U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
Aircraft Certification Service Policy

ORDER 1370.76B

Effective Date:
09/28/2009

SUBJ: Aircraft Certification Information Resource Management (IRM) Governance Program

1. Purpose of this Order.

a. This order establishes the Information Resources Management (IRM) governance program in the Aircraft Certification Service (AIR). The governance program sets up the structure and articulates the operating principles that will enable us to act decisively to maximize the business value of information technology (IT).

b. In this order we describe the IRM governance structure and document the responsibilities and staff connections necessary to ensure that we achieve corporate IT and business goals. We have written this order for all FAA staff that use, manage, and benefit from IT.

2. Audience. All Aircraft Certification Service (AIR) personnel and the Office of Quality, Integration, and Executive Services, Information Technology Division, AQS-200 personnel.

3. Where You Can Find This Order. You can find this order on the Directives Management website at MyFAA employees website at https://employees.faa.gov/tools_resources/orders_notices/.

4. What This Order Cancels. FAA Order 1370.76A, Aircraft Certification Information Resource Management Program, dated December 4, 1998, is cancelled.

5. Explanation of Changes. This order covers AIR information resource management policy, staff responsibility, and background on the development of the AIR IRM governance program. This order also addresses necessary communication, coordination, and collaboration between AIR and AQS-200 on development, management, and maintenance of AIR IT tools. Many aspects of information technology advance at differing, and rapid, rates. To maintain currency of this order, we have excluded quickly-outdated material, like specific strategies, hardware and software design, security requirements, training and implementation plans and procedures, all of which were featured in Order 1370.76A. We issue those separately in an easily updated form and make them available on AIR's Information Technology intranet web site at https://employees.faa.gov/org/linebusiness/avs/offices/AIR/info_tech/.

6. AIR IRM Governance Program. The AIR IRM governance program consists of designated organizational structures, defined roles and responsibilities, and documented guidance and business processes to ensure that IT sustains the enterprise's strategies and objectives. It ensures alignment of IT with the mission and goals of the business, responsible use of IT resources, appropriate management of IT-related risks, and maximum realization of benefits.

a. Information Technology Steering Group (ITSG) AIR established the Information Technology Steering Group (ITSG) to provide strategic oversight of the IRM governance

program including: communicating plans and goals, driving business/IT alignment, monitoring and evaluating IT investments, and providing input for AIR and AVS IT plans and programs. (Refer to paragraph 11, below.)

b. Memorandum of Agreement (MOA) Between AIR and AQS-200

(1) AIR recognizes the effective information management and delivery of information technology to address business needs requires recognition, understanding, and application of the principles of IT governance. To support these principles, AIR and AQS-200 will maintain a Memorandum of Agreement (MOA) that further defines the mutual support needed for successful IRM implementation.

(2) The information in this Order about AQS-200 Division and Branch offices' responsibilities is included to give the reader a general understanding of their roles, responsibilities, and how they work with AIR throughout software and system development processes. It is not meant to negate or supersede the Orders, ISO practices, standards, or other documents that direct AQS-200 on how to manage the development of software and IT systems within AVS.

7. AQS-200 Responsibilities. The Manager-Office of Quality, Integration, & Executive Services, Information Technology Division, AQS-200, reports to the Director, Office of Quality, Integration, and Executive Services, AQS-1. AQS-200:

a. Develops IT project plans based on the ITSG defined priorities for automation and that consider all of AVS' needs.

b. Establishes and articulates QMS processes, procedures and standards for the design, development, and integration into the IT infrastructure of AVS information technology programs, and their maintenance and disposition.

c. Assigns a Project Manager and Program Manager when AQS-200 deems it appropriate, for AVS application development and deployment.

d. Allocates funds from a centralized budget for AVS application development and maintenance based on the ITSG defined priorities for automation.

e. Initiates and manages contracts for all AVS application development and maintenance.

f. Manages and oversees all AVS national application development and deployment in conjunction with the application's AIR Business Sponsor.

g. Advises the ITSG and AIR IT Business Liaison on requests for development of local applications; and, provides guidance on ITSG-approved local applications development to ensure compliance with policy and standards (for example, applying appropriate security measures, and use of appropriate templates for web-enabled applications).

8. AQS-230 Program Manager Responsibilities. AQS Program Managers report to the AQS-200 Branch Managers of the Office of Quality, Integration, & Executive Services. AQS Program Managers coordinate all program IT and business efforts across the other programs. The Program Manager:

a. Coordinates with the AIR IT Business Liaison, AIR Business Sponsors, and business process owners to identify IT tools needed to support business processes and operations, and to communicate those needs to AIR, AVS, and AQS, and to share information on program and

project activities.

b. Oversees the creation and management of project documentation such as the requirements document, design documentation, test and deployment documents, etc.

c. Understands the status of related IT programs, and communicates these to the AIR IT Business Liaison, AIR Business Sponsors, and business process owners

d. Coordinates IT program efforts across AVS to ensure alignment and integration into the FAA AVS Enterprise Architecture.

e. Represents IT programs to business governance boards.

f. Support F&E funding programs and may coordinate the work of several Project Managers that manage the individual IT projects comprising the F&E program.

g. Guides and informs Project Managers.

h. Shares responsibilities with the Project Manager and the Project Team, as required.

i. Coordinates with Business Sponsors, as required.

j. Oversees application development and maintenance funding and manages IT Project budget.

9. Project Manager Responsibilities. The Project Manager is assigned the responsibility for each IT project, after the ITSG and AQS-200 have approved and committed resources to the project. The Project Manager resides in AQS-200 and may report to any of the AQS-200 Branch Managers. The Project Manager:

a. Creates and maintains a project management plan, including resource requirements timeframes, and risks.

b. Ensures the project is managed to control, measure, and to deliver the agreed-on automated solution that meets cost, schedule, performance, and quality standards.

c. Coordinates all project team members' work toward achieving project goals.

d. Establishes and maintains communications with stakeholders throughout the project.

e. Participates and provides support to the project Information System User Group (ISUG), as appropriate.

f. Decides, and makes recommendations, on project resources, trade-offs between cost, schedule, and technical performance, and changes to the project itself.

g. Obtains the application development contract by providing the Statement of Work (SOW), Independent Government Cost Estimate (IGCE), and Technical Evaluation (TE) for application development contract and, where appropriate, acts as Contractor Officer Technical Representative (COTR).

h. Follows the AQS-200 Quality Management System design and control process to include the AQS-200 System Development Lifecycle (SDLC).

i. Provides coordination with AQS-270 for the Security Certification and Accreditation (C&A) for application.

10. Project Team. The Project Team consists of all the specialties necessary during the project lifecycle. Typically, the team is comprised of the AIR Business Sponsor, Information System User Group (ISUG), a Training Program Manager from AIR-520, and policy representative(s), including Safety Management, if appropriate, and from AQS-200, the Project Manager, Configuration Manager, Quality Assurance (QA) representative, security, database administrator, system architect, and systems analyst. The Business Sponsor, in consultation with the Project Manager, will determine the need for union representation on the ISUG. The team is responsible for the successful development, deployment, and maintenance of automation tools and technology defined in the Concept/Boundary Document, Requirements Document, Design Document, and other project documentation.

11. ITSG. The ITSG directs, leads, and oversees the AIR IRM governance program by applying the policies, procedures, and guidelines established by this order and related documents. ITSG is accountable to the Aircraft Certification Management Team (ACMT), and is generally made up of representatives from AIR Management Teams, the Safety Management Program Manager, an AQS representative, and chaired by the AIR IT Business Liaison. ITSG is supported by the AIR IT Business Liaison in the Planning and Program Management Division, AIR-500, ISUGs, AIR Business Sponsors, and AQS IT Program and Project Managers. The ITSG:

a. Develops and manages the AIR IT strategic plan for AIR IT tools development that:

(1) is based on the AIR business strategic goals;

(2) addresses AIR's migration toward a systems approach to safety oversight;

(3) addresses FAA AVS Enterprise Architecture; and,

(4) includes coordination of all AIR business process changes for proper integration into all IT tools development projects.

b. Ensures achievement of AIR IT strategic goals.

c. Prioritizes automation projects for AQS support and funding; manages AIR's priorities for automation and its associated IT portfolio.

d. Applies consistency when evaluating new and existing AIR business needs that can be met by IT.

e. Maintains materials that document the strategic direction and governance of AIR's IT program by working with necessary FAA entities.

f. Develops, supports, maintains, and follows the AIR IRM policy, principles, and practice.

g. Reviews and approves the process for initiating AIR IT projects.

h. Collaborates with AIR Management Teams to select Business Sponsors.

i. Ensures every AIR Business Sponsor has a mentor.

j. Ensures every AIR Business Sponsor successfully completes required 'IRM Governance and IT Tool Development' training.

k. Orients AIR Business Sponsors, communicates expectations, and supports them with necessary resources.

l. Approves high-level requirements and high-level implementation plans such that they are consistent with the scope defined within the Concept/Boundary Documents.

m. Recommends ITSG membership changes to the ACMT.

12. AIR Business Sponsor Mentor. The AIR Business Sponsor Mentor is a member of the ITSG. The mentor orients the newly appointed AIR Business Sponsor and ensures continued and regular communications between the AIR Business Sponsor, AIR IT Business Liaison, and the ITSG, and acts as the point of contact for the AIR Business Sponsor to the ITSG.

13. AIR IT Business Liaison. The AIR IT Business Liaison resides in AIR-500, and reports directly to the AIR-500 Manager. The liaison is the primary interface between AIR and AQS-200, and is AIR's primary advisor on IT opportunities, programs issues and requirements. The liaison:

a. Promotes achievement of AIR IT strategic goals.

b. Keeps apprised of AIR business needs by participating in ACMT meetings, as needed, AIR planning processes, and through outreach to AIR Management Teams.

c. Promotes communication with AIR Management Teams, business process owners, and other major stakeholders, to keep them aware of IT initiatives (planned or in-progress) and gain their input.

d. Collaborates with the AIR Web Content Program Manager and AQS-200 Program Managers to ensure their programs' alignment with AIR's strategic goals.

e. Works with other AIR offices to define, prioritize, and articulate AIR's business requirements to AQS-200.

f. Coordinates the organization and prioritization of IT system and requirements.

g. Maintains close contact with AQS-200 management to communicate issues and AIR concerns, and ensures that changes to AIR's business requirements and reprioritization are communicated to AQS-200 as soon as practicable.

h. Consults with AQS-200 to help find existing applications that satisfy an identified business need, determines if a new application is needed, and informs users of existing efforts that align with their needs.

i. Serves as a focal point to AQS-200 on requests for AIR IT budget and operational requirements.

j. Works with AQS-200 and the ITSG to allocate funding (or reallocate funding from existing projects, if necessary) such that any prioritization changes or added IT projects are sufficiently funded.

k. Collaborates with AQS-200 to define and maintain a capital planning and investment control process that is integrated with AVS budget and planning.

l. Keeps informed of AQS IT projects that affect AIR, and communicates AQS-200's plans and objectives to AIR.

m. Helps facilitate discussions around IT.

n. Maintains the AIR IRM Order (1370.76) or other materials that document roles, responsibilities, and operating guidelines for AIR IT program.

o. Defines and communicates the process for initiating AIR IT projects to satisfy a business need.

p. Supports development of an FAA and AVS Enterprise Architecture.

q. Collaborate with other offices, services, and LOBs in order to align business processes so they can share common data, provide efficient hand-offs, reduce wasteful duplication, and eliminate unnecessary process variations.

r. Supports activities required to comply with federal IRM regulatory requirements (such as the Office of Management and Budget Circular No. A-11; Part 7 (section 300); Planning, Budgeting, Acquisition, and Management of Capital Assets – also known as Exhibit-300, or OMB-300).

s. Organizes and conducts meetings, and chairs the ITSG.

14. Business Sponsor. Every project must have a Business Sponsor, as it is a critical position throughout the lifecycle of national applications development and maintenance. The Business Sponsor is selected by, and accountable to, the ITSG, and must be a member of an AIR Management Team with full understanding of the business functions affected by the project. Sponsors exercise their responsibilities in cooperation and coordination with the ITSG mentor and AQS IT Project Manager. The Business Sponsor:

a. Collaborates with ITSG, ITSG mentor, AIR Management Teams, and AQS-200 Program/Project Manager(s) throughout all phases of the software development lifecycle to assure their input, buy-in, support of the project and that they have a complete understanding of the project's value to the business. Sponsors brief the ITSG at the end of each SDLC phase to ensure they approve the products from that SDLC phase.

b. Supports, maintains, and follows AVS QMS principles and practices.

c. Develops criteria used to select ISUG members.

d. Ensures that all stakeholders are represented by an ISUG member (including the process owner), and that each ISUG member is fully aware of stakeholders they represent.

e. Works with AIR Management Teams to select ISUG members and appoint an ISUG Team Lead.

f. Along with the Project Manager, determines the need for and selects any project team specialties, such as a policy representative.

g. Charters the ISUG (in consultation with the Project Manager), leads and directs the ISUG to ensure that the ISUG understands their role and responsibilities within the context of the IT program, and ensures the ISUG continually functions within their charter and the scope of the project.

h. Participates in ISUG meetings and telephone conferences, ensuring that all assigned work or pre-work is done before the meetings and telephone conferences.

i. Ensures continuity of the ISUG membership, active participation of members, and determines when to refresh the ISUG membership.

j. In collaboration with the business process owner, oversees business process re-engineering, issuance of related policy documents, such as Orders, Notices, etc., as they relate to the IT application development.

k. Provides leadership throughout the project to ensure that it is accomplished within the intent of the ITSG and to resolve policy, process, and automation discrepancies. Collaborates with the Project Manager to address and mitigate risks.

l. Supports the Project Manager in their effort to deliver a project that meets cost, schedule, performance, and quality standards.

m. Reviews automation requirements, design, and implementation plans developed under the direction of the Project Manager and recommends approval/modification to the ITSG.

n. Formally approves requirements, design, user acceptance testing, deployment, and implementation documents after ITSG concurrence.

o. Develops and defines the AIR Concept/Boundary Document.

p. Works with AIR Management Teams to ensure AIR supports all phases of IT initiatives.

q. Provides oversight of AIR IT projects and investments; measuring progress against performance criteria, detecting inadequate performance, undertaking corrective actions, and seeking ITSG guidance and approval, as necessary.

r. Works with AVS to ensure the alignment of IT plans, goals, project timeframes and deliverables.

15. Business Process Owner The business process owner may identify the need for a new IT application, or revision to an existing application. The business process owner, in collaboration with the Business Sponsor, oversees business process re-engineering, issuance of related policy documents, such as Orders, Notices, etc., as they relate to the IT application development. Further, the business process owner:

a. Write the Concept Paper and Concept Boundary Document;

b. Conducts the feasibility and cost benefit analysis study;

c. Consider input from users and Management Teams; and,

d. Ensures integration of the business process and the IT application that supports it.

16. Information System User Groups (ISUG). The ISUG is selected by the Business Sponsor working with the relevant AIR Management Teams. The ISUG is made up of representatives from each of the Directorates and Headquarters Divisions, as appropriate. ISUG members are subject matter experts on the business functions affected by the project. They represent the business needs of their respective organizations. The ISUG role is critical throughout the lifecycle of applications development and maintenance, as such, an ISUG is selected and assigned to each IT project. ISUG members:

a. Attend ISUG meetings and perform assigned work to prepare in advance of the meetings.

b. Collaborate with the Project Manager to develop and validate detailed requirements and specifications for the project, ensuring those requirements are clear, complete, and are stated such that they can be tested or measured. Examples include, savings, efficiency, and improved safety.

c. Represent the needs of all stakeholders (including the process owner), and actively communicate project progress to them.

d. Solicit information, from the organization they represent, on business requirements to be met by the project.

e. Apprise appropriate division/directorates of ISUG progress.

f. Ensure the final requirements fully support the business processes, procedures, and policies being automated.

Note: The final requirements, budget, and schedule must be fully within the scope defined by the Concept/Boundary Document. Any variation requires ITSG approval prior to proceeding to development.

g. Act as members of the applications Change Control Board (CCB).

h. Work directly with the Project Manager to define release dates and methods.

i. Contribute to the development of the program plan, including the communications, implementation, and user acceptance test plans.

j. Actively participate in all design and development reviews, including assessing the risk of any deferred or unsatisfied requirements.

k. Define test scenarios and participate in user acceptance testing.

l. Test and approve functionality, user interface, usability, and outputs of the automated system.

m. Promote full acceptance and integration of the automated system into the business environment.

n. Identify and prioritize enhancements throughout the life of the system and support their implementation.

o. Participate with the AIR IT Business Liaison and AQS-200 in the Post Implementation Review (PIR) 12-18 months after system deployment to measure the success of the project in terms of meeting the established business goals. (See para. 16.b.)

p. Participate in the annual Operational Assessment (OA) in order to show the investment met and continues to efficiently meet its goals. (See para. 16.b.)

17. Planning and Program Management Division, AIR-500. AIR-500, in collaboration with the ITSG, is responsible for ensuring the consistent and standard application of this Order. Also, AIR-500 develops training for the business processes and the IT that facilitates them. The AIR IT Business Liaison position(s) resides in AIR-500 and reports to the AIR-500 Manager.

18. Supervisors and Managers. To support AIR and AVS IT initiatives, FAA Supervisors and Managers:

a. Dedicate to ISUGs personnel who meet the business sponsor’s criteria.

b. Ensure ISUG members participate in ISUG meetings and telephone conferences and that assigned work or pre-work is done before meetings and telephone conferences.

c. Ensure there are adequate procedures to implement a new system, and that old procedures are terminated when replaced with new ones.

d. Ensure employees attend training provided to support IT initiatives and tools.

e. Ensure employees use the system to achieve its stated objectives.

f. Ensure the integrity and accuracy of data stored in information systems.

19. Users. Users may be FAA employees, designees, contractors, or others who use FAA automation functions. Users are responsible to:

a. Provide input to the ISUG on requirements for new systems and providing feedback on existing systems.

b. Attend training to support IT initiatives, and using the systems as intended.

c. Confer with the business process owner and the AIR IT Business Liaison about the need for any automation or application. The liaison will consult with AQS-200 to help find existing applications that satisfy the need, determine if a new application is needed, and inform the users of existing efforts that align with their needs.

d. Ensure the integrity and accuracy of data created and stored in information systems.

20. Management Teams. ACMT-recognized groups of peer-level managers representing common work functions and business processes. Examples of teams include, the Aircraft Certification Office Leadership Team (ACOLT), Manufacturing Inspection Management Team (MIMT), AIR Support Team (AST), and Standards Management Team (SMT), and long-standing teams responsible for strategic safety initiatives such as the Safety Management Project Team (SMPT). Management Teams:

a. Support AIR and AVS IT initiatives by recommending subject matter experts for ISUGs who meet Business Sponsor criteria.

b. Provide input and feedback on business needs and priorities and proactively communicate and promote all phases of IT initiatives and national applications, and support implementation strategy development and execution where the IT projects affect their business processes.

c. Recommend potential Business Sponsors for IT initiatives as requested by the ITSG.

21. Background. The Paperwork Reduction Reauthorization Act (PRRA) of 1986 introduced IRM to federal government agencies. The Act requires us at the FAA to carry out information management activities effectively, efficiently, and in full compliance with Director of the Office of Management and Budget (OMB) information policies and guidelines.

a. Information Resource Management (IRM) includes the functions of planning, budgeting, organizing, directing, training and managing information. IRM encompasses both information itself and its related resources, such as personnel, equipment, funds and technology. Effective and efficient IRM supports the PRRA through:

(1) Life-cycle creation, collection and use of information;

(2) Information functions, including automatic data processing, records management, reports management, and telecommunications;

(3) Taking an integrated approach to managing information resources (the total systems concept); and,

(4) Promoting and using new technologies to improve information use and dissemination.

22. Office of Quality, Integration, and Executive Services Information Technology Branch, AQS-200. In February 2002, FAA Aviation Safety (AVS) consolidated all AVS IT projects under AQS-200. The AQS-200 mission is to provide integrated information technology capabilities to AVS line services and offices. AQS-200 centrally manages all AVS information technology programs. These programs include all IT applications, infrastructure, operations support, and IT standards and policies.

23. Definitions.

a. Automation. Application of information technology to automate a process or service.

b. Enterprise architecture. Map of the business architecture (strategy, goals, process, organization, measures) and the technical architecture (data/information, applications, technology) in a way to ensure that IT solutions are driven from business needs.

c. Governance. Responsibilities and practices exercised by a governing body to provide strategic direction, achieve objectives, use resources effectively and responsibly, manage risks appropriately, deliver value and measure performance.

d. Hardware. Equipment (computers, monitors, terminals, printers, plotters, and cables) uses to run software programs.

e. Information resource management (IRM). Planning, budgeting, organizing, directing, training, promoting, controlling, and management activities associated with the collection, creation, use, and dissemination of information by agencies. Includes the management of information and related resources, such as Federal information processing resources.

f. IRM governance program. Principles, practices, processes, and resources required to govern information resource management.

g. Information technology. Any equipment or interconnected system or subsystem of equipment used in the automatic acquisition, storage, manipulation, management, movement, control, display, switching, interchange, transmission, or reception of date or information (Source: Clinger Cohen Act of 1996).

h. Local application program/project. Program or project limited to the needs of a specific division or directorate.

i. National application program/project. Program or project covering the needs of multiple divisions/directorates, or requires the sharing/modification of enterprise data, or both.

j. Program. Group of projects managed in a coordinated way to obtain benefits not available from managing them individually. Programs may include elements of ongoing operations. (PMBOK Guide, PMI)

k. Project. Temporary endeavor to create a unique product, service, or result.

l. Project life cycle. Collection of project phases.

m. Project management. Applying knowledge, skills, tolls, and techniques to project activities to meet the project requirements.

n. Project phase. Sequence of logically related project activities, usually culminating in the completion of a major deliverable(s).

o. Project schedule. Planned dates for performing activities and meeting milestones.

p. Project scope. Work that must be done to deliver a product with the specified features and functions.

q. Quality assurance. Regular evaluation of overall project performance to assure stakeholders that the project will satisfy the relevant quality standards.

r. Resource. People, equipment, money and time needed to perform a project activity.

s. Risk. An uncertain event of condition that, if it occurs, has a positive or negative effect on a project's objectives.

t. Risk management. Activities directed towards effective management of potential opportunities and adverse effects or risks.

u. Risk mitigation. Reducing the probability and/or impact of a risk to below an acceptable threshold.

v. Software. Instructions used by computer hardware to process pre-programmed commands and the supporting documentation, including user manuals, and templates.

w. Strategic plan. A business blueprint that clearly and concisely defines a strategic framework resulting from the planning process.

24. Distribution. Distribute this order to all the branch level offices within the Aircraft Certification Service, and the Regulatory Support Division at the Aeronautical Center, and to the Office of Quality, Integration, and Executive Services, Information Technology Division, AQS-200.

for Dorenda D. Baker
Director, Aircraft Certification Service

Appendix A. AIR IRM Governance Program Software Development Lifecycle

1. **Concept**
   - **a.** Concept Document *****
   - **b.** Management Approval (AIR)
2. **Feasibility Study**
   - **a.** Boundary & Scoping Document *****
   - **b.** Management Approval (AIR)
3. **Requirements Gathering**
   - **a.** Detailed Requirements Specification
   - **b.** Project Team Approval
   - **c.** System Make/Buy Decision (AQS-200)
4. **Design**
   - **a.** Design Specification Package
   - **b.** Project Team Approval
   - **c.** Component Make/Buy Decision (AQS-200)
5. **Development**
   - **a.** Software Delivery Package (includes test report)
   - **b.** Project Manager, Quality Assurance and Management (QAM), and Configuration Management and Administration (CMA) Approvals
6. **Deployment**
   - **a.** Post-Implementation Review (PIR)
   - **b.** Project Manager, Quality Assurance and Management (QAM) Approvals
7. **Maintenance**
   - **a.** Change Management
   - **b.** Operational Assessments (OA)
8. **Disposition & Retirement**

***** Change Request(s) Require ISUG & Changed Concept Boundary Approval

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Note: The information in this appendix is included to give the reader a general understanding of the software and system development processes and is for reference only. It is not meant to negate or supersede the Orders, ISO practices, standards, or other documents that direct AQS-200 on how to manage the development of software and IT systems within AVS.

Appendix B. AIR IRM Governance ProgramAIR Automation Projects Concept, Design & Deployment

1. Concept Paper

a. For new Concepts, or revision to an existing application, the business process owner who identifies the need for a new tool, or revision to an existing system:

(1) Writes the Concept Paper (1-3 pages) including: Statement of need; Organizational units impacted; Description of work to be automated; Estimated costs and benefits; other options considered; Description of how the function is currently being performed; and, Requester's name, routing symbol, and position.

(2) Writes a Concept Boundary Document.

(3) Conducts a Feasibility/Cost Benefit Analysis (CBA) study.

(4) Forwards the documents to the ITSG for review/approval.

b. For New IT Tool Development Requests

(1) AIR business process owner writes the Concept Paper and sends it to the ITSG for review and consideration for approval.

(2) ITSG conducts a Concept Paper Review (CPR) and maintains a record of the discussion and decision. If the decision is that the project:

(a) **is not approved**, then the ITSG returns the Concept Paper to the business process owner, informs him/her of their decision and the rationale behind the decision, and then closes the request.

(b) **concept should be revised**, then the ITSG informs the business process owner of the decision, and requests the business process owner revise the Concept Paper and re-submit.

(c) **is approved**, then the ITSG:

1. Returns the Concept Paper to the business process owner with instructions to write the project Concept Boundary Document.

2. Prioritizes the project in the AIR IT Portfolio (as a future project based on acceptance of the Concept Boundary Document).

3. Forwards to AQS-200, as defined in the AIR/AQS-200 Memorandum of Agreement (MOA), a request for an IT tool development project, including the Concept Paper and requests appointment of an IT Project Manager.

4. Appoints AIR Business Sponsor.

(3) AIR Business Sponsor oversees the project per the plan, and:

(a) Ensures appointment of a Quality Assurance (QA) focal, and communicates with that focal on the various audits and project reviews.

(b) Provides status updates to the ITSG.

2. Concept Boundary Document

a. AIR business process owner, working with AIR Business Sponsor and AQS-200 Project Manager as advisor, develops the Concept Boundary Document.

b. AIR Business Sponsor sends the Concept Boundary Document to the ITSG for review and consideration for approval.

c. ITSG meets to review the Concept Boundary Document, documents the group's discussion and decision in meeting minutes, and maintains a record of the discussion and decision. If the decision is that the project:

(1) **is not approved**, then the ITSG informs the business process owner of their decision and the rationale behind the decision, returns the Concept Boundary Document, and then closes the request.

(2) **concept should be revised**, then the ITSG informs the business process owner of the decision, and requests the business process owner revise the Concept Boundary Document and re-submit. (Go to paragraph 2.A., above.)

(3) **is approved** then the ITSG returns the Concept Boundary Document to the business process owner with instructions to conduct Feasibility/Cost Benefit Analysis (CBA) study.

3. Feasibility/Cost Benefit Analysis (CBA) Study

a. AIR business process owner, working with AQS-200 Project Manager as advisor, conducts the Feasibility/CBA study, writes a Feasibility/CBA report, and sends the report to the ITSG for review and consideration for approval.

b. ITSG meets to review the Feasibility/CBA report, documents the group's discussion and decision in meeting minutes, and maintains a record of the discussion and decision. If the decision is that the project:

(1) **is not approved**, then the ITSG informs the business process owner of the decision and the rationale behind the decision, returns the Feasibility/CBA report, and then closes the request.

(2) **concept should be revised**, then the ITSG informs the business process owner of the decision, and requests the business process owner revise the Feasibility/CBA report and re-submit. (Go to paragraph 3.a., above.)

(3) **is approved**, then:

(a) The ITSG prioritizes and activates the project in the AIR IT Portfolio.

(b) The ITSG informs the AIR Business Sponsor of the decision with notice to select the Information System User Group (ISUG) for the project.

(c) AIR Business Sponsor provides the Concept Boundary Document and Feasibility/CBA Study to the Quality Assurance focal for review.

(d) The Quality Assurance focal notifies the AIR Business Sponsor of discrepancies, if any.

(e) The AIR Business Sponsor adjusts the project plan as needed to address QA's concerns, and provides feedback to the QA.

4. Detailed Requirements Document

a. AIR Business Sponsor:

(1) Selects the ISUG.

(2) Provides direction to, and oversight of, the ISUG during requirements gathering and Detailed Requirements Document (DRD) development.

b. The ISUG:

(1) Gathers requirements and develops a Detailed Requirements Document.

(2) Sends the Detailed Requirements Document to the AIR Business Sponsor for review and consideration for approval.

c. AIR Business Sponsor reviews the Detailed Requirements Document. If the Detailed Requirements are:

(1) **Within the project scope**, as defined in the Concept Boundary Document, then the AIR Business Sponsor and ISUG forwards the Detailed Requirements Document to AQS-200 Project Manager with notice to proceed with design.

(2) **Not within the project scope**, as stated in the Concept Boundary Document, then:

(a) The AIR Business Sponsor returns the Detailed Requirements Document to the ISUG with instructions to work with AQS-200 to determine impact of revised scope, schedule, and cost estimates.

(b) The ISUG revises the Concept Boundary Document with impact assessment, and sends it to the ITSG together with a Request to Change Scope.

5. Request to Change Scope

a. ITSG receives the Request to Change Scope, along with the revised Concept Boundary Document and impact assessment from the ISUG.

b. ITSG meets to review the Request and the revised Concept Boundary Document, documents the group's discussion and decision in meeting minutes, and maintains a record of the discussion and decision. If the decision is that the Request to Change Scope:

(1) **is not approved**, then the ITSG notifies the AIR Business Sponsor, who notifies the ISUG, to revise the Detailed Requirements Document within the project scope and resubmit for review and approval.

(2) **is approved, with revision or condition**, then the ITSG notifies the AIR Business Sponsor, who provides direction to the ISUG, to revise the Concept Boundary Document to address the ITSG revision/condition and resubmit for review and approval. (Go to paragraph 5.A., above.)

(3) **is approved**, then the ITSG notifies the AIR Business Sponsor of the decision. The AIR Business Sponsor forwards the revised Concept Boundary Document and Detailed Requirements Document to AQS-200 Project Manager with notice to proceed with design.

6. Design & Deployment

a. AQS-200 Project Manager

(1) Develops the project plan, in collaboration with the AIR Business Sponsor, and initiates the project design.

(2) Oversees the project design and provides status updates to the AIR Business Sponsor.

b. AIR Business Sponsor collaborates with the AQS-200 Project Manager to develop the project plan.

c. AQS-200 Project Manager conducts Design Reviews with the ISUG.

d. The ISUG participates in the Design Reviews and provides Design Review Feedback to the AQS-200 Project Manager. If, during the Design Review, the ISUG determines a scope change is needed, then ISUG revises the Concept Boundary Document with impact assessment, and forwards it to the ITSG together with a Request to Change Scope.

e. AQS-200 Project Manager

(1) Considers ISUG Design Review Feedback and incorporates changes to the system/tool design, as necessary.

(2) Collaborates with the AIR Business Sponsor and ISUG to develop the Implementation Plan in alignment with activities associated with improving or implementing the application's associated business process, and forwards the plan to the AIR Business Sponsor and ISUG.

f. AIR Business Sponsor and ISUG review the Deployment Plan and provide feedback to the AQS-200 Project Manager.

g. AQS-200 Project Manager adjusts the Deployment Plan, if necessary.

h. AIR Business Sponsor sends to the AQS-200 Project Manager written authorization to deploy the tool/system.

i. AQS-200 Project Manager deploys the tool/system.

Note: The information in this appendix is included to give the reader a general understanding of the software and system development processes and is for reference only. It is not meant to negate or supersede the Orders, ISO practices, standards, or other documents that direct AQS-200 on how to manage the development of software and IT systems within AVS.

U.S. Department
of Transportation

**Federal Aviation
Administration**

Directive Feedback Information

Please submit any written comments or recommendations for improving this directive, or suggest new items or subjects to be added to it. Also, if you find an error, please tell us about it.

Subject: Order IR 1370.76B

To: Directive Management Officer, 9-AWA-AVS-AIR-DMO@faa.gov

(*Please check all appropriate line items)*

☐ An error (procedural or typographical) has been noted in paragraph _____ on page _____.

☐ Recommend paragraph _____ on page _____ be changed as follows:
(attach separate sheet if necessary)

☐ In a future change to this directive, please include coverage on the following subject:
(briefly describe what you want added)

☐ Other comments:

☐ I would like to discuss the above. Please contact me.

Submitted by: _____ Date: _____

FTS Telephone Number: _____ Routing Symbol: _____

FAA Form 1320–19 (dated 10/98)