

APPENDIX D DEFINITIONS

Acquisition Management System (AMS). Establishes policy and guidance for all aspects of the acquisition life cycle, from determining mission needs to procurement and life-cycle management of products and services that satisfy those needs. The AMS simplifies, integrates, and unifies the elements of life-cycle acquisition management into an efficient and effective system that increases the quality, reduces the time, and decreases the cost of delivering needed services to customers.

Acquisition Program Baseline (APB). Establishes performance, supportability, and benefits requirements for the acquisition program, as well as the cost and schedule parameters. The APB is a formal document approved by the Joint Resources Council (JRC) at the investment decision. It is a contract between the user organization that requires the program product and the provider of the product—the Integrated Product Team (IPT).

Acquisition Review Committee. Forerunner of the Joint Resources Council (JRC).

Acquisition Strategy Paper. A required document that defines the overall approach for executing an acquisition program during the solution implementation phase. It is a high-level, strategic overview of the technical, management, and procurement approach. The acquisition strategy paper is approved by the co-leaders of the appropriate integrated management team (IMT).

Affordability assessment. The process of assessing the affordability of each candidate solution developed in the Investment Analysis phase against all existing programs in the agency's financial baselines for the same years. Standard criteria are used to determine the priority of the candidate program in relation to all others. If the amount of funding available for the years in question is insufficient, offsets from lower priority programs are identified. Affordability assessment is also performed when considering acquisition program baseline changes for existing programs that involve an increase in the cost baseline and the need to reallocate resources. It considers all appropriations.

Baseline. A configuration identification document or set of documents formally designated and fixed at a specific time during a configuration item's life cycle.

Baselines, plus approved changes to those baselines, are the current configuration identification. The FAA defines NAS requirements, NAS design level, acquisition, and operational baselines.

Baseline Management Notice (BMN). The method used to report changes to the funding, schedule, benefits, or performance baseline as established by the acquisition program baseline. The BMN is also used by the sponsor to delete programs from the Aviation System Capital Investment Plan (CIP).

Capability. A combination of specific hardware, software, procedures, and other elements that creates a desired outcome (such as 'weather in the cockpit'). Until all of the constituent parts of the capability are operational, the full capability does not exist.

Capital asset. Land, structures, equipment, and intellectual property, including software, that are used by the Federal Government and have an estimated useful life of 2 years or more. The cost of a capital asset includes both its purchase price and all other costs incurred to bring it to a form and locations suitable for its intended use. Capital assets may be acquired in different ways: through purchase, construction, or manufacture; through lease-purchase or other capital lease, regardless of whether title has passed to the Federal Government; through an operating lease for an asset with an estimated useful life of 2 years or more; or through exchange. Capital assets include not only the assets as initially acquired but also additions, improvements, replacements, rearrangements and reinstallations, and major repairs, but not ordinary repairs and maintenance.

Certification. The process of approving for operation a system, software release, or patch. Certification involves testing and verifying system performance and operational capability.

CIP financial baseline. The time-phased funding requirement for all current and planned CIP programs/projects for 10 years into the future (rolling window). It reflects individual program/project baselines.

CIP program. A facilities and equipment program described in the CIP and identified with a three-digit number (e.g., A01). A CIP program consists of one or more CIP projects.

CIP project. For CIP purposes, a CIP project is a subdivision of a CIP program. A CIP project consists of one or more subprojects or segments. A CIP project may or may not be identified as a separate entity in a CIP program description. Outside the CIP document, many CIP projects will most likely be referred to as programs.

Commercial-off-the-shelf (COTS) Item. Any item, other than real property, that is of a type customarily used by the general public for nongovernmental purposes, and that has been sold, leased, or licensed to the general public; is sold, leased, or licensed in substantial quantities in the commercial marketplace; and is offered to the Government without modification, in the same form in which it is sold, leased, or licensed in the commercial marketplace.

Configuration. The functional and/or physical characteristics of hardware/software set forth in technical documentation and achieved in a product. ‘Configuration’ stands for the orderly agreement of subordinated parts and functional characteristics to give unity to the whole.

Configuration item. An aggregation of hardware/software/firmware, or any of its discrete portions, which satisfies an end-use function and is designated by the Government for configuration management.

Corporate Decision Points.

- *Mission Need Decision* - a key decision made by the JRC at the conclusion of mission analysis.
- *Investment Decision* - a key decision made by the JRC at the conclusion of investment analysis that specifies the best overall solution for satisfying a mission need.
- *Inservice Decision* - the decision by the operational organization to accept a product or service for operational use. The inservice decision normally occurs toward the end of solution implementation, reflecting system readiness for national deployment.

Customer. Any recipient of FAA or NAS services. A customer can be internal or external to the FAA.

FAA integrated Capability Maturity Model (iCMM). The model that integrates the Systems Engineering CMM (SE-CMM), the Software Acquisition CMM (SA-CMM) and the CMM for Software (SW-CMM). The model guides the improvement of FAA-wide processes used to manage, acquire, and engineer software intensive systems across the FAA acquisition life cycle. The FAA expects to achieve

more effective and efficient process improvement by using the integrated model, rather than the three source CMM’s separately.

Final operating capability (FOC). The date when work at the last site in a series has been successfully completed and meets the defined requirements.

Firmware. Computer software contained in computer hardware read-only memory (ROM) devices that cannot be readily modified under program control.

Hardware. The physical equipment of the computer system including terminals, memory boards, printers, and disk drives.

Information technology. Any equipment or interconnected system or subsystem of equipment that is used in the automatic acquisition, storage, manipulation, management, movement, control, display, switching, interchange, transmission, or reception of data or information by the executive agency. Equipment is used by an executive agency if the equipment is used by the agency directly or is used by a contractor under a contract with the agency which (1) requires the use of such equipment, or (2) requires the use, to a significant extent, of such equipment in performing a service or furnishing a product. Information technology includes computers, ancillary equipment, software and firmware and similar procedures, services (including support services), and related resources.

Initial operating capability (IOC). The date when work at a site has been successfully completed and meets the defined requirements.

Investment Analysis Report. A summary of the analytical and quantitative information developed during investment analysis in searching for the best way to satisfy mission needs. The report is the primary information document supporting the investment decision.

Joint Resources Council (JRC). The FAA body responsible for making corporate-level decisions regarding acquisition and capital investments. Membership consists of the Associate Administrators representing all lines of business investment areas of the agency:

- Air Traffic Services (ATS)
- Regulation and Certification (AVR)
- Airports (ARP)
- Research and Acquisitions (ARA)

- Commercial Space Transportation (AST)
- Civil Aviation Security (ACS)

and:

- FAA Acquisition Executive
- Associate Administrator for Financial Services (ABA)
- Legal Counsel (AGC).

Key Decision Point (KDP). A point in the acquisition cycle that requires Joint Resources Council (JRC) approval to proceed.

Life-cycle costs. All direct and indirect initial costs of an asset, including planning and other costs of procurement; all periodic or continuing costs of operation and maintenance; and costs of decommissioning and disposal. Costs are included for all appropriations (R,E&D, R&E, and Ops).

Mission need statement. A formal planning document that defines a mission capability shortfall or technological opportunity the agency should address. Approval of the mission need statement by the Joint Resources Council at the mission need decision initiates investment analysis to determine the best means for satisfying mission need.

Mission performance areas. Areas that relate directly to the FAA mission by which the performance of the FAA is measured:

- *Safety.* Encompasses FAA activities that minimize the probability of injury or death of people or damage or loss of property due to accidents/incidents within the civil aviation and commercial space transportation systems.
- *Security.* Encompasses FAA activities that minimize the probability of injury or death or damage or loss of property due to criminal or terrorist acts that may be directed at the civil aviation system.
- *System efficiency.* Encompasses FAA activities that increase and maintain the ability of the civil aviation system to govern the flow of aviation traffic. These activities provide an efficient aerospace system by:
 - Maximizing flexibility and predictability of operations, and access to system services for users
 - Minimizing user delay in receiving services
 - Minimizing the cost to users of NAS actions required or proposed by the FAA

- Fostering an environment in which aviation and commercial space transportation can meet the needs of their customers and users
- Providing fair and full access of U.S. aerospace to worldwide markets as part of a safe and efficient global aerospace system.

- *Environment.* The range of FAA activities that minimize injury, damage, disruption, and unacceptable levels of intrusion imposed on the environment, resulting from the operations of the aerospace system.

- *Productivity.* The range of activities that increase the FAA's ability to operate on reduced financial resources without reducing operational safety, security, and capacity.

National Airspace System (NAS) Architecture. A detailed exposition of and planning tool for operational concepts and procedures, mandatory schedules, system requirements, human and physical resources, regulatory policies, and other actions essential for maintaining the safety and capacity of the NAS.

NAS Architecture data base. A complex set of descriptive, budgetary, financial, and schedule data used to describe the NAS Architecture. Data in the database can be structured into reports, graphs, charts, financial analyses, and schedules to support decision-making by senior FAA staff.

NAS Change Proposal (NCP). A document that is used to propose a technical change to a NAS baseline.

Non-developmental item (NDI). Any previously developed item of supply used exclusively for governmental purposes by a Federal agency, a state, or local government that requires only minor modifications or modifications of a type customarily available in the commercial marketplace.

Operational readiness date (ORD). The date the system is ready to be placed in operational use.

Outcome measure. Assessment of the actual results, effects, or impacts of a program activity compared to the program's intended purpose. A clear definition of the results expected from a program is a prerequisite for measuring outcomes.

Performance goal. A targeted level of performance expressed as a tangible, measurable objective, against which actual achievement can be compared, including a goal expressed as a quantitative standard, value, or rate.

Performance indicator. The value or characteristic used to measure output or outcome. A mix of related performance indicators, such as quantity, quality, timeliness, cost, and outcome, aids managers in balancing priorities among several goals.

Project change categories. Status of changed projects since the most recent publication of the CIP.

Completed. A facilities and equipment (F&E) project or program that has completed solution implementation and has been transferred to in-service management.

Inactive. A project currently without funding or without accomplishments to report since the most recent publication of the CIP, but that has not been withdrawn from the CIP by the sponsor.

Re-baselined. A project that has a schedule, cost, benefits, or performance baseline change since the most recent publication of the CIP. (NOTE: a project schedule that has been stretched out due to budget constraints is not considered re-baselined.)

Restructured. A project that has had a Program Office change or has been rescoped (e.g., elimination of certain requirements or changed to fee-for-service) since the most recent publication of the CIP.

Terminated. A previously approved acquisition project whose acquisition program baseline has been revoked by the JRC.

Withdrawn. A previously approved acquisition project that is temporarily or permanently removed from the CIP by the sponsor for technical or funding reasons.

Project description. A brief narrative of the activities required to implement, or modify the implementation of, a function; or to sustain an existing function.

Project/program phases. Steps in a project's life cycle.

- *Mission analysis (MA).* Performing strong, forward-looking, and continuous analytical activity to evaluate the capacity of agency assets to satisfy existing and emerging demands for services.
- *Investment analysis (IA).* Determining the most advantageous solution to an approved mission need. IA involves:
 - Developing operational requirements
 - Conducting a marketing search to determine industry capability

- Analyzing alternative approaches for satisfying requirements
- Conducting an affordability assessment to determine what the agency can afford.

- *Solution implementation.* The phase that begins with JRC selection of a solution and establishment of a program and ends when the new capability goes into service. Activities include:
 - Planning solution implementation
 - Obtaining the solution
 - Making the in-service decision
 - Deploying the solution.
- *Inservice management.* The phase that provides operational and maintenance services and control for fielded hardware and/or software.
- *Service life extension.* Increasing the inservice lifespan of fielded equipment by incorporating hardware and/or software improvements in the original device.
- *Removing an obsolete solution.*

Requirements Document (RD). A formal planning document approved by the Associate Administrator of the FAA sponsoring organization. The RD establishes the operational framework and the cost, schedule, performance, and benefits baselines required by the line of business with a mission need. It translates the mission need into top-level performance, supportability, and benefit requirements that should be satisfied in the final fielded capability. The RD is prepared in the Investment Analysis (IA) phase of the life-cycle acquisition management process.

Resources Management Council (RMC). The FAA body responsible for making corporate level decisions regarding the Operations budget.

Risk management. Process of developing plans and procedures to minimize/mitigate the technical, cost, and schedule uncertainties of a given FAA project.

Screening Information Request (SIR). Any FAA request for documentation, information, or offer for the purpose of screening to determine which offeror provides the best value solution for a particular procurement.

Segment description. A brief narrative of the budget items that will be used to fund the sustainment or implementation of functions described in the project.

Service. Actions or products provided by the FAA that enable and enhance the operations of the aero-

space community. A service can be internal or external to the FAA.

Service provider. Person or organization that provides actions or products to an aerospace user.

Software. Computer programs, routines, and symbolic languages that control the functioning of computer hardware and direct its operations.

- *Agency operational (application) software.* Software for Agency operations other than business or the management and control of air traffic.
- *Corporate (application) software.* Supports business operations, including executive decision-making and acquisition, office, financial, human resources, and records management.
- *Infrastructure management software.* Supports management of operational software and other operational information technology.
- *Operational (application) software.* Software for the management and control of air traffic that has reached initial operating capability at the first facility and has been transitioned to the operating services.
- *Operating system software.* Computer programs that control the execution of other computer programs in a computer. Operating systems schedule the time when computer programs are run, assign memory, and provide diagnostic and accounting information about a program's execution.
- *Support software.* Software found in the developer's software engineering environment, software test environment, and system development, test, and support environments. It is rarely appropriate to impose the same degree of controls, documentation, and other requirements on support software as on the application software.
- *System software.* A collection of programs written to service hardware or other software programs. System programming concerns the development of programs that perform translation, loading, supervision, maintenance, control, and running of computers and computer pro-

grams. It might also serve the function of monitoring the health of the hardware system. Operating systems and real-time executives are examples of system software.

Software development process. The methodology used to create software, such as prototyping, spiral, and waterfall techniques.

Stakeholder. Person or organization with a vested interest in the outcome of an FAA program, project, study, or other effort.

Sustainment. The process of restoring a system as a whole to its current level of performance and functionality by replacing existing system components with equivalent components not available in the spares inventory. Sustainment also includes minor functional or performance enhancements using system components within the current baseline.

System description. A brief list of the major functions of the system.

System engineering. The study, design, integration, and development of systems/programs that apply to both hardware and software.

System upgrade. A modification to an existing system that adds functionality to the system.

Technology insertion. The process of taking advantage of technology opportunities to improve the performance or reduce the cost of the system by replacing existing system components with newer technology components.

Technology refresh. The process of restoring or maintaining a system as a whole to its current level of performance and functionality (during development, production, deployment, and in-service management phases) by replacing the underlying COTS/CAS that is no longer supported by the manufacturer or primary vendor.

Transportation System Acquisition Review Council (TSARC). The Departmental body responsible for making corporate-level decisions.

