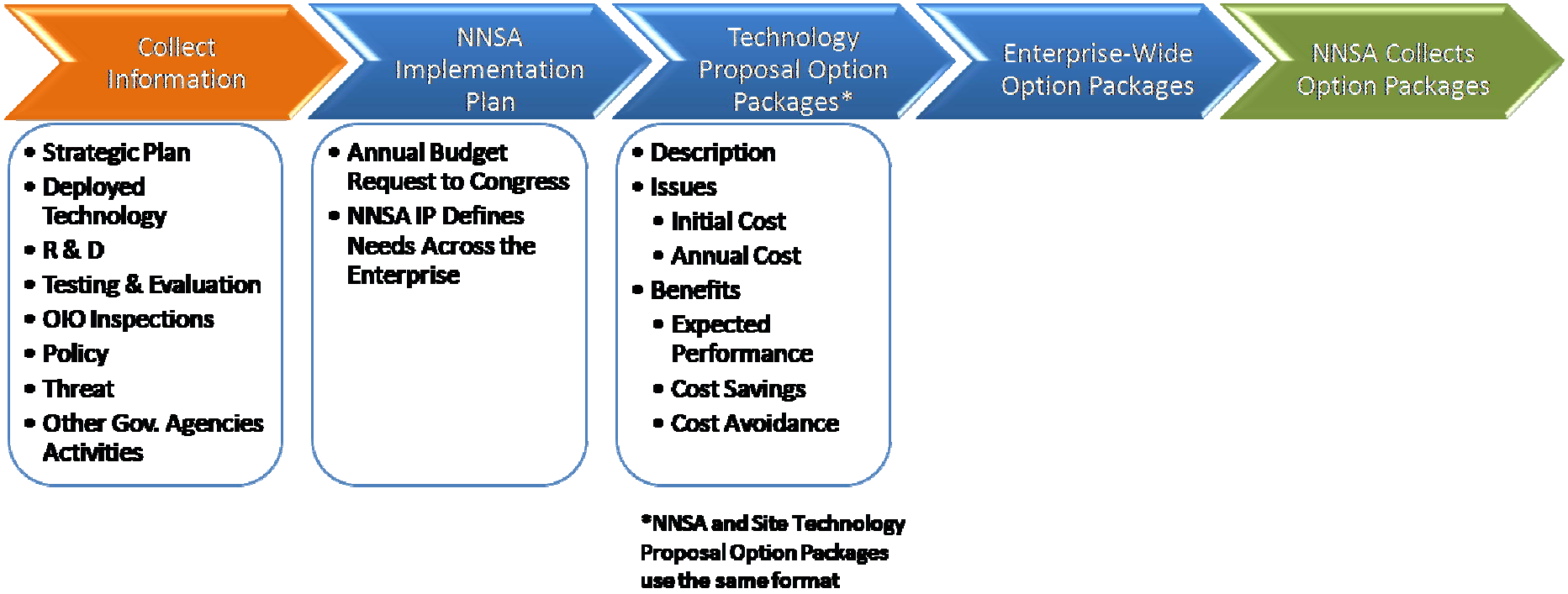
- SSSP
- VA Results
- Regulations
- OIO Inspections

- Annual Budget Request to NNSA
- IP Defines Needs

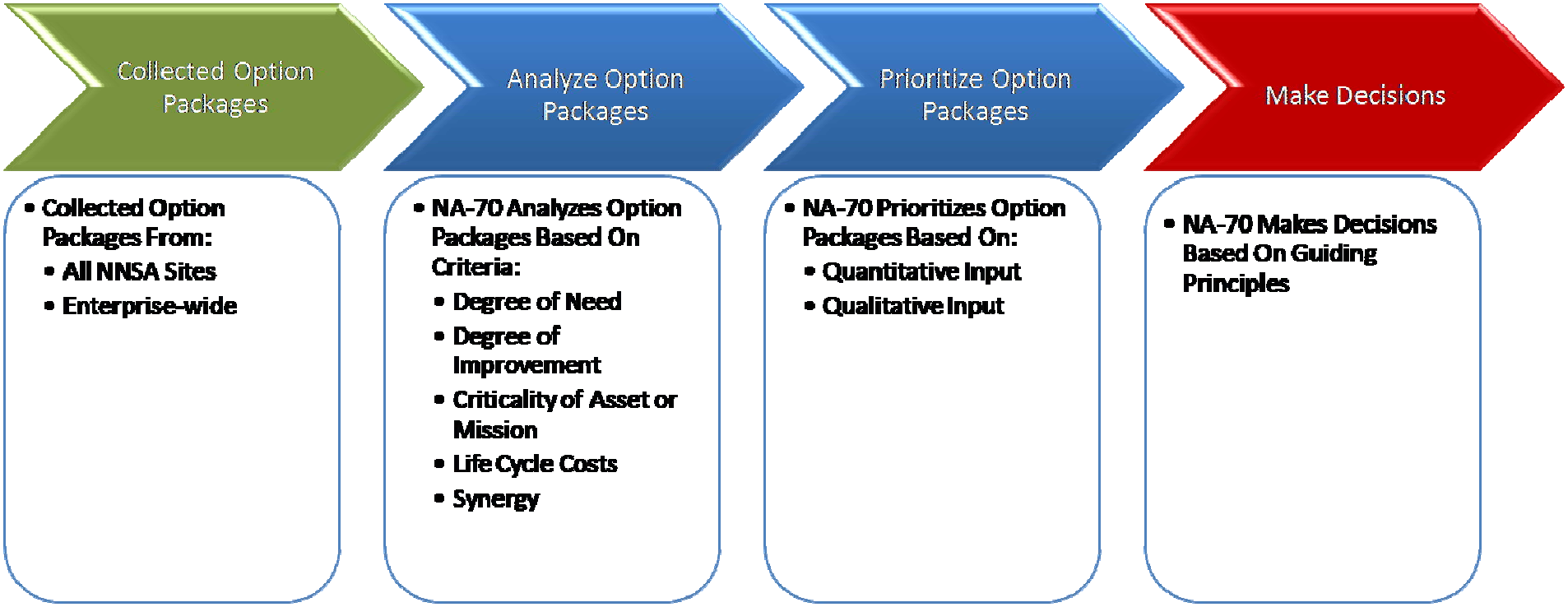
- Description
- Issues
- Benefits

*NNSA and Site Technology Proposal Option Packages use the same format

Step 2. NNSA Collect Information



Step 3. Analyze Information



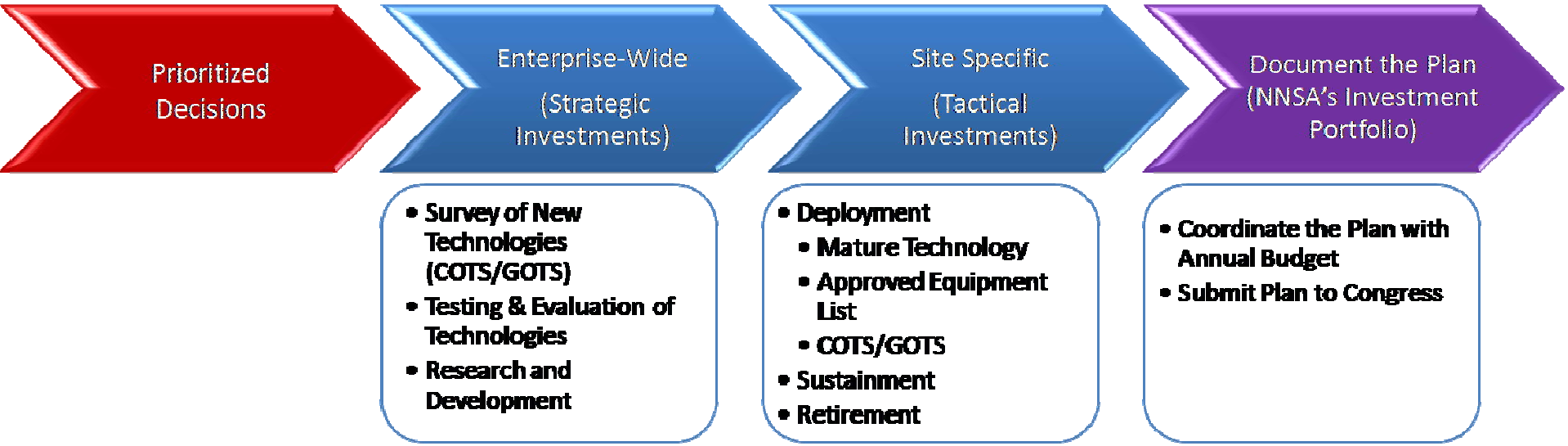
Step 3. Analyze Information (cont.)

- **Investment Categories:**
  - **Projects that address recognized security vulnerabilities**
  - **Projects that enable sites to become compliant with ongoing and newly-created security requirements and directives**
  - **Projects that are related to sustainment, maintenance, improvement and standardization of existing security assets, infrastructures, activities**
  - **Projects related to development, maturation and evaluation of new technologies**

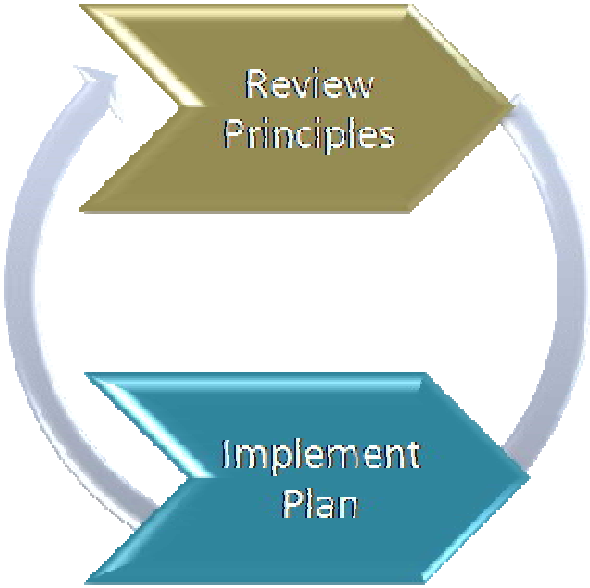
Step 3. Analyze Information (cont.)

- **Criteria used to evaluate technology option package:**
  1. **Degree of need (current baseline condition)**
  2. **Degree of improvement achieved by investment**
  3. **Criticality of the asset or mission being protected**
  4. **Total lifecycle costs associated with investment including:**
     - **Lifecycle implementation, operation, maintenance and retirement costs**
     - **Security & operational costs that will be avoided if investment is implemented**
  5. **Synergy with other proposed projects**

Step 4. Develop Plan



Step 5. Implement Plan



- **Track Progress**
  - **Track Investments**
  - **Meet Objectives**
  - **Milestones**
  - **Deliverables**
  - **Budget**
  - **Issues**

Summary

- This process:
  - Develops a plan to prioritize, fund, implement, and sustain physical security technology
  - Leverages successful programs in DOE
  - Develops a database of currently deployed physical security technology
  - Defines a method to prioritize physical security technology needs based on:
    - » Degree of Need
    - » Degree of Improvement
    - » Criticality of the Asset/Mission
    - » Total Life-cycle Costs
    - » Synergy with other Proposed Projects

Summary

- Understanding existing conditions of assets is critical for:
  - Planning investments
  - Identifying recurring maintenance and replacement costs
- Utilizing a predefined process allows any enterprise:
  - Identify and evaluate the assets they are responsible for
  - Prioritize between differing objectives
  - Make justifiable investment decisions

Questions?