

U.S. ARMY CORPS OF ENGINEERS (USACE) INFORMATION RESOURCE MANAGEMENT (IRM) STRATEGIC PLAN FISCAL YEARS 2014-2018

Document Change History

Date	Rev	CRQ ID	Description
28 Feb	1.0		First Draft review
1 Mar 2013	2.0		DM comments and grammatical changes
5 Mar 2013	3.0		Added Cyber Security
5 Mar 2013	4.0		Added PII impact
6 Mar 2013	5.0		Revised "Improving our services to customers paragraph
6 Mar 2013	6.0		Integrated IPR (6 Mar 13) comments and recommendations
7 Mar 2013	6.1		New CIO Authorities Paragraphs
			Formatting changes
3 Apr 2013	7.1		Integrated with staff comments and updated with OMB Codes
10 Apr 2013	8.0		Integrated DD comments and Human Resources
15 Nov	9.0		Incorporate results from Annual Strategic Planning Event
3 Feb 2014	10.0		Incorporated suggestions from OMB review

This document was created with source material from OMB Portfolio Guidance, USACE Campaign Plan, USACE Directorate of Corporate Information CY13 Campaign Plan, USACE 2017 Target IT Architecture, DoD IT Enterprise Strategy and Roadmap, U.S. Army publications and with input from the U.S. Army Corps of Engineers Information Technology (IT) Strategic Plan.

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From the Chief Information Officer (CIO)

For over 200 years the US Army Corps of Engineers has changed and evolved in response to domestic and international developments. We believe our value to our military and our Nation increases when we lead change in our area of responsibility—not lag behind it.

This plan asks that we apply two key mission enablers –information and technology—the same mission principles of leadership and discipline that have long applied in our core engineering mission.

This plan is the cornerstone for a set of challenging changes that will make the Information Management/Information Technology (IM/IT) community stronger mission partners, more agile and adaptable, and better able to support our great workforce as they continue Building Strong.

We can do this.

ROBERT V. KAZIMER

Director, Corporate Information

Table of Contents

1.	Introduction	1
	Guiding principles	
3.	Mission	7
4.	Vision	7
5.	Strategic Framework	7
6.	Strategic Goals and Objectives (AXXB)	9
7.	OMB Additional topics	. 11
8.	Accessibility (IXXA, IXXB, IXXC)	. 17
Ар	pendix A References:	. 18

OMB Content Tags

Agency Strategic Goals and Objectives (AXX-)
Improving Services to Customers (BXX-)
Governance and Management Processes (CXX-)
CIO Authorities (DXX-)
Cyber security Management (EXX-)
Workforce (FXX-)
Managing Information as an Asset (GXX-)
Commodity IT and Shared Services (HXX-)
Accessibility (IXX-)

1. Introduction

The United States Army Corps of Engineers (USACE) mission is to deliver vital engineering solutions in collaboration with our partners to secure our Nation, energize our economy, and reduce risk from disaster.

We envision presenting a "GREAT" engineering force of highly disciplined people providing engineering solutions for the Nation's toughest challenges.

USACE is an executive branch agency within the Department of Defense and a Direct Reporting Unit within the Army. The Corps employs approximately *34,000* people, including military and civilian personnel who perform Civil Works and Military Program duties. As such, the Corps is the world's largest public engineering, design, and construction management agency. The Corps leverages its internal expertise through contracts with commercial companies for all of its construction work and much of the design work, and by investing in appropriate information technologies.

The Assistant Secretary of the Army for Civil Works has the principal responsibility for overall policy direction and supervision of the Department of the Army functions related to all aspects of the Civil Works mission. A Lieutenant General serves as the Chief of Engineers and Commanding General, USACE. He oversees execution of both the Civil Works and Military Program missions. The Chief of Engineers delegates responsibility for the leadership and management of the Civil Works mission to the Director of Civil Works, and the leadership and management of the Military Programs mission to the Director of Military Programs. The integration of Civil Works and Military Programs expertise provides a flexible instrument for problem solving, as well as the design and implementation of engineering solutions. As such, the Corps expertise contributes to the economic development, security, and revitalization of the U.S. and the nations it supports.

Delivery of the Civil Works and Military Program public engineering services and capabilities, across a full spectrum of operations in peace and war in support of national interests, is being executed in a very complex and challenging environment. In compliance with the current Department of Defense-wide "Efficiencies Initiative" to move America's defense institutions toward a "more efficient, effective and cost conscious way of doing business", the Corps of Engineers must institute a dynamic approach for continued relevance to the nation through execution of concise corporate goals that support and align with the DoD IT strategic goals: increase mission effectiveness, improve cyber security, and deliver efficiencies.

The USACE Civil Works Mission-Serve the public by providing the Nation with quality and responsive:

Development and management of the Nation's water resources;

- Support of marine transportation systems for commercial navigation;
- Protection and management of the natural environment;
- Restoration of aquatic ecosystems;
- Flood risk management and emergency management; and
- Engineering and technical services in an environmentally sustainable, economic, and technically sound manner with a focus on public safety and collaborative partnerships.

Strategic Goals

USACE will achieve the Civil Works mission by pursuing the following five goals:

- 1. Transform the Civil Works Program to deliver enduring and essential water resource solutions through Integrated Water Resources Management.
- 2. Improve the safety and resiliency of communities and water resources infrastructure.
- 3. Ensure the Nation's waterborne transportation systems are available for economic and natural security purposes.
- 4. Restore, protect, and manage the environment to benefit the Nation.
- 5. Manage the life-cycle of water resources infrastructure systems in order to consistently provide sustainable solutions.

Civil Works Cross-Cutting Strategies

State-of-the-Art Technology – Embrace new and emerging technology for its fullest advantage. Invest in research that improves the resiliency of structures, assists in updating design criteria, and improves approaches toward planning and design.

Investment in research and development must continue to provide the technology that addresses contemporary problems, and which spurs future innovations. Within USACE, the research and development laboratories, as organized under the Engineering Research and Development Center (ERDC), will facilitate this innovation. In partnership with the Institute for Water Resources (IWR) and the other Centers of Expertise, ERDC will employ technology transfer to infuse new technologies into practice.

USACE is committed to developing and maintaining a unified and interoperable geospatial program to support analysis, data presentation, outreach, and mapping across all business lines through the Enterprise Geospatial Engineering System (EGES) Program.

The USACE Military Programs Mission

Provide premier engineering, construction, real estate, stability operations, and environmental management products and services for the Army, Air Force, other US Government agencies and foreign governments.

The five Military Programs mission lines:

- 1. Major Construction
- 2. Installation Support
- 3. Interagency and International Support
- 4. Environmental
- 5. Real Estate

Military Programs Strategic Direction

To be the Nation's most effective and dynamic public engineering and technical services organization. In collaboration with customers, partners, and allies we anticipate and deliver innovative and sustainable solutions that support military readiness and operations, and national policies and objectives. We are a values-based organization and a force-multiplier with domestic and global capabilities.

Military Programs Cross-Cutting Strategies

- Risk Management
- Cost effectiveness and efficiency
- Process improvement
- Virtual Capability

Virtual Capability is the ability to leverage technology that integrates seamlessly with other organizations, assets, and resources for the purpose of effective communication, monitoring, problem-solving, learning, and knowledge management. It facilitates sharing skills, costs, and knowledge in order to collectively and collaboratively solve problems and/or provide specific products or services. Virtual capability may be temporary or permanent, linked by information and communication technologies. It enables accomplishing strategic partnering or outsourcing arrangements through sharing expertise, resources, and cost savings until the objectives are met and the network is dissolved. Organizations that are virtual exist largely in cyberspace, but are also unconstrained by the traditional barriers of time and place.

USACE Campaign Plan

Aligning with OMB and DoD/DA strategic planning, USACE strategizes mission success with the following Campaign Goals (AXXA):

- A. Goal 1: Support the War-fighter Deliver innovative, resilient, and sustainable solutions to DoD and the nation.
- B. Goal 2: Transform Civil Works Deliver enduring and essential water resource solutions using effective transformation strategies.
- C. Goal 3: Reduce Disaster Risks Deliver support that responds to, recovers from, and mitigates disaster impacts to the Nation.
- D. Goal 4: Prepare for Tomorrow Build resilient People, Teams, Systems and Processes to sustain a diverse culture of collaboration, innovation and participation to shape and deliver strategic solutions.

The Agency's campaign is presented from the command level down to the individual employee, all charged with setting project level and professional goals and objectives mapped in direct harmony with the organization's campaign. Consistently being ready to promote and or defend their position within the important mission of USACE.

To support these Command goals the Directorate of Corporate Information focuses on four supporting goals:

- A. **Grow our People --** Build the workforce with the right skills and tools to plan for and deliver effective and efficient information services to USACE customers.
- B. **Provide Mission Focused IT Services --** Build and operate a secure and easy to use Information Services infrastructure.
- C. **Modernize --** Transform the Automated Information System and Computing environments into a cost effective ecosystem based upon common standards, platforms and services (i.e., move to the cloud model).
- D. **Govern IT Investments --** Implement Effective Information Services Governance.
- E. **Cyber Security --** Implement USACE's cyber security program and manage IT security throughout USACE.

This Information Resource Management (IRM) strategic plan sets and communicates specific goals and objectives to guide in streamlining, standardizing and optimizing our IM/IT operations to enable USACE to meet its strategic mission. This will also enable IM/IT to manage our costs and security risks and to help our team set priorities given our limited human capital and funding resources. This plan will forge a strong strategic partnership with mission leaders and other stakeholders and between the staff and line

elements of our corporate information organization.

The USACE Corporate Information organization, led by the Chief Information Officer (CIO), is composed of two elements (Corporate Information Directorate (CECI), which performs the staff functions of governance, architectural compliance and control, policy development and enforcement, portfolio management, and budget development and review, and the Army Corps of Engineers – Information Technology (ACE-IT) Field Operating Agency (FOA) which provides the line functions of delivering secure IT services to USACE.

Information technology, as well as the integrity and quality of our information resources, is a major factor in sustaining USACE as the world's premier public engineering organization – trained and ready to provide support anytime, anyplace.



USACE Vision

USACE Campaign Plan

USACE FY14-18 IRM Strategic Plan

Goal 4: Sue Engelhardt / Jeff Holland

Prepare for Tomorrow

Build resilient People, Teams, Systems, and Processes

to sustain a diverse culture of collaboration, innovation, and participation to shape and deliver strategic solutions.

Objective 4a: Jeff Holland

Maintain and advance DoD and

Army critical enabling technologies.

Objective 4b: Bob Kazimer / Curry Graham

Enhance trust and understanding with customers,

stakeholders, teammates, and the public

through strategic engagement and communication.

Objective 4c: Wes Miller / Stuart Hazlett

Streamline USACE business.

acquisition, and governance processes.

Action 4c3: Improve Acquisition execution w/ policy, processes, and certified professionals

Action 4c1: Mature Quality and Performance Improvement (QPI) Framework.

Action 4c2: Improve USACE Governance processes and systems.

Action 4b1: Improve integrated Strategic Engagement and Communication.

Action 4b3: Enhance Cyber Security in USACE Culture and Technology.

Action 4b2: Improve communication delivery and quality.

Action 4a2: Improve Knowledge Creation / Sharing and Technology Transfer

Action 4a1: Develop new Science and Technology (S&T).

Action 4a3: Improve Technology Infusion Policy and Innovation.

USACE Mission

Deliver vital engineering solutions, in collaboration with our partners,

to secure our Nation, energize our economy, and reduce risk from disaster.

Engineering solutions for the Nation's toughest challenges.

Goal 1: Lloyd Caldwell

Support the Warfighter

Deliver innovative, resilient, and sustainable solutions to DoD and the Nation.

Objective 1a: TBD

Support the Combatant Commands' security activities, and the efforts of other U.S. government agencies around the globe, to advance our Nation's interests.

Action 1a1: Achieve a Comprehensive Enterprise Behavior.

Action 1a2: Engage and Integrate USACE Capability to Achieve JIM effects.

Action 1a3: Deliver Responsive R&D, S&T, and Geospatial Engineering Solutions

Action 1a4: Institutionalize and Sustain Expeditionary Posture

Objective 1b: Rich Hancock / Stacev Hirata

artner with Installation Management Communities at all echelons to deliver and maintain enduring installations and contingency basing.

Action 1b1: Improve Delivery of major construction via Life Cycle Analysis (LCA)

Action 1b2: Develop USACE Capacity for Asset Management (AM).

Action 1b3: Transform Real Estate practices.

Objective 1c: TBD

Support the Nation and the Army in achieving our energy security and sustainability goals.

Action 1c1: Active Federal sustainability and energy goals and targets.

Action 1c2: Support Army energy programs.

Action 1c3: Successfully design and construct sustainable buildings.

Objective 1d: BG Funkhouser / COL Hill

Support the larger Engineer Regiment to ensure it is designed, uipped, organized, manned, led, trained, and enabled by relevan doctrine to meet the needs of the Army and the Joint Force.

Action 1d1: Expand Career Opportunities and Credentialing for Soldiers.

Action 1d2: Improve USACE partnership and outreach.

Action 1d3: Improve information sharing with Joint Services.

Goal 2: Steve Stockton

Transform Civil Works

Deliver enduring and essential water resource solutions using effective transformation strategies.

Objective 2a: TAB Brown

Modernize the Civil Works project planning program and process.

Action 2a1: Implement planning modernization process.

Objective 2b: Mark Mazzanti

Enhance and refine the Civil Works budget development process through a systems-oriented watershed approach, priorities, and collaboration.

Action 2b1: Implement a watershed-based budget development process.

Objective 2c: James Dalton

Improve USACE Methods of Delivery to produce quality engineering solutions and services on schedule.

Action 2c1: Improve Methods of Delivery.

Objective 2d: Jim Hannon

Deliver reliable, resilient, and sustainable infrastructure systems.

Action 2d1: Implement the USACE Infrastructure strategy.

Action 2d2: Improve CW portfolio performance in changing climatic conditions

Goal 3: Karen Durham-Aguilera

Reduce Disaster Risks

Deliver support that responds to, recovers from, and mitigates disaster impacts to the Nation.

Objective 3a: Karen Durham-Aquilera

Enhance interagency disaster response, recovery, and risk reduction capabilities.

Action 3a1: Maintain and Improve Readiness with contingency capabilities.

Action 3a2: Improve linkage with USNORTHCOM / ARNORTH on DSCA missions.

Action 3a3: Update, maintain, and train in accordance with established doctrine.

Action 3a4: Increase physical security for critical infrastructure

Objective 3b: Karen Durham-Aguilera

Enhance interagency disaster recovery capabilities.

Action 3b1: Enhance support to the National Disaster Recovery Framework (NDRF).

Action 3b2: Develop All-Hazards recovery capacity within USACE specific authorities / programs.

Objective 3c: Karen Durham-Aquilera

Enhance interagency disaster preparation and mitigation capabilities.

Action 3c1: Develop capacity to support the National Mitigation Framework.

Action 3c2: Enhance capacity to reduce the Nation's Flood Risk.

Action 3c3: Improve State-level collaboration with the Silver Jackets program

Objective 3d: TBD

Strengthen Interagency Support.

Action 3d1: Engage to apply USACE capabilities in Interagency strategic objectives.

Action 3d2: Integrate USACE capabilities in interagency planning / requirements development.

Action 3d3: Deliver tailored solutions that support whole of government efforts.

Objective 4d: Sue Engelhardt / James Dalton

Build ready and resilient people and teams through innovative talent management and leader development strategies and programs.

Action 4d1: Shape the workforce of the future.

Action 4d2: Increase STEM and Wounded Warrior initiatives.

Action 4d3: Improve USACE Competencies and Capacity.

Action 4d4: Prepare agile leaders to operate in the Army's complex environment.

FY15 Action: Mandatory MSC / District Action for inclusion in IPLANs / OPLANS.

Legend:

Action: MSC / District may align w/ this Action. Lead = HQ + Objective Network.

Figure 1. USACE Campaign Plan

2. Guiding principles: We use the following principles to guide our decisions and behavior.

- a) Honesty, integrity and care for mission and people in all things.
 - Conduct analysis and reviews objectively and honestly.
 - Consider impacts on mission and people.
 - Care about the quality of services and impact on the USACE community.
- b) Empower the USACE Mission.
 - Quality and speed can literally save lives. We have to provide the right solutions when needed.
 - Bureaucracy kills THINK and do the right thing over the routine thing, eliminate unnecessary steps; continually improve quality.
- c) Seek a balanced approach
 - cost, technology, security, time, and mission effectiveness all have weight and need to be balanced and rebalanced over time
 - tomorrow's solution will be different because the environment changes.
 - Be agile embrace, plan for and lead change.

Members of the Corporate Information team provide vital services and make decisions every day that affect the ability of USACE team members to accomplish the USACE strategic missions. We have to think about the USACE missions first and adjust our behavior and processes to maximize benefits to the USACE missions.

3. Mission: Deliver secure and effective Information Technology Solutions and Services on time enabling USACE to complete missions worldwide.

The Corporate Information team (i.e., HQ, ACE-IT and local IT elements) delivers secure and effective IT solutions that enable the USACE team to accomplish USACE's primary missions. USACE is a complex organization employing over 35,000 people working on hundreds of projects in locations all around the world. To be effective the USACE team needs to be in communications with access to key software applications, information and services in the office, at home and on the go. It is the Corporate Information team's responsibility to assure that USACE has the right, secure, effective, reliable and affordable IT solutions when they need them.

4. Vision: USACE -- always connected to the right information and people.

The Corporate Information team is succeeding when USACE is connected to the people and digital information and services they need when they need it.

5. Strategic Framework

The USACE Strategic Framework (Figure 2) is designed to deliver measurable outcomes and ultimately uphold the vision "Engineering solutions for the Nation's

toughest challenges". Maintaining and keeping up with emerging technology is one of the greatest challenges for the IM/IT community. The Information Management Resource vision "USACE -- always connected to relevant information and people" defines one road for the organization to travel, driving the tasks and measurements for achieving the current and future goals.

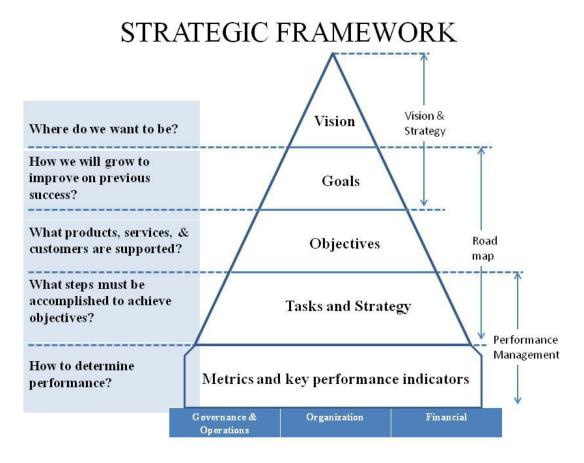


Figure 2. Strategic Framework

The USACE Enterprise Roadmap is the methodology used to outline and provide a detailed strategy to achieving the IRM goals. Coordination and collaboration between the command and its customers is essential. The Enterprise Roadmap is a guide that explains new technologies the Corps plans to implement over the next five years. This document provides a graphic representation of the change from current to new technologies to aid in planning for their integration and implementation. The document will serve to advance continued improvement in areas such as shared services that benefit the customer directly to access data anytime and anywhere, support the Corps efforts to improve its infrastructure, improve security, and increase operational efficiency in support of the Corps of Engineers Vision and Mission.

6. Strategic Goals and Objectives (AXXB)

The purpose of this plan is to provide a set of strategic goals and outline specific objectives that the Corporate Information Team can use to set priorities and measure success.

A. Goal 1: Grow our People. Build the workforce with the right skills and tools to plan for and deliver effective and efficient information services to USACE customers. The focus is on people process and organization. Creating a workforce with the skills to access and utilize emerging technologies; maintain a supportive management team; deliver high quality information and technology services as a strategic enabler of USACE missions.

Our Strategy for achieving this goal has two parts. First we will continuously train our team to assure our workforce has the right skills to be successful in the ever changing IT field. Second we will reshape our workforce and structure to adapt to our ever changing environment to allow us to cost effectively deliver the services and products USACE needs and can afford.

- Objective 1.1 Execute a life cycle management framework for Human Capital
- Objective 1.2 Plan for and support the FY15 ACE-IT manpower survey
- Objective 1.3 Institute a USACE CIO awards program
- **B.** Goal 2: Provide Mission Focused IT Services. Operate and deliver the IT service the USACE community authorizes during the annual IT portfolio review and approval cycle in a secure and easy to use environment.

Our strategy is to engage our customers to understand what IT services and products they need and can afford and to adjust to deliver those service cost effectively.

- Objective 2.1 Deliver ordered IT services within established Service Level Requirements (SLR)
- Objective 2.2 Update SLRs based on Customer feedback
- Objective 2.3 Implement a unified IT acquisition process / ordering tool for USACE to automate goal 1 waiver and USACE IT approval process request
- Objective 2.4 Establish the Enterprise Change Control Board (ECCB) and assign to ACE-IT
- Objective 2.5 Enhance network monitoring and control
- Objective 2.6 Bandwidth optimization

C. Goal 3: Modernize. Transform the Automated Information System and Computing environments into a cost effective ecosystem based upon common standards, platforms and services (i.e., move to the cloud model). USACE has a unique mission within the Federal government, which entails a variety of customers and stakeholders whose many unique needs place diverse demands on USACE for application services.

Our strategy is to provide a set of cost effective common services and environments.

- Objective 3.1 Deploy a standard single Common Access Card (CAC) sign-on solution
- Objective 3.2 Establish a standard virtualization environment
- Objective 3.3 Establish ability to provision cloud services
- Objective 3.4 Develop a USACE storage program
- Objective 3.5 Develop cloud computing reference architecture for USACE
- Objective 3.6 Publish USACE Technology Roadmap
- **D. Goal 4: Govern IT Investments**. Implement Effective Information Technology Governance. USACE must continue to monitor the delivery of superior performance, responsive, affordable and secure information and technology services. Policy and guidance must ensure that the needs of all customers are met in a cost effective manner.

Our strategy is to institute governance practices to improve the delivery of technology.

- Objective 4.1 Transition to the Portfolio Management Model
- Objective 4.2 Align technical and target architectures
- Objective 4.3 Establish clear lines of authority and responsibility
- Objective 4.4 Control the USACE software inventory
- Objective 4.5 Provide visibility and transparency of IT services and governance to all stakeholders
- Objective 4.6 Establish IT acquisition governance control structure

E. Goal 5: Cyber Security. Implement USACE's cyber security program and manage IT security throughout USACE. USACE must continue to monitor the security of information and technology services it provides.

Our strategy is to implement technology, policies and best practices to enhance USACE's cyber security posture.

- Objective 5.1 Enhance USACE Supervisory Control and Data Acquisition (SCADA) systems' security
- Objective 5.2 Enhance alternate smartcard login (ASCL) usage

7. OMB Additional topics

A. Improving our services to customers

The USACE IM/IT independent servicing activity (ACE-IT) is a team comprised of dedicated government employees and contractors. The team was established in accordance with USACE A-76 requirements to meet the existing and emerging challenges of delivering cost-effective IM/IT services and to transform the USACE IM/IT environment. After the expiration of the Letter of Obligation a product development team (PDT) determined that the best solution to continue to deliver the best services to the USACE customers was for ACE-IT to become the line organization under the CIO. Corporate Information is responsible for strategic command and control activities such as governance and oversight, while ACE-IT is responsible for tactical and operational activities.

Guidance and directives from the Federal level down through DoD/DA were the key artifacts for the analysis and planning to develop and execute an organization strategy. To ensure the achievement of service oriented strategic goals and their corresponding objectives, USACE also identified several factors that are critical to the successful delivery of their services. Some of the factors are externally controlled, while others can be addressed internally by USACE. Environmental factors affecting delivery can be internal, such as the organization's culture and policies, or external conditions that influence the execution of services.

The ACE IT Strategic Plan FY13-FY15 (Appendix A) contains a detailed plan describing the goals, objectives and key performance indicators for tracking progress, and related tools and projects supporting achievement of each goal in addition to determining customer satisfaction. (BXXA)

B. Government and Management Process (CXXA, CXXB, CXXC, CXXD, CXXE)

USACE has a new IT investment capital planning process in place. The new Portfolio management process aligns USACE more closely with DoD and Army, allowing a smoother process for DoD certification and approval for spending. In the past there

were three boards that provided oversight and control of IT spending, the Executive Functional Assessment Team (EFAT) the Cross Functional Assessment Team (CFAT) and the Regional Functional Assessment Teams (RFAT). In an effort to move to a portfolio management structure the CFAT and EFAT have been replaced with IRB and an Executive IRB (EIRB) to review the portfolios and provide funding allocation and approval. Each investment in a portfolio is mapped to the Campaign Plan, reviewed for justification and mission need, in addition to value added to USACE. The EIRB is the command level executive board, which reviews each IRBs investment approval and funding recommendations and makes the final recommendation to the commander for funding across all portfolios. The program manager is responsible for presenting artifacts and submitting a detailed IT investment summary sheet to the IRBs in order to plan future year spending. The development and execution of migration plans to the 2017 Target Architecture by all IT investments has proven effective in our effort to move forward with emerging technologies and the DoD strategy for a common operating environment

C. Chief Information Officer (CIO) Authorities (CXXA, DXXA)

- 1. In coordination with the Chief Financial Officer and the Chief Acquisition Officer, the USACE Chief Information Officer has the authority to govern and manage the overall USACE IT capital planning process which includes oversight of: EIRB and IRB reviews as well as requiring the annual execution of RFAT reviews. The CIO monitors the performance of investments by chairing annual Compliance and Technical investment reviews. In addition, the CIO approves the request and scheduling of IT investment TechStat reviews. Periodic performance reviews are conducted in conjunction with the above reviews, holding all program managers responsible for the outcome of each and every IT program.
- 2. To improve purchasing power and drive costs down, a plan to eliminate duplication and unnecessary redundancy across the organization was put into effect through the following initiatives. (CXXG)
 - a) Application rationalization
 - b) Consolidation and reduction of datacenters
 - c) Enterprise email consolidation
 - d) Increased usage of collaboration tools (e.g. SharePoint, DCO connect/chat)
 - e) Increased Enterprise License Agreements, especially those governed by DA
 - f) Controlling the Hardware and Software Inventory
- 3. The CIO was the catalyst for the planning and execution of a Directorate reorganization to:
 - a) Include ACE-IT as part of the Corporate Information as the line organization.
 - b) Restructure the Directorate staff to manage IM/IT by mission portfolios and

provide compliance oversight.

- 4. USACE Data Steward, appointed by the Army CIO/G6. Participate and coordinate in the Army Data Board to ensure that standardized Army data processes and procedures are effective and consistently used. Develop configuration management, integration and maintenance of Information Exchange Standards Specifications and associated Vocabulary Guides for their designated area when their organizational requirements task and fund them to do so. Adjudicate and approve the recommendations of the Functional Data Managers for the identification of "Joint" Army Authoritative Data Sources.
- 5. As the Designated Approving Authority (DAA), the USACE CIO has the authority and primary responsibility to implement USACE's information security program and manages cyber- security throughout USACE. The CIO receives and reports on the agency-wide security program monthly. This monitoring includes the distribution of monthly risk assessment reports, ultimately transmitted to the Department of Homeland Security. Program/Project managers are to respond and correct applications in the High Risk sessions.

D. Cyber Security (EXXA, EXXB)

USACE certifies and accredits its networks and systems IAW the DoD Information Assurance (IA) Certification and Accreditation Process (DIACAP), which ensures risk management is applied on each network and applicable information system. As part of the DIACAP process, all mission critical applications, to include the Corps network, have a continuity of operation (COOP) and disaster recovery plan identifying capabilities necessary to support the proper level of continuity of government operations in accordance with Federal statute and guidance.

USACE will reinforce Cyber Security in all USACE technology. USACE is improving cyber security readiness to ensure mission effectiveness by providing Guidance, Standard Operating Procedures (SOPs), Operation Orders (OPORDS) and understanding cyber security and readiness to ensure mission effectiveness.

The USACE Information Assurance Program Manager and the Cyber Security Division provides Cyber security services to include protection, reaction, verification, validation and reporting for all USACE supported devices, sites and customers. Local, regional and enterprise Information Assurance experts guide the USACE organization in all computer security related activities. Information Assurance Security Officers (IASOs) are located at strategic sites to provide support to local Commands as well as the enterprise. The USACE Computer Incident Response Team (CIRT) is a Department of Defense (DoD) Computer Network Defense Incident Responder (CND-IR) and is responsible for handling all computer incidents, as well as working with the infrastructure team in monitoring the USACE network 24 hours a day, 365 days per year.

E. Human Capital Practices for improving the Workforce (FXXA)

The USACE Human Capital Life Cycle (Strategic Planning, Recruitment, Development, and Sustainment) provides the blueprint for shaping the workforce to meet current and future mission requirements. The Office of Personnel Management Human Capital Assessment and Accountability Framework (HCAAF) serves as the guideline for our human capital planning. Ultimately our goal is to be the employer of choice, attracting and retaining disciplined, competent, and professional talent, delivering innovative solutions now and into the future. We will accomplish this by a successful USACE Human Capital Strategic Plan. The USACE Human Capital Strategic Plan is a five-year document that contains broad, overarching goals and objectives and is a roadmap for continuous improvement of human capital strategies. Implementation of this plan is in harmony with the IRM:

- 1. Identifying the competencies required for meeting USACE IT objectives Identifying competencies for the IT workforce falls within Human Capital Goal 1 to determine current and future competency requirements, define the causes of competency gaps, and execute effective solutions to close the gaps.
- 2. Monitoring fill time and implementing hiring best practices Significant work has been done at the USACE corporate level to address barriers for mission-critical occupations. Emphasis will continue on data driven analysis and forecasting to plan for effective recruiting. USACE exceeded the Army end- to-end goal of recruitment within 80 days with a fill time of 75.4 days. Our fill time continues to improve. Hiring information on the USACE workforce (turnover rate, retention rates, and fill time) is published quarterly and made available to managers and supervisors on the HR SharePoint site.
- 3. Developing employees corporately USACE is assessing the line-of-sight relationship from organizational goals to individual employee objectives. This will include interviews with employees to assess their understanding and effectiveness of the process, and their responsibilities for their own performance management. Employees must have the training and competencies to succeed in their current assignments and to develop the skills and abilities to advance in their careers, to be the leaders of the future. A comprehensive program of formal and on-the-job training, developmental assignments, self development, and mentoring and leadership development is needed. USACE has a solid foundation in its current training program, which should be further developed and expanded to incorporate an over-arching strategic view to support the USACE Human Capital program toward building a strong and sustainable workforce.

Communicating, motivating and improving morale – USACE listened to feedback based on an Employee Climate Survey, recognizing both the challenges and the benefits associated with our unique virtual employment environment. USACE is committed to continue finding ways for all of us to enhance our sense of belonging to a cohesive team. The USACE Human Capital Strategic Plan provides the mechanism to coordinate and integrate all aspects of a team member's life-cycle within the USACE

program.

F. Managing Information as an Asset (GXXA, GXXB)

The current Administration's goal is to "Building a 21st Century Platform to better serve the American People". USACE is supporting this initiative through the execution of an aggressive migration strategy resulting in the digitizing of all forms of data. An Electronic Document and Records Management System (EDRMS) usage was enforced. This tool is used to capture, store, manage, preserve and deliver electronic documents and records at the desktop. The modified Hewlett-Packard software TRIM is a certified DOD 5015.2-STD electronic records management system; supports AR 25-400-2 Army Records and Information Management System (ARIMS) records dispositions schedules; manages Microsoft Office Suite files including Outlook e-mail, the Microsoft SharePoint environment, and non-Microsoft files such as PDF and CADD. Future capabilities include scanning initiatives and integration with USACE automated information systems such as ProjectWise. Statutory and regulatory requirements for managing electronic records include: Federal Records Act of 1950; 36 Code of Federal Regulations (CFR), Subchapter B, Part 1236 Electronic Records Management; DODD 5015.2 DOD Records Management Program; AR 25-1 Army Information Technology, Chapter 5-4 Records Management, AR 25-400-2 Army Records and Information Management System (ARIMS).

In coordination with DoD, USACE recommended a web-based function "CORPS LOCKS" as a suitable candidate for the OMB Digital Government Strategy initiative (BXXB). As a digitally transmitted collection of aggregated data, CORPS LOCKS met the data call digital requirements (e.g., XML format). It also has an API capability for an android App. The information reporting categories are for vessels in Lock Queue, Find a Vessel, Lock Status, Lock Tonnage and Data Web Services.

USACE has an Engineering Regulation that enforces enterprise data standards and interoperability, in accordance with the DoD/DA data management strategy. An Enterprise Data Warehouse is in use to interface and exchange data across multiple systems to produce reports.

In accordance with Section 208 of the E-Gov Act of 2002, USACE conducts an annual assessment of its IT systems/investments. Section "N" of the annual USACE Technical and Business Assessment contains the requirements for USACE IT systems to ensure compliancy. USACE appointed a PIA general manager to provide policy and guidance for the completion of the PIA checklist. All USACE systems that require a PIA have completed them and provided them to Army for posting.

G. Commodity IT and Shared Services (HXXA, HXXB)

In accordance with the Portfolio Stat requirements, the CIO has executed a monitoring process for USACE Commodity IT and Shared Services. The shared services include the review and monitoring of software licensing and maintenance agreements, by

adoption of enterprise license agreements.

Since USACE began aggressively pursuing the consolidation of disparate, redundant software requirements into holistic, enterprise-wide licensing agreements (ELAs) in FY10, this initiative has reduced procurement costs by approximately \$108M and reduced administrative costs by approximately \$15M. These achievements are the direct result of the Corps' successful transition to a centralized enterprise software management strategy that effectively implements a number of best practices.

USACE's Enterprise Software Licensing (ESL) Automated Information System (AIS) Program team is responsible for centrally (1) managing the procurement of new ELA requirements, (2) managing the administration and management of existing ELAs, and (3) ensuring adequate funding levels are maintained from year to year to cover the cost of all renewals and anticipated new procurements. One of the ESL AIS's main functions is to manage the execution of an enterprise revolving fund account that is able to make single payments for requirements deployed throughout the enterprise. There are currently 18 ELAs that fall under the ESL AIS Program scope. The requirements for these ELAs are selected based on (1) end-user needs and (2) business case results determining that consolidation of requirements into a single, centralized, contract vehicle will generate significant reduced procurement and/or administrative costs. IT commodities obtained through these ELAs range from graphic design and desktop publishing tools to server and database applications and underpinning the networks on which all USACE IT operates.

USACE efforts to consolidate software requirements leverage two general sources. The first is comprised of internal contract vehicles procured, administered, and managed by USACE. The second source is comprised of external contract vehicles procured, administered, and managed at the Department of Army or Department of Defense level. These external vehicles are available through Army's Program Directorate Computer Hardware, Enterprise Software and Solutions (PD CHESS) or the Department of Defense (DoD) Enterprise Software Initiative (ESI). Acquisition of software through these channels and management through the ESL AIS has become standard practice for the relevant software titles and has reduced duplication of effort across USACE.

Army CIO/G6 simultaneously undertook the long-term mission of Army-wide consolidation of software titles used throughout Total Army. The effectiveness of USACE consolidation efforts and the cost savings they have achieved have made USACE a model for some Army-wide efforts. Though USACE has historically benefited from Army-wide consolidation of desktop, information management, and other software products, recent efforts have presented a number of challenges to USACE and other MACOMs. These challenges suggest that there is an optimal level of consolidation beyond which efforts may be counterproductive.

In accordance with Executive Order 2011-0505 "Army Data Center Consolidation Plan", USACE is undergoing a Server Consolidation Centralization effort. The objective of this effort is for the virtualization and consolidation of legacy USACE servers to eliminate

aging hardware, centralize support, and lower the cost of IT service support. To date USACE has virtualized 916 servers and decommissioned 879 servers.

In accordance with the Army directive for agencies to perform application portfolio reviews to cut costs associated with legacy applications that no longer provided value to the mission, USACE is undergoing an Application Rationalization effort. The Application Rationalization also supports the consolidation of Data Centers for improved efficiency of operations and services. The goal of this effort is to perform an enterprise wide rationalization of Commercial off the Shelf (COTS) and locally developed server applications with a target of 50% reduction in non-standardized applications over a six year period.

8. Accessibility (IXXA, IXXB, IXXC)

Web Policy: The U.S. Army Corps of Engineers is committed to present information on our intra/extra websites that is usable by all people, to the greatest extent possible, without the need for adaptation or specialized design. We are continuously maintaining our sites in compliance with Section 508 of the Rehabilitation Act website standards as well as those of the W3C Web Accessibility Initiative. Website content, images and documents contain the necessary tags and are test readable. Public websites are being hosted by the Defense Media Activity's system, American Forces Public Information Management System (AFPIMS). External private websites (extranet) are hosted internally and are being migrated to the USACE Demilitarized Zone (DMZ). It is also USACE policy for all Information Systems Data entry screens to be compliant with section 508 of the Rehabilitation Act. Section 508 of that act requires that when Federal agencies develop, procure, maintain, or use Electronic Information Technology (EIT), Federal employees with disabilities will also have access to and use of information and data that is comparable to the access and use by Federal employees without disabilities, unless an undue burden would be imposed on the agency. For example, the text equivalent will be displayed for non-text items. Multimedia training modules and data collection will be synchronized with the display for all persons.

Appendix A References:

- 1. OMB 25 Point Implementation Plan to Reform Federal IT, 20 Feb 2013
- 2. OMB M-11-29 (2011), Chief Information Officer Authorities
- 3. Department of Defense (DoD) Information Technology (IT) Enterprise Strategy and Roadmap. (Sep 2011)
- 4. Department of Army (DA), LandWarNet 2020 Strategy and Architecture 2012
- 5. ASA, Information Technology Management Reform (ITMR) Implementation Plan (2013).
- 6. USACE Campaign Plan (2013)
- 7. ACE IT Strategic Plan FY13-FY15
- 8. ER 1130-2-500; Chapter 16, Accessibility; A-8 Chapter 6, Sign Standards Program for Civil Works Projects
- 9. Chief of Engineering Division, Directorate of Military Programs and Chief of Engineering Division, Directorate of Civil Works joint Memorandum, Subject: Access for People with Disabilities, 25 January 1994
- 10. Chief of Engineers Memorandum, January 1993.
- 11. Chief of Engineers Memorandum, Subject: Universal Access to Recreation Facilities and

Programs, 28 January 1997

- 12. Director of Civil Works Memorandum, Subject: Universal Accessibility to Corps Recreation Facilities and Programs, 15 January 1993
- 13. <u>Secretary of Defense Memorandum</u>, Subject: Access for People with Disabilities, 20 October 1999
- 14. USACE Human Capital Strategic Plan 2012-2017