

AMS/FAST CHANGE REQUEST (CR) COVERSHEET

Change Request Number: 21-67

Date Received: Jun 10, 2021

Title: Add JRC Checklist as Primary Source of AMS Artifacts & Requirements

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Initiator Organization Name / Routing Code: Life Cycle Acquisition Policy, AAP-130

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Policy and Guidance: (check all that apply)

- ☒ Policy
- ☐ Guidance
- ☐ Procurement Forms, Templates and Samples
- ☐ Real Property Templates and Samples
- ☐ Procurement Clauses
- ☐ Real Property Clauses
- ☐ Other FAST Tools and Resources

Summary of Change: The change clears up outdated references to eliminated ACATs, as well as clarifies confusing phrases. It also adds language referencing the JRC Checklist as the comprehensive source for all items necessary for a JRC decision, listed by Investment phase and ACAT.

Reason for Change: Clarification and align JRC Checklist and AMS policy.

Development, Review, and Concurrence: AAP-100/130/200

Target Audience: Contracting personnel, acquisition workforce, governance organizations, Program office

Briefing Planned: No.

ASAG Responsibilities: None.

Section / Text Location: AMS Policy 1.2; 2.4; 2.5; 4.4, and Appendix B

The redline version must be a comparison with the current published FAST version.

☒ I confirm I used the latest published version to create this change / redline

or

☐ This is new content

Links:

https://fast.faa.gov/docs/acquisitionManagementPolicy/acquisitionManagementPolicy_1.pdf

https://fast.faa.gov/docs/acquisitionManagementPolicy/AcquisitionManagementPolicy_4.pdf

https://fast.faa.gov/docs/acquisitionManagementPolicy/AcquisitionManagementPolicy_2.pdf

<https://fast.faa.gov/docs/acquisitionManagementPolicy/AcquisitionManagementPolicyAppendix B.pdf>

Attachments: Redline and final documents.

Other Files: N/A.

Redline(s):

Section Revised: 1.2 – Key Elements of Acquisition Management

Acquisition Management Policy - (~~4/2021~~7/2021)

1.2 Key Elements of Acquisition Management

1.2.1 Strategic Planning, Management, and Budgeting Revised 1/2014

1.2.2 FAA Enterprise Architecture Revised 4/2017

1.2.3 Service Management Revised 7/2013

1.2.4 Portfolio Management Revised 4/2017

1.2.4.1 Agency-Wide Portfolio Management Revised 4/2013

1.2.4.1.1 Portfolio Management Governance Revised 4/2013

1.2.4.1.2 Portfolio Management Criteria Revised 4/2013

1.2.4.2 Operational Capability Portfolios Revised 4/2013

1.2.5 Acquisition Categories Revised ~~1/2021~~7/2021

1.2.6 Lifecycle Management Decision-Making Revised 1/2021

1.2.7 Acquisition Quarterly Program Reviews Revised 4/2019

1.2.8 TechStat Reviews Revised 4/2019

1.2.9 Cost Accounting Revised 4/2013

1.2.10 Workforce Development and Qualification Revised 4/2013

1.2.11 Continuous Improvement Revised 7/2010

1.2.12 On-line Policy and Guidance Revised 1/2012

1.2.13 AMS Change Management Revised 1/2012

1.2.14 Legal Coordination Revised 7/2006

1.2.15 AMS Lifecycle Management Documentation Revised ~~1/2021~~7/2021

1.2.16 OMB Budget Documentation Revised 1/2021

1.2.17 National Acquisition Evaluation Program Added 7/2007

1.2.18 Earned Value and Baseline Management Revised 4/2019

1.2 Key Elements of Acquisition Management

1.2.1 Strategic Planning, Management, and Budgeting Revised 1/2014

The Government Performance and Results Act of 1993, requires Federal agencies to have measurable performance targets tied to agency goals and objectives. These targets serve as the basis for planning capital investments and measuring progress.

The FAA supports this requirement through a strategic management process that forecasts the future aviation environment and captures goals, objectives, and performance targets in its strategic plan, currently FAA strategic initiatives. FAA strategic planning links the long-range vision and goals for the agency directly to the service needs of customers and defines top-level performance measures and multi-year performance targets.

The NAS Concept of Operations specifies the operational capabilities that the National Airspace System will have over time. Together, the FAA strategic plan and NAS Concept of Operations set the primary context for the FAA Enterprise Architecture and all lower-level plans and budgets within the agency. FAA lines of business and staff offices align their planning to the goals and objectives in FAA strategic planning. Service organizations within the lines of business in turn align their business and operating plans to line-of-business planning. These relationships are illustrated in Figure 1.2.1-1 FAA Strategic Planning, Management, and Budgeting.

Figure 1.2.1-1 Strategic Planning, Management, and Budgeting



Service organizations develop integrated business plans and budgets across all appropriations to achieve full lifecycle support of service delivery. Planning is realistic within budgetary constraints. Success or failure in achieving performance goals influences future planning and budgeting decisions. Resources are dedicated to key activities such as service analysis, concept and requirements definition, and investment analysis.

The Administrator approves the FAA strategic plan; the NextGen Management Board approves the NAS Concept of Operations; the Joint Resources Council approves the FAA Enterprise Architecture.

The Chief Financial Officer formulates the budget across lines of business and staff offices; tracks actual performance against planned execution based on input from these organizations; records approved resource adjustments to FAA plans and budgets; and incrementally moves FAA planning and budgeting forward each year. The Chief Financial Officer also develops the Facilities and Equipment (F&E), Research, Engineering, and Development (RE&D), and Operations (OPS) budget requests.

Planning for the Airport Improvement Program is coordinated with planning for the RE&D,

F&E, and OPS appropriations so that capital assets necessary to support new and expanded airport operations are available when needed.

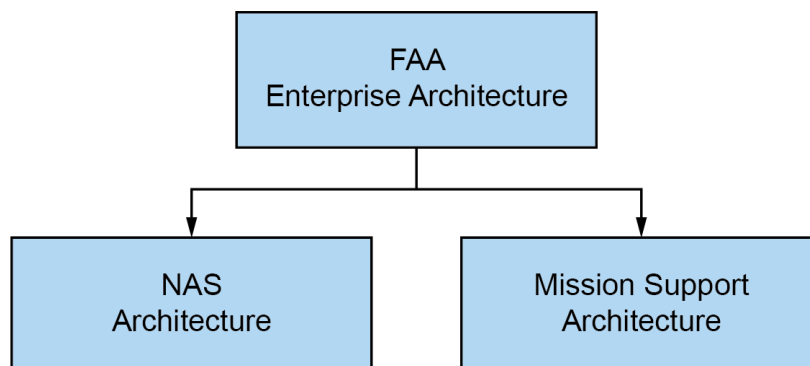
The FAA reports facility and equipment expenditures to Congress in the Capital Investment Plan; research, engineering, and development resource requirements in the National Aviation Research Plan; and operations funding requirements in the annual budget request to Congress.

1.2.2 FAA Enterprise Architecture **Revised 4/2017**

The FAA Enterprise Architecture (referred to as the enterprise architecture throughout AMS policy) defines the operational and technical framework for all capital assets of the FAA. It describes the agency's current and target architectures, as well as the transition strategy for moving from the current to the target architecture. The enterprise architecture is approved annually by the Joint Resources Council in support of FAA budget and strategic management processes.

The enterprise architecture has two components: the National Airspace System (NAS) architecture and the Mission Support architecture (See Figure 1.2.2-1 FAA Enterprise Architecture). The NAS architecture is comprised of the systems, people, and procedures necessary for command and control of the National Airspace System. It also includes mission-support systems that manage or design command and control components and air traffic procedures. The Mission Support architecture is comprised of the information technology operations and investments needed for agency business administration and planning. It includes all mission-support applications, systems, policies, and procedures not directly involved in air traffic control.

Figure 1.2.2-1 FAA Enterprise Architecture



The FAA Enterprise Architecture Board governs the enterprise architecture. The Chief Information Officer maintains it. The Enterprise Architecture Service Division administers the NAS architecture. The Office of Information & Technology, Solution Delivery Service, Solution Strategy Division, Enterprise Architecture (EA) Branch administers the Mission Support architecture.

1.2.3 Service Management **Revised 7/2013**

Acquisition management policy is structured to apply FAA investment resources to the cost-effective delivery of safe and secure services to its customers. The delivery of these services is accomplished through service organizations, which are responsible and accountable for lifecycle management of service delivery.

A service organization is any organization that manages investment resources, regardless of appropriation, to deliver services. It may be a service unit, program office, or directorate, and may be engaged in air traffic services, safety, security, regulation, certification, operations, commercial space transportation, airport development, or administrative functions.

Service organizations bring together the stakeholders and specialists necessary to plan, obtain, manage, and sustain assigned services throughout their lifecycle. A service may be delivered directly to a customer, such as flight planning for general aviation, or to other service organizations that deliver end services to customers. Together, service organizations span the spectrum of FAA activity and responsibility.

Service organizations manage service delivery by means of integrated portfolios of capital investments and operational assets. These portfolios include investment assets under acquisition; fielded equipment, legacy systems, infrastructure, and facilities; and all other types of resources.

Service organizations perform service analysis annually to determine what capabilities must be in place now and in the future to meet agency goals and the service needs of customers and to move planning forward each year. Results are captured in enterprise architecture roadmaps, which are the transition plans for moving the current “as is” architecture to the future “to be” state. These roadmaps are the foundation for line-of-business and staff office business plans, which in turn are the basis for service organization operating plans.

The operating plan of each service organization specifies how it will manage its operational assets and investment initiatives over time to sustain and improve service delivery. Each operating plan is maintained on a continuing basis and updated yearly to reflect progress against plan, Congressional or executive direction, emerging customer needs, and critical aviation incidents. Service organizations track performance, accomplishments, and resource expenditures relative to the operating plan, and take corrective action as necessary to achieve agreed upon goals and objectives. Service organizations work closely with each other to manage shared assets efficiently and effectively.

1.2.4 Portfolio Management Revised 4/2017

The FAA views and manages its investment and operational assets through multiple levels and groupings of portfolios to ensure they work together efficiently to achieve agency strategic, mission, and service goals. At the agency level, the entire FAA budget is a portfolio of planned expenditures organized to balance support of existing operational services with investment in new capability. Within this portfolio, the R&ED, F&E, and Operations appropriations are distinct portfolios that allocate research, investment, and operational funding to the most pressing service needs of the aviation community. Similarly, the enterprise architecture is a portfolio with investments and assets

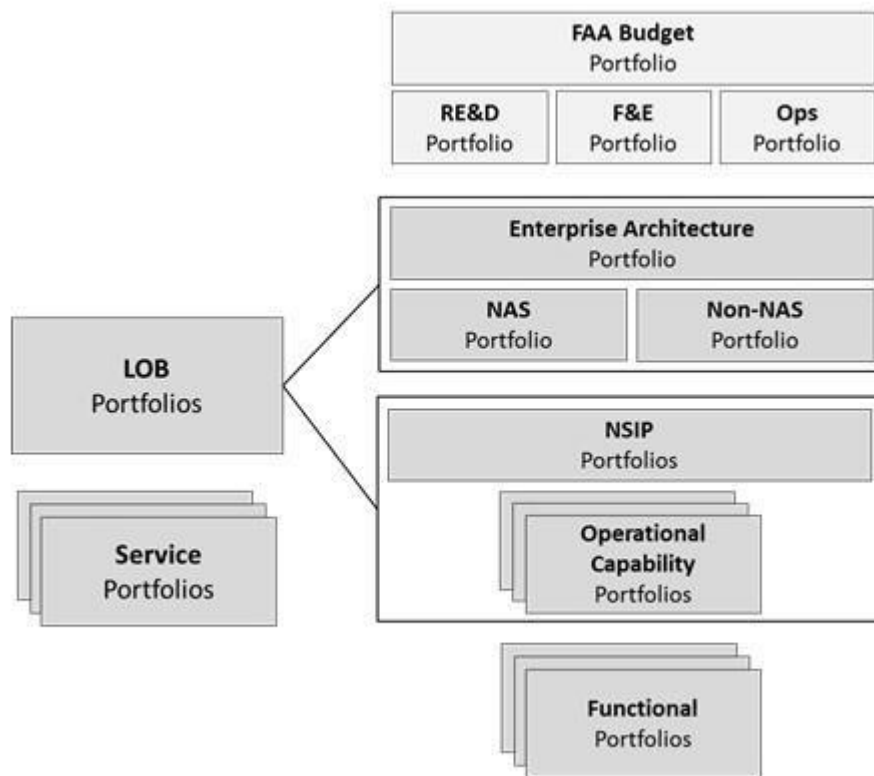
that make up the National Airspace System (NAS) and administrative and mission support information technology (Mission Support). The enterprise architecture can be viewed as distinct portfolios segmented in different ways for specific purposes.

Operational capability portfolios are rational groupings of NAS investment programs proceeding through the AMS lifecycle management process that have critical interdependences which must be taken into account when making investment decisions for individual components of the portfolio.

The Joint Resources Council uses portfolio management in conjunction with strategic planning, the enterprise architecture, and outcome-based performance measures when making investment decisions and managing selected groupings of investments.

AMS policy does not create a universal definition for the term “portfolio management.” It establishes the definition and policy for several standard agency-wide portfolios (Section 1.2.4.1) and for operational capability portfolios (Section 1.2.4.2). This policy does not preclude other types of portfolios within the agency, nor does it provide policy or guidance for managing them. Figure 1.2.4-1 illustrates the levels and groupings of FAA portfolios.

Figure 1.2.4-1 Portfolio Management in FAA



1.2.4.1 Agency-Wide Portfolio Management Revised 4/2013

The FAA implements agency-wide portfolio management at multiple organizational levels and within a unified functional framework:

Corporate Portfolio Management - The FAA, through the Joint Resources Council and other means, manages the overall agency investment portfolio with the following:

Enterprise Architecture: The enterprise architecture portrays the "as is" and "to be" state of FAA operational assets along with roadmaps that lay out over time what investments will be made to achieve the end-state configuration. The enterprise architecture is developed and updated annually by analyzing the functions the FAA needs to provide based on identified gaps in needed services over time. This view of the corporate-level portfolio is presented to the Joint Resources Council each year for approval.

FAA Budget: The budget is developed using a strategic management process that ties it to the needs in the enterprise architecture and the goals in the FAA strategic plan to create a unified performance-based budget. The budget is reviewed each year considering several corporate-level portfolio measures including progress in meeting FAA strategic goals, budget allocations relative to strategic planning targets, and assessments of under-performing programs using earned value management. This information is presented to the Joint Resources Council annually when it reviews the agency budget submission.

Line-of-Business Portfolio Management - Each line of business and staff office oversees, coordinates, and integrates the service portfolios of its service organizations to achieve the greatest overall contribution to agency strategic goals and targets.

Service Portfolio Management - Service organizations (e.g., terminal services, en-route and oceanic services, regulatory services, certification services) manage integrated sets of investment and operational assets to optimize service delivery over time.

NAS Segment Implementation Portfolio Management - The NextGen organization oversees investment portfolios that cut across service organizations to provide fully integrated operational capabilities for the National Airspace System in such areas as precision-based navigation and improved runway operations. More than one service organization may be involved with implementation and in-service management of these investment packages.

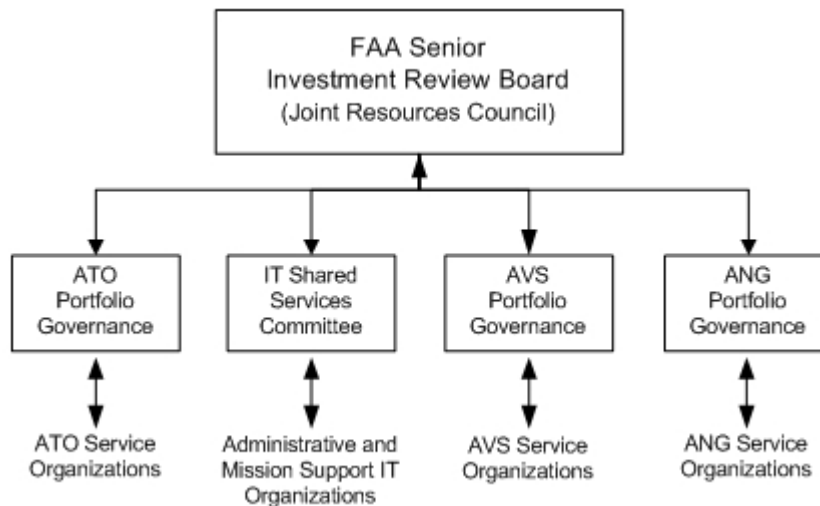
Functional Portfolio Management - The NextGen organization oversees investment packages that cut across service organizations to provide fully integrated functional capability for the National Airspace System in such areas as weather, surveillance, communications, automation, and navigation. More than one service organization may be involved with implementation and in-service management of these investment packages.

1.2.4.1.1 Portfolio Management Governance Revised 4/2013

Figure 1.2.4.1.1-1 portrays portfolio management governance within FAA.

Figure 1.2.4.1.1-1 FAA Portfolio Management Governance

(representative depiction)



The Joint Resources Council oversees the FAA investment portfolio as expressed in the enterprise architecture, FAA budget, and individual service portfolios. It evaluates the performance of all investment programs and operational assets within each service against quantified baseline measures. Planned initiatives for new investment are discussed along with proposals to remove, replace, or improve operational assets with declining performance that no longer satisfy service need or are nearing the end of their service life. The Joint Resources Council aligns and coordinates investment activity across the lines of business through annual review and approval of the enterprise architecture and agency budget submissions to Congress.

Line-of-Business portfolio governance aligns and coordinates investment activity across service organizations within a line of business or staff office. This governance ensures investment and operational resources support priority FAA strategic and performance goals; ensures there is no overlap, redundancy, or gap in service delivery; and reviews progress, tracks baseline variances, and monitors remedial planning and execution within service portfolios. Specifically, Air Traffic Organization (ATO) governance oversees, reviews, and coordinates service portfolios related to the National Airspace System and the provision of air traffic control services (e.g., terminal, en- route, and technical operations). NextGen (ANG) and Aviation Safety (AVS) governance oversee and recommend investment portfolios within their line of business.

The Information Technology Shared Services Committee reviews, oversees, and recommends administrative and mission support information technology investment portfolios.

Service organizations manage service delivery within their service area of responsibility. They evaluate service demand on a continuing basis and recommend changes to the service portfolio over

time to optimize service delivery.

1.2.4.1.2 Portfolio Management Criteria Revised 4/2013

The FAA has standard criteria for selecting, controlling, and evaluating its investment portfolio. The Joint Resources Council uses the standard criteria when evaluating new investment opportunities for inclusion in a service portfolio, when evaluating the status of on-going investment programs, and when evaluating the efficiency and effectiveness of operational assets.

The three categories of portfolio management criteria are listed below. Details for some elements of these criteria are defined elsewhere in AMS (e.g., earned value management policy is in Section 4.16 and the standard selection criteria are located in FAST).

Selection criteria: The Joint Resources Council applies the following standard quantitative and judgmental selection criteria to assess the relative contribution of investment options for inclusion in an investment portfolio: benefits; lifecycle cost; benefit to cost ratio; consistency with the enterprise architecture; impact on FAA strategic goals; and risk.

Control criteria: The FAA employs earned value management, risk management, and testing to determine how efficiently developmental, modernization, and enhancement investment programs are performing relative to plan during solution implementation. For investment programs that do not involve development, modernization, or enhancement, the FAA applies multiple control techniques such as independent review of program cost and schedule estimates; comparison of spend plans against budget authorization; comparison of actual cost and schedule results against planning estimates; and periodic program and data reviews against planning. These management controls identify and quantify variances to baseline cost, schedule, and performance measures as the basis for corrective action. Service organizations test and evaluate the products of investment programs against requirements in the program requirements document to determine whether they are satisfied.

Evaluation criteria: The FAA periodically measures the efficiency (technical quality) and effectiveness (business value) of operational assets to determine whether they should be upgraded, replaced, or removed from service. Service directorates evaluate in-service assets by means of post-implementation reviews and operational analyses. Post-implementation reviews determine whether performance, cost, schedule, and benefit goals are being attained. They provide the basis for corrective action, as well as lessons learned for improving agency investment management processes. Operational analysis determines trends in such factors as reliability, maintainability, supportability, obsolescence, and operating and maintenance costs. They are the basis for validating continued support for fielded assets or some other action such as upgrade, replacement, or removal from service.

1.2.4.2 Operational Capability Portfolios Revised 4/2013

The NextGen Management Board establishes operational capability portfolios to achieve priority NAS performance and operational goals subject to concurrence by the Joint Resources Council. When an

individual investment increment of the portfolio comes before the Joint Resources Council for investment decisions, the portfolio manager is present so decisions are made within context of the entire portfolio and overall corporate framework.

An operational capability portfolio may contain materiel (e.g., hardware or software deliverables) and non-materiel (e.g., airspace redesign or procedures) components. Each investment increment must receive an acquisition category designation from the Acquisition Executive Board and is managed through the AMS lifecycle according to its designation.

An operational capability integration plan (OCIP) approved by the executives responsible for each investment increment of an operational capability portfolio defines the critical interdependencies between investment increments, how they will be managed, and their interaction with each other and the overall portfolio. The OCIP specifies how cost, schedule, or performance issues will be communicated to other portfolio investment increments and how they will be resolved corporately for the benefit of the portfolio. A standard template is used to develop the OCIP, which includes measures for tracking and evaluating the portfolio (e.g., portfolio costs and benefits).

1.2.5 Acquisition Categories Revised 1/2021/2021

Acquisition categories ensure the appropriate level of oversight and documentation requirements are applied to each FAA investment initiative. Acquisition categories apply to all NAS investment initiatives, regardless of funding, as well as all other F&E-funded initiatives.

Investment initiatives are classified by acquisition category (new investment, software enhancement, technology refreshment portfolio, sustainment, variable quantity, facility initiative, support service contract, or research and concept maturity) and then categorized by acquisition level based on qualitative and quantitative criteria. Definitions for acquisition categories and levels are in the [AMS Table of Acquisition Categories](#), along with phase activity ~~and~~. ~~A complete list of~~ artifact requirements for the ~~early~~ phases and decision points of the AMS lifecycle management process can be found on the JRC Checklist.

The sponsoring service organization recommends an acquisition category to the Acquisition Executive Board, which makes the categorization decision and notifies the Joint Resources Council for confirmation through the JRC Executive Secretariat. The acquisition category designation is made early in concept and requirements definition and then revalidated in preparation for the investment analysis readiness decision. A standard readiness process applies to all acquisition category levels for AMS decision points.

1.2.6 Lifecycle Management Decision-Making Revised 1/2021

Table 1.2.6-1 specifies the decision authority for each AMS lifecycle management decision point. The Joint Resources Council is the FAA senior investment review board. It makes corporate-level resource decisions, including authorization and funding for investment programs, and approves changes to the enterprise architecture. The Joint Resources Council selects for approval and funding those investment

opportunities having the highest potential for contributing to FAA strategic and performance goals, improving service delivery, increasing aviation safety, lowering operating costs, or otherwise providing value to the FAA and its customers. The Joint Resources Council may approve, disapprove, modify, or terminate an investment initiative at any AMS decision point.

The Joint Resources Council approves investment resources, regardless of appropriation, in useful and manageable segments (e.g., development, demonstration, production, deployment, and operations). Each segment is managed within cost, schedule, and performance targets in the acquisition program baseline or execution plan approved by the Joint Resources at the final investment decision. The portfolio manager attends all lifecycle management decision points involving each investment increment of an operational capability to disclose the impact on an end-state capability of not approving an investment increment.

The service team or program office must complete all phase activities and artifacts to qualify for a decision to proceed to the next lifecycle management phase, but can return to the Joint Resources Council at any time including the next decision point if the recommendation is to terminate the effort.

Service teams, program offices, and executing organizations may request or the JRC may direct additional updates or decision meetings. These include status updates, strategy update sessions, and direction-requested decision meetings.

Status updates are conducted when the JRC requires information to closely monitor or oversee an investment as it progresses thorough the AMS lifecycle. These updates may be driven by key planned events or may be conducted periodically.

Strategy update sessions are conducted to inform the JRC of changes to plans for an investment that cannot be captured in a typical AMS milestone decision. Strategy update sessions can be conducted when there is a proposed change of strategy to an investment program as it progresses through the AMS lifecycle management process or after a final investment decision. Examples include changes to approved alternatives or the acquisition strategy. Strategy update sessions may include minor requests for funding that are within the CIT-delegated funding authority. Strategy update sessions cannot be used for requests for JRC approval for decisions that would impact the cost, schedule, or performance baseline of an approved program.

The service team, program office, or executing organization must notify the JRC Secretariat as soon as the updated strategy is ready for consideration. The Secretariat will place the presentation on an upcoming JRC agenda. When there are impacts to an approved program baseline resulting from the strategy update session, the program office must plan and conduct any required JRC decision meetings, such as a direction-requested decision or baseline change decision, before the program can execute any related changes.

Direction-requested decision meetings are conducted when there is a need for the JRC to approve a decision for a program that has broad implications or time-sensitive needs. Direction-requested decisions may be used for requests to approve major changes in program scope or direction or to approve large funding requests separate from or prior to a final investment decision. Examples of direction-requested briefings include requests to spend funding to fix critical NAS equipment, to

obtain early funding, or to support pressing priorities. A direction-requested decision is also used when a program needs to re-plan deliverables or interim milestones for an already approved acquisition program baseline or execution plan or to use management reserve for additional scope or new projects outside that of an already approved acquisition program baseline or execution plan.

The service team, program office, or executing organization must notify the JRC Secretariat as soon as the need is identified for a JRC decision. The Secretariat will place the presentation on an upcoming JRC meeting agenda. The JRC must approve the direction-requested decision before the program can execute the proposed approach. Templates for JRC status updates, strategy update sessions, and direction-requested decisions are available on the JRC Executive Secretariat portal.

The Air Traffic Services Committee reviews all JRC investment decisions for procurement of air traffic control equipment of \$100,000,000 or more in facilities and equipment costs.

Table 1.2.6-1 Lifecycle Management Decision-Making

Decision	Decision Body	Decision Chair
Concept and requirements definition readiness decision	FAA Enterprise Architecture Board	None
Investment analysis readiness decision	JRC	Acquisition Executive
Initial and final investment decisions (including new programs and extension of current capability)	JRC	Acquisition Executive
Status Update/Strategy Update Session/Direction Requested Decision	JRC	Acquisition Executive
Product demonstration 1	Note 2	Note 2
Production 1 and 2	Note 2	Note 2
In-service 2	Note 2	Note 2
Program baseline change	JRC	Acquisition Executive
F&E, RE&D, and OPS budget approvals	JRC	Acquisition Executive
FAA Enterprise Architecture changes	JRC	Acquisition Executive

1 Decision required for developmental products. See AMS section 2.6.1.

2 The Joint Resources Council designates the product demonstration, production and in-service decision authorities at the final investment decision. If the JRC retains any of these decisions, the chair is the Acquisition Executive.

The JRC Executive Secretariat supports the Acquisition Executive and Joint Resources Council in executing decision-making responsibilities. The Secretariat ensures service organizations have complied with AMS policy requirements before seeking JRC approval. The Secretariat also manages the JRC decision-making processes and acquisition quarterly program reviews on

behalf of the Acquisition Executive.

Service organizations make and are accountable for all service-level management decisions except those explicitly assigned otherwise by this policy or the Joint Resources Council.

1.2.7 Acquisition Quarterly Program Reviews Revised 4/2019

The Joint Resources Council reviews investment programs at acquisition quarterly program reviews to oversee cost, schedule, and technical performance using a standard set of program and performance measures (see AMS 2.1.6). These standard program measures are organized into: financial, schedule, technical, resources, program manager assessment, and external interests. The status of OMB Information Technology Dashboard milestones is also reviewed along with significant program risks. The Directors of each service organization present and discuss performance for all baselined programs and those planning programs that report to the Office of Management and Budget. The reviews use SPIRE, earned-value management (or equivalent), and enterprise architecture data to assess technical, cost, and schedule issues that may impact the ability of programs to meet baseline values in their acquisition program baseline or execution plan. The portfolio manager is present at the reviews to discuss the impact on an operational capability of cost, schedule, or performance shortfalls among capability investment increments and to present for consideration potential baseline adjustments among increments, when applicable.

1.2.8 TechStat Reviews Revised 4/2019

The FAA uses TechStat reviews when appropriate to assess underperforming investment programs. A TechStat review is an in-depth examination of program performance data from the OMB Information Technology Dashboard and SPIRE, including associated earned value management data, program management and control data, and actions for achieving the JRC- approved program baseline or execution plan. The TechStat review results in a corrective action plan to improve program execution and performance within the approved program baseline or execution plan, or results in other actions if the program is unlikely to improve as baselined. The Joint Resources Council determines whether a TechStat review will be conducted, and uses acquisition quarterly program reviews and investment decision meetings to identify those programs that will be subject to a TechStat review.

1.2.9 Cost Accounting Revised 4/2013

The FAA uses a financial management system that integrates planning, budgeting, and accounting across service organizations and appropriations. Cost accounting provides the financial basis for determining whether the FAA is meeting its performance goals within baseline costs and for determining the actual cost of service delivery.

Cost categories include all activities necessary for full lifecycle management of service delivery, including research, service analysis, concept and requirements definition, investment analysis,

solution implementation, operations and support, and decommissioning. The FAA standard lifecycle work breakdown structure, cost accounting system, and labor distribution report are aligned to use the same cost categories and activities.

1.2.10 Workforce Development and Qualification Revised 4/2013

The FAA manages its human capital as a critical investment to ensure the agency has the capabilities it needs to achieve business goals. The FAA Acquisition Workforce Council, comprised of executives with acquisition responsibilities from across FAA, sets acquisition workforce-related requirements and oversees implementation and annual update of FAA Acquisition Workforce Plan. The Director of Acquisition Policy and Oversight, who reports directly to the Chief Acquisition Officer, chairs the Acquisition Workforce Council and leads the acquisition career management function. AMS Section 5 contains policy related to the FAA acquisition career program and associated competency, training, and certification requirements for personnel in key acquisition positions.

1.2.11 Continuous Improvement Revised 7/2010

The FAA continually improves its policies and guidance to increase the safety, capacity, efficiency, and effectiveness of agency services. It does this through periodic comparison with the best practices of industry and other government organizations. The FAA integrates into its policy and guidance successful practices that save time, reduce cost, and improve customer satisfaction.

1.2.12 On-line Policy and Guidance Revised 1/2012

The FAA Acquisition System Toolset (FAST) is the official record of the Acquisition Management System. It is an information system available via the Internet at <http://fast.faa.gov>. FAST contains official lifecycle acquisition management policy and guidance, process flowcharts, contract clauses, document templates and instructions, checklists, practices, and other job-related aids for use by the workforce.

1.2.13 AMS Change Management Revised 1/2012

The Acquisition Executive Board reviews and authorizes development and implementation of acquisition management policy, guidance, processes, practices, procedures, and tools. The Acquisition Executive Board also directs and oversees the Acquisition System Advisory Group (ASAG).

The ASAG is a cross-organizational body that evaluates proposed changes to acquisition management policy and guidance to ensure:

- ☐ Changes contribute to FAA strategic goals;
- ☐ Policy is streamlined and effective;

- ❑ Best practices from industry and government are incorporated when beneficial;
- ❑ Information is consistent and compatible across functional disciplines;
- ❑ Quality is maintained and improved; and
- ❑ A consistent enterprise-wide view of policy.

The ASAG initiates changes or establishes working groups to develop new policy or guidance, as required. It also periodically reviews existing policy for effectiveness. Anyone may propose changes to acquisition management policy or guidance by submitting the change to their ASAG representative, who processes it in accordance with AMS change management procedures. Originators develop proposed changes in conjunction with primary users of the policy or guidance, or in the case of a complex change, with an ad hoc workgroup.

The Administrator approves significant changes to acquisition management policy via the Acquisition Executive. The Acquisition Executive approves all other policy changes. The Director, Acquisition Policy and Oversight approves guidance changes. Approved changes are incorporated into FAST quarterly. The acquisition policy change manager maintains FAST.

1.2.14 Legal Coordination Revised 7/2006

Service organizations coordinate with agency counsel on competitive acquisitions with an estimated total value greater than \$100,000 and on non-competitive acquisitions with an estimated total value greater than \$10,000. In addition, certain matters, described in Procurement Guidance (T1.15), require legal coordination regardless of their dollar value. FAA counsel also advises service organizations regarding legal issues and represents service organizations in litigation and other legal matters. Service organizations document the acquisition file with agency counsel's opinion and recommendations.

At Headquarters, the Assistant Chief Counsel for Procurement, and at Regions and Centers, the Region or Center Counsel, may make written exceptions to this coordination policy, adjust dollar minimums, or in appropriate cases, waive the coordination.

1.2.15 AMS Lifecycle Management Documentation Revised ~~1/2021~~7/2021

Table 1.2.15-1 summarizes the purpose, requirement, responsible organization, and approving official for required AMS lifecycle management planning and control documents. Appendix B contains detailed policy for investment program documents. Complete instructions and templates are in FAST. ~~Click here to view tailoring guidelines by acquisition category.~~

Click here to [view the official storage location of investment-related program documentation](#).

Table 1.2.15-1 AMS Lifecycle Acquisition Management Policy Planning and Control Documents

Agency-Level Strategic Planning Documents

Document	Purpose	Requirement	Responsible Organization(s)	Approving Official or Body
FAA Strategic Plan (currently FAA strategic initiatives)	Defines long-range vision and goals for the FAA Establishes top-level performance measures and multi-year performance targets for the FAA	Reviewed and updated annually	Strategy, Budget, and Planning Committee	Administrator
NAS Concept of Operations (ConOps)	Defines target operational capabilities of the National Airspace System	Reviewed annually and updated as needed	Advanced Concepts & Technology Development Office	NextGen Management Board
NAS Operational Requirements Document (ORD)	Specifies FAA operational services consistent with the NAS ConOps	Updated annually or as necessary to remain consistent with the NAS ConOps	Advanced Concepts & Technology Development Office ATO Operational Concepts and Requirements Lines of business	NextGen Management Board Concept Steering Group endorses
NAS Requirements Document	Specifies NAS functional and performance requirements derived from the NAS ORD	Updated annually or as necessary to remain consistent with the NAS ConOps and ORD	NAS Systems Engineering Services Advanced Concepts & Technology Development Office NAS Lifecycle Integration Office ATO Operational Concepts and Requirements	NextGen Management Board NAS Systems Engineering Services endorses

			Lines of business	
FAA Enterprise Architecture	Defines the FAA target architecture and the transition strategy to reach the target Establishes the basis for service organization planning Defines the strategic investment plan for the FAA	Reviewed annually and updated as needed	Chief Information Officer Assistant Administrator for NextGen	Joint Resources Council

Portfolio-Level Documents

Document	Purpose	Requirement	Responsible Organization(s)	Approving Official or Body
Operational Capability Business Case (NAS)	Defines the rough costs and benefits of an operational capability	Required as the basis for establishing a new operational capability	Advanced Concepts and Technology Development Office ATO Program Management Office Investment Analysis & Planning Service organizations	NextGen Systems Engineering & Modeling
Operational Capability Integration Plan (NAS)	Defines the relationships, responsibilities, and agreements between all organizations contributing to the achievement of an	Preliminary plan required upon formation of a capture team Final plan required when all capability	Portfolio manager Capture team	NextGen Management Board

	operational capability	elements have entered concept and requirements definition		
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Program-Level Documents

Document	Purpose	Requirement	Responsible Organization(s)	Approving Official or Body
Acquisition Program Baseline or Execution Plan	Establishes the performance, cost, and schedule baselines for an investment program segment	Required for the final investment decision	Investment analysis team headed by the service organization with the mission need	Chair of the Joint Resources Council Designated ACAT reviewers
Program Requirements Document	Defines the operational framework and performance requirements an investment program must achieve	Preliminary document at the investment analysis readiness decision Revised document at the initial investment decision Final document at the final investment decision	Implementing service organization Operating service organization	ATO: Vice Presidents of the executing service organization during solution implementation and the operating service organization Non-ATO: Second-level executive of the executing service organization during solution implementation
Business Case	Provides the analytical and quantitative basis for investment decisions	Initial business case at the initial investment decision Final business case at the final investment decision.	Investment analysis team, headed by the service organization with the mission need	ATO: Vice President of the implementing service organization Non-ATO: Director of the implementing service

				organization Designated ACAT reviewers
Implementation Strategy and Planning Document	Defines overall implementation strategy and planning for an investment program	ISPD is required for the final investment decision Reviewed annually	Implementing service organization Operating service organization	Chair of the Joint Resources Council ATO: Chief Operating Officer / Deputy Chief Operating Officer Non-ATO: Second-level executive of the organization executing during solution implementation Stakeholder organizations approve specific sections per the ISPD template Updated sections approved at the same level
Program Management Plan	Defines how the implementation strategy of the investment program will be executed during solution implementation	PMP required for the final investment decision Reviewed annually	Implementing service organization	Director, implementing service organization Updates approved at the same level
Test and Evaluation Master Plan	Describes the test strategy and scope of a test program Defines the test and evaluation	Preliminary document at initial investment decision Initial document at the	Test and evaluation service organization(s)	Director of the test service organization Non-ATO: Second level

	methodologies that will be used to assess safety hazard controls and mitigations and security risks	final investment decision Final document after contract award or as defined in the ISPD		executive of the organization executing during solution implementation For Mission Support IT programs: AIT, Solution Delivery Service
OMB Major IT Business Case	Budgetary document required by OMB for designated investment programs	Preliminary document at the initial investment decision Final document at the final investment decision	Investment analysis team Implementing service organization	ATO: Chief Operating Officer Non-ATO: Associate or Assistant Administrator of the line of business or staff office Acquisition Executive Chief Financial Officer Chief Information Officer Deputy Administrator concurs

1.2.16 OMB Budget Documentation **Revised 1/2021**

The OMB Major IT Business Case is a budget request document updated yearly and sent to Office of Management and Budget during the annual budget cycle for designated capital investment programs. Service organizations prepare the OMB Major IT Business Case, which is independently reviewed and scored by the Office of Information & Technology, Enterprise Program Management Service, Budget, Program Control & CPIC Branch. The Chief Information Officer, Chief Financial Officer, and Acquisition Executive approve the OMB Major IT Business Case for designated information

technology capital investments before submission to OMB. The Acquisition Executive and Chief Financial Officer approve OMB Major IT Business Cases for designated non-information technology capital investments.

1.2.17 National Acquisition Evaluation Program Added 7/2007

The National Acquisition Evaluation Program provides oversight of FAA acquisition management through the evaluation of contracts, programs, and acquisition management practices. The goal is to ensure consistent implementation of AMS policy and guidance by FAA offices and to identify innovative processes or opportunities for improvements. Recommendations based on findings are tracked to closure to promote continuous process improvement and procurement integrity.

1.2.18 Earned Value and Baseline Management Revised 4/2019

The Office of Management and Budget (OMB) directs all Government agencies to use an earned value management (EVM) system that complies with the industry EVMS Standard, American National Standard Institute, Electronic Industries Alliances-748, for capital investment programs involving development, modernization, or enhancement. Service organizations comply with this directive, which includes an integrated baseline review of cost and schedule projections within six months of contract award or baseline approval. The earned-value management focal point reports quarterly the earned-value status of major investment programs to the Joint Resources Council.

Service organizations manage investment programs during solution implementation within controlled acquisition program baselines or execution plans approved at the final investment decision. They take action to correct negative variance from any cost, schedule, or performance baseline measure. Negative variances that exceed 10 percent must be reported quarterly to the Joint Resources Council, along with an explanation of the cause(s), impact on service delivery, and a recovery strategy. The Administrator must notify the Congress of any program cost or schedule variance exceeding 50 percent and must either terminate the activity or justify why it should be continued and provide a recovery plan. When the Joint Resources Council determines an investment program cannot recover from a degenerating negative baseline variance, it may elect to rebaseline the effort by adding resources or changing its scope or schedule, or it may decide to terminate the activity.

Section Revised: 2.4 – Concept and Requirements Definition

Acquisition Management Policy - (~~4/2021~~7/2021)

2.4 Concept and Requirements Definition Revised ~~4/2021~~7/2021

2.4.1 What Must Be Done Revised ~~4/2021~~7/2021

2.4.2 Outputs and Products Revised ~~4/2021~~7/2021

2.4.3 Who Does it? Revised 1/2021

2.4.4 Who Approves? Revised 1/2021

2.4.5 Investment Analysis Readiness Decision Added 4/2013

2.4.5.1 Entrance Criteria Revised ~~4/2021~~7/2021

2.4.5.2 Joint Resources Council Actions Revised 1/2021

2.4 Concept and Requirements Definition Revised 4/2021-7/2021

All investment opportunities that require funding outside the scope of an approved acquisition program baseline or execution plan undergo concept and requirements definition. This includes upgrades or replacements to existing capability without approved investment funding.

Activity during concept and requirements definition achieves the following primary objectives:

- Translate priority operational needs in the enterprise architecture into preliminary requirements and a solution concept of operations for the capability needed to improve service delivery;
- Quantify the service shortfall in sufficient detail for the realistic estimation of potential costs; and
- Identify and define the most promising alternative solution(s) able to satisfy the service need, one of which must be consistent with the conceptual framework in the enterprise architecture.

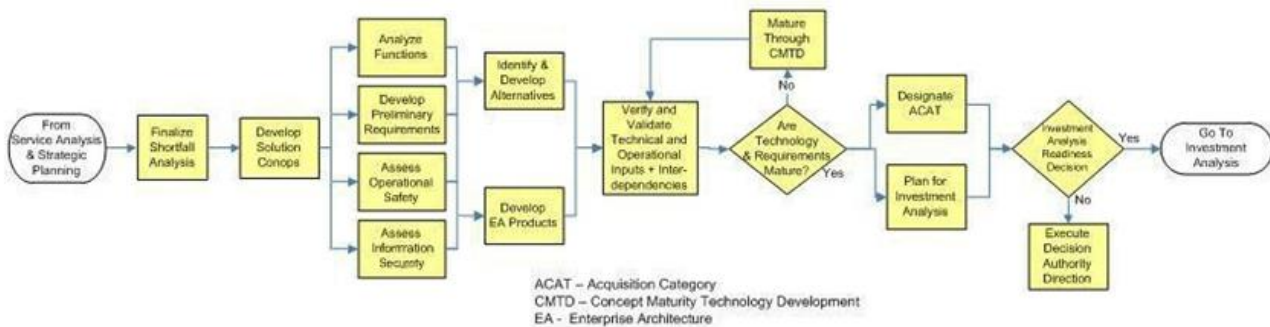
Concept and requirements definition is authorized to begin when the FAA Enterprise Architecture Board determines that action must be taken to address a priority service or infrastructure need in an enterprise architecture roadmap. These needs typically relate to existing or emerging shortfalls in the “as is” architecture or to 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 FAA Enterprise Architecture Board and approval by the Joint Resources Council.

The FAA may undertake research activity during concept and requirements definition 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 service need.

When the investment initiative entering concept and requirements definition is an element of an operational capability (NAS only), the management team responsible for achieving the operational capability participates in and contributes to CRD activity. The management team is populated with representatives from each service team or program office that will provide an increment of the overall operational capability. These team members ensure all preliminary alternatives emerging from concept and requirements definition for each investment increment fit within the strategy for obtaining the capability and can provide the necessary performance and functionality.

Figure 2.4-1 defines the key activities of concept and requirements definition for a New Investment Level 1 acquisition category, which is the most complex and highest risk investment initiative undertaken by the FAA. For other acquisition categories, these activities are adjusted to require what is needed for each individual initiative using the ACAT table as the basis. As an example, a Sustainment initiative to replace obsolete processors in a radar system with a form-fit-function equivalent does not impact the solution concept of operations or performance requirements of the operational asset and would not need to develop those artifacts. For a complete list of required artifacts, by ACAT and AMS phase/decision point, refer to the JRC Checklist.

Figure 2.4-1 Key Activities of Concept and Requirements Definition



2.4.1 What Must Be Done Revised 4/2024/7/2021

- **Convene Collaboration Team.** A collaboration team of key stakeholder organizations and the program office or service organization with the need is formed at the start of CRD phase activity to facilitate determination of the appropriate acquisition category for each initiative and to foster teamwork and shared goals during the conduct of concept and requirements definition. The collaboration team typically has representatives from the program office (or service team) proposing the initiative; key stakeholder organizations such as the NAS Systems Engineering Office, ATO Technical Operations, safety, information security, and testing; and the AMS policy team. The collaboration team is also available throughout execution of concept and requirements definition to resolve issues that are delaying or affecting the quality of the work effort.
- **Finalize Shortfall Analysis.** The service organization or program office updates, refines, and quantifies the preliminary shortfall identified during service analysis in sufficient detail to serve as the basis for (1) clearly understanding the nature, urgency, and impact of the service need; (2) defining preliminary requirements; (3) determining realistic and economic alternative solutions; and (4) quantifying likely program costs and benefits. Results are recorded in the final shortfall analysis report.
- **Determine Preliminary ACAT.** The collaboration team evaluates the complexity, risk, political sensitivity, safety, ~~and security~~, and cost associated with the investment initiative to recommend the appropriate acquisition category. The program office or service team prepares a preliminary ACAT determination request based on this evaluation and presents it to the Acquisition Executive Board for ~~approval~~ acceptance.
- **Analyze Functions.** The service organization or program office translates stakeholder needs in the shortfall analysis, solution concept of operations, and NAS Requirements Document (NAS only) into high-level functions that must be obtained to achieve the desired service outcome. These are then decomposed into sequentially lower level functions. For NAS investment initiatives, this decomposition may have been done during service analysis when operational improvements and sustainments in the NAS ConOps were decomposed into functional and performance requirements and investment increments.
- **Develop Solution Concept of Operations.** The solution concept of operations describes how users will employ the new capability within the operational environment and how it will satisfy the service need. The solution ConOps defines the roles and responsibilities of key participants (e.g.,

controllers, maintenance technicians, pilots); explains operational issues that system engineers must understand when developing requirements; identifies procedural issues that may lead to operational change; and establishes a basis for identifying alternative solutions and estimating their likely costs and benefits. Multiple solution concept of operations may be required if more than one alternative is proposed and they differ significantly from each other.

- **Develop Preliminary Requirements.** The service organization or program office prepares preliminary requirements in consultation with the NAS Systems Engineering Services organization (NAS) or the Office of Information & Technology, Solution Delivery Service, Solution Strategy Division, EA Branch (Mission Support). Preliminary requirements specify only function and performance, and do not define a solution. They are expressed such that the degree to which different solutions satisfy them can be measured and evaluated. Research and analysis or even prototyping may be necessary to define preliminary requirements adequately. When the investment increment is an element of an operational capability, preliminary *program* requirements must be derived from and be traceable to overall operational capability requirements, when applicable.
- **Develop Alternatives.** The service organization or program office surveys the marketplace to identify feasible and economic solutions to the service need or shortfall. Both materiel and non-materiel alternatives can be evaluated. When multiple solutions are identified, one candidate solution must be the hypothesized "best" alternative in the enterprise architecture. Key factors are safety, security, operational cost efficiencies, technological maturity, and impact on the workforce and enterprise architecture. When multiple alternatives are identified, they should be qualitatively different from each other. Low-risk, cost-effective, and operationally suitable commercial or non-developmental solutions are preferred. Alternative(s) may not meet 100 percent of preliminary requirements. Rough lifecycle costs are developed for each alternative and compared to the monetized shortfall as a basis for determining which should be retained or eliminated from consideration. Rough lifecycle costs are also calculated for sustaining the legacy case in service. When a new capability involves information processing and storage, use of cloud computing is considered and the results of the cloud suitability assessment are documented.
- **Assess Information System Security.** The service organization or program office assesses each proposed alternative solution to determine information security: (1) risk factors, (2) requirements for the preliminary program requirements document, (3) rough cost estimates to mitigate security risk for each alternative solution, and (4) a rough estimate of annual operational benefits to be gained from implementing security requirements.
- **Assess Operational Safety.** The service organization or program office works with ATO Safety and Technical Training to assess the operational safety of each alternative solution. This assessment identifies, assesses, and documents operational hazards and risks. No alternative is pursued whose operational risk cannot be mitigated to an acceptable level at affordable cost.
- **Develop Enterprise Architecture Products.** The service organization or program office engages with the appropriate architecture organization (NAS or Mission Support) to develop required products, views, and amendments. These include the operational (business rule) and systems (engineering) view families.
- **Verify and Validate Technical and Operational Work Products.** The service organization or program office uses the FAA AMS Lifecycle Verification and Validation Guidelines to evaluate whether key work products produced during concept and requirements definition are sufficiently complete and mature as the basis for proceeding to the investment analysis readiness decision.

This includes the solution ConOps, preliminary requirements document, safety and security risk assessments, architecture products, and interdependencies with other investment increments.

- **Are Technology and Requirements Mature?** NAS Systems Engineering Services (NAS) or Office of Information & Technology, Solution Delivery Service, Solution Strategy Division, EA Branch (Mission Support) evaluates preliminary requirements and the technology base to ensure sufficient maturity of singular or multiple solutions for further progression in the AMS lifecycle management process. The objective is to have only low-risk investment initiatives entering investment analysis and solution implementation. Additional research and development may be prescribed when technological risk is too high or when requirements are not mature - or the investment initiative may be deferred or terminated.
- **Conduct Research or Analysis.** For NAS initiatives, the Technical Review Board recommends further research or analysis when technology or requirements are not sufficiently mature. Prescribed activity may take the form of simulation, analysis, operational prototyping, or field demonstration in a controlled operational environment. See the Guidelines for Concept Maturity and Technology Development in the FAA Acquisition System Toolset for more information. For Mission Support initiatives, the Architecture Review Board defines what analytical activity may be needed.
- **Validate Acquisition Category.** The collaboration team either concurs with the preliminary ACAT designation or recommends a different designation based on the results of concept and requirements definition. The concurrence or recommendation is vetted through NAS Systems Engineering Services for NAS initiatives or the Office of Information & Technology, Solution Delivery Service, Solution Strategy Division, EA Branch for Mission Support initiatives and submitted to the Acquisition Executive Board.
- **Plan for Investment Analysis.** The plan for investment analysis: (1) defines scope and assumptions; (2) describes the singular or multiple alternatives and their associated rough lifecycle costs; (3) describes planned activities and specifies how tasks will be accomplished; (4) defines output and exit criteria; (5) establishes a schedule for completion; (6) defines roles and responsibilities of participating organizations; and (7) estimates resources needed to complete the work. By signing the plan for investment analysis, the organizations that will conduct the analysis agree to provide the resources necessary to complete the work. This activity includes development of the investment analysis readiness decision package and pre-briefings to decision-makers

2.4.2 Outputs and Products Revised 4/2021/7/2021

Refer to the ACAT Table ~~found~~ on the FAST website ([link](#)) and the JRC checklist for required outputs and products ~~for each~~by decision point for ~~New Investment Level~~ All ACATs.

2.4.3 Who Does it? Revised 1/2021

Organization(s)	Responsibilities
Collaboration team	□ Facilitates determination of the appropriate acquisition category for each investment initiative and fosters cooperation and common goals among key stakeholders of concept and requirements

	definition ☐ Assists in the resolution of issues delaying or affecting the quality of the work effort during concept and requirements definition
Implementing service Organization or program office	☐ Leads and completes all activities and outputs of concept and requirements definition unless otherwise specified in the plan for CRD ☐ Prepares the acquisition category designation request
NAS Systems Engineering Services Office (ANG-B), Office of Information & Technology, Solution Delivery Service, Solution Strategy Division, EA Branch (Mission Support)	☐ Provides engineering services in such areas as specialty engineering, safety and security assessments, and architecture products ☐ Validates technical and operational products of CRD ☐ Assesses maturity of solution technology and requirements
NAS Lifecycle Integration Office (ANG-D), Program Management Office, lines of business, operating service organization, Office of Information & Technology, Solution Delivery Service, Solution Strategy Division, EA Branch (Mission Support)	☐ Assists the implementing service organization or program office in completing CRD activities ☐ Maintains guidance and acquisition aids for service analysis and concept and requirements definition
Operational capability management team (NAS only)	☐ Monitors and oversees CRD activity when the investment initiative is an element of an operational capability ☐ Ensures alternatives can provide the performance and functionality necessary to achieve the overall operational capability

Detailed roles and responsibilities of participating organizations for each CRD activity and output or product are found in the Service Analysis and Concept and Requirements Definition Guidelines.

2.4.4 Who Approves? Revised 1/2021

Artifact	Approval Authority
Acquisition category	Acquisition Executive Board recommends, FAA Acquisition Executive approves, Joint Resources Council concurs

CRD outputs and products	Approval authorities are found in the Service Analysis and Concept and Requirements Definition Guidelines.
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2.4.5 Investment Analysis Readiness Decision Added 4/2013

The investment analysis readiness decision determines whether the solution ConOps, preliminary requirements, architecture products and amendments, and preliminary alternatives are sufficiently mature to warrant entry into investment analysis. The decision is made within context of all ongoing and planned investment activities to sustain and improve service delivery. It ensures proposals for new investment are consistent with overall corporate needs and planning.

2.4.5.1 Entrance Criteria ~~1/2021~~7/2021

The required artifacts ~~required~~ for all acquisition categories ~~at the investment analysis readiness decision~~ are located ~~in the ACAT Table found on the FAST website (link)~~. JRC checklist.

2.4.5.2 Joint Resources Council Actions Revised 1/2021

The Joint Resources Council makes the decision to enter investment analysis when it determines:

- ☐ The initiative is consistent with agency strategic goals and plans;
- ☐ Investment action needs to be taken now; and
- ☐ The required artifacts and activities of concept and requirements definition have been completed, validated, and verified.

Section Revised: 2.5 – Investment Analysis

Acquisition Management Policy - (~~4/2021~~7/2021)

2.5 Investment Analysis Revised 1/2021

2.5.1 Initial Investment Analysis Revised 1/2021

2.5.1.1 What Must be Done Revised 1/2021

2.5.1.2 Outputs and Products Revised ~~1/2021~~7/2021

2.5.1.3 Who Does It? Revised 1/2021

2.5.1.4 Who Approves? Revised 1/2021

2.5.1.5 Initial Investment Decision Revised ~~1/2021~~7/2021

2.5.1.5.1 New Investment I Added 1/2021

2.5.1.5.2 Research and Concept Maturity II (Prototype Demonstration)

~~Added 01/2021~~Revised 7/2021

2.5.2 Final Investment Analysis Revised 1/2021

2.5.2.1 What Must be Done Revised 1/2021

2.5.2.2 Outputs and Products Revised ~~1/2021~~7/2021

2.5.2.3 Who Does It? Revised 1/2021

2.5.2.4 Who Approves? Revised ~~1/2021~~7/2021

2.5.2.5 Final Investment Decision Revised 1/2021

2.5 Investment Analysis Revised 1/2021

Investment analysis is a disciplined process that supports sound capital investment decisions. Investment analysis is conducted in the context of the enterprise architecture and FAA strategic goals and objectives. Such plans serve as guides to prioritize current and future investment analyses. Investment analyses, in turn, help to refine and mature those plans by providing decision-makers with a clear picture of investment opportunities and their risks and value.

NAS and Mission Support roadmaps in the enterprise architecture establish when an operational capability or service need 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 timeliness, complexity, and size of the investment analysis with the rigorous development of quantitative data needed by the Joint Resources Council to make an informed investment decision.

Affordability and accurate cost and schedule estimates are important factors in the decision to approve a new investment program. The results of investment analysis help the Joint Resources Council determine which potential investments will improve operations across the air transportation system and by how much. The outcome of investment analysis can be used to make individual, portfolio, and prioritization decisions.

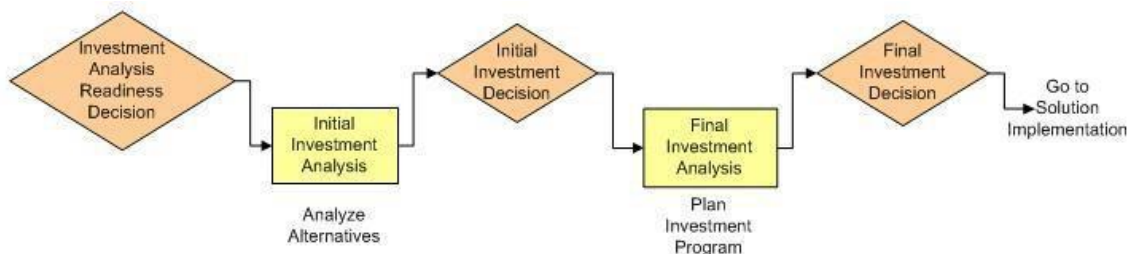
When the investment initiative is an element of an operational capability (NAS only), the management team for the capability (if established) participates in and contributes to investment analysis activity. The management team is populated with representatives from each service team or program office that will provide an increment of the overall operational capability. They ensure the alternative emerging from investment analysis for each increment fits within the strategy for obtaining the operational capability and can provide the necessary performance and functionality.

All proposed investments must answer the same following questions:

- ☐ What problem needs to be addressed or resolved?
- ☐ What is the range of alternatives that could address this problem?
- ☐ What are the costs, benefits, and risks associated with alternative solutions to the problem?
- ☐ Based on the above, what is the recommended course of action?

Figure 2.5-1 illustrates the phases and decision points of investment analysis. Initial investment analysis evaluates alternative solutions to service needs, and recommends the most promising for further development. Final investment analysis develops detailed cost and benefits estimates, detailed plans, and final requirements for the most promising alternative.

Figure 2.5-1 Phases and Decision Points of Investment Analysis



The level of activity required during investment analysis is based on the acquisition category assigned to the investment initiative. In general, the larger and more complex the initiative, the greater the effort required during investment analysis.

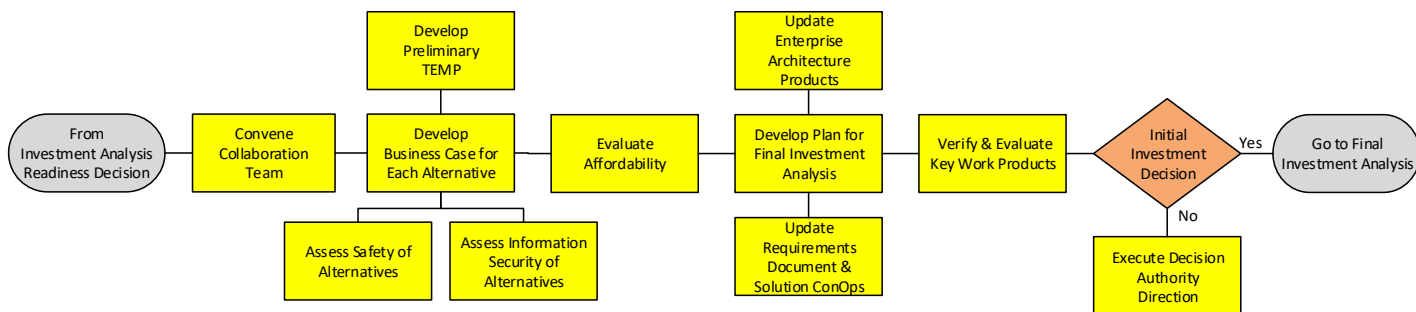
Very complex investment programs are structured into manageable, lower-risk segments and approved incrementally by the Joint Resources Council. When sequential segments are required to fully implement an investment opportunity, the program office (or service organization) conducts final investment analysis for each segment and brings planning and baseline documents to Joint Resources Council for approval.

2.5.1 Initial Investment Analysis Revised 1/2021

2.5.1.1 What Must Be Done Revised 1/2021

Figure 2.5.1-1 defines the key activities that must be completed during initial investment analysis for the New Investment Level I acquisition category which is the most complex and highest risk initiative undertaken by FAA.

Figure 2.5.1.1-1 Key Activities of Initial Investment Analysis



- **Convene Collaboration Team.** The collaboration team convenes to agree on the goals and outcomes of initial investment analysis and to identify participants who will work together to facilitate and contribute to the work effort. The collaboration team will typically have representatives from the program office (or service team) proposing the initiative; key stakeholder organizations such as Investment Analysis and Planning, ATO Technical

Operations, safety, information security, and testing; and the AMS policy team. The collaboration team is also available during execution of initial investment analysis to resolve issues that are delaying or affecting the quality of the work effort.

- **Develop Preliminary Test & Evaluation Master Plan.** The test service organization develops a preliminary test and evaluation master plan consistent with the initial requirements document to provide sufficient detail to define the investment program test strategy and scope prior to the initial investment decision.
- **Develop Business Case for each Alternative.** The business case focuses on key factors such as cost, benefits, schedule, and risk associated with each alternative. The objective is to determine which alternative demonstrates the most value and worth to the FAA, aviation industry, and flying public at acceptable cost and risk. When the investment initiative is an increment necessary to achieve an operational capability, the impact on achieving the capability is also a key factor of the business case. See the Business Case Analysis Guidance for more details.
- **Assess Safety of each Alternative.** The system safety organization assists in determining safety risks and the likely cost of mitigation efforts for each alternative. Results are recorded in a comparative safety analysis report in accordance with the Safety Risk Management Guidance for System Acquisitions.
- **Assess Information Security of each Alternative.** The Information Systems Security organization assists in determining information security risks and the likely cost of mitigation efforts for each alternative. Results are recorded in accordance with the Information Systems Security Guidance for System Acquisition.
- **Evaluate Affordability.** FAA Finance assesses the budget impact and relative contribution to agency goals of each alternative against other ongoing and proposed investment programs in the FAA financial baseline. The impact assessment may shape subsequent deliberations of the investment analysis team.
- **Develop Plan for Final Investment Analysis.** The plan defines work activities, resources, schedules, roles and responsibilities, and products required for final investment analysis. It also specifies exit criteria and a planning date for the final investment decision. See Investment Analysis Plan Guidance and Template for more details.
- **Update Enterprise Architecture Products and Views.** Should the results of initial investment analysis and the determination of the most beneficial and affordable alternative affect the enterprise architecture, the program office (or service organization) prepares the necessary products and views and submits them to the FAA Enterprise Architecture Board for review and approval.
- **Update Requirements Document and Solution ConOps.** The program office (or service team) updates the Program Requirements Document and Solution ConOps to reflect outcomes and trade-off decisions made during initial investment analysis and to reflect the anticipated functional and performance capability of the alternative determined to be most beneficial and affordable from the analysis.
- **Develop, Verify, and Validate Key Work Products.** Validation of the business case is described in the Business Case Evaluation and Assessment Guide. Verification and validation for all other documentation is described in the FAA AMS Lifecycle Verification and Validation Guidelines. The full list of work products that may be required for the initial investment decision is found on the JRC Secretariat website.

2.5.1.2 Outputs and Products **Revised 1/2021**

The principal output from initial investment analysis is information that enables the Joint Resources Council to select the alternative that best satisfies agency functional and performance requirements and offers the greatest value to the FAA and its customers. The following are [a partial list of](#) required products:

- Updated program requirements document;
- Business case for each alternative;
- Safety and information security assessment for each alternative;
- Updated enterprise architecture products and views (if the recommended alternative requires change to the enterprise architecture); and
- Plan for final investment analysis.

~~Key work~~ [For a complete list of required products, refer to the JRC checklist.](#)

[Work](#) products are verified and validated according to FAA AMS Verification and Validation Guidelines before the initial investment decision.

2.5.1.3 Who Does It? **Revised 1/2021**

Organization	Responsibilities
Collaboration team	• Facilitates agreement on the goals and outcomes of initial investment analysis and identifies participants who will work together and contribute to the work effort • Assists in resolving issues delaying or affecting the quality of the work effort during initial investment analysis.
Investment analysis team	• Performs work activities and prepares the outputs and products of initial investment analysis
Implementing service organization or program office	• Typically leads the investment analysis team • Works with stakeholder organizations to ensure their essential needs are integrated into the analysis of alternative solutions
Investment Planning and Analysis organization	• Verifies and validates the business case for both NAS and Mission Support initiatives • Provides standards, guidance, training, and consulting services to ensure consistency in the conduct of investment analysis • Provides analysts who may lead, conduct, or review business cases as agreed in the investment analysis plan
Stakeholder organizations	• Represent their organizations on the investment analysis team and contribute to the products and outcomes of initial investment analysis
Capability management team (NAS only)	• Ensures the recommended alternative emerging from initial investment analysis can provide the performance and functionality necessary to obtain the overall operational capability (when the initiative is a building block of an operational capability)

2.5.1.4 Who Approves? Revised 1/2021

Approval authorities for the outputs and products of initial investment analysis are found in the document template for each artifact located on the initial investment analysis page of the FAST website.

2.5.1.5 Initial Investment Decision Revised ~~1/2021~~7/2021

The Joint Resources Council makes the initial investment decision. The decision applies to the following acquisition categories:

- New Investment Level I
- Research and Concept Maturity II (Prototype Demonstration)

2.5.1.5.1 New Investment Level I Added 1/2021

For a New Investment Level I initiative, the Joint Resources Council selects the best alternative for the required capability or rejects all alternatives and specifies what action is needed. It uses the following criteria when making the investment decision:

- Lifecycle costs;
- Benefits;
- Risk;
- Benefit to cost ratio;
- Consistency with the FAA enterprise architecture; and
- Impact on FAA strategic goals.

If the Joint Resources Council approves an alternative, it:

- Approves entry into final investment analysis;
- Approves funding for any analytical or developmental work related to the selected alternative; and
- Designates a service organization or program office to lead final investment analysis.

Alternatives can be rejected if the technology is not mature, when requirements are not sufficiently defined, or when relative costs and benefits of the initiative are not favorable. If rejected, the Joint Resources Council can approve such actions as research, further analysis, development, or termination.

When the initial investment decision involves an investment initiative that is an element of an operational capability, the capability portfolio manager attends the JRC decision meeting to explain the interrelationships among capability elements and the impact on the overall operational capability of not approving the initiative.

2.5.1.5.2 Research and Concept Maturity II (Prototype Demonstration) ~~Added 01/2021~~Revised 7/2021

For a Prototype acquisition category, the Joint Resources Council may:

- Approve the prototype concept to continue to final investment analysis;
- Continue prototype development and evaluation;
- Continue to initial investment analysis with the prototype concept as an alternative for a New Investment initiative; or
- Terminate the initiative.

The Joint Resources Council uses the following criteria when determining the course of action following completion of the prototype demonstration:

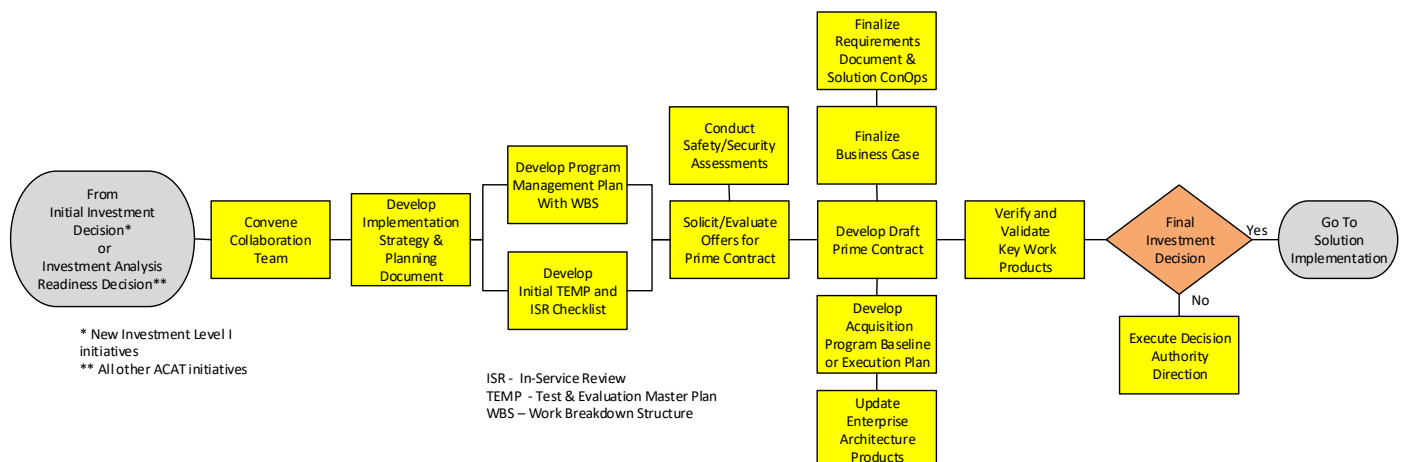
- Cost/risk/performance assessment;
- Safety assessment;
- Information security assessment;
- Maturity of the technology base;
- Maturity of functional and performance requirements; and
- Degree to which the demonstrated capability satisfies priority agency service needs.

2.5.2 Final Investment Analysis **Revised 1/2021**

2.5.2.1 What Must Be Done **Revised 1/2021**

Figure 2.5.2.1-1 defines the key activities of final investment analysis for a New Investment Level 1 acquisition category, which is the most complex and highest risk investment initiative undertaken by the FAA. For other acquisition categories, these activities are adjusted based on artifact requirements in the ACAT table. The flow of activities in Figure 2.5.2.1-1 is intended as a logical guide for the program office or service organization as they complete the work activities of final investment analysis. In actual practice, the outputs and products of final investment analysis are interdependent and will evolve and mature over time during the conduct of phase activities. However, all must be finalized, verified, validated, and have the required approvals before the final investment decision.

Figure 2.5.2.1-1 Key Activities of Final Investment Analysis



- **Convene Collaboration Team.** The collaboration team convenes to agree on the goals and outcomes of final investment analysis and to identify participants who will work together to facilitate and contribute to the work effort. The collaboration team will typically have representatives from the program office (or service organization) proposing the initiative; key stakeholder organizations such as Investment Analysis and Planning, ATO Technical Operations, safety, information security, and testing; and the AMS policy team. The collaboration team is also available during execution of final investment analysis to resolve issues that are delaying or affecting the quality of the work effort.
- **Develop Implementation Strategy and Planning Document.** The program office (or service organization) develops a detailed strategy for procuring, implementing, and supporting the solution over its service life with input from key stakeholder organizations. This strategy is the foundation for a request for offer to industry for procurement of the solution and all other program planning and tasking artifacts. Planning is recorded in the implementation strategy and planning document which must be completed and signed before the final investment decision.
- **Develop Program Management Plan with Work Breakdown Structure.** The program office (or service organization) uses the FAA standard work breakdown structure and in-service review checklist as the basis for preparing the program management plan for implementing the solution. This plan specifies how the program office (or service organization) will execute the implementation strategy in the ISPD and defines the roles and responsibilities of key participating organizations. Planning must cover all aspects of obtaining the solution so costs and schedules are accurately reflected in resource documents and the acquisition program baseline or execution plan. The program work breakdown structure (Section 3 of the FAA standard work breakdown structure) is a required attachment to the program management plan.
- **Develop Initial Test & Evaluation Master Plan and In-Service Review Checklist.** The test organization develops an initial test and evaluation master plan consistent with the final requirements document, program management plan and draft prime mission product contract. The TEMP describes the test program for the initiative, establishes the basis for test requirements in the request for offer to industry, and establishes the basis for test costs and schedules in the acquisition program baseline or execution plan. The in-service decision authority organization works with the program office and key stakeholder organizations to develop the in-service review checklist. Completion of checklist items is a foundational basis for making the in-service decision.
- **Solicit Offers For Prime Contract(s).** The program office (or service organization) with assistance from key stakeholder organizations develops and releases a request for offers and then evaluates industry responses for completeness, technical suitability, and compliance with the statement of work. The most acceptable industry response forms the basis for the final business case, final requirements document, final planning, and the acquisition program baseline or execution plan for the initiative.
- **Conduct System Safety and Information Security Assessments.** The program office (or service organization) works with the system safety organization to develop a preliminary system safety hazard analysis for the proposed solution in support of the final investment decision. It also works with the information systems safety organization to conduct and document a final information security assessment of the proposed solution.
- **Finalize Requirements Document and Solution Concept of Operations.** The program

office (or service organization) updates the program requirements document and solution concept of operations as necessary to be consistent with the draft contract to be awarded to the prime mission product contractor.

- ❑ **Finalize Business Case.** The investment analysis organization and program office (or service organization) work together to finalize the business case and supporting documents according to templates located on the final investment analysis web page in FAST. The final business case must take into consideration the costs and schedules from the prime contractor proposal selected for award.
- ❑ **Develop Draft Prime Contract.** The program office (or service organization) develops the draft contract to be awarded to the prime mission product contractor after the Joint Resources Council approves the initiative for implementation and funding at the final investment decision. Key stakeholder organizations assist by providing statement of work paragraphs and contract deliverable descriptions within their domains of responsibility (e.g., logistics, test and evaluation, information security, safety, configuration management, training, and system engineering).
- ❑ **Develop Acquisition Program Baseline or Execution Plan.** The acquisition program baseline or execution plan establishes the cost, schedule, and key performance baselines for the investment initiative. It is the agreement between the program office (or service organization) and the Joint Resources Council concerning the performance that will be obtained and the timeframe and resources agreed to by the agency.
- ❑ **Update Enterprise Architecture Products.** The program office (or service organization) works with the enterprise architecture organization to produce the products and views required for the final investment decision and submits them to the FAA Enterprise Architecture Board for review and approval.
- ❑ **Verify and Validate Key Work Products.** Investment Planning and Analysis validates the business case as described in Business Case Evaluation and Assessment Guide. Verification and validation for all other program work products is done according to the FAA AMS Lifecycle Verification and Validation Guidelines. The full list of work products that may be required for the final investment decision is found in the JRC Checklist located on the JRC Secretariat website.

In all cases, organizations conducting investment analysis must apply the processes and guidelines located in the investment analysis section of FAST.

2.5.2.2 Outputs and Products Revised 1/2021~~7/2021~~

The principal output of every final investment analysis is detailed planning for the alternative selected for implementation. ~~The~~A partial list of required outputs and products for a Level 1 New Investment ~~are listed~~is provided below. Refer to the ~~ACAT table (link)~~JRC checklist for ~~outputs~~a complete list for this and ~~products~~all for other acquisition categories.

- Final implementation strategy and planning document;
- Program management plan with program work breakdown structure;
- Initial test and evaluation master plan;
- In-service review checklist;

- Solicitation for prime contract;
- Preliminary system safety hazard analysis;
- Final information security assessment;
- Final program requirements document with concept of operations;
- Final business case;
- Updated architecture products and views;
- Draft prime mission product contract; and
- Acquisition program baseline or execution plan.

Key work products are verified and validated according to the FAA AMS Verification and Validation Guidelines before the final investment decision.

2.5.2.3 Who Does It? Revised 1/2021

Organization	Responsibilities
Collaboration Team	☐ Facilitates agreement on the goals and outcomes of final investment analysis and identifies participants who will work together and contribute to the work effort ☐ Assists in resolving issues delaying or affecting the quality of the work effort during final investment analysis.
Investment analysis team	☐ Performs the activities and prepares the outputs and products of investment analysis
Implementing service organization or program office	☐ Typically leads the investment analysis team ☐ Works with stakeholder organizations to ensure their needs are integrated into the solution especially the draft prime mission product contract
Investment Planning and Analysis	☐ Verifies and validates the business case for both NAS and Mission Support investments ☐ Provides standards, guidance, training, and consulting services to ensure consistency in the conduct of investment analyses ☐ Provides analysts who may lead, conduct, or review business cases as agreed to in the investment analysis plan
Stakeholder organizations	☐ Represent their organizations on the investment analysis team and contribute to the products and outcomes of final investment analysis
Capability management team (NAS only)	☐ Ensures the solution emerging from final investment analysis can provide the performance and functionality necessary to obtain the overall operational capability (applies when the initiative is a building block of an operational capability)
Test service organization	☐ Develops the initial test and evaluation master plan during final investment analysis

2.5.2.4 Who Approves? Revised ~~1/2021~~7/2021

Approval authorities for the outputs and products of final investment analysis are found in document template for each artifact located on the final investment analysis page of the FAST website-, [as well as the JRC checklist](#).

2.5.2.5 Final Investment Decision Revised 1/2021

The Joint Resources Council makes the final investment decision except in the case of Tech Refresh Portfolio sub-ACAT 2 initiatives for which the Stakeholder Governance Board is the decision authority. The Stakeholder Governance Board follows the decision guidelines and criteria in the governance board charter approved by the Joint Resources Council.

If the Joint Resources Council approves the initiative for funding and implementation, it:

- ☐ Establishes an investment program and delegates responsibility for implementation to the appropriate service organization or program office;
- ☐ Approves the final program requirements document, final business case, enterprise architecture products, implementation strategy and planning document, program management plan with program work breakdown structure, acquisition program baseline or execution plan, initial test and evaluation master plan, and draft prime contract;
- ☐ Commits the FAA to funding the program, as specified in the acquisition program baseline or execution plan; and
- ☐ Approves adjustments to FAA plans and budgets to reflect the investment decision.

If the Joint Resources Council disapproves the recommendation, it returns the investment package to the program office or service organization with specific instructions for further work or it terminates the effort.

When a final investment decision involves an investment initiative that is an element of an operational capability, the portfolio manager attends the JRC decision meeting to explain the interrelationships among capability elements and the impact of not approving the initiative on the overall operational capability.

Section Revised: 4.4 – Test and Evaluation

Acquisition Management Policy - (~~4/2021~~7/2021)

4.4 Test and Evaluation Revised ~~7/2016~~7/2021

4.4.1 Service Analysis, Concept and Requirements Definition, and Investment Analysis
Revised 1/2021

4.4.2 Solution Implementation Revised 7/2020

4.4.3 In-Service Management Revised 7/2016

4.4 Test and Evaluation Revised 7/20167/2021

Test and evaluation is planned and conducted in accordance with the guidelines, standards, and practices found on the FAA Acquisition System Toolset (FAST) to:

- ☐ Provide essential information in support of decision-making for investment programs;
- ☐ Provide essential information for assessing technical and investment risks;
- ☐ Verify the attainment of technical performance specifications and objectives; and
- ☐ Verify and validate that systems, solutions, and capabilities are operationally effective and suitable for the intended use.

The types of test and evaluation standards and processes to be followed for each investment program are based on the milestones and decision points they support and the type of investment program. These test and evaluation standards and processes address: NAS new investment, NAS modifications, and Mission Support programs.

The high-level test strategy is defined in the implementation strategy and planning document. The program management plan specifies how the test strategy will be executed. Based on complexity and criticality, new investments may be required to deliver a test and evaluation master plan (TEMP), as indicated on the ~~ACAT designation form~~. JRC checklist. For designated investment initiatives, the TEMP provides more detail than the ISPD and the PMP on contractor and FAA test needs, scope, planning and reporting.

The test and evaluation approach, level of analysis, and test criteria are determined by reporting requirements for program milestones and decisions. The requirements that need to be verified and validated form the basis for test criteria. The risks and complexity of the system, solution, or capabilities being tested drive the scope and robustness of evaluation methods, test cases, and reporting structure.

4.4.1 Service Analysis, Concept and Requirements Definition, and Investment Analysis **Revised 1/2021**

During service analysis, test and evaluation activities help identify and prioritize critical FAA service needs. During concept and requirements definition, test and evaluation helps to identify the best alternative solutions to those needs. During investment analysis, the criteria for testing operational effectiveness and suitability are expressed as critical performance requirements and critical operational issues in the program requirements document.

For investment programs designated to have a test and evaluation master plan (New Investment and Software Enhancement only unless otherwise required by the Acquisition Executive Board), a preliminary TEMP (pTEMP) is developed during initial investment analysis based on the concepts and functions documented in the preliminary program requirements document to support the initial investment decision. An initial TEMP (iTEMP) is developed during final investment analysis once program requirements are finalized and the identity of the most promising solution is known. The iTEMP describes the test program and establishes the basis for test requirements in the request for

offer to industry and test costs/and schedules in the acquisition program baseline or execution plan. The iTEMP is required to support the final investment decision. The ISPD and PMP define the plan and schedule for delivery of the final TEMP (fTEMP).

4.4.2 Solution Implementation Revised 7/2020

Solution implementation activities follow documented and structured T&E processes appropriate to the systems, solutions, and capabilities being tested. Early test and evaluation activity assesses potential operational, safety, and security risks and identifies opportunities for risk mitigation. Later test and evaluation examines performance and operational readiness (suitability and effectiveness) in support of decision-makers at the production, deployment, and in-service decisions.

Each test and evaluation program consists of developmental, operational and site testing as specified in the fTEMP and associated PMP and ISPD, as well as independent operational assessment for designated programs (see AMS Section 4.5). Developmental testing verifies requirements, functional design, and integration of the system, solution, or capability. Operational testing validates achievement of operational needs, as well as the effectiveness and suitability of the solution. For deployable products site testing verifies and validates requirements, design, and suitability of the solution in the fielded environment and configuration. As part of site testing, field familiarization testing may be required to support the site operational readiness decision.

4.4.3 In-Service Management Revised 7/2016

Developmental, operational and site testing are performed in accordance with documented, structured test processes defined by each in-service management organization in accordance with FAA Orders and Acquisition Management System Policy guidance. This applies to development and implementation of all NAS and Mission Support modifications during the in-service management lifecycle phase. In-service management test processes include standard test approaches that define the phases and detailed activities to be included during testing. These processes also support/and ensure that safety risk management and information system security requirements are addressed.

Section Revised: Appendix B – Acquisition Planning and Control Documents

Acquisition Management Policy - (~~4/2021~~7/2021)

Appendix B: Acquisition Planning and Control Documents Revised ~~4/2021~~7/2021

Acquisition Program Baseline Revised 4/2021

Program Requirements Document Revised 10/2012

Business Case Revised 10/2012

Implementation Strategy and Planning Document Revised 10/2015

Program Management Plan Added 1/2015

Appendix B: Acquisition Planning and Control Documents Revised 4/20197/2021

AMS Policy Section 1.2.5, as well as the ACAT table, provide guidance and direction for the use of acquisition categories in the FAA acquisition process. These categories ensure the appropriate level of oversight and documentation requirements are applied to each FAA investment program.

This appendix contains the purpose, approval authority, distribution, and content for AMS planning and control documents. Templates are available for each document in FAST. This list contains only AMS planning and control documents. For a complete list of required artifacts for each ACAT and AMS phase/decision point, refer to the JRC checklist.

The documents are:

- ☐ Acquisition program baseline or execution plan
- ☐ Program requirements document
- ☐ Business case
- ☐ Implementation strategy and planning document
- ☐ Program Management Plan

These documents are structured as an integrated set with clear progression and traceability from service need to requirements to implementation strategy to actions and work activities. Template instructions are comprehensive in scope to accommodate complex investment programs. They are tailored to be appropriate for each specific investment program.

Acquisition Program Baseline Revised 4/2021

PURPOSE

The Acquisition Program Baseline (APB) documents the cost, schedule, and performance baselines for the investment program. It is the mutual agreement between the investment decision authority, the performing organization, and the user organization concerning the performance and capability the program will provide and the cost and schedule authorized for the program. There are two APB templates. The first is for New Investment ACATs. The second APB template is to be used for Tech Refresh Portfolio Project Level 1 and Sustainment Level 1 initiatives.

DESCRIPTION

The acquisition program baseline is established at the final investment decision concurrent with approval of an investment program for implementation. The cost and schedule baselines are developed during final investment analysis by the service organization (working within the investment analysis team) that will implement and manage the program throughout its lifecycle.

The acquisition program baseline contains critical cost, schedule, and performance parameters and their associated values designated for control by the investment decision authority. They relate to corporate FAA's commitment to satisfying the mission need, achieving needed operational capability, and meeting schedule requirements of interdependent programs. Investment decision authority controls are identified during final investment analysis by the investment analysis team

and approved by the investment decision authority. They define the empowerment boundaries of the service team during solution implementation.

APPROVAL

The chair of the investment decision authority approves the acquisition program baseline with the concurrence of other IDA members. Designated ACAT reviewers also sign the document.

NOTE: No funding may be committed or obligated that would exceed the cost baseline in the acquisition program baseline

DISTRIBUTION

Send an electronic copy of the acquisition program baseline and updates to the JRC executive secretariat before a decision meeting per instructions in the JRC secretariat quick-start guide. The JRC executive secretariat maintains a database of all acquisition program baselines.

CONTENT

The acquisition program baseline consists of a cost baseline, schedule baseline, and performance baseline. Content is defined in the APB template.

Execution Plan

PURPOSE

The execution plan documents the cost, schedule, and performance parameters for investment programs that do not require an acquisition program baseline. The execution plan contains a description of program and the cost, schedule, and performance parameters that will be reported and tracked monthly.

DESCRIPTION

There are four execution plan templates. The execution plan templates used are based on the initiative's assigned ACAT. Variable Quantity programs use the Variable Quantity template. The Facility ACAT has two templates – one for the overall Facility program and the second used for Facility Level 1 sub – projects. The fourth execution plan is for Tech Refresh Portfolio 1.

APPROVAL

Approval is defined in the execution plan templates.

DISTRIBUTION

Send an electronic copy of the execution plan and updates to the JRC executive secretariat.

CONTENT

Content is defined in the execution plan templates.

Program Requirements Document Revised 10/2012

PURPOSE

The program requirements document establishes the operational framework and performance baseline for an investment program. It is the basis for evaluating the readiness of products and services of an investment program to become operational.

APPROVAL

Within the ATO, the Vice Presidents of the organization executing the investment program during solution implementation and the operating organization approve the program requirements document. Within the other lines of business, the second-level executive of the organization executing the program in solution implementation approves the program requirements document.

DISTRIBUTION

Send an electronic copy of the program requirements document and updates to the JRC executive secretariat before a decision meeting per instructions in the JRC secretariat quick-start guide. The JRC executive secretariat maintains a database of all program requirements documents.

CONTENT

At the readiness for investment analysis decision, the program requirements document defines preliminary functional and performance requirements any potential solution to mission need must satisfy. At the final investment decision, the program requirements document defines exactly the operational concept and requirements the investment program must achieve.

The author must use the program requirements document template in FAST and must provide information for all sections. For sections that do not apply, the author so indicates.

Business Case Revised 10/2012

PURPOSE

The business case summarizes cost, schedule, and benefit information for each alternative solution to mission need for use by the investment decision authority when making initial and final investment decisions.

APPROVAL

The Vice President (ATO) or Director (non-ATO) of the implementing service organization approves the business case. Designated ACAT reviewers review and sign the business case.

DISTRIBUTION

Send an electronic copy of the business case and updates to the JRC executive secretariat before a decision meeting per instructions in the JRC secretariat quick-start guide. The JRC executive secretariat maintains a database of all business cases.

CONTENT

The business case synthesizes the results of investment analysis. At the initial investment decision, it describes alternatives, assumptions, and constraints, and provides full lifecycle cost estimates, benefit estimates, schedule analysis, risk analysis, and economic analysis for each alternative. At the

final investment decision, it updates this information and records full lifecycle information for the alternative selected for implementation.

The author must use the business case template in FAST and must provide information for all sections.

Implementation Strategy and Planning Document Revised 10/2015

PURPOSE

The implementation strategy and planning document (ISPD) provides the investment decision authority a summary characterization of the plans for solution implementation and in-service management of the proposed investment. It conveys the most critical, relevant, and meaningful information to support decision-making. More detailed and comprehensive plans are generated as part of acquisition best-practices at appropriate event-driven milestones, some of which occur before the final investment decision and some afterward. An initial ISPD is required for the initial investment decision covering specific sections identified in the ISPD template. A complete ISPD is required for a final investment decision. After the final investment decision, the ISPD is modified only if the program returns to the investment decision authority for a change to the investment decision and information needs to be modified.

APPROVAL

The ISPD is submitted for approval by the first level executive of the organization that will execute the program in solution implementation. Within ATO, the ISPD is approved by the Vice President of the organization that will execute the program and by the Chief Operating Officer/Deputy Chief Operating Officer. Outside ATO, the ISPD is approved by the second-level executive of the organization that will execute the program. Certain sections of the ISPD are reviewed and approved by specific executives, as follows:

Section 2: Director, Acquisition and Contracting; and Director, Financial Analysis;

Sections 5, 6 and 10: ATO Vice President for Technical Operations, (NAS and Mission Support programs) and Director, AIT Infrastructure & Operations, (Mission Support programs);

Sections 1, 4 and 5: Director of NextGen Engineering Services (NAS programs); Director, AIT Strategy & Performance Service (Mission Support programs)

Sections 6.7, 7.1, 9.2 and 10.2: Vice President, Safety and Technical Training.

The organization executing the program in solution implementation obtains the required approvals before the investment decision with the exception of Joint Resource Council members, which are obtained at the time of the JRC decision by the JRC executive secretariat. The JRC Chairperson signs the ISPD on behalf of the JRC members concurrent with the investment decision.

DISTRIBUTION

Send an electronic copy of the ISPD to the JRC executive secretariat before an initial or final investment decision. The JRC executive secretariat maintains a database of all ISPDs.

CONTENT

The originating office uses the ISPD template in FAST to generate the document. For sections that do not apply to the investment program, the originating office so indicates.

Program Management Plan Added 1/2015

PURPOSE

The program management plan (PMP) defines how the service organization or program office will manage the implementation strategy recorded in the ISPD approved by the Joint Resources Council at the final investment decision. The intent is to ensure: (1) the full scope of program implementation is understood and planned, and (2) agreements are established with key support organizations (e.g., logistics, test, information security, safety, systems engineering) that must provide resources or otherwise contribute to successful program implementation. Do not repeat the implementation strategy recorded in the implementation strategy and planning document – explain how you will manage the execution of that strategy.

A revision to the PMP occurs in the event of a baseline change decision that affects the implementation strategy significantly or when human resource needs change substantially as the program progresses through solution implementation.

APPROVAL

The program management plan is circulated for review with the implementation strategy and planning document. It is approved by the Director of the service organization assigned responsibility for implementing the investment program after concurrence by all key stakeholders through a formal review cycle. Key stakeholders are those organizations that have a vested interest in the operational assets to be provided by the investment program, as well as those organizations that must support the implementing service organization or program office to achieve successful implementation and operational use.

DISTRIBUTION

Send an electronic copy of the approved program management plan to the JRC executive secretariat before the final investment decision. Send an electronic copy of all approved revised PMPs to the JRC executive secretariat as well. The JRC executive secretariat maintains a database of all approved PMPs and revisions.

CONTENT

Use the PMP template in FAST to prepare the document. Scope and detail should be commensurate with the complexity of the investment program. Be succinct and complete. Quality is preferred over length.