

AMS CHANGE REQUEST (CR) COVERSHEET

Change Request Number: 16-32

Date Received: March 22, 2016

Title: AMS T&E Policy Update

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Guidance and Policy must be submitted with separate CR coversheets.

Policy

Or

Procurement Guidance

Real Estate Guidance

Other Guidance

Summary of Change: Establish consistent test policy wording for Solution Implementation and In-Service Management that focuses on the future trends of FAA programs. Remove the reference to the T&E Gold Standard.

Reason for Change: Current test policy is out dated and based on (1) previous organizational structures and processes, (2) how technologies were previously acquired and (3) NAS single system changes. The T&E Gold Standard has not been maintained and is not a policy.

Development, Review, and Concurrence: Has been reviewed and concurred on by Terminal (AJM-24)/En Route (AJM-25) 2nd Level Engineering and IOA (AJI-321). Non-NAS, AJW and AEB.

Target Audience: All FAA organizations and programs conducting test and evaluation under the Acquisition Management System.

Briefing Planned: Yes.

ASAG Responsibilities: Review and comment.

Section / Text Location: Functions: Test & Evaluation

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:

<http://fast.faa.gov/docs/acquisitionManagementPolicy/AcquisitionManagementPolicy4.4.pdf>

Attachments: Redline and Final

Other Files: N/A

Redline(s):

Section Revised: 4.4 – Test and Evaluation

4.4.1 – Service Analysis, Concept and Requirements Definition, and Improvement Analysis

4.4.2 – Solution Implementation

4.4.3 – In-Service Management

Acquisition Management Policy - (~~4/2016~~ 7/2016)

[4.4 Test and Evaluation](#) Revised ~~11/2009~~ 7/2016

[4.4.1 Service Analysis, Concept and Requirements Definition, and Investment Analysis](#)

Revised ~~7/2015~~ 7/2016

[4.4.2 Solution Implementation](#) Revised ~~7/2015~~ 7/2016

[4.4.3 In-Service Management](#) Revised ~~11/2009~~ 7/2016

4.4 Test and Evaluation Revised 11/2009 7/2016

Test and evaluation is planned and conducted in accordance with the AMS Test guidelines, standards, and Evaluation Process Guidelines practices found on the FAA Acquisition System Toolset (FAST). ~~The objectives are~~ 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 investment products 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 non-NAS 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. 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 7/2015 7/2016

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.

~~The test strategy for the For investment program is defined in the implementation strategy and planning document (ISPD). The objective of any test program is programs designated to verify achievement of technical performance requirements and to validate the operational suitability and effectiveness of the acquired solution.~~

~~Based on complexity and criticality, new investments will be required to deliver have a test and evaluation master plan (TEMP) as indicated on the ACAT designation form. The TEMP provides~~

~~more detail than the ISPD of test needs, scope, and plans for new investment initiatives. A preliminary TEMP (pTEMP) is developed during initial investment analysis based upon 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 initial TEMP 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. The initial TEMP iTEMP is required to support the final investment decision. The ISPD defines and PMP define the plan and schedule for delivery of the final TEMP. All contractor and FAA testing is planned, conducted, and reported in accordance with the TEMP. (fTEMP).~~

4.4.2 Solution Implementation Revised 7/2015 7/2016

~~All system/software and facility investment programs~~ Solution implementation activities follow a documented and structured, disciplined T&E process/processes appropriate to the product or facility/systems, solutions, and capabilities being tested. Initially, Early test and evaluation in solution implementation activity assesses potential operational, safety, and security risks and identifies opportunities for risk mitigation. Later test and evaluation examines performance and operational readiness and supplies data to (suitability and effectiveness) in support of decision-makers in support of at the production, deployment, and in-service decisions.

~~A typical T&E~~ Each test and evaluation program consists of developmental test, operational test, and site acceptance testing, and field familiarization testing as specified in the fTEMP (if required) and associated PMP and ISPD, as well as independent operational assessment for designated programs (see AMS Section 4.5). It is recorded in the final test and evaluation master plan for new investment initiatives once the contractor has completed design of all major software and hardware configuration items and once all test Developmental testing verifies requirements are known. The test program for the other ACATs is defined in the program management plan. Test, functional design, and evaluation of commercial and non-developmental items is tailored to account for test results already available from vendors. For example, an operational integration of the system, solution, or capability demonstration may reduce system test requirements. As part of field familiarization. Operational testing, all systems/software validates achievement of operational needs, as well as the effectiveness and suitability of the solution. For deployable products normally require site operational testing verifies and information security 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 11/2009 7/2016

~~The Test~~ Developmental, operational and Evaluation Gold Standards site testing are performed in accordance with documented, structured test processes defined by each in-service management organization in accordance with FAA Orders and Implementation Guide defines standards for the Acquisition Management System Policy guidance. This applies to development and implementation of all NAS and non-NAS modifications to the National Airspace System during the in-service

~~management. It includes a standardized testing process lifecycle phase. In-service management test processes include standard test approaches that lists define the phases and detailed activities to be addressed. The Gold Standard process as designed will included during testing. These processes also support/and ensure that the activity of safety risk management is address in the FAA and information system security requirements are addressed.~~

~~The Test and Evaluation Gold Standard Matrix is used as a management tool to record development and test status, improve internal and external communications, and support risk assessment using best business practices. This document is applicable to all NAS modifications across all FAA organizations.~~