CPC Demonstration Technology Transfer

Martin J. Savoie
Gary W. Schanche
Construction Engineering Research Lab
U.S. Army Engineer R&D Center

Enabling the transition from emerging technology to common practice
**Title:** CPC Demonstration Technology Transfer

**Performing Organization:**
U.S. Army Engineer R&D Center, Construction Engineering Research Lab, PO Box 9005, Champaign, IL

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**Notes:**
- Standard Form 298 (Rev. 8-98)
- Prescribed by ANSI Std Z39-18
What are Criteria Documents?

- Unified Facilities Criteria (UFC) documents
- Unified Facilities Guide Specifications (UFGS)
- Technical Manuals (TM)
- Engineer Regulations (ER)
- Engineer Manuals (EM)
- Engineer Technical Letters (ETL)
- Engineer Circulars (EC)
- Design Guides and Instructions
- Engineering and Construction Bulletins (ECB)
- Public Works Technical Bulletins (PWTB)
- Engineering Software
- Library of Standard Facilities Designs
- Whole Building Design Guide (WBDG) website (www.wbdg.org)
- USACE TechInfo website (www.hnd.usace.army.mil/techinfo/engpubs.htm)
Criteria Document “Shortfalls”

- Fragmented system for introducing new and emerging technologies into criteria documents
- Heavy focus on updates of referenced “industry standards” in UFGS
- UFGS only criteria document that has consistent update system & funding - no recurring funding or update system for other criteria documents
- Many critical UFC documents for facility BASOPS & SRM are very dated
- Technology transfer using only criteria documents is very “passive” and does not work well for inexperienced staff
Necessary, but is it Sufficient?

- Policy & Procedures
- Criteria Documents
- RDT&E Reports
- COTS Technology
- Personal Experience
- Enduring Solution
- Industry Practice

US Army Engineer R&D Center
Integrate with ACSIM Facility Standardization Process

Streamlined Standardization Process – May 2006

**Primary Responsibilities**

- Army Standard Signature Authority
- Management and Review Authority
- Programmatic Policy and Execution Oversight

**Facilities Design Group**

- Approves Design Mandatory Criteria
- Approves Army Standard Designs and Waivers Thereunto

**Technology Standards Group**

- Provides Technology Solutions in Support of Standard Designs or to Implement Army Standards
- FDT – Facility Design Team
- COS – Center of Standardization
- AS – Army Standard
- SD-C – Standard Design Criteria
- DMP – Deputy Commanding General Military and International Operations, HOUUSACE

**Technology Evaluation Teams**

Provides Policy and Signs Army Standards

**SES/O-6 level Army Facility Standardization Committee (AFSC)**

**ACSIM**

Graphic courtesy of Operations Directorate, OACSIM

US Army Engineer R&D Center
Establishes Army Standards applicable to construction, renovation, and maintenance of facilities.

Administers the Installation Technology Transition Program (ITTP).

Evaluates Technologies for Army-wide implementation.

Recommends improvements to policy, standards and guidance related to facilities O,M & R

Provides guidance to AFSC regarding waiver requests of Army Standards.

TSG members:
Phil Columbus (ACSIM-ODF Chair)
Vince Kam (ACSIM-ODF)
Keith King (ACSIM-ISH)
Claude Matsui (ACSIM-ODO)
Jeff Ward (IMCOM-PW)
Kathy Aydt (IMCOM-PL)
Mario Sarracino (HQUSACE)
Barry Bartley (HQUSACE)
Marty Savoie (ERDC)
Bill Haris (TARDEC)
Kelly Dilks (ACSIM-ODF, ERDC, Facilitator)
Speeding Technology Transition

“The Challenge”

- S&T Planning
- Installations

“Perceptions” of the S&T Community
- S&T’s job is complete at the tech development stage
- Implementation of the technology is the customer’s (problem) responsibility
- The role of S&T is “tech push” — If it’s good technology — they will come!
- Development cycle for S&T is too long for most Acquisition and Warfighter customers
- Focus only on the technology and not on the business rationale for implementation

Key Impediments
- Budget: Lack of Transition Funds
- Transition Process Lacks Definition & Visibility
- Culture: Difference Goals & Timelines between S&T and Acquisition Managers
- Lack of Incentives

Managed by System Program Offices

Technology Transition “Seam”

S&T Planning

Installations
Equipment Development & Infusion Process

**RDTE 6.1 BR**

**RDTE 6.2 AR**

**RDTE 6.3 ATD**

**RDTE 6.4 ACD&P**

- Environment for which item will be operated, maintained, and stored
- Operational Tempo
- Logistics support requirements
  - Specifications and Standards
  - Quantitative measures
  - Data management
  - Prototypes
  - Material selection
  - Geometry
  - Coatings and finishes

**RDTE 6.5 SDD**

- Production
- Operational Test
- New Equip Trng
- MOS School Trng
- Fielding

**Procurement**

- Design the System
- Design the Support
- Support the Design

**Formal & Resourced Army Process**
Establish a Formal Capability Assessment & Acquisition Process for Installations

DoD/OSD Acquisition Guidance Docs
- DoD 5000
- JCIDS
- RAND Report
- Army Mod Strat
- Army Install Strat
- Army S&T Master
- Def Install Strat

Capability/Requirements Documents
- Force Operating Capabilities
  - Func Area Analysis
- Func Needs Analysis
- Func Solutions Analysis
- DOTMLPF
- TRADOC
- PAM 525-66

Coordinated Army Equipping & Installation Programs
- Ideal Solution
- Installation S&T Roadmaps
- Army Installations Program Future Technology Investments

Ranking for Capability Needs

Army Mod Strat
Coordinated Transition of Technology

- Basic Research
- Applied Research
- Demonstration & Validation
- Initial Fielding, Policy, Procedures & Training
- Commercialization & Fielding

Technology Sources
- National Lab & University research
- Emerging Technologies
- New Processes & COTS

Funding Sources
- Expanded BA1
- Expanded BA2
- New BA3
- New BA4
- Expanded BASOPS & SRM

Game-changing New Ideas
Leverage the “Best & Brightest”

Flexible technology development with seamless transition to the field

Formal Installation Technology "wedge"

US Army Engineer R&D Center
Questions?

For Further Information:
• Martin J. Savoie, USA ERDC-CERL, (217) 373-6762
  Martin.J.Savoie@usace.army.mil
• Gary W. Schanche, USA ERDC-CERL, (217) 352-6511 Ext. 7415
  Gary.W.Schanche@usace.army.mil