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# Technical Release 15: Implementation Guidance for General Property, Plant, and Equipment Cost Accumulation, Assignment and Allocation

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## Status

<b>Issued</b>	September 26, 2013
<b>Effective Date</b>	Effective upon issuance
<b>Interpretations and Technical Releases</b>	None.
<b>Affects</b>	None.
<b>Affected by</b>	Technical Release 17.

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## Summary

The implementation guidance promotes an understanding of organizational considerations that affect the application of the standards for general property, plant, and equipment (G-PP&E) except for internal use software. The implementation guidance relates to:

- a) Recognition requirements for programmatic, managerial, administrative, and other elements of program costs incurred during the G-PP&E lifecycle, decisions regarding the granularity of cost information, and acceptable methods for recognizing those costs (i.e., capital costs captured on the Balance Sheet or period expense costs captured on the Statement of Net Costs [SNC]),
- b) The concept of a cost accumulation and allocation decision framework (i.e., acceptable methods of accumulating, assigning, and reporting cost data), and
- c) Management's role in applying the cost accumulation, assignment, and allocation decision framework.

One of the objectives of this Technical Release is to enable federal reporting entities to use a consistent framework to apply existing guidance. The guidance also supports the objectives of ensuring that transactions involving G-PP&E are recorded in accordance with federal accounting standards, and the cost of producing federal financial information, as it relates to establishing the cost of G-PP&E, does not outweigh the benefits derived by the users of the financial information. Lastly, it provides a decision framework flowchart to assist entity management in applying the principles described throughout the Technical Release.

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## Introduction

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### Purpose

1. Statement of Federal Financial Accounting Standards 6 (SFFAS 6), *Accounting for Property, Plant, and Equipment*, (as amended) outlines the recognition requirements for general property, plant, and equipment (G-PP&E) except for internal use software. Paragraph 26 states that,

"All general PP&E shall be recorded at cost. Although the measurement basis for valuing general PP&E remains historical cost, reasonable estimates may be used to establish the historical cost of general PP&E, in accordance with the asset recognition and measurement provisions herein. Cost shall include all costs incurred to bring the PP&E to a form and location suitable for its intended use."

The AAPC G-PP&E Cost Accounting Issues Subgroup was developed to address a request for implementation guidance for these requirements.

2. The implementation guidance promotes an understanding of organizational considerations that affect the application of the standards for general property, plant, and equipment (G-PP&E) except for internal use software. The implementation guidance relates to:
  - a. Recognition requirements for programmatic, managerial, administrative, and other elements of program costs<sup>1</sup> incurred during the G-PP&E lifecycle, decisions regarding the granularity of cost information, and acceptable methods for recognizing those costs (i.e., capital costs captured on the Balance Sheet or period expense costs captured on the Statement of Net Costs [SNC]),
  - b. The concept of a cost accumulation and allocation decision framework (i.e., acceptable methods of accumulating, assigning, and reporting cost data), and
  - c. Management's role in applying the cost accumulation, assignment, and allocation decision framework.

In promoting an understanding of the standards it is important to reiterate management's responsibility to consider the six<sup>2</sup> qualitative characteristics of financial reporting established in Statement of Federal Financial Accounting Concepts (SFFAC) 1. More specifically,

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<sup>1</sup>In this document, all subsequent references to these costs are collectively referred to as "program costs."

<sup>2</sup>Understandability, Reliability, Relevance, Timeliness, Consistency, and Comparability (SFFAC 1 paragraph 156)

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management should be mindful of comparability when establishing policies and procedures. This framework should aid management in selecting policies which are comparable because they are derived from underlying transactions or organizational characteristics rather than being attributable to preferences.

3. The accounting standards and related basis for conclusions consistently recognize management's role in interpreting and applying generally accepted accounting principles (GAAP) (i.e., management's decision framework) to its respective entity's operational environment. The standards are meant to provide wide-ranging, reasonable, and consistent principles for reporting entities to operate within and to apply, respectively. For example, paragraph 3 of SFFAS 4, *Managerial Cost Accounting Standards and Concepts*, states, "These standards are based on sound cost accounting concepts and are broad enough to allow maximum flexibility for agency managers to develop costing methods that are best suited to their operational environment."
4. Consistent with "management's decision framework" (see Decision Framework Flowchart at **Appendix C**), this Technical Release is intended to reemphasize the "framework" aspect of the managerial cost accounting concepts and standards as they relate to G-PP&E cost accounting and reporting as outlined in SFFAS 6 and SFFAS 4.

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## Background

5. The Accounting and Auditing Policy Committee (AAPC) G-PP&E Cost Accounting Issue (CAI) subgroup was tasked with identifying and presenting recommendations to the AAPC to address the complexities of allocating program costs to G-PP&E consistent with the role of management's decision framework. This Technical Release (TR) addresses the following three central components of G-PP&E cost accounting and reporting:
  - a. Recognition requirements for programmatic, managerial, administrative, and other elements of program costs incurred during the G-PP&E lifecycle, decisions regarding the granularity of cost information,, and acceptable methods for recognizing those costs (i.e., capital costs captured on the Balance Sheet or period expense costs captured on the Statement of Net Costs [SNC]),
  - b. The concept of a cost accumulation and allocation decision framework (i.e., acceptable methods of accumulating, assigning, and reporting cost data), and
  - c. Management's role in applying the cost accumulation and allocation decision framework.

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6. The decision framework is intended to be used as a tool for management to leverage and guide professional judgment in the development and application of policies and practices to account for the cost incurred for G-PP&E in accordance with GAAP. Every entity has unique requirements and needs for financial management information to enable the successful execution of its mission and associated programs. Further, each entity needs varying levels of precision and granularity when allocating costs to end outputs or objectives. Therefore, each entity must assess and establish the appropriate cost benefit threshold for allocating program costs to G-PP&E in accordance with GAAP based on its mission requirements, operating environment, and stakeholder needs. The purpose of the decision framework is to provide guidelines and considerations, founded on a G-PP&E acquisition lifecycle approach, to guide management through the application of the G-PP&E accounting standards within their unique business environment. The decision framework incorporates the inherent application flexibility built into the accounting standards to assist management to reasonably apply the standards in order to appropriately recognize the cost of G-PP&E within their unique operating environment.
  7. The decision framework discussed in this Technical Release recognizes that the financial management information needs of stakeholders, both internal and external, vary by entity depending on the entity's characteristics. An entity's revenue source (e.g., appropriated funds, revolving fund, user fee, etc.) significantly impacts the types of and level of cost detail required to be allocated to end assets. For example, entities operating under a fee -for-service or working capital fund structure may have a business need to accumulate and allocate relevant costs at a more granular level to ensure that their pricing models, rates and schedules facilitate the full recovery of costs under a non-appropriated, user-fee model.
  8. The following three principles may be used by management to determine their stakeholder's financial management information needs:
    - a. Relevance/usefulness of information (both to internal and external stakeholders);
    - b. Level of precision (e.g., materiality) needed to properly manage and report costs; and
    - c. Cost-benefit of establishing and executing cost assignment processes, methods and tools.<sup>3</sup>

When applying the principles listed above, management should develop formalized policies and procedures documenting its decisions. Such decisions should be based on an understanding of the entity's mission and operating model and how the entity's stakeholders use the information.

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<sup>3</sup>A [costing] method is economically feasible if the benefits resulting from implementing the method outweigh its costs. It is not advantageous to use a costing method if it requires a large amount of resources and yet produces information of little value to users. (SFFAS 4 paragraph 142)

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9. The decision framework described in the remainder of this Technical Release provides users with an organized approach for applying the principles described above to support their process for developing entity specific policies and procedures for accumulating, allocating, and reporting the cost of G-PP&E in compliance with relevant accounting standards.
  10. Paragraph 10 was rescinded by Technical Release 17.

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## Materiality

11. The provisions of this Statement need not be applied to immaterial items. The determination of whether an item is material depends on the degree to which omitting or misstating information about the item makes it probable that the judgment of a reasonable person relying on the information would have been changed or influenced by the omission or the misstatement.

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## Scope

12. Readers of this Technical Release should first refer to the hierarchy of accounting standards in SFFAS 34, *The Hierarchy of Generally Accepted Accounting Principles, Including the Application of Standards Issued by the Financial Accounting Standards Board*. This Technical Release supplements the relevant accounting standards, but is not a substitute for and does not take precedence over the standards. This Technical Release clarifies but does not change guidance provided in SFFAS 4 or SFFAS 6 (as amended).
13. This Technical Release does not address Internal Use Software. (See instead SFFAS 10, *Accounting for Internal Use Software*.)

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## Summary of Existing Standards

14. SFFAS 6 Paragraph 26 states:

All general PP&E shall be recorded at cost. Although the measurement basis for valuing general PP&E remains historical cost, reasonable estimates may be used to establish the historical cost of general PP&E, in accordance with the asset recognition and measurement provisions herein. Cost shall include all costs incurred to bring the PP&E to a form and location suitable for its intended use. For example, the cost of acquiring property, plant, and equipment may include:

- amounts paid to vendors;
  - transportation charges to the point of initial use;
  - handling and storage costs;
  - labor and other direct or indirect production costs (for assets produced or constructed);
  - engineering, architectural, and other outside services for designs, plans, specifications, and surveys;
  - acquisition and preparation costs of buildings and other facilities;
  - an appropriate share of the cost of the equipment and facilities used in construction work;
  - fixed equipment and related installation costs required for activities in a building or facility;
  - direct costs of inspection, supervision, and administration of construction contracts and construction work;
  - legal and recording fees and damage claims;
  - fair value of facilities and equipment donated to the government; and
  - material amounts of interest costs paid [FN 16: "Interest costs" refers to any interest paid by the reporting entity directly to providers of goods or services related to the acquisition or construction of PP&E.]
15. The types of costs assigned to G-PP&E may vary depending on if the asset is purchased as a completed item, is contractor constructed, or is self-constructed. SFFAS 6 specifically states that the costs recorded in G-PP&E should include only those costs that "bring the (G-) PP&E to a form and location suitable for its intended use." These costs may include both direct and indirect costs. However, indirect production costs only occur when G-PP&E are produced or constructed.
16. According to SFFAS 4, paragraph 90, "direct costs are costs that can be specifically identified with an output." [For purposes of this guidance "output" is an item or items of G-PP&E.] A few examples of direct costs noted in SFFAS 6, paragraph 26, are amounts paid to vendors, labor and other direct production costs, an appropriate share of the cost of the equipment and facilities used in the construction work, and direct costs of inspection, supervision, and administration of construction contracts and construction work. The direct costs accumulated and identified as costs incurred to "bring the G-PP&E to a form and location suitable for its intended use" should be assigned to the cost of the G-PP&E item(s). If the direct costs are not identified as costs incurred to "bring the G-PP&E to a form and location suitable for its intended use", then the costs should be expensed or capitalized in accordance with other standards. The item(s) of G-PP&E must meet or will meet the entity's capitalization threshold or other capitalization recognition criteria.
17. Indirect costs are costs that cannot be identified specifically with or traced to a given cost object in an economically feasible way [SFFAS 6, Glossary]. [For purposes of this guidance

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"cost object" is an item or items of G-PP&E.] The example of indirect costs noted in SFFAS 6, paragraph 26, is indirect production costs (for assets produced or constructed). The indirect costs identified as costs incurred to "bring the G-PP&E to a form and location suitable for its intended use" should be accumulated, assigned or allocated to the cost of the G-PP&E item(s). If the accumulated indirect costs are not identified as costs incurred to "bring the G-PP&E to a form and location suitable for its intended use" (for example, administrative overheads that do not contribute to bringing the G-PP&E item to a form and location suitable for its intended use), then the costs should be expensed. Note also that if the item(s) of G-PP&E do not (or will not) meet the entity's capitalization criteria (e.g., capitalization threshold) then indirect costs are not a consideration.

18. A fundamental concept presented in this Technical Release is that it is reasonable to expect a difference in the level of granularity that federal entities use to allocate program costs to G-PP&E. Some entities have an inherent business/operational need to assign or allocate costs at a more granular level while others do not. This Technical Release emphasizes the concept that an entity management's role of establishing GAAP compliant policies and processes includes a critical element of flexibility. The flexibility allows management to create and execute policies and procedures that fit within the GAAP framework and align with the respective entity's business/operating model.
19. The below guidance is presented as responses to the three issues, previously identified in this Technical Release, posed as questions. Refer to Appendix D, *Accounting Literature* for a more extensive presentation of accounting literature relevant to this discussion.

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## Questions & Answers

20. Q1. SFFAS 6, paragraph 26, requires G- PP&E to be recorded at the costs incurred to bring the G-PP&E to a form and location suitable for its intended use. Examples of costs of acquiring G-PP&E are provided. Does management have discretion in applying the cost assignment methods identified in SFFAS 4, paragraph 124, to accumulate acquisition costs?
21. A1. Yes. SFFAS 4 establishes a principle for management to apply. Of particular importance is the emphasis on economic feasibility with regard to direct tracing of costs to outputs. SFFAS 4, paragraph 124, provides that "[in] principle, costs should be assigned to outputs in one of the methods listed below in the order of preference:
  - a. Directly tracing costs wherever economically feasible;
  - b. Assigning costs on a cause-and-effect basis; and
  - c. Allocating costs on a reasonable and consistent basis."



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22. Each reporting entity should determine the appropriate detail for the cost accounting processes and procedures used to identify costs incurred to bring the G-PP&E to a form and condition suitable for its intended use per SFFAS 6, paragraph 26. The reporting entity should make this determination based on several factors, to include (SFFAS 4, paragraph 72):

- a. nature of the entity's operations;
- b. precision needed in cost information to meet managerial needs, including cost-recovery decisions;
- c. practicality of data collection and processing;
- d. availability of electronic data handling facilities;
- e. cost of installing, operating, and maintaining the cost accounting processes; and
- f. any specific information needs of management.

23. Q2. How should general management and administrative support be applied in considering the acquisition cost of G-PP&E?

24. A2. Management should consider general management and administrative support costs when identifying the costs to bring the G-PP&E to a form and location suitable for its intended use. Entities may incur indirect costs<sup>4</sup> that cannot be reasonably allocated to programs, segments, or outputs including G-PP&E acquisition. Because reporting entities have different organizational structures and missions, there will be differences in the level of allocation of such costs across all outputs including item(s) of G-PP&E. SFFAS 4, paragraph 92, explains that:

A reporting entity and its responsibility segments may incur general management and administrative support costs that cannot be traced, assigned, or allocated to segments and their outputs. These unassigned costs are part of the organization costs, and they should be reported on the entity's financial statements (such as the Statement of Net Costs) as costs not assigned to programs.

25. Q3. How does the principle of "non-production costs" apply in considering the acquisition cost of G-PP&E?

26. A3. SFFAS 4, paragraph 104, explains that:

A responsibility segment may incur and recognize costs that are linked to events other than the production of goods and services. Two examples of these non-production costs were discussed earlier: (1) Other Post-Employment Benefits

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<sup>4</sup>Indirect production costs only occur when G-PP&E are produced or constructed.

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(OPEB) costs that are recognized as expenses when an OPEB event occurs, and (2) certain property acquisition costs that are recognized as expenses at the time of acquisition. Other non-production costs include reorganization costs, and nonrecurring cleanup costs resulting from facility abandonments that are not accrued. Since these costs are recognized for a period in which a particular event occurs, assigning these costs to goods and service produced in that period would distort the production costs. In special purpose cost studies, management may have reasons to determine historical output costs by distributing some of these costs to outputs over a number of past periods. Such distribution may be appropriate when: (a) experience shows that the costs are recurring in a regular pattern, and (b) a nexus can be established between the costs and the production of outputs that may have benefited from those costs.

Non-production costs should not be assigned as G-PP&E acquisition costs, for instance, losses that arise from a natural disaster should not be attributed to G-PP&E acquisition costs even if the assets damaged are those being used to construct the G-PP&E. For example, if cranes used in constructing a building are completely destroyed in a hurricane, the cost of such damage should be treated as non-production costs and not as costs incurred to bring the building to a form and location suitable for use.

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## Summary of Illustrations

27. The decision framework supports development of accounting policies and practices appropriate to each organization's characteristics in accordance with GAAP. The framework is meant to provide parameters or principles for reporting entities to consider in developing organizational accounting policies and practices that will best support their operating models, provide the financial information necessary to manage programs, and report in accordance with GAAP. Reporting entities should report the full costs of outputs in the general purpose financial reports. Full costs may be expensed or capitalized in accordance with GAAP and based on each entity's accounting policies and practices.
28. This Technical Release provides examples of three different agencies applying the framework (**see Appendix B** for examples), which demonstrate GAAP compliant G-PP&E cost accumulation and allocation methodologies appropriate for unique organizational characteristics including operating models.

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## Effective Date

29. This Technical Release is effective upon issuance.

The provisions of this Statement need not be applied to immaterial items.

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## Appendix A: Basis for Conclusions

This appendix discusses some factors considered significant by AAPC members in reaching the conclusions in this Technical Release. It includes the reasons for accepting certain approaches and rejecting others. Individual members gave greater weight to some factors than to others. The guidance enunciated in this Technical Release—not the material in this appendix—should govern the accounting for specific transactions, events, or conditions.

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### Project History

- A1. In January 2008, the Accounting and Audit Policy Committee established the General Property, Plant, & Equipment (G-PP&E) task force to assist in developing implementation guidance for federal G-PP&E as it relates to SFFAS 6, *Accounting for Property, Plant, & Equipment*, SFFAS 23, *Eliminating the Category National Defense Property Plant, & Equipment*, and other related G-PP&E guidance developed by the FASAB. The task force includes federal agency representatives who are experiencing G-PP&E implementation issues and those who have G-PP&E implementation best practices to share with the federal community.
- A2. The G-PP&E task force was divided into four subgroups to address a set of related issues. The subgroups have met separately to discuss their set of issues and report back to the full task force on its progress towards the development of implementation guidance. The four sub-groups are
- G-PP&E Acquisition
  - G-PP&E Use
  - G-PP&E Disposal
  - G-PP&E Records Retention
- A3. A fifth subgroup, the G-PP&E Cost Accounting Issues (CAI), was later added to address the complexities of allocating programmatic, managerial, and administrative costs to G-PP&E. The subgroup's primary objective was to reinforce the FASAB's provisions for Federal reporting entities to apply a reasonable level of management interpretation and flexibility, within the standards, to their G-PP&E financial recording and reporting processes. The subgroup's objectives did not include prescribing specific types of costs that should be included in the capitalized cost of an asset.
- A4. This proposed guidance was developed by the CAI subgroup. The subgroup included industry representatives from several public accounting and consulting firms as well as representatives from the following federal agencies

- Department of Defense (DoD) (including the individual military departments)
- Department of Homeland Security (DHS)
- Federal Aviation Administration (FAA)
- General Services Administration (GSA)
- National Aeronautics and Space Administration (NASA)
- National Reconnaissance Office (NRO)
- Office of the Director of National Intelligence (ODNI)
- United States Bureau of Reclamation (USBR)

- A5. The subgroup developed the Asset Acquisition Lifecycle Phases (AALP) data call for the task force member agencies' representatives to complete and submit to the subgroup for consolidation and discussion. The data call was designed to highlight the commonalities across the federal G-PP&E acquisition process and to use those commonalities to outline a general acquisition decision framework to assist agencies with accounting for G-PP&E costs in accordance with GAAP.
- A6. The data call also focused on identifying the cost activities that occur in each AALP, the accounting treatments assigned to those activities, and the rationale for management's accounting policy that drives those cost accumulation and allocation determinations. Management's ability to document and implement a reasonable and consistent approach is a critical component of supporting management's application of GAAP.
- A7. In reaching its conclusions, the subgroup recognized the need to develop implementation guidance to address the complexities of allocating programmatic, managerial, and administrative costs to G-PP&E. The subgroup felt that clarification of this issue is especially critical given the ongoing and significant efforts and resources that many federal entities such as the DOD, DHS, and IC are expending to obtain and maintain unqualified audit opinions. There are a number of cost beneficial and reasonable changes (e.g., policies, systems, and processes) that federal entities can and should make in order to facilitate better financial management and reporting. However, entity management must be allowed to navigate within the parameters of GAAP to determine the point at which the costs of improving or providing financial information outweigh the derived benefits.
- A8. The decision framework discussed in this Technical Release recognizes that the financial management information needs of stakeholders, both internal and external, vary by entity. The agency-specific examples (detailed in Appendix B) demonstrate how G-PP&E cost accumulation methodologies may be tailored to different operating models and still be in accordance with GAAP. The implementation guidance does not provide a one-sized fits all solution, instead it is designed to give management a framework on which to base their stakeholder financial management information needs. The framework comprises the following three principles:

- a. Relevance/usefulness of information (both to internal and external stakeholders);
- b. Level of precision (e.g., materiality) needed to properly manage and report costs; and
- c. Cost-benefit of establishing and executing cost assignment processes, methods and tools.

A9. One of the objectives of this Technical Release is to enable federal reporting entities to use a consistent framework to interpret existing guidance given the flexibility it provides. The proposal also supports the objectives of ensuring that (1) transactions involving G-PP&E are recorded in accordance with federal accounting standards, and (2) the cost of producing federal financial information, as it relates to establishing the cost of G-PP&E, does not outweigh the benefits derived by the users of the financial information. Lastly, it provides a decision framework flowchart to assist entity management in applying the principles described throughout the Technical Release.

## Responses to the Proposal

A10. The AAPC received 15 response to the exposure draft from the following sources:

**Table 1.0 - - Types of Respondents**

	Federal (Internal)	Non-federal (External)
Users, academics, others		2
Auditors	0	2
Preparers and financial managers	11	

A11. The AAPC considered responses to the exposure draft at its July 11, 2013, public meeting. The AAPC did not rely on the number in favor of or opposed to a given position. Information about the respondents' majority view is provided only as a means of summarizing the comments. The AAPC considered the arguments in each response and weighed the merits of the points raised.

A12. Of the 15 responses, 14 supported the proposal. Of the remaining 1, offered comments.

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## AAPC & Board Approval

A13. The Technical Release was approved by the AAPC for release to the FASAB for issuance. The Board has reviewed this Technical Release and a majority of its members do not object to its issuance. Written ballots are available for public inspection at the FASAB's offices.

## Appendix B: Illustrations

The examples in this Appendix are illustrative only; they do not represent authoritative guidance. These illustrations only depict a portion of the entities' operations and the inclusion of an illustration in this Technical Release does not mean the acceptance of the entities' policies by the FASAB or the AAPC.

### Illustrations - Asset Acquisition Lifecycle Phases (AALP)

B1. The subgroup defined the AALPs to highlight the commonalities across the federal PP&E acquisition process and to use those commonalities to outline a general acquisition decision framework to assist agencies to account for G-PP&E costs in accordance with GAAP. Note that the AALP and illustrations reflect practices as of the Technical Release date and are not updated for changes that may have occurred since. The five generic AALPs are as follows: 1) Preliminary Research and Development (R&D) - Concept Exploration, 2) Intermediate R&D -Concept Development, 3) Advanced R&D - Concept Design and Development, 4) Production - Asset Development and "In-service" Placement, and 5) Operations and Maintenance. Table 1 (below) lists the five generic AALPs, for several task force member agencies' corresponding phases, the subgroup's AALP descriptions, examples of activities that may indicate transition from one AALP to another [phase indicators (examples)] and general accounting treatments that apply to activities in each AALP.

**Table 1: Agency Summary Examples: Asset Acquisition Lifecycle Phases**

Generic Subgroup AALP Titles	Task Force Member Agency	Task Force Member Agency Phase Titles Used	Generic Subgroup AALP Descriptions
<b>Phase 1: Preliminary R&amp;D - Concept Exploration</b>	<b>DoD</b>	Material Solution Analysis	Decision R&D activities directed at an identifiable current or emerging resource requirement(s).
	<b>FAA</b>	Mission Analysis Phase	
	<b>GSA</b>	Identification Phase	
	<b>NASA</b>	Pre-Formulation (Concept Studies)	
	<b>NRO</b>	Concept Studies	

**Phase 1 Indicators (Examples):** Concept, feasibility, and trade studies.

**Phase 1 General Accounting Treatment:** Expensed in the period incurred.



Generic Subgroup AAPL Titles	Task Force Member Agency	Task Force Member Agency Phase Titles Used	Generic Subgroup AAPL Descriptions
<b>Phase 2:</b> Intermediate R&D -Concept Development	<b>DoD</b>	Technology Development	Targeted R&D activities that build upon the prior phase's Decision R&D activities and are directed at an identifiable current or emerging resource requirement(s).
	<b>FAA</b>	Investment Analysis Phase	
	<b>GSA</b>	Pre-Award Phase	
	<b>NASA</b>	Formulation (Preliminary Design and Technical Completion)	
	<b>NRO</b>	Concept Development	
<b>Phase 2 Indicators (Examples):</b> Investment analysis and review of alternatives. <b>Phase 2 General Accounting Treatment:</b> Expensed in the period incurred.			
<b>Phase 3:</b> Advanced R&D - Concept Design and Development	<b>DoD</b>	Engineering and Manufacturing Development	R&D closeout and the genesis of asset development activities.
	<b>FAA</b>	Solution Development	
	<b>GSA</b>	Award	
	<b>NASA</b>	Formulation (Preliminary Design and Technical Completion)	
	<b>NRO</b>	Preliminary Design	
<b>Phase 3 Indicators (Examples):</b> Source selection decision and approval for final investment analysis <b>Phase 3 General Accounting Treatment:</b> Mixture of costs that are expensed in the period incurred and those that are capitalized and depreciated or amortized over the useful life of the asset.			
<b>Phase 4:</b> Production - Asset Development and "In-service" Placement	<b>DoD</b>	Production & Deployment (P&D)	Fully-engaged asset development activities.
	<b>FAA</b>	Solution Implementation	
	<b>GSA</b>	Post-Award	
	<b>NASA</b>	Implementation (Final Design, Fabrication, Assembly, Integration & Test, Launch)	
	<b>NRO</b>	Build	
<b>Phase 4 Indicators (Examples):</b> Initiate asset development or acquisition. <b>Phase 4 General Accounting Treatment:</b> Capitalized and depreciated or amortized over the useful life of the asset.			
<b>Phase 5:</b> Operations and Maintenance	<b>DoD</b>	Operations & Support	Activities aimed at maintaining the operability of the entity's assets.
	<b>FAA</b>	In-Service Management	
	<b>GSA</b>	Operation and Maintenance	
	<b>NASA</b>	Implementation (Operation and Sustainment)	
	<b>NRO</b>	Operations	
<b>Phase 5 Indicators (Examples):</b> Asset is placed in service. <b>Phase 5 General Accounting Treatment:</b> Expensed in the period incurred (excluding costs incurred to extend the useful life, enhance existing capabilities, or add new capabilities to the asset).			

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## Agency Specific Examples: Asset Acquisition Lifecycle Phases

- B2. A given entity may consider certain costs, such as the agency head's office, to be period costs because the activities contribute to the entity's strategic objectives and mission rather than the acquisition of a particular asset. In contrast, another entity may have an operational or business need to allocate the same type of costs to individual assets because such costs are incurred in support of acquiring those assets. Examples from the FAA, GSA, and the NRO are included in this Technical Release to demonstrate how an entity's operating model may affect how management identifies and records certain program costs.<sup>5</sup> The GSA's operating model requires more granular cost accumulation policies that allocate costs across the many individual assets it is responsible for acquiring. As shown in the following tables, this business need does not exist for the FAA or the NRO, where the mission is not primarily asset acquisition.
- B3. The FAA's mission includes the modernization and improvement of the National Airspace System (NAS) and Research, Engineering & Development (RE&D) activities to improve the safety and effectiveness of the air traffic control system. To support its mission the FAA incurs direct (burden base) and indirect (burden pool) costs. The FAA has developed a burdening process by which management allocates indirect costs to various projects. For example, the FAA "pools" indirect technical support services contract (TSSC) and systems engineering and technical assistance (SETA) costs and uses its burdening process to allocate those costs to capital projects.
- B4. A significant part of the GSA's mission is to serve as a supplier of goods and services to Federal agencies on a reimbursable basis. In this role, the GSA has a business need to capture costs (including overhead and indirect costs) at a very granular level. This permits the GSA to establish rates and develop pricing models that will recoup the full cost of operating under a non-appropriated, user-fee model. The difference in operational requirements results in GSA's personal property capitalization threshold of \$10,000, which is lower than FAA and the NRO thresholds of \$100,000. The GSA's personal property capitalization threshold is reflective of the types and quantities of property acquired by the GSA. This is an example of management's role in establishing internal policies and procedures that fit within the parameters outlined in GAAP and align to the entity's operating model.
- B5. The NRO's G-PP&E cost accumulation and allocation policies and procedures allow the agency to meet the intelligence needs of the Intelligence Community (IC), Department of

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<sup>5</sup>SFFAC 1 paragraph 164 states, comparability implies that differences among financial reports should be caused by substantive differences in the underlying transactions or organizations rather than by the mere selection of different alternatives in accounting procedures or practices.

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Defense, Department of Homeland Security, and users of intelligence products. Unlike the GSA, the NRO does not operate on a fee-for-service or reimbursable basis. The NRO utilizes cost-plus contractual agreements, which allows them to procure large scale satellite assets, as well as a wide range of professional and technical services that cross multiple PP&E assets and lifecycle phases. This acquisition and funding model contributes to an operating environment which results in a different decision point at which the benefits of achieving more precise cost allocation information are outweighed by the cost to obtain that information.

- B6. The GSA has a business need to accumulate and allocate detailed cost information to ensure that their pricing models, rates and schedules facilitate the full recovery of costs under a non-appropriated, user-fee model. For GSA's real property construction and alteration projects, the cost object is a G-PP&E asset. In contrast, for the FAA and the NRO, the end program objective is enhanced information to meet a mission need. Each of these agencies utilizes their respective operating model as a component in the development and execution of their accounting policies and procedures. The G-PP&E cost accumulation policies and procedures of the FAA and the NRO are primarily related to their respective aerospace services and satellite-driven intelligence missions. The operating environments of these agencies are supported by low volume and high dollar value G-PP&E acquisitions. Consequently, these agencies have differing precision points at which accumulating and assigning costs to G-PP&E assets at a more granular level is ineffective and inefficient.
- B7. The following examples describe the primary differences between these three agencies:
- i. When a project meeting the capitalization threshold is deemed probable and feasible, the GSA will classify certain feasibility costs as eligible for capitalization. At the same time, the FAA and the NRO consider these costs to be period expenses.
  - ii. The GSA capitalizes direct labor cost and various types of allocable indirect labor costs associated with its capital projects. The FAA "pools" indirect TSSC and SETA costs and uses its burdening process to allocate those costs to capital projects.
  - iii. The NRO applies an allocation methodology to costs that are determined to be acquisition management costs (AMCs). AMCs include comingled government program management costs; costs associated with integration and support services provided on SETA, Federally Funded Research and Development Centers (FFRDC) and Contractor Assistance and Advisory Service (CAAS) contracts; directorate-level office support costs; and agency-level general and administrative costs. NRO's cost accounting system and processes do not facilitate direct tracing of AMCs and there is no inherent business or mission need to implement a system or reengineer processes that would do so. The NRO's allocation methodology capitalizes a portion of these AMCs to individual G-PP&E assets.

B8. Tables 2-4 provide a summary-level view of the GSA's, the FAA's, and the NRO's PP&E acquisition lifecycle cost accounting policies and procedures.

**Table 2: General Services Administration**

Phase	Activity	Recognition	Recognition Basis per Entity Internal Accounting Policies
1	Administrative Costs (Direct) of Developing & Fielding a System	Capitalize	<b>Pre-acquisition Costs.</b> Costs incurred prior to the formal project phase such as costs of feasibility studies, environmental studies, zoning and traffic studies, appraisals, surveys, and various planning and design costs may be capitalized if acquisition or approval of the project is probable and the costs can be directly identified to the project. If at a later date the project is canceled, then the previously capitalized costs are expensed.
2	Design Reviews (e.g., Formal Qualification Reviews, Preliminary And Critical Design Reviews):  a. Before Technical Feasibility Has Been Determined. b. After Technical Feasibility Has Been Determined	a. Expense b. Capitalize	
3	Labor Costs During Construction (This includes the GSA's personnel and contract Direct Labor costs as well as Indirect costs allocated to capital projects.)	Capitalize	<b>Capitalized Projects.</b> GSA's real property policy capitalizes projects that acquire land and/or construct new buildings and structures; improve land; or extend the useful life of buildings and their systems; or replace, enhance or upgrade a substantial portion of an asset with additional functionality or capacity. For a project to be capitalized, it must: (1) have a cost of \$50,000 or greater; (2) have a useful life of 2 years or more.
4	Project Management Costs - Baseline and Contractor Administration	Capitalize	
5	General Maintenance	Expense	The GSA considers the costs incurred in this phase inherently an expense.

**Table 3: Federal Aviation Administration**

Phase	Example Cost Activities	Recognition	Recognition Basis per Entity Internal Accounting Policies
1	Research & Development costs: • Mission Analysis • Identify Projected Demand for Services • Identify Technological Opportunities • Mission Needs Analysis and Assessment • Initial Requirements Definition	Expense	The FAA believes that the costs incurred in this phase are inherently expense.

Phase	Example Cost Activities	Recognition	Recognition Basis per Entity Internal Accounting Policies
2	Research & Development costs: <ul style="list-style-type: none"> <li>• Investment Analysis</li> <li>• Initial Investment Decision</li> <li>• Final Investment Decision</li> </ul>	Expense	The FAA expenses all prototype costs incurred before technological feasibility has been established except for operational feasibility prototypes that will be used in operations if successful..
3	<ul style="list-style-type: none"> <li>• Solution Development</li> <li>• Program Management</li> <li>• System Engineering</li> <li>• Hardware/Software Design</li> <li>• Physical Airspace (PHYS/AIRSP) Infrastructure</li> <li>• Test and Evaluation</li> <li>• Data/Documentation</li> </ul>	Comingled (i.e., Expense and Capitalize)	<p>At the completion of a final investment decision the FAA makes the decision to acquire (develop or purchase) a G-PP&amp;E asset. Based on guidance from the FAA financial manual certain costs will be capitalized and certain costs will be expensed. All qualifying costs necessary to acquire a capital asset, or improve on an existing capital asset, are classified as capital costs. The purchase price and costs incurred to bring an asset to a form and location suitable for its intended use are examples of capital costs. Costs that do not meet these criteria are expensed.</p> <p>The FAA expenses all costs incurred on a first prototype before technological feasibility has been established. After technological feasibility has been established, the subsequent costs of constructing and installing a first prototype are eligible for capitalization.</p>
4	<ul style="list-style-type: none"> <li>• Implementation</li> <li>• Program Management</li> <li>• Engineering</li> <li>• Environmental/OSHA</li> <li>• Site Selection</li> <li>• Construction</li> <li>• Install and Checkout</li> <li>• Commissioning/Close</li> <li>• Telecommunication</li> <li>• Training</li> </ul>	Comingled (i.e., Expense and Capitalize)	See above (Phase 3).
5	<ul style="list-style-type: none"> <li>• In-Service Management</li> <li>• Program Support</li> <li>• Second Level Engineering</li> </ul>	Expense	At the completion of a joint acceptance inspection the asset is in a form and location suitable for its intended use. The FAA believes that the costs incurred in this phase are inherently expense.

**Table 4: National Reconnaissance Office**

Phase	Activity	Recognition	Recognition Basis per Entity Internal Accounting Policies
1	<ul style="list-style-type: none"> <li>Directorate Level Research and Development leading to the initial decision point (i.e., Key Decision Point A<sup>6</sup>)</li> </ul>	Expense	Basic, applied, and advanced R&D costs incurred prior to the secondary decision point (i.e., Key Decision Point B) are expensed.
2	<ul style="list-style-type: none"> <li>Costs related to the proposal review and contract award processes</li> </ul>	Expense	Basic, applied, and advanced R&D costs incurred prior to Key Decision Point B are expensed.
3	<ul style="list-style-type: none"> <li>At Key Decision Point B the Director of the NRO signs a Decision Memorandum</li> <li>Requirement and specification development</li> <li>Labor costs during construction</li> </ul>	Capitalize	Key Decision Point B triggers the capitalization of costs for development.
	<ul style="list-style-type: none"> <li>AMCs related to the program acquisition strategy management processes. These costs include:                             <ol style="list-style-type: none"> <li>Government program management costs,</li> <li>Integration and support contracts for SETA, FFRDC, and CAAS,</li> <li>Directorate level office support, Agency General and administrative costs</li> </ol> </li> </ul>	Comingled (Expense and Capitalize)	The NRO uses an allocation methodology by which Acquisition Management Costs (AMC) incurred throughout the entire acquisition lifecycle (excluding the Operations and Maintenance phase) are "bucketed" and allocated to capital and expense accounts based on the proportional percentage of actual, non-AMC capital and expense expenditures incurred throughout the year.
4	<ul style="list-style-type: none"> <li>Costs related to final design, build, test, and delivery activities</li> </ul>	Capitalize	Development costs continue to be capitalized in this phase.
	<ul style="list-style-type: none"> <li>Project Management Costs - Baseline and Contractor Administration</li> <li>AMCs related to the government program management processes</li> </ul>	Comingled (Expense and Capitalize)	See AMC explanation in above Phase 3.
5	<ul style="list-style-type: none"> <li>Operations and Maintenance (O&amp;M)</li> </ul>	Expense	Initial operating capability (IOC) triggers the expense of costs for operations and maintenance.

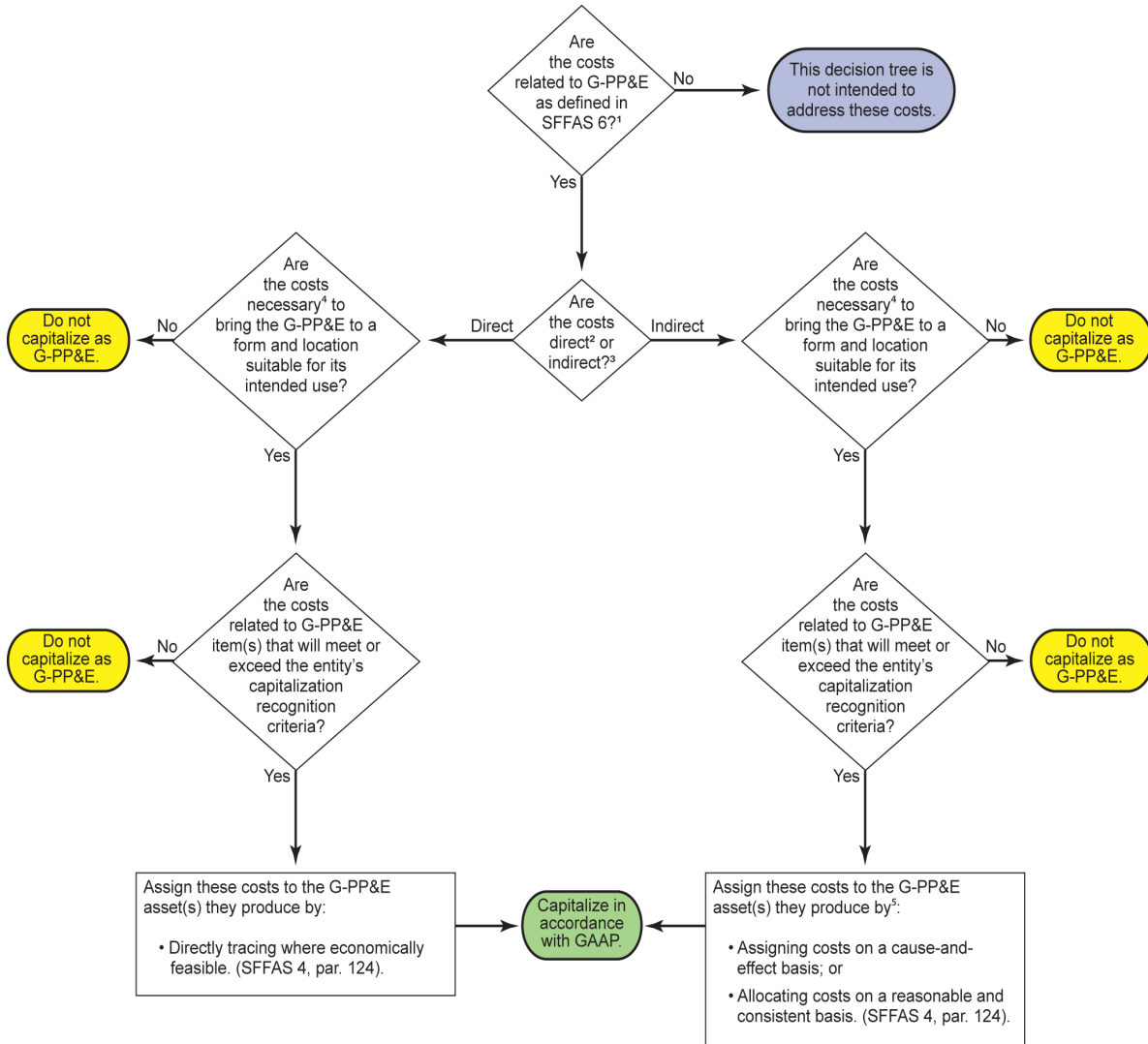
<sup>6</sup> Key Decision Points (KDP) are defined significant milestones in the National Security Space program of the Department of Defense acquisition lifecycle. For example, KDP B is the official program initiation of a National Security Space program of the Department of Defense, which triggers a formal review to determine maturity of technology and the program's readiness to begin the preliminary system design.

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## Appendix C: Decision Framework Flowchart

- C1. As stated throughout this Technical Release, management should base their financial management information needs on the following three principles:
- a. Relevance/usefulness of information (both to internal and external stakeholders);
  - b. Level of precision (e.g., materiality) needed to properly manage and report costs; and
  - c. Cost benefit of establishing and executing cost assignment processes, methods and tools.
- C2. The decision framework flowchart provides users with an organized approach for applying the principles described above to support their process of developing entity specific policies and practices for accumulating, allocating, and reporting the cost of G-PP&E in compliance with relevant accounting standards.



<sup>1</sup> Refer to *SFFAS 6 paragraphs 17 and 23* for the definition of PP&E and specific characteristics of G-PP&E, respectively.

<sup>2</sup> The cost of resources directly consumed by an activity. Direct costs are assigned to activities by direct tracing of units of resources consumed by individual activities. A cost that is specifically identified with a single cost object. *FASAB Handbook, Appendix E: Consolidated Glossary.*

<sup>3</sup> A cost that cannot be identified specifically with or traced to a given cost object in an economically feasible way. *FASAB Handbook, Appendix E: Consolidated Glossary.*

<sup>4</sup> Refer to *SFFAS 6 paragraph 6* for a list of **examples** (i.e., not all inclusive) of costs that **may** (i.e., not prescriptive) be included in the full cost of G-PP&E.

<sup>5</sup> Consider:

- The relevance/usefulness of information to internal and external stakeholders,
- The level of precision needed to properly manage and report costs, and
- The cost-benefit of establishing and executing the alternative cost assignment processes, methods, and tools.



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## Appendix D: Accounting Literature

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### Recognition

D1. SFFAS 6 *Accounting for Property, Plant, and Equipment*, paragraph 26 provides the examples below as cost activities that reporting entities may incur in order to bring PP&E to a form and location suitable for its intended use. "For example, the cost of acquiring property, plant, and equipment may include:

- amounts paid to vendors;
- transportation charges to the point of initial use;
- handling and storage costs;
- labor and other direct or indirect production costs (for assets produced or constructed);
- engineering, architectural, and other outside services for designs, plans, specifications, and surveys;
- acquisition and preparation costs of buildings and other facilities;
- an appropriate share of the cost of the equipment and facilities used in construction work;
- fixed equipment and related installation costs required for activities in a building or facility;
- direct costs of inspection, supervision, and administration of construction contracts and construction work;
- legal and recording fees and damage claims;
- fair value of facilities and equipment donated to the government; and
- material amounts of interest costs paid."

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### The Cost Assignment and Allocation Decision Framework

D2. Office of Management and Budget (OMB) Circular A-136, *Financial Reporting Requirements*: Statement of Net Cost (SNC) introduces the following components of the cost accumulation and allocation decision framework:

- a. **Costs that cannot be assigned to specific programs or outputs** - Section II.4.4, "Statement of Net Cost", The "Components of Net Cost" subparagraph states that: "The statement should include a presentation of the following: (1) Program costs, (2) related exchange revenues, (3) the excess of costs over exchange revenues (net program costs), (4) gain/loss on pension, ORB, or OPEB assumption changes, (5) the

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- costs that cannot be assigned to specific programs or outputs, and (6) the exchange revenues that cannot be attributed to specific programs and outputs.
- b. **Program level versus output level cost allocation** - Section II.4.4.3 "Gross Program Costs" states that: The reporting entity should report the full cost of each program's output, which consists of (a) both direct and indirect costs of the output, and (b) the costs of identifiable supporting services provided by other segments within the reporting entity and by other reporting entities. The reporting entity should accumulate and assign costs in accordance with the costing methodology in SFFAS No.4. Program costs should also include any non-production costs that can be assigned to the program but not to its outputs.
  - c. **Costs not assigned to programs** - Section II.4.4.7 "Costs Not Assigned to Programs" states that: A reporting entity and its sub-organizations may incur: (a) high-level general management and administrative support costs that cannot be directly traced, assigned on a cause-and-effect basis, or reasonably allocated to segments and their outputs and (b) non-production costs that cannot be assigned to a particular program. These costs are part of the entity and sub-organization costs and should be reported on the SNC as "costs not assigned to programs."

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## Management's Role in Applying the Cost Accumulation, Assignment, and Allocation Decision Framework

- D3. SFFAS 4 *Managerial Cost Accounting Standards and Concepts*<sup>7</sup> introduces the following components of the cost allocation decision framework:
- a. **Appropriate and consistent cost accumulation, assignment, and allocation** - Costs of resources consumed by responsibility segments should be accumulated by type of resource. Outputs produced by responsibility segments should be accumulated and, if practicable, measured in units. The full costs of resources that directly or indirectly contribute to the production of outputs should be assigned to outputs through costing methodologies or cost finding techniques that are most appropriate to the segment's operating environment and should be followed consistently.

The cost assignments should be performed using the following methods listed in the order of preference: (a) directly tracing costs wherever feasible and economically practicable, (b) assigning costs on a cause-and effect basis, or (c) allocating costs on a reasonable and consistent basis.

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<sup>7</sup>SFFAS 4 Text box above paragraph 116.

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- b. **Factors for management's consideration** - Each reporting entity should determine the appropriate detail for its cost accounting processes and procedures based on several factors. These include the:
- nature of the entity's operations;
  - precision desired and needed in cost information;
  - practicality of data collection and processing;
  - availability of electronic data handling facilities;
  - cost of installing, operating, and maintaining the cost accounting processes; and
  - any specific information needs of management.

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## Appendix E: Abbreviations

AALP	Asset Acquisition Lifecycle Phases
AAPC	Accounting and Auditing Policy Committee
AMC	Acquisition Management Costs
ASID	Accounting System Identification
CAAS	Contractor Assistance and Advisory Service
CAI	Cost Accounting Issues
DHS	Department of Homeland Security
DoD	Department of Defense
FAA	Federal Aviation Administration
FASAB	Federal Accounting Standards Advisory Board
FFRDC	Federally Funded Research and Development Centers
GAAP	Generally Accepted Accounting Principles
G-PP&E	General Property, Plant, and Equipment
GSA	General Services Administration
IC	Intelligence Community
KDP	Key Decision Point
NAS	National Airspace System
NASA	National Aeronautics and Space Administration
NRO	National Reconnaissance Office
O&M	Operations and Maintenance
ODNI	Office of the Director of National Intelligence
OMB	Office of Management and Budget
OPEB	Other Post-Employment Benefits
ORB	Other Retirement Benefits
OSHA	Occupational Safety and Health Administration
PBS	Public Buildings Service
PHYS/AIRSP	Physical Airspace
PP&E	Property, Plant, and Equipment
RE&D	Research, Engineering & Development
R&D	Research and Development
SETA	Systems Engineering and Technical Assistance
SFFAC	Statement of Federal Financial Accounting Concepts
SFFAS	Statement of Federal Financial Accounting Standards
SNC	Statement of Net Costs
TSSC	Technical Support Services Contract
TR	Technical Release
USBR	United States Bureau of Reclamation