

Circular
No. 25-1-303

1 August 2002

EXPIRES 31 August 2004
Information Management
INFORMATION TECHNOLOGY INVESTMENT MANAGEMENT (ITIM)

1. **Purpose.** This circular establishes policy and implements the U.S. Army Corps of Engineers (USACE) Information Technology Investment Management (ITIM) business process.
2. **Applicability.** This circular applies to all elements of Headquarters (HQ), USACE, the Office of the Chief of Engineers (OCE), and all USACE Commands.
3. **Distribution.** Approved for public release; distribution is unlimited.
4. **References.** References are at Appendix A.
5. **Terms.** Special terms used in this publication are explained in Appendix B.
6. **Policy.** It is the policy of the U.S. Army Corps of Engineers that the defined set of IT investment management functions and activities set forth in this circular will be used as the official USACE-wide method for *selecting, controlling, and evaluating* IT investments. Funds will not be obligated or expended, nor released for use for any IT investments that have not successfully completed appropriate management oversight reviews as required by this circular and other regulations. The policy and ITIM business process set forth in this circular are mandatory and will be used by Commanders/Directors throughout USACE as a guide for implementing ITIM in their organization commensurate with their delegated authority. At all command levels, IT investments and the IT investment decisions will be:
 - a. Tied to strategic goals and missions/programs/projects;
 - b. Tied to the business process(es) they enable;
 - c. Linked to strategies that foster and enable e-government for the effective and efficient delivery of products and services to citizens, partners, stakeholders and customers;
 - d. Selected by a disciplined governance process based on business value and risk;
 - e. Acquired or developed in accordance with prescribed technical standards;
 - f. Acquired or developed to share data/information and create opportunities to unify and/or simplify systems and processes across the enterprise; and,

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g. Acquired, developed, operated and maintained using cost, schedule, and other performance measurements that are monitored and reported to the IT investment sponsor and IT investment decision authority to assure systems are working together synergistically and are meeting performance goals.

7. **Responsibilities.**

a. The USACE Commanding General will:

(1) Articulate and update, as necessary, key enterprise strategic directions, business goals and strategies against which IT investment decisions will be made;

(2) Serve as the final approval authority for the USACE IT Investment Portfolio;

(3) Chair the Senior Program Budget Advisory Council;

(4) Establish a USACE Cross-Functional Assessment Team; and,

(5) Ensure that ITIM has been implemented in all USACE commands.

b. The USACE Chief Information Officer (CIO) will:

(1) Serve as the Commanding General's principal agent to facilitate the IT Investment Management business process;

(2) Manage and maintain the USACE IT Investment Portfolio, focusing on those IT investments that are enterprise-wide, i.e., have HQUSACE proponentcy, cross multiple command boundaries, or are otherwise of special interest;

(3) Serve as the Life Cycle Management of Information Systems (LCMIS) Milestone Decision Authority (MDA) for enterprise-wide IT investment programs and projects;

(4) Ensure that the USACE Corps Enterprise Architecture (CEA) is established within the guidelines of the Federal Enterprise Architecture Framework (FEAF), and includes appropriate configuration management practices;

(5) Serve in partnership with the Office of the Principal Assistant for Contracting (PARC) and the Directorate of Logistics Management to achieve efficiencies and economies in enterprise IT acquisition strategies;

(6) Support the USACE Chief Financial Officer (CFO) and IT investment sponsors in the preparation and submission of OMB Exhibit 53 and supporting Capital Asset Plans and Business Cases (Exhibit 300Bs) for major IT investments;

(7) Ensure IT investment selection, control and evaluation is accomplished IAW the ITIM business process, including supporting the ITIM management process, with the management review mechanisms provided herein (see Appendix C); and,

(8) Develop and maintain outcome-based performance indicators for the planning, alignment, and management of all corporate IT investments within the ITIM.

c. The USACE Chief Financial Officer (CFO) will:

(1) Conduct the Junior Program Budget Advisory Committee (JPBAC) as the mid-level management review board responsible for the preliminary review of ranked IT investment and funding recommendations, and serve as its Chairperson.

(2) Facilitate, and serve on, the Senior Program Budget Advisory Committee (SPBAC) as the senior-level executive review board (chaired by the CG) that makes the final decisions on ranked IT investments to ensure balance between command missions and the distribution of resources.

(3) Prepare and submit OMB Exhibit 53 and supporting OMB Exhibit 300Bs (Capital Asset Plan and Business Case) for major IT investments with support from the USACE CIO.

d. HQUSACE Staff Principals and Major Subordinate Commanders will:

(1) Streamline and reengineer business processes before making IT investments or modernization decisions;

(2) Be responsible for all program/project management aspects of the IT investment to include Capital Plan and Business Case preparation and compliance with the ITIM business process;

(3) Ensure that performance measurements are in place to assess the effectiveness and efficiency of their IT investments;

(4) Nominate a primary and alternate representative from either the MSC Headquarters or a subordinate District to serve on the CFAT; and,

(5) Participate in Junior/Senior Program Budget Advisory Councils, as required.

e. USACE Commanders/Directors will implement an ITIM business process described in this circular appropriate to their delegated authority to manage the IT investments in their IT Investment Portfolios. Commanders/Directors are responsible for providing direction to insure IT investments produce meaningful improvements in cost, quality, timeliness of service, and mission accomplishment as well as for providing feedback on command-wide, standard information systems to their HQUSACE functional proponents.

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f. IT Investment Sponsors (Functional Proponents) will comply with the IT Capital Planning guidance and instructions issued by the USACE CIO; enter their IT investment information into the USACE IT Investment Portfolio System (ensure the information is kept up-to-date and accurate); prepare documentation, justification, and OMB Exhibit 300Bs for major IT investments; and present the IT investment business case to the CFAT. In addition, the IT Investment Sponsor will appoint a Program/Project Manager and establish a Program/Project Delivery Team (PDT) in accordance with ER 5-1-11 and ER 25-1-2.

8. **ITIM Business Process.** The ITIM business process (see Appendix D, Figure D-1), like any other business process, has its inputs, controls, and mechanisms and produces outputs or delivers services. The ITIM business process takes IT investment requirements (inputs), processes these inputs using controls (criteria, standards, checklists) and mechanisms (SMEs, teams, committees, councils, decision authorities) and produces outputs (assessments, prioritized lists, funding decisions). Its sole purpose is to ensure that the right IT investments are funded according to their function and importance to the USACE.

a. ITIM is used to manage IT investments – from requirements identification through the retirement or disposal of the IT investment asset; e.g., the retirement of an automated information system (AIS) or upgrade of communication circuits. IT investments, as an integrated “portfolio,” are approved by the IT Investment Decision Authority. The following are key components and functions embodied in the ITIM business process (see Appendix D for explanation of components and functions):

- Capital Planning;
- Investment Control;
 - Architecture Alignment and Assessment;
 - Information Assurance and Privacy;
 - Value/Risk Assessment;
 - Budget Decision;
- Benefit/Value Realization, including ancillary maintenance and manpower costs at each command; and,
 - Life Cycle Management of Information Systems.

The first two components comprise the USACE Capital Planning and Control (CPIC) process and all four components comprise the USACE ITIM business process.

b. The ITIM business process is intended to achieve for the IT investment sponsor and the organization one or more of the following results or outcomes:

- Determining where resources are best allocated;
- Improving mission, program, and project performance;
- Improving business process;
- Increasing product/service delivery, quality, and customer satisfaction;
- Implementing E-government solutions;
- Enhancing data/information sharing;
- Reducing total cost of ownership;

- Eliminating duplicate systems;
- Selecting the right IT investments;
- Optimizing the IT infrastructure; and,
- Improving IT benefit/cost ratio.

In order to achieve the primary results or outcomes indicated above, the following must be implemented:

(1) Identify opportunities to unify and/or simplify processes and information systems across the enterprise, and the Federal Government;

(2) Promote alignment, integration, change, time-to-delivery, and convergence opportunities to improve mission, program, and project performance;

(3) Enhance communication among and between lines-of-business and program areas across the enterprise;

(4) Improve the consistency, accuracy, timeliness, integrity, quality, availability, access, and sharing of information;

(5) Improve alternative and value/risk analysis to determine benefits, impacts, and appropriate performance measurements of IT investments;

(6) Identify redundant, obsolete, or duplicative systems or processes and consolidate or eliminate where appropriate;

(7) Achieve economies of scale by optimizing the sharing of IT assets, information systems, and services on a regional and enterprise basis;

(8) Expedite the integration of legacy, migration, and new information systems; and,

(9) Emphasize the inclusion of information security and privacy requirements throughout the IT investment's life cycle.

c. The ITIM business process is the primary means for selecting, controlling, improving and evaluating IT investments in the USACE IT Investment Portfolio. IT assets, initiatives, programs, and projects identified in the portfolio may involve new, changed, and on-going mission requirements. Examples include: A strategic business direction like becoming a "Learning Organization," an Army Knowledge Management (AKM) goal to webify applications, or sustaining base requirements for already installed IT assets, information systems, and networks. Each IT investment in the USACE IT Investment Portfolio includes funding requirements for the prior years, current budget year, budget year plus one, budget year plus two, and future outyears regardless of the funding source – direct, indirect, fee-for-service or PRIP. The USACE IT Investment Portfolio is managed in the aggregate; i.e., the consolidation of

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various IT investment by "business domain," "lines-of-business," and/or "IT investment class" (such as office automation) as well as by each major IT investment itself.

d. For major IT investments, the IT investment sponsor prepares an OMB Exhibit 300B (Capital Asset Plan and Business Case) and presents their business case to the CFAT. IT Investment Portfolio management and IT investment funding is synchronized and integrated with the USACE budget business process, which is an adaptation of the DoD/Army Planning, Programming, Budget and Execution System (PPBES) methodology.

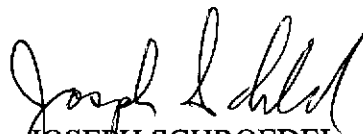
e. The USACE IT Investment Portfolio and major IT investments will be processed using the policy, discussion, definitions, and mechanisms described in this circular. Each ITIM management process team will perform its appropriate role and functions in the selection, control, and evaluation of the Corps IT investments. This will ensure that those IT investments recommended in the budget business process to the IT Investment Decision Authority for funding have been properly assessed and prioritized, from the most critical to the least important, based upon their benefit/value as well as alignment with the CEA and compliance with information security and privacy requirements. IT investment reviews may be tailored according to the scope, impact, or cost the IT investment, e.g., command-wide versus organization unique.

9. **Compliance Review.** ITIM is subject to review under the Command Staff Inspection Program.

10. **Implementation Schedule.** HQUSACE and all USACE commands will implement the policy, guidance and ITIM business process, with its supporting ITIM management processes, prescribed in this circular within 120 days of the publication date. USACE commands may tailor their implementation consistent with their delegated authority.

FOR THE COMMANDER:

- 3 Appendices
- App A – References
- App B – Explanation of Terms
- App C – Management Review
Mechanisms
- App D – Description of Key
Components and Functions


JOSEPH SCHROEDEL
Colonel, Corps of Engineers
Chief of Staff

Appendix A

References

The references cited contain policy and guidance directly related to the functions, roles, and responsibilities inherent with the IT Investment Management business process.

National Defense Authorization Act for FY2001, Title X, Subtitle G, 44 U.S.C. 3531, et. seq.

Clinger-Cohen Act, Division D, 40 U.S.C. 251, et. seq.

Clinger-Cohen Act, Division E, 40 U.S.C. 1401, et. seq.

National Information Infrastructure Protection Act, 18 U.S.C. 1030

Paperwork Reduction Act, 44 U.S.C. 101, et. seq.

Government Performance and Results Act, U.S.C. 1101, et. seq.

Government Paperwork Elimination Act, 44 U.S.C. 3504, et. seq.

Privacy Act, 5 U.S.C. 552a, as amended

Freedom of Information Act, 5 U.S.C. 552, as amended

Executive Order 13011, 16 Jul 96, "Federal Information Technology"

OMB Circular A-11, Preparation and Submission of Budget Estimates

OMB Circular A-123, Management Accountability and Control

OMB Circular A-127, Financial Management Systems

OMB Circular A-130, Management of Federal Information Resources

OMB memorandum M-97-02, Funding Information Systems Investments

OMB memorandum M-00-07, Incorporating and Funding Security in Information Systems Investments

DoD 5000.2-R, Mandatory Procedures for Major Defense Acquisition Programs (MDAPS) and Major Automated Information System (MAIS) Acquisition Programs

DoD Instruction 5200.40, "DOD Information Technology Security Certification and Accreditation Process (DITSCAP)"

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DoDD 5400.11, Department of Defense Privacy Program

DoD C4ISR Architecture Framework, Version 2.0

AR 11-18, Cost and Economic Analysis Program

AR 25-1, Army Information Management

AR 70-1, Army Acquisition Policy

AR 71-9, Material Requirements

AR 380-19, Information Systems Security

AR 340-21, The Army Privacy Program

Joint Technical Architecture – Army (JTA-A), V6.5

Department of the Army, Economic Analysis Manual, U.S. Army Cost and Economic Analysis Center

Department of the Army, Cost Analysis Manual

ER 5-1-11, USACE Business Process

ER 25-1-2, Life Cycle Management of Information Systems (LCMIS)

Federal CIO Council, Architecture Alignment & Assessment Guide

Federal CIO Council, Federal Enterprise Architecture Framework (FEAF), Version 1.1

Federal CIO Council, A Practical Guide to Federal Enterprise Architecture

Appendix B

Explanation of Terms

Alignment. The degree of relational agreement, conformance, and consistency between organization's mission, vision, values and goals with its policies, guidance, structures, processes and systems, competencies, and individual behaviors.

Architecture Alignment & Assessment. The determination made about an IT investment's alignment with the Corps Enterprise Architecture (CEA). Using criterion to evaluate whether or not, and to what degree, there is conformance determines the IT investment alignment. IT investment alignment is evaluated against each of the CEA architectural views – Business, Information, Application, and Technical.

Benefit. A term used to indicate an advantage, profit, or gain attained by an individual or organization. Tangible benefits can be explicitly quantified. Such benefits may include reducing costs, increasing productivity, decreasing cycle time, or improving quality.

Business Case. A document, generally having a structured format, which articulates an initiative, action or change requiring the allocation of resource and a management decision. A business case typically includes a statement about why the initiative, action or change is required; assumptions, constraints, and risks; economic analysis on alternatives; return-of-investment (benefits and value); and a recommendation.

Business Process. A systematic, disciplined and consistent means by which people perform work to produce products or achieve results/outcomes, or deliver services. Business processes usually have policy and guidance associated with them and, characteristically, have sub-processes, procedures, activities, events, and tasks. Business processes have inputs, controls, outputs, and mechanisms to ensure efficiency, effectiveness, quality, and customer satisfaction. Time-to-Delivery is generally used to measure business process performance.

Cost. A term used to indicate the obligation and expenditure of funds or as a means to express the aggregation of difference types of costs over time. It is not unusual for "cost" to be preceded or followed by a noun, adverb, or adjective to clarify or emphasis it's meaning, such as "overhead cost" or "recurring cost."

DoD Information Technology Security Certification and Accreditation Process

(DITSCAP). The standard DoD management process for identifying information security requirements, providing security solutions, and managing information system security activities.

Enterprise Architecture (EA). A strategic, representational view that defines the business, information, applications (information systems), and information technologies necessary to support the mission, programs, and projects of the enterprise. The EA identifies the current "state" (AS-IS) as well as the "objective, end-state" (TO-BE) of the organization, and serves as a "blueprint" for implementing changes to the business, information, applications, and information technology needs of the enterprise. The EA is a "tool" used in the architecture alignment and

assessment management process and is critical component in the IT investment control management process for selecting, controlling and evaluation IT investments.

Enterprise Architecture Framework (EAF). A graphical presentation that documents the linkages between an enterprise's business (mission and processes), information requirements, information system (applications), and information technology infrastructure (IA assets and technical standards). The EAF serves as a guide (and tool) for IT capital planning and investment control, both at the strategic and operational levels.

Information Technology (IT) Investment Decision Authority. The organization's commander or designated senior management official having the authority to approve the proposed IT investment and/or aggregation of IT investments as having value/benefit to the organization and the authority to make the budget decision for funding.

Information Technology (IT) Investment Sponsor. The organization or person that identified the IT requirement and submitted the requirement for funding. The functional proponent for an IT investment, and the individual held accountable for value/benefit realization.

Information System. The organized collection, processing, transmission, and dissemination of information in accordance with defined procedures, whether automated or not.

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. For the purpose of the preceding sentence, equipment is used by the government, or is used by a contractor under a contract with the government, which (1) requires the use of such equipment, or (2) requires the use, to a significant extent, of such equipment in the performance of a service or the furnishing of a product. IT includes the computers, ancillary equipment, software, firmware and similar procedures, services (including support services), and related resources used by an organization to accomplish a function.

Information Technology Investment. An asset, initiative, program, or project as well as service and support service for which the enterprise is or will allocate resources, in particular funds. Also, the "decision" by the organization to expend resources or the actual expenditure of resources on selected information technologies or IT-related initiatives for which there is an expectation that the benefits from the expenditure exceed the value of the resources expended.

Information Technology Investment Portfolio. The aggregation of the enterprise's IT assets, initiatives, programs, projects, automated information systems and services/support services requirements, both planned and installed and operational.

Information Technology Investment Portfolio System (ITIPS). The official source for all USACE IT investment information.

Major IT Investment. Major IT investment means an IT asset, initiative, program or project that requires special management attention because of its importance to USACE; its high

development, operating, or maintenance funding requirement; or its significance in supporting the Corps' missions, programs, projects, finances, property, or other resources. Large IT infrastructure investments (e.g., major purchases of personal computers or local area network improvements) are considered major IT investments. For the financial management mission area, "major" is any IT investment whose funding requirement is \$500,000 or greater. IT investments that are E-Government in nature or use e-business information technologies are considered "major" regardless of the cost.

Methodology. A documented approach for performing activities in a coherent, consistent, accountable, and repeatable manner.

Milestone. A point-in-time or event that an expected deliverable or activity is scheduled to be started, completed or is in the process of being completed. A milestone is typically used to measure progress, and to hold an individual, team, or organization accountable for success or failure.

Outcome. The actual results, effects, or impacts of a business process, procedure, activity, task or action taken or not taken. Actual outcomes typically are compared to expected outcomes.

Policy. A guiding principle, typically established by management, to influence and determine the results or outcomes of business processes or personnel practices.

Process. A sequence of procedures, activities/events, and tasks/actions performed for a given purpose.

Program/Project Manager (PM). The individual appointed, verbally or in writing, by a management official responsible for the delivery of agreed upon deliverables to the IT investment sponsor. A steward responsible for the resources provided and for the execution of the approved program/project management plan.

Program/Project Delivery Team (PDT). The individuals serving on a team, who share collective responsibility, for the successful delivery of the service, product, program or project assigned the team. A PDT is often composed of individuals with diverse competencies needed to ensure delivery success.

Risk. A term used to define the class of factors which (1) have a measurable probability of occurring during an IT investment's life cycle, (2) have an associated cost or affect on the investment's output or outcome (typically an adverse affect that jeopardizes the success of an investment), and (3) have alternatives from which the organization may chose.

Technical Reference Guide (TRG). Identifies and describes the standards pertaining to information technology and IT service delivery (e.g., databases, communications, security, software, hardware, Intranet, etc.) to be used throughout the Corps.

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Technical Reference Model (TRM). Identifies and describes the information technology standards and IT service delivery used for a specific IT investment. The TRM is a subset of the Technical Reference Guide (TRG). There may be many TRM's associated with the TRG.

Value. A term used to identify intangible benefits that may be easy to identify but that can be difficult to quantify. These benefits may include more efficient decision-making, brand recognition, goodwill, valued partner, greater data accuracy, improved data security, reduced customer burden, or increased organizational knowledge.

Appendix C

Management Review Mechanisms (Teams)

Investment Analysis Team (IAT). This is a CIO team whose primary function is to coordinate Capital Asset Plans and Business Cases (OMB Exhibit 300Bs) with Corporate Information's other internal teams and the Cross-Functional Assessment Team (CFAT). In addition, the IAT reviews the USACE IT Investment Portfolio to determine adequacy and appropriateness of participation by USACE commands in IT Capital Planning and to provide quality control on IT investment information in the portfolio. The IAT will provide oversight of the USACE IT Investment Portfolio and major IT investments throughout the ITIM business process, provide appropriate coordination and feedback to the other ITIM management processes, provide administrative support to CFAT, conduct preliminary review of the IT investment sponsor's AIS/IT Capital Asset Plan and Business Case, and serve as the steward for the ITIM business process.

Architecture Alignment & Assessment (AAA) Team. The AAA Team consists of Corporate Information personnel and other key subject matter experts (SMEs) identified as content managers/providers for various Technical Reference Guide (TRG) domains and architecture views. The AAA Team will assess the alignment of the IT investment with the Corps Enterprise Architecture (CEA) to determine how well it aligns with the Business, Information, Application, and Technical architectural views as well as whether or not new or modernization IT investment initiatives are consistent with the CEA "To-Be" architectures. The AAA Team serves as the steward for the Architecture Alignment & Assessment management process.

Information Assurance Assessment and Privacy (IAAP) Team. This is a CIO team whose primary function is to review IT investment compliance with all information assurance and privacy requirements, the USACE Information Security Plan, and to ensure that the IT investment does not compromise the protection of data, information, systems, and networks against unauthorized use, denial of service, and data/information destruction or change. All USACE information systems and networks must comply with the DoD Information Technology Security Certification and Accreditation Process (DITSCAP). The IAAP Team serves as the steward for the Information Assurance Assessment management process.

USACE Cross-Functional Assessment Team (CFAT). This is a management team, with field representation, whose primary function is to assess the business value and risk of USACE-wide IT investments, the costs associated with the operations and maintenance incurred by commands for command-wide, standard information systems, prioritize (rank) IT investments, and make recommendations to the Program Budget Advisory Councils on funding (fully, partially, or not at all). The Cross-Functional Assessment Team representatives are appointed by HQUSACE staff principles and MSC commanders and is chaired by the HQUSACE Chief of Staff. Team member representation is a combination of lines-of-business program managers and senior executives.

Life Cycle Management of Information Systems (LCMIS) Team. This is a CIO team whose primary functions are to assist the USACE CIO, as the Milestone Decision Authority (MDA) for

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enterprise-wide IT program or project initiatives; review IT program/project management documentation for milestone decision reviews; assess IT program/project management plan (PMP) execution against performance measurements; make recommendations to the MDA; and, serve as the steward for the LCMIS management process. The LCMIS Team ensures that ER 25-1-2, Life Cycle Management of Information Systems, is used as the Project Management Business Process (PMBP) for IT investment programs/projects. The LCMIS Team is responsible for the coordination of all LCMIS milestone decision reviews with the other ITIM management process teams prior to the submission of a System Decision Paper (SDP) to the MDA for approval.

Appendix D

Description of Key Components and Functions

Information Technology Investment Management (ITIM) Business Process Flow Diagram.

The following diagram graphically depicts an overall view of the ITIM business process.

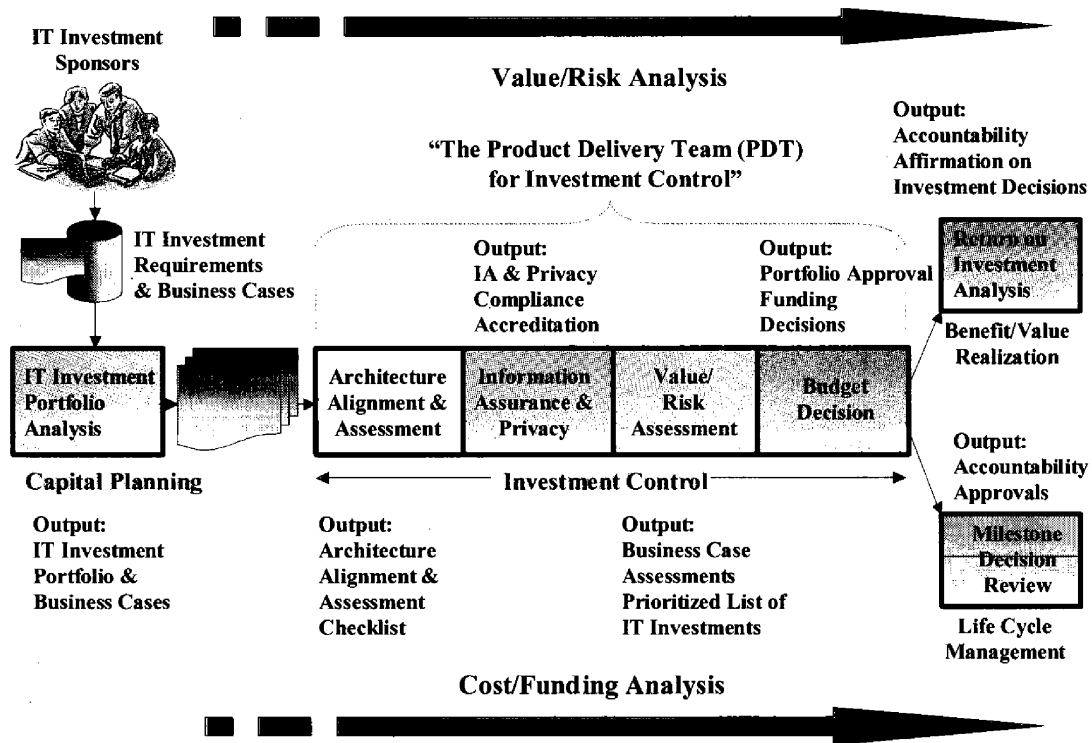


Figure D-1

Capital Planning. Capital planning is the management process used to identify IT investment requirements that will improve the Corps’ mission, program, and project delivery performance to the Nation, the Army, and its customers as well as enhance the effective and efficiency of its business processes. Annually the USACE CIO issues broad guidance in the Command Consolidated Guidance (CCG) document and more detailed, specific guidance and instructions in a memorandum to HQUSACE Staff Principles and USACE Commanders. The Director or Chief of Information Management in each command is responsible to their commander for the identification of IT investment requirements and the funding necessary to acquire, install, operate, support, and maintain the IT investment asset. Each command enters its requirements into the IT Investment Portfolio System (ITIPS). ITIPS is a single database that contains each command’s IT Investment Portfolio. Each command, appropriate to its delegated authority, manages its own IT Investment Portfolio. Each MSC, under the Regional Business Center framework, manages, in aggregate, its MSC IT Investment Portfolio. The USACE CIO manages, in total, the USACE IT Investment Portfolio. The Investment Assessment Team (IAT) identifies major IT investments in the USACE IT Investment Portfolio that must come under HQUSACE management, and prepares and presents to the USACE CIO the Corps’ investment

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funding requirements by organization, business domains, lines-of-business, and IT class for the past, current, and future budget cycles. This provides a holistic view as to where IT investment funding is required, and notionally indicates the relative distribution of where funding has been provided in the past and where it is needed to meet current and future funding requirements. Legacy IT investments that exceed the inflation rate are “flagged” for further investigation.

Investment Control. Investment control is the management process used to select, control, and evaluate which IT investments will be ranked and recommended for funding using the information submitted by IT investment sponsors, through their commands, in the capital planning process. Included in the investment control management process are other management processes, functions, and mechanisms that support and facilitate the execution of the investment control process. In the investment control management process, IT professionals, IT investment functional proponents, lines-of-business program managers, and senior executives are involved. Management involvement by lines-of-business program managers and senior executives is the critical ingredient for making IT investment decisions that represent the best IT investment portfolio choices consistent with the Corps’ strategic goals and mission requirements. Lines-of-business program managers and senior executives serve on the Cross-Functional Assessment Team (CFAT) and Program Budget Advisory Councils (PBACs). The IT investment reviews performed by the IAT, CFAT and PBACs provide the opportunity to identify information systems that would result in shared benefits or costs across the Corps and well as DoD, DA, other Federal agencies. When these opportunities occur, the IT Investment Decision Authority will direct the appropriate IT sponsors to coordinate and partner to optimize benefits and costs sharing. IT investment funding will not be provided to duplicative or similar requirements.

Architecture Alignment and Assessment (AAA). Architecture alignment and assessment is the management process used to evaluate how well IT investments are aligned with the Corps’ Enterprise Architecture (CEA). IT investments that are fully aligned, with each architecture view (Business, Information, Application, and Technical), are more likely to provide the benefits or value articulated by their sponsors. An IT investment that is less or only partially aligned will generally not produce the benefits or value anticipated. New IT investment initiatives or proposed major enhancements (modernization or upgrade) to existing IT investment are evaluated, by the AAA Team, using an Architecture Alignment and Assessment Checklist (each architectural view has its own checklist). With each architectural view, a numeric value is assigned based upon meeting checklist criteria -- the higher the numeric value, the greater the alignment. IT investments that fail their CEA alignment and assessment review will not be recommended for approval by the Architecture Alignment and Assessment Team. For these IT investments to be considered for funding in the budget decision process, the IT sponsor must first obtain a waiver from the IT Investment Decision Authority.

Information Assurance (IA) and Privacy. IA and privacy policies, guidance, processes, and procedures focus on protecting the Corps’ IT infrastructure assets, information systems, and data/information against unauthorized use, denial of service, and data/information disclosure, alteration, or destruction. The IA and privacy management process ensures the availability, confidentiality, and integrity of information processed within the USACE IT infrastructure for USACE information systems as well as provides a measure of confidence that the IT investments incorporate security features and/or functionality appropriate to their risks. The Information

Assurance Assessment and Privacy (IAAP) Team evaluates IT investments to determine whether or not, and to what degree, appropriate security/privacy features, functionality, procedures, practices, and methodologies have been included and/or have been implemented and are being used. The IA and privacy management process mediates and enforces information security and privacy requirements. USACE has established and implemented a USACE-wide IT Security Program in accordance with the Clinger-Cohen Act, Computer Security Act, Government Information Security Reform Act, Information Infrastructure Protection Act, OMB Circular A-130, and other higher authority requirements. All information systems and networks must undergo a security review and receive accreditation under the Defense Information Technology Security Certification and Accreditation Process (DITSCAP). All information systems and networks must have a final or interim approval to operate.

Value/Risk Assessment. Value/risk assessment is the management process used to determine the overall value and risks associated with IT investments, in particular for major IT investments that are information systems. Value and risk criterion, weighted based upon importance, is used to assign a “rating.” The USACE CIO submits the USACE IT Investment Portfolio and major IT investment business cases, after appropriate reviews by other ITIM management process teams, to the Cross-Functional Assessment Team (CFAT). The CFAT applies value/risk criterion, and its collective lines-of-business knowledge, to assign a rating to an IT investment and to quantitatively, qualitatively, and functionally compare and prioritize IT investments. A high value and low risk rating for an IT investment indicates its potential to be prioritized ahead of other IT investments and be given serious consideration for funding. The USACE CFO integrates the prioritized IT investments with other USACE funding requirements, and the USACE CIO and CFO jointly present the prioritized IT investments recommendations to the Program Budget Advisory Councils (Junior and Senior PBAC). Figure D-2 illustrates value/risk

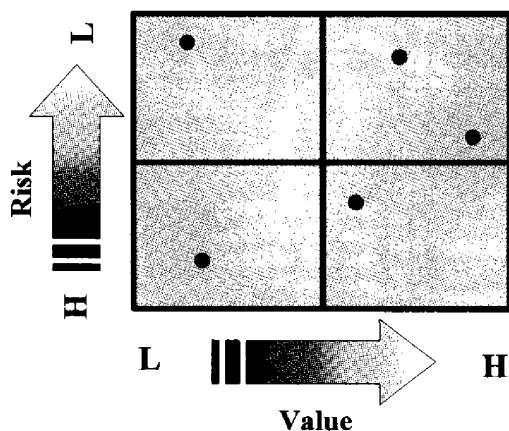


Figure D-2

assessment and the quantitative and qualitative comparison of IT investments. Each “dot” represents a specific IT investment. The “dot” in lower left corner (third quadrant) of the four quadrant square is an IT investment determined to have low value and high risk where as the “dot” in the upper center of the second quadrant is an IT investment determined to have high value and low risk. IT investments that fall into the second quadrant generally represent the better IT investment choices for the enterprise and would be ranked higher on the prioritized list for funding consideration.

Budget Decision. Budget decision is the management process used to finalize what mission, program, and project investment and operating requirements will be funded, partially funded or not funded. The budget decision management process is part of the budget business process. The USACE CIO and CFO share a joint responsibility for integrating IT capital planning and investment control with those processes used for making budget, financial, and program management decisions. Critical in the budget decision process is determining whether or not to

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undertake a particular investment in an information system based upon its projected return on investment. The quantitative and qualitative comparison assessment done by the CFAT provides valuable information to assist senior manager and executives in making investment decisions in the budget decision process. The Junior PBAC is authorized to make adjustments and recommend these changes to the Senior PBAC. The Senior PBAC members review the funding recommendations and offer final changes to the Senior PBAC Chairperson (the Commander, USACE or his designated representative) of decision. The Commander, USACE is the IT Investment Decision Authority for approving the USACE IT Investment Portfolio and for what IT investments are funded.

Benefit/Value Realization. IT investment sponsors must be able to quantitatively (benefit) and/or qualitatively (value) articulate the benefits/value for their IT investments. The ability to do this is what characterizes the funding provided as an investment verse a cost. Quantitative and/or qualitative performance measurements must be established and the appropriate data/information collected, analyzed, and reported by the IT investment sponsor to the Decision Authority. The IT Investment Decision Authority holds the IT investment sponsor accountable for benefit/valuation realization. IT investments that fail to achieve the anticipated benefits/value are subject to immediate review and if determined not to be correctable will be terminated. Benefit/value realization provides the means for obtaining information to verify whether or not there has been a return on the investment.

Life Cycle Management of Information Systems (LCMIS). LCMIS provides a disciplined project management approach for developing information systems and implements the acquisition precepts of Department of Defense (DoD) and Department of the Army (DA) regulations. LCMIS consists of a full five-phase life cycle management process that is consistent with USACE Project Management Business Process (PMBP) doctrine, and is scaled based on the IT investment's estimated program/project cost. Under DoD, DA, and USACE LCMIS regulations, approval authorities are delegated as milestone decision authorities (MDAs). MDAs partner with the IT investment sponsors to ensure the success of IT investment initiatives.

The LCMIS management process has five milestones, at which a decision review is conducted. Typically the first milestone decision review (MDR) is conducted at Milestone 0, the end of the Mission Need Justification phase. In each LCMIS phase and at MDRs, the Architecture Alignment and Assessment and Information Assurance and Privacy Teams are involved and perform their evaluation functions to ensure continued IT investment program/project alignment with the CEA and compliance with information security and privacy requirements. The LCMIS Team evaluates the IT sponsor's Systems Decision Paper, and supporting management and technical documentation, integrating into their evaluation the input from the AAA and IAAP Teams as well as its perspective on/about Government Paperwork Elimination Act requirements, and makes recommendations to the MDA as to whether or not the IT investment initiative, program, or project should be continued, adjusted, or terminated. The MDA issues a Milestone Decision Review memorandum to the IT investment sponsor approving continuation to the next LCMIS phases or halting the effort in the current phase until the guidance issues is satisfied. The LCMIS management process provides the means for USACE executives and senior managers to obtain timely information on/about the progress of IT initiatives, programs, and projects and whether the projected quantifiable benefits and qualitative values will be achieved or the whether

the risks have changes significantly enough to compromise success. Any IT major initiative, program, or project that exceeds its program cost by 10% or its schedule by 90 days will have an in-progress review (IPR) conducted jointly by the MDA and its investment sponsor.