Introduction: Support National Defense and the Nation – Today and Tomorrow

The 2012 Military Missions Strategic Direction described the broad strategic concepts that have shaped our mission areas. It described the paradigm shift that moved USACE Military Missions into a “post-surge” era where total program dollars and numbers of project have decreased, but stakeholder expectations remain high. It noted that we require fresh solutions to support stakeholder requirements, and it outlined important capabilities – known as Critical Success Factors – for USACE to remain a distinguished partner in the future.

In 2013, we are applying these broad concepts to an even more complex and still evolving strategic context. In the past year, the Department of Defense and the Army has further shaped its vision and strategy for the future. Informed by this, we continue to refine our priorities and practices as we seek to provide the engineering solutions our nation needs in theater and at home.

This year opened with a significant amount of uncertainty regarding budget and workloads. We anticipate continuing fiscal uncertainty for the next three to five years, and this uncertainty will impact the Military Missions’ operating environment and that of our stakeholders. While we address these challenges, we must also sustain our professional competence and make progress in our long-range strategy. This 2013 Strategic Direction articulates the long-range outcomes we seek to achieve. The accompanying Portfolio of Initiatives outlines actions to ensure we achieve these outcomes.

THE ROAD TO 2020

As we advance, Military Missions will sharpen our focus on supporting our key stakeholders in achieving their strategic effects. We will seek to enable those we serve in three key areas:

- Support the Combatant Commands’ security activities and the efforts of other U.S. government agencies around the globe to advance our Nation’s interests
- Partner with the Installation Management Community at all echelons to deliver and maintain enduring installations and contingency basing
- Support the Nation and the Army in achieving energy security and sustainability goals

DEFINITION OF MILITARY MISSIONS

The term “Military Missions” refers to collective capabilities USACE brings to bear in providing tailored engineering solutions for our military, interagency and international partners in support of national security objectives. Embracing a concept in which agile and adaptive leaders are empowered to apply disciplined initiative within the commander’s intent, the concept of Military Missions recognizes the synergy of USACE enterprise capability to provide the appropriate expertise our stakeholders need to achieve their outcomes or desired strategic effects, both at home and globally.

The Military Missions capability includes the program management activities performed by the Military Programs Directorate to include integration of all USACE organizational capability such as Civil Works, Contingency Operations, Research and Development, and Geospatial. All of these capabilities are integrated and focused on supporting our defense and diplomatic partners to accomplish their missions.
THE WAY AHEAD: CAPABILITIES AND SOLUTIONS

To achieve our outcomes, USACE continues to need problem solvers able to manage complexity, drive innovation, lead change, build relationships and shape competencies. More than ever, our stakeholders and the Nation need USACE agility and ingenuity to address the challenges of an uncertain future.

Our CY12 Strategic Direction described the need for USACE to develop and sustain capabilities in the following Critical Success Factors (CSF):

- Systems Thinking
- Learning Organization
- Alliance Development
- Strategic Sense Making
- Innovation
- Customer Relationships
- Scalability
- Flexibility

In CY13, we renew our commitment to these CSFs. We will apply them as we execute our Portfolio of Initiatives. Through USACE Campaign Plan action 1b4, we will work across USACE to form enterprise initiatives that will give us understanding to benchmark and foster these capabilities within our teams.

PORTFOLIO OF INITIATIVES

The Military Missions CY13 Portfolio of Initiatives contains near-term [FY13-15] initiatives that the Directorate plans to initiate or continue to develop. The more detailed action plans associated with each initiative are tracked in Military Missions’ I-Plan.

Leaders at HQ, MSCs, and Districts should review and understand the concepts found in the MMSC, Strategic Direction and Military Missions Portfolio of Initiatives. There will be opportunities for all leaders to participate in the development and execution of the initiatives identified. The learning achieved during the development of the initiatives - to include application of the associated CSFs - will continue to inform and shape future actions in the USACE Campaign Plan.

THE USACE PROFESSIONAL

Our Army doctrine states that “trust is the core intangible needed by the Army inside and outside the profession.” The USACE professional establishes and maintains trust by both living the Army values and adhering to the standards, integrity, and ethics of his/her chosen technical profession.

The USACE professional aspires to the following qualities:

- Understands the complex and evolving systems in which our stakeholders operate and can assist in shaping and articulating requirements.
- Builds alliances with technical leaders in the field through interaction with academics, professional associations and industry to embrace innovation and bring the best technical solutions to bear.
- Embraces the principles of sustainability and has awareness of the applicability of sustainability and energy security goals.
- Assesses risk as a matter of business and collaboratively works with partners to mitigate risk wherever possible.
- Pursues professional development, certificates, licenses, and other credentials that distinguish themselves as proficient and members of a profession.
- Gives back to the profession, invests in the profession’s future, and excites the next generation that follows through support of Science Technology Engineering and Math (STEM) education initiatives.
Support the Combatant Commands’ security activities and the efforts of other U.S. government agencies around the globe to advance our Nation’s interests

Current Context: The May 2010 National Security Strategy and January 2012 Defense Strategic Guidance describe a transition point in US Government and military emphasis after a decade of war. In light of new strategies and continuing fiscal constraints, the Army, Combatant Commands (CCMDs), and the Nation seek to shape an increasingly complex security environment. Integrated, “whole-of-government” approaches to Diplomacy, Defense, and Development in the Joint, Interagency, Intergovernmental, and Multinational (JIIM) community are vital to addressing these security challenges.

USACE, with its unique and diverse engineering, science, management, and expeditionary capabilities, and mix of civilian and military personnel, serves as a key enabler to the Army, CCMDs, and the Nation in achieving holistic solutions to theater and national security objectives. USACE activities reflect long-standing engagement in more than 140 countries annually with enduring presence in over 40 countries.

The inherent nature of JIIM and whole-of-government, operations will require USACE to provide agile and small footprint services in addition to our traditional large infrastructure development. USACE will deliver tailored solutions ranging from technical engineering consultation and advice and capacity development to project delivery drawing on capability and expertise from across the enterprise. International technical exchange and cooperation will remain important.

Supporting our partners’ desired effects will be dependent on:

- A foundational framework of enterprise mission assignment combined with flexible application of enterprise resources, and capability;
- Vertically aligned strategic communication and engagement which effectively translate the value of USACE to key stakeholders and enable integration into strategies, plans, and concepts such as Regionally Aligned Forces (RAF).

2020 Context: The Capstone Concept for Joint Operations, Joint Forces 2020, issued in September 2012, introduces the concept of “globally integrated operations,” a framework in which emerging capabilities such as special operations, cyber and intelligence, reconnaissance and surveillance are integrated. It requires globally postured forces to quickly combine capabilities with itself and mission partners across domains, echelons, geographic boundaries, and organizational affiliations.

This concept underpins the whole-of-government approach laid out in the national security strategy and entails several elements that draw on USACE’s strengths:

- Global agility – which leverages our expeditionary capability, forward global presence, and MSC geographic alignment.
- Partnering – through long-held JIIM relationships and unique authorities
- Cross-domain synergy – supported by a broad range of technical and engineering core competencies across military, civil works, and R&D/applied S&T domains.

Building on its broad experience in aligning multiple stakeholder objectives and capabilities to a common goal, USACE will serve as an integrator of interagency
and NGO capabilities to achieve the best solutions for COCOM and JIIM objectives.

**Outcome 2020:** By 2020, the full suite of USACE engineering and scientific capabilities will be fully integrated into COCOM and interagency partners’ regional plans to provide scalable solutions that help our partners achieve their strategic effects, matching the right core competency to each requirement in each region. We will be prepared to provide service based on our core competencies across a spectrum from technical consultation, to plans development, to design solutions, to project execution. As a national leader and expert in infrastructure, water resources, and technology development, we will assist COCOMs and our interagency partners to identify and apply the right engineering and science solution to achieve their objectives and ensure that our nation’s interests abroad are fulfilled.

USACE will continue to provide opportunity for our engineers and scientists to understand, contribute, and grow in the defense, diplomacy and development framework of our national security strategy. We will share knowledge through technology exchange forums with allied nations, and we will seek to advance the understanding of good business practices wherever we engage in developing and partner nations. We will work with the Services, Defense Agencies, and other interagency partners to continue to develop our security assistance training and professional development in the international/interagency arena.
<table>
<thead>
<tr>
<th>Initiative</th>
<th>Description</th>
<th>Primary CSF</th>
<th>Lead Office</th>
</tr>
</thead>
<tbody>
<tr>
<td>Combatant Command, International and Interagency (CII) Doctrine and Business Processes (&quot;IIS Transformation&quot;)</td>
<td>Codify through published doctrine the defining roles and responsibilities for HQ, regionally aligned MSCs, labs, centers, and other USACE assets in support of the CCMDs. Develop strategic operational awareness via tools such as the Engineering Common Operating Picture (ECOP). Develop governance mechanism to ensure strategic choices in CII</td>
<td>Systems Thinking Alliance Building Customer Relationships Strategic Sense Making</td>
<td>Lead: IIS Support: LNOs, G3</td>
</tr>
<tr>
<td>Build the Bench for Security Cooperation</td>
<td>Establish coordinated training and recruiting strategy for security cooperation /assistance skills. Align USACE capabilities and business processes to effectively support CCMD Prevent and Shape strategic objectives.</td>
<td>Organizational Learning</td>
<td>IIS</td>
</tr>
<tr>
<td>Theater Engagement Strategy</td>
<td>Complete and socialize enterprise engagement strategy for CCMDs/JIIM</td>
<td>Customer Relationships</td>
<td>IIS</td>
</tr>
</tbody>
</table>
Partner with the Installation Management Community at all echelons to deliver and maintain enduring installations and contingency basing.

Current Context: As the Department of Defense rebalances the force, the Installation Management Community (USACE, the Services, and Defense Agencies) is faced with the daunting challenge of measuring existing facility and infrastructure posture in a decision process that determines how best to invest limited resources into optimal decisions on “what to build”, “what to keep”, “what to fix”, and “what to dispose”. These are difficult decisions.

At the same time, defense priorities cannot ignore the significant importance of adequate infrastructure to sustain the force, mission capability and defense readiness. USACE provides the Army and DoD engineer capability to both a) “prevent” by enabling infrastructure stability in our statutory role as a MILCON design and construction agent and to b) “shape” by providing technical capabilities that enable smart facility investment decisions. We must provide that capability at established military installations worldwide as well as stability and low intensity operations in the Asia-Pacific Region and in the Middle East and Southwest Asia.

2020 Context: The Army Facilities Strategy (AFS) 2020, approved by the Army Chief of Staff, serves as the foundation for aligning facilities with Force Rebalancing. Methods, techniques, decision metrics, and application of combined USACE, IMCOM, and OACSIM resources are needed to achieve the tenants of AFS 2020 through a disciplined facility investment strategy. In short, the Army seeks to align infrastructure with anticipated mission requirements of 2020 by focusing on a disciplined process which includes: 1) sustaining required facilities, 2) disposing of excess facilities, 3) improving existing facilities through targeted investments in Restoration and Modernization (R&M), and 4) building out critical facilities shortfalls with MILCON. Similarly the USAF is assessing a more centrally managed process to assure the best investment of limited funding for sustaining infrastructure.

Leveraging USACE’s substantial expertise and experience will enable smart investment decisions and resource prioritization in AFS 2020. First, USACE can enable and develop the metrics for decision on “what to keep” and “what to fix”. By assessing current condition and functional relevance of legacy facilities based on standards and criteria that have already been validated from a doctrinal, operational, and readiness requirements, decisions on how best to keep as-is, repurpose, or reuse can be made with consistency.

Second, once “keep” and “fix” decision parameters are determined, “disposal” decisions of surplus or facilities that are too costly to renovate and/or modernize can be made. This action simultaneously makes more resources available for “fix-reuse/repurpose” by harvesting funds no longer needed to sustain facilities that are no longer cost effective or “beyond economical repair” from both an engineering and mission functionality perspective. The third order effects include reducing the carbon footprint; reducing old, expensive legacy facilities; and assisting master planning of sustainable communities by reducing the potential of “historic districts” that often fragment contiguous land areas.

These “shaping” activities then free up scarce construction dollars to meet crucial facility shortfalls that cannot be met with renovation, modernization, and OMA new construction.

Manpower reductions, training needs, and other cost-cutting initiatives have not kept pace with functional needs of installation management and operations. In addition to budget challenges, climate change and carbon footprint challenges pose new considerations for installation planning and management. Delays in operational capability of completed facilities due to outfitting and information systems installation can be managed by integration into the overall facility delivery process.

Partnership with the installation host commands in identifying, developing, and implementing support with economical models that optimize the inherent benefits of a project-based funded organization like the USACE enterprise have large potential. Development of a more doctrinally based relationship for the Chief of Engineers with installation engineer functions will fill gaps, eliminate redundancies,
achieve better effects, and gain economy for the Installation Management Community.

**2020 Outcome:** An enterprise framework for identifying, developing, and delivering USACE support to installations across the full life cycle of facilities delivery.

Military Missions seek elimination of capability gaps and uneconomical redundancies while seeking to find economy and best practices in more traditional support practices and activities. This includes an objective to develop a more integrated and doctrinal life cycle management of infrastructure.

WHERE ARE WE GOING?

Integrated, technical capabilities across the full facilities life cycle providing solutions to complex engineering & construction problems
### Partner With Installation Management Communities At All Echelons To Deliver And Maintain Enduring Installations and Contingency Basing

<table>
<thead>
<tr>
<th>Initiative</th>
<th>Description</th>
<th>Primary CSF</th>
<th>Lead Office</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enterprise Program Management Plans</td>
<td>Complete and socialize EPGMs</td>
<td>Customer Relationships</td>
<td>PID</td>
</tr>
</tbody>
</table>
| Codification of Transformed Processes | • Utilize Life Cycle Metric Management Framework to analyze MILCON Business Process to identify gaps, redundancies, and processes which require revision.  
  • Note: Part of an established, common operating framework from which Military Missions provides technical capabilities across the full life cycle of facilities delivery. | Systems Thinking | PID |
| Codification of Transformed Processes | Utilize Enterprise Lessons Learned to capture MILCON, environmental and real estate best practices | Customer Relationships | Primary: PID  
Support: Real Estate/Environment |
| Acquisition Strategies and Tools | Implement NCO/RM PDT guidance on enterprise-wide service contract acquisitions, including guidance on Service Contract Approval Report documentation. | Systems Thinking | Environment |
| Sustainment Management System | Indoctrinate BUILDER, ROOFER, PAVER, RAILER into SRM programming and planning and analysis processes as the central validation and forecasting tool for the Services as well as interested other federal agency stakeholder (i.e., AOC, WHS, DoDEA, VA, etc.) with support from OSD leadership. | Strategic Enterprise, Systems Thinking, Customer Support Relationships | Lead: Installation Support  
ERDC – CERL: Technical Center of Expertise (TCX) |
| SRM Transformation | Through a process of standardization gain efficiencies in planning design and construction of Sustainment, Restoration and Modernization (SRM) projects. Apply principles of MILCON transformation to SRM projects. Specifically:  
  Standardize identifiable severable mission functional areas of a building and standardize the design of these areas such that they may be inserted into areas of existing buildings across Installations that are being renovated or repurposed.  
  Develop a model RFP for SRM work to be used as a tool to 1) develop scope for budget submissions; 2) serve as a statement of work for design (AE or In-house) and 3) develop technical performance specifications for construction contract award.  
  Establish SRM centers of standardization to create and transfer knowledge, maintain standards and develop leading edge technical solutions. | Organizational Learning | Lead: E&C  
Support: IS |
| Technical competency - Commissioning and Building Information Modeling (BIM) | Build competencies in use of BIM to second, third, fourth order magnitudes. Institutionalize the practice of de-confliction, start to capture technical data on installed equipment for maintenance management, embed installed cost of materials to produce project cost estimates and last schedule duration of activities for time management. | Organizational Learning | E&C |
| Metering/Meter Data Management | Help the Army create an energy informed culture by  
  • Implementing the Army metering program – which will measure installation energy, natural gas, water, and steam for the purpose  
  • Providing the meter data management support that allows Army leadership to make data-based energy decisions | Strategic Sense, Systems Thinking | Installation Support |
| DCIP – Defense Critical Infrastructure Program Public Works Sector | Establish and resource a Defense Critical Infrastructure Program (DCIP) office at HQ USACE to ensure the availability of networked assets critical to DoD missions. | Strategic Sense, Customer Relationships | Installation Support |
Support the Nation and the Army in achieving our sustainability goals.

Current Context: Sustainable facilities and operations are increasingly important and a national priority. The Army and the Nation have established goals that provide greater sustainability and will create greater efficiencies in our stewardship of the Nation’s fiscal and natural resources.

Sustainability is a holistic, multifunctional concept that calls on USACE to apply a robust systems thinking approach to achieve its goals. Fully applied systems thinking – a critical success factor identified in the Mil Missions Strategic Concept – as a USACE core competency – will drive success in this area.

We are working to achieve our enterprise energy, water, and waste reduction targets within USACE’s internal operations and infrastructure. The Corps of Engineers is striving to meet the federal sustainability targets as described in Executive Order 13514: Federal Leadership in Environment, Energy and Economic Performance for its own operations and facilities (an area of shared management with MM and CW). We are positioned to make rapid and effective progress in meeting our sustainability and energy goals and be a credible service provider to others, USACE must demonstrate commitment to meet its own sustainability goals and obligations.

We also provide our military partners with solutions that help them meet their sustainability and energy efficiency goals in a cost effective manner. In the past, sustainability was a consideration amongst many tradeoffs made when developing requirements. Today, sustainability (and even more specifically energy efficiency) is a primary drive facility requirements. As the Army’s and a DoD infrastructure engineer, USACE must establish standards and lead industry best practices into both established installations, as well as contingency bases. We will guide the adoption of standards that advance the application of science while respecting the policy and economical limits.

Sustainability is an umbrella concept that incorporates multiple strategies. In recent years, the federal government has been intensely focused on energy and water efficiencies and green house gas reduction. However, USACE has also developed strategies related to climate change adaptation, ecosystem restoration, master planning, and environmental management.

2020 Context: Sustainability will continue as a national focus, and USACE will have the technical competency to deliver sustainable solutions for its own operations and for other agencies. In Achieving the Vision for Civil Engineering in 2025: A Roadmap for the Profession, the American Society of Civil Engineers state,

“Civil engineers will enter 2025 having long recognized the imperative for sustainable practices and the urgency for social equity in the consumption of resources. In that year, policies and government funding will encourage or require sustainability and resilient approaches. Civil engineers will have put new technology, techniques, and financial methods in place for sustainable planning, design, construction, operation, and maintenance in carrying out their vital role. In addition, civil engineers will routinely encourage owners to adopt new environmental technologies and techniques to improve the quality of life, while environmental stewardship becomes an integral part of engineering education and research.”

Issues of environmental, water and energy security will also continue to play a role in U.S. international relations. The Millennium Project’s 2011 State of the Future states “Environmental security is increasingly
dominating national and international agendas, shifting defense and geopolitical paradigms because it is increasingly understood that conflict and environmental degradation exacerbate each other.”

In addition, the recently released Intelligence Community Assessment on global water security states that water issues – shortages, flooding, and quality problems – will compound with other social issues in certain regions of the world (most notably, Central Asia, North Africa and the Middle East) to create tension and possibly incite regional conflict. The report states that in regions with shared river basin, water may be used as a weapon (cutting off or poisoning sources) within 10 years or beyond.

2020 Outcome: USACE will exceed federal sustainability goals and be noted as a leader in assisting other agencies to do the same, at home and in support of national interests abroad. It will foster behavioral awareness of the value of sustainability and energy security in its services and activities such that all employees take action to affect sustainability performance within their work products and personal behaviors.

REFERENCES

(in order of reference in this document)

USACE Military Missions Strategic Concept

ADP-1: The Army – “Chapter 2: Our Profession”

2010 National Security Strategy


Capstone Concept for Joint Operations: Joint Force 2020
http://www.jcs.mil/content/files/2012-09/092812122654_CCJO_JF2020_FINAL.pdf

Executive Order (EO) 13514, “Federal Leadership in Environmental, Energy, and Economic Performance,”

American Society of Civil Engineers: “Achieving the Vision for Civil Engineering in 2025: A Road Map for the Profession:

The Millennium Project: 2011 State of the Future
http://www.millennium-project.org/millennium/2011SOF.html
# Support the Nation and the Army in Achieving Sustainability Goals

<table>
<thead>
<tr>
<th>Initiative</th>
<th>Description</th>
<th>Primary CSF</th>
<th>Lead Office</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integration &amp; Synchronization of Sustainability Initiatives</td>
<td>Implement approved recommendations of Sustainability PDT to better integrate sustainability and energy capabilities and efforts across the enterprise.</td>
<td>Systems Thinking, Learning Organization</td>
<td>Primary: Environment Support: All offices</td>
</tr>
<tr>
<td>Environmental Services Transformation</td>
<td>Implement approved recommendations of Environmental Services Transformation PDT to improve efficiencies and maintain capabilities to deliver quality, timely environmental services to customers during environmental programs downsizing.</td>
<td>Customer Relationships</td>
<td>Environment</td>
</tr>
<tr>
<td>Center of Standardization - Minigrid</td>
<td>Stand up Center of Standardization for Smart Power Infrastructure “Deployment” for Energy Reliability and Security (SPIDERS). This center will empower the configuration management, life cycle control and ownership for systems integration, commissioning, and subsequent O&amp;M support. Build DD1391s, SRM plans, support to PPA, EUL, UESC and UP contracts so that “smart grid” technology is system engineered for optimized application.</td>
<td>Strategic Sense, Systems Thinking, Customer Relationships</td>
<td>Primary: Installation Support Secondary: Engineering and Construction</td>
</tr>
<tr>
<td>Industrial Controls Systems Cyber Support</td>
<td>Provide both threat and vulnerability subject matter expertise to promote better coordination, education and field assistance to military installations on their accreditation, technology modernization and networking industrial controls systems.</td>
<td>Strategic Sense, Systems Thinking, Customer Relationships</td>
<td>Primary: Installation Support Secondary: Engineering and Construction</td>
</tr>
<tr>
<td>CUP – Commercial Utilities Program</td>
<td>Secure resourcing for the Commercial Utilities Program by making the business case that CUP reduces the Army’s commercial utilities costs.</td>
<td>Strategic Sense, Customer Relationships</td>
<td>Installation Support</td>
</tr>
</tbody>
</table>