

# CHANGE REQUEST COVER SHEET

**Change Request Number:** 08-96

**Date Received:** 11/10/2008

**Title:** Nonmaterial Solution

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**Name:** Colleen Gutrick

**Phone:** 202-493-5605

**Policy OR Guidance:** Policy

**Section/Text Location Affected:** 2.3.4, 2.4 and 2.4.1.4

**Summary of Change:** Corrects inconsistency in AMS policy regarding who approves nonmaterial solutions.

**Reason for Change:** In sections 2.3.4 and 2.4, AMS policy specifies the request to implement a nonmaterial solution is presented to the head of the line of business for decision. AMS section 2.4.1.4 states the Vice President or Director of the service organization may implement a nonmaterial solution when it can be fully implemented within existing resources.

**Development, Review, and/or Concurrence:** Developed by the Acquisition Policy Group

**Target Audience:** AMS Workforce

**Potential Links within FAST for the Change:** None

**Briefing Planned:** Yes

**ASAG Responsibilities:** Approve

**Potential Links within FAST for the Change:** None

**Links for New/Modified Forms (or) Documents (LINK 1)**

**Links for New/Modified Forms (or) Documents (LINK 2)**

**Links for New/Modified Forms (or) Documents (LINK 3)**

## SECTIONS EDITED:

Acquisition Management Policy:

**Section 2.3.4 : Concept and Requirements Definition** [\[Old Content\]](#) [\[New Content\]](#) [\[RedLine Content\]](#)

Acquisition Management Policy:

**Section 2.4 : Investment Analysis** [\[Old Content\]](#) [\[New Content\]](#) [\[RedLine Content\]](#)

Acquisition Management Policy:

**Section 2.4.1.4 : Who Approves?** [\[Old Content\]](#) [\[New Content\]](#) [\[RedLine Content\]](#)

## SECTIONS EDITED:

### **Section 2.3.4 : Concept and Requirements Definition**

**Old Content:** Acquisition Management Policy:

#### **Section 2.3.4 : Concept and Requirements Definition**

All investment opportunities that require funding outside the scope of an approved Exhibit 300 program baseline undergo concept and requirements definition. This includes upgrades to existing capability without approved investment funding.

Concept and requirements definition translates priority operational needs in the enterprise architecture into preliminary requirements and a concept of use for the capability needed to improve service delivery. It also quantifies the service shortfall in sufficient detail for the definition of realistic preliminary requirements and the estimation of potential costs and benefits. Finally, concept and requirements definition identifies the most promising alternative solutions able to satisfy the service need, one of which must be the alternative in the enterprise architecture.

Planning for concept and requirements definition begins when a roadmap in the enterprise architecture specifies action must be taken to address a priority service or infrastructure need. These needs typically relate to existing or emerging shortfalls in the “as is” architecture or essential building blocks of the “to be” architecture. Should a service organization wish to pursue an investment opportunity not in an enterprise architecture roadmap, it must first develop architectural change products and amendments and get endorsement from the cognizant architectural review board.

The FAA may undertake research activity or employ research by other agencies or industry to define the operational concept, develop preliminary requirements, demonstrate and refine computer-human interfaces, reduce risk, or achieve customer buy-in to potential solutions to mission need.

A nonmaterial solution that emerges during concept and requirements definition may be implemented without proceeding further in the lifecycle management process, provided it satisfies the need, can be achieved within approved budgets, and is acceptable to users and customers. This determination is presented to the ATO Executive Council chaired by the Chief Operating Officer or the Associate or Assistant Administrator (non-ATO) of the line of business for decision.

FAST Version 01/2009

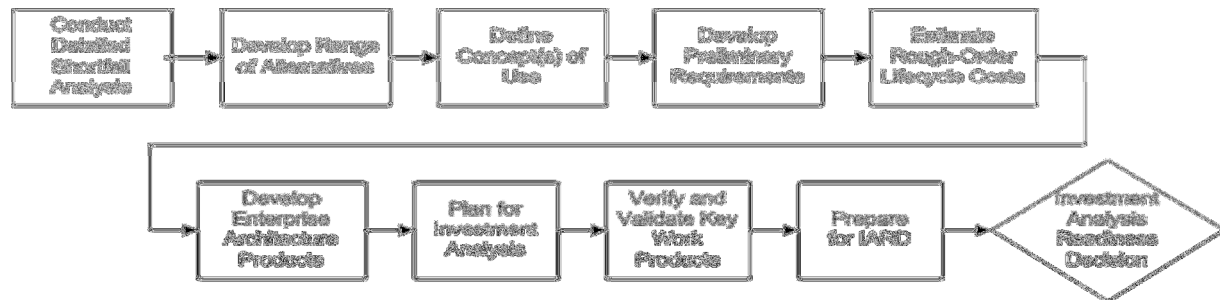
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Key functional disciplines such as safety, security, and human factors *must* participate in the activities of concept and requirements definition in order to determine mandatory requirements and evaluate their impact on potential alternative solutions.

The key activities of concept and requirements definition are shown in Figure 2.3.4-1.

**Figure 2.3.4-1 Key Activities of Concept / Requirements Definition**



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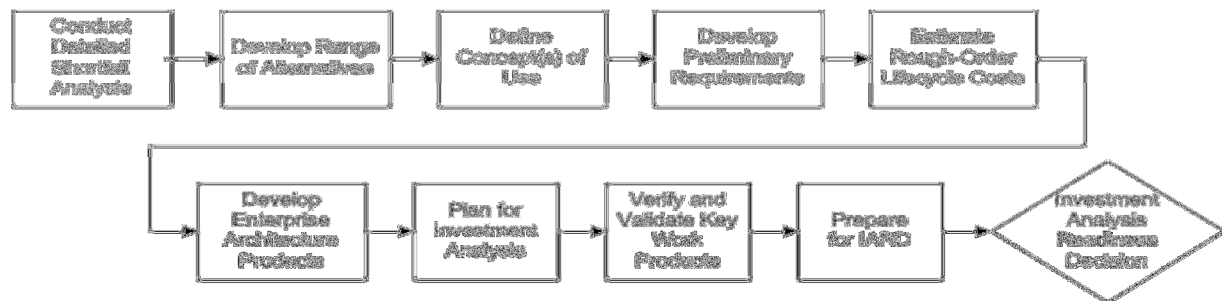
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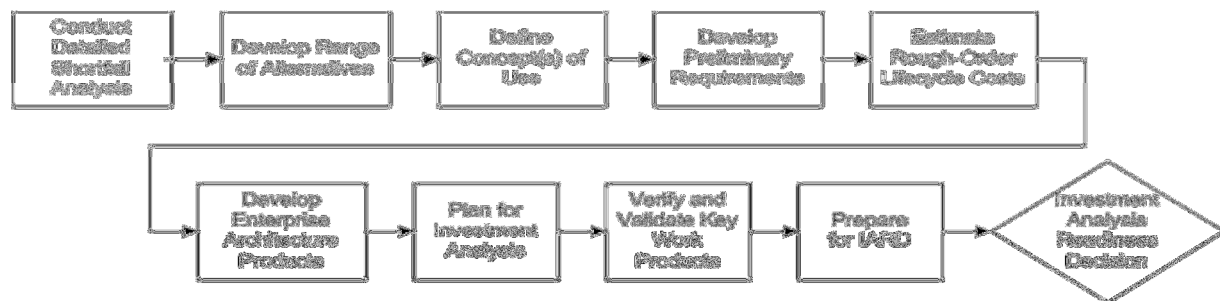
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## **Section 2.4 : Investment Analysis**

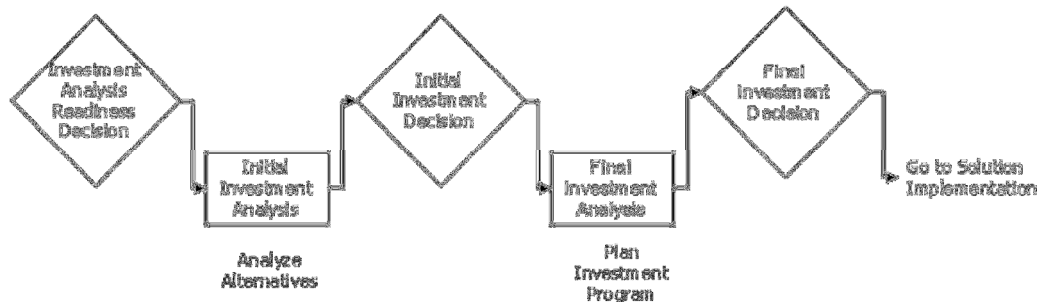
**Old Content:** Acquisition Management Policy:

### **Section 2.4 : Investment Analysis**

Figure 2.4-1 illustrates the phases and decision points of investment analysis, which is conducted to ensure FAA's critical needs are satisfied by practical and affordable solutions. Initial investment analysis evaluates alternative solutions to mission need and provides realistic options to the Joint Resources Council that satisfy FAA strategic and performance goals and achieve best

overall value for the FAA and its customers. Final investment analysis develops detailed plans and final requirements for a proposed investment opportunity.

**Figure 2.4-1 The Phases and Decision Points of Investment Analysis**



Investment analysis is a flexible process that is tailored for the specific analysis to be performed. Tailoring actions are approved by the acquisition executive or the Joint Resources Council and recorded in the appropriate plan and JRC record of decision for initial or final investment analysis.

Investment analysis teams conduct major, complex investment analyses. These teams have representatives from the service organization with the mission need, the operating service organization, the ATO Operations Planning organization, the ATO business case analysis organization, and necessary key subject-matter experts from such disciplines as system safety, information security, human factors, and integrated logistics. In all cases, organizations conducting investment analysis apply the standard processes and guidelines located in the investment analysis section of the FAST toolset.

Investment analysis is conducted within context of all planned or in-place FAA assets, capabilities, and resources described in the enterprise architecture. Recommendations are consistent with and support FAA strategic and performance goals and the enterprise architecture.

NAS and non-NAS roadmaps in the enterprise architecture establish when an operational capability must be in place. This, in turn, determines when investment analysis should be complete to allow sufficient time to acquire and deploy a suitable solution. The key is to balance the timeliness of the analysis with the rigorous development of quantitative data needed by the Joint Resources Council to make an informed investment decision.

Cost-effective, operationally suitable commercial or non-developmental solutions are preferred over developmental alternatives when performance and lifecycle support costs are acceptable.

Investment programs are structured into manageable phases approved incrementally by the Joint Resources Council. Each phase is normally five years or less, and may be divided into technology development or demonstration followed by production and deployment. Production and deployment may also be divided into useful segments to reflect agency funding and

operational priorities. Cost, schedule, performance, and benefit projections for each phase must always be deemed beneficial to the FAA and its customers. When additional phases are required to fully implement an investment program, the service organization conducts final investment analysis and brings each sequential phase to the Joint Resources Council for approval.

If a nonmaterial solution emerges during investment analysis that satisfies the need, can be achieved within approved budgets, and is operationally acceptable to the user, it may be implemented without proceeding further in the lifecycle management process. This determination is presented to the Chief Operating Officer (ATO) or the Associate or Assistant Administrator (non-ATO) of the line of business for decision.

Affordability and accurate cost and schedule estimates are key factors in the decision to approve a new investment program. During initial investment analysis, the capital investment team assesses the budget impact and relative contribution to agency goals of each alternative solution to mission need against other ongoing and proposed investment programs in the FAA's financial baseline. During final investment analysis, they assess the budget impact of the proposed investment program. Results are reported to the Joint Resources Council and included in the business case analysis report. Appendix A contains the membership of the capital investment team.

The FAA standard lifecycle work breakdown structure shall be used when developing cost and schedule estimates. When available, cost estimates must be based on actual or historical data.

Stakeholder participation is important throughout investment analysis. Stakeholder support for the solution approved at the initial investment decision is key to program success. Coordination with stakeholders is the responsibility of the service organization.

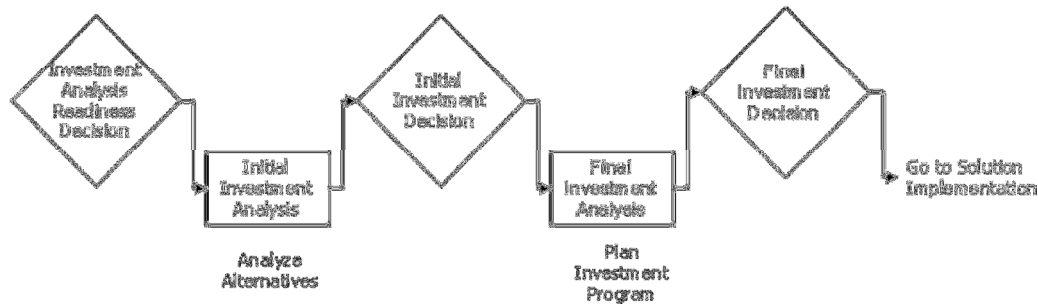
Investment analysis processes conform to the Federal laws, regulations, and guidelines specified in Appendix E. In particular, the information required by OMB Circular A-11, Preparation, Submission, and Execution of the Budget is generated, and the requirements of OMB Circular A-76, Performance of Commercial Activities are considered. OMB Circular A-11 contains Federal policy for planning, budgeting, and managing capital assets. OMB Circular A-76 contains established government policy that requires consideration of commercial sources to supply the products and services the government needs, and performance of inherently governmental activities by government personnel. This includes consideration of government sources as an alternative. The FAA follows the policies of these circulars to the extent that they are consistent with FAA's statutory authority.

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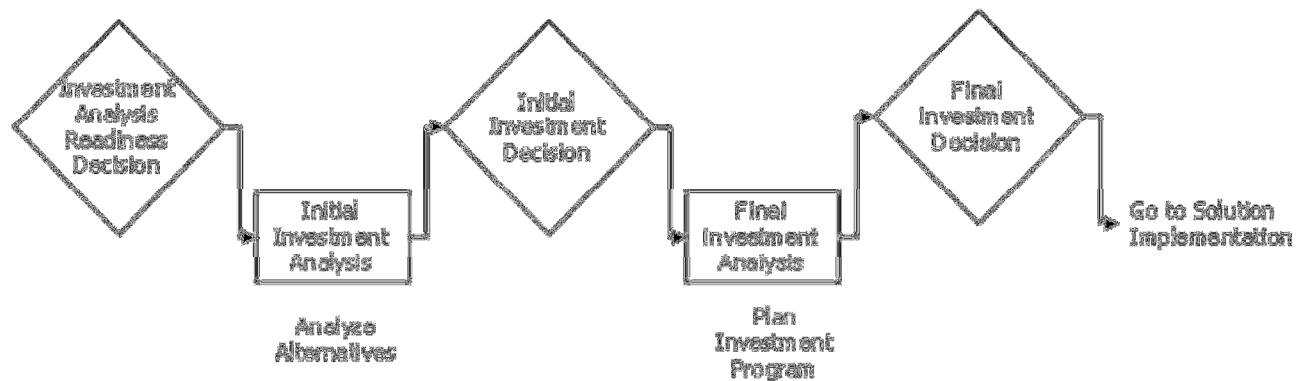
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#### **Section 2.4.1.4 : Who Approves?**

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