

US Army Corps
of Engineers
Engineering and Support
Center, Huntsville

The Army Metering Data Management System (MDMS)

Using MDMS

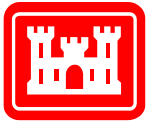
To Meet the Army's Energy Goals

Report Documentation Page

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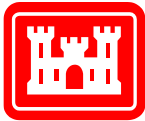
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Meeting Army Energy Goals

- The metering data management system (MDMS) captures and reports enterprise data from advanced meters
- MDMS will help the Army to comply with:
 - Energy Policy Act of 2005 (EPAAct 2005)
 - Energy Independence and Security Act of 2007 (EISA 2007)
 - Executive Orders
- MDMS measures progress on strategies such as AEWCP, AESIS, and IMCP



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Meeting Army Energy Goals

Policy Drivers

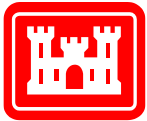
DODI 4170.11, EPLA 2005, EO 13423, EISA 2007, and EO 13514

Senior Energy Council and HQDA
Provide vision, mission, and objectives

Strategic Planning
AEWCP, AESIS, IMCP

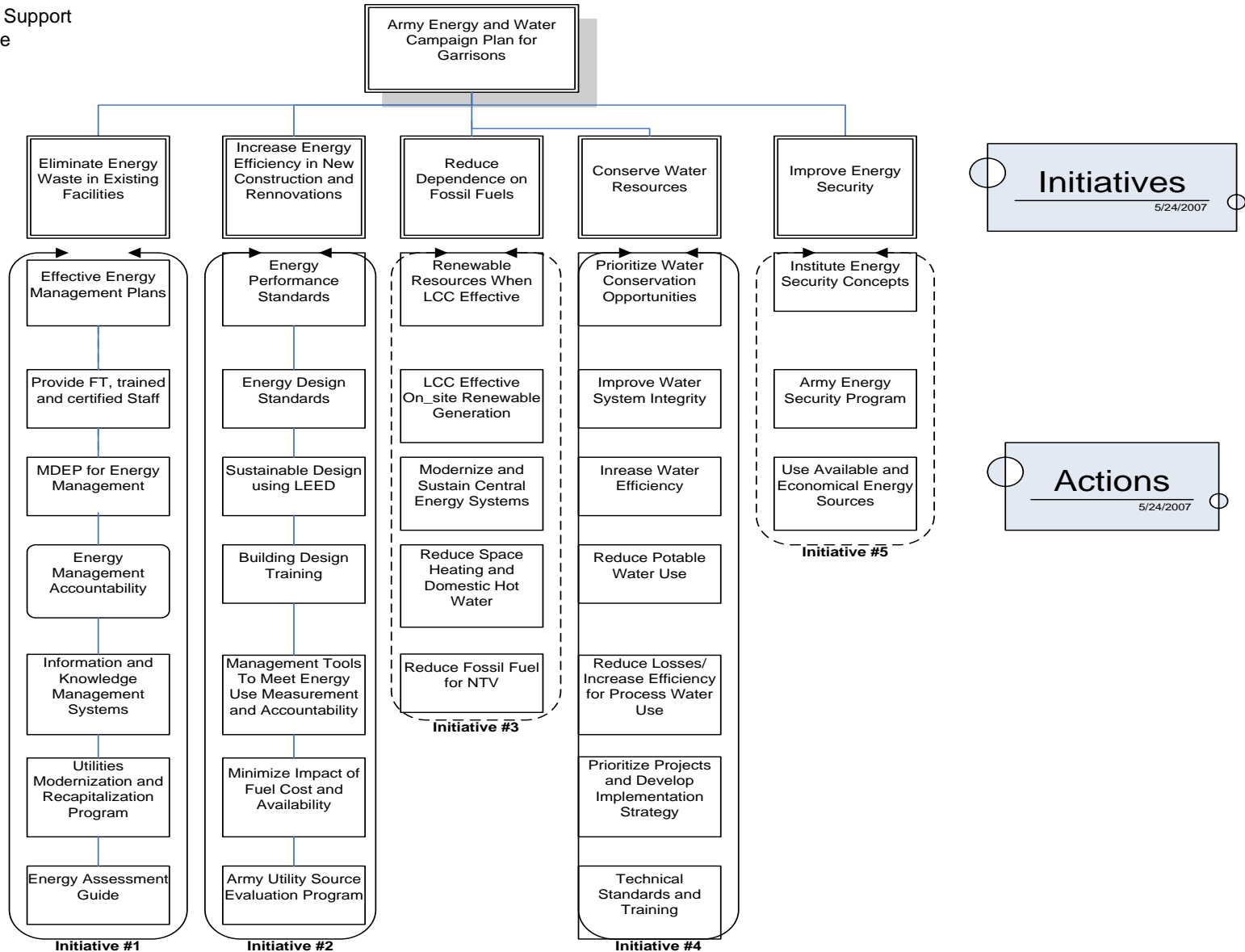
Program/Project Needs Assessment
EACA, EEAP, REM, ESCO DES as Prioritized by Army Energy Manager

ECIP, UESC, ESPC, ESP, UMCS, AMP as supported by MDMS
Reports for M&V, OMB Scorecards, and AEWRS



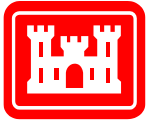
Army Energy and Water Campaign Plan

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Initiatives
5/24/2007

Actions
5/24/2007

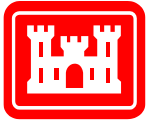


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Army Energy Security & Implementation Strategy (AESIS)

Energy Security Goals (ESG)

- ESG-1: Reduce energy consumption
- ESG-2: Increase energy efficiency across platforms and facilities
- ESG-3: Increase use of new renewable and alternative
- ESG-4: Assure access to sufficient energy supplies
- ESG-5: Reduce adverse impacts on the environment.

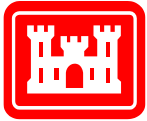


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Installation Management Campaign Plan (IMCP) Goals

Energy Goals (EN)

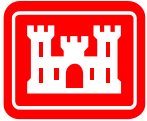
- EN 1 – Reduce energy and water consumption
- EN 2 – Increase energy and water efficiency and modernize infrastructure
- EN 3 – Improve the development of renewable and alternative energy, and ensure access to energy supplies
- EN 4 – Improve the development of renewable and alternative energy for vehicle fleet mobility fuel



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What is MDMS?

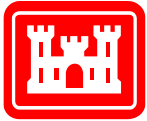
- An enterprise system to track the Army's energy consumption worldwide
 - Track meter data from advanced utility meters in a central database (MDMS Enterprise)
 - Automate meter data collection on a secure network
 - Produce energy reports accessible via Army Engineering Knowledge Online (EKO) and MDMS Enterprise Portal
- Provide active Army installations the ability to track utility commodities such as, electricity, water and natural gas consumption at the facility level
- Support Army's energy goals and improve energy consumption accountability



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MDMS Overview

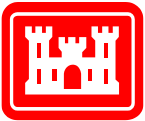
- MDMS Pilot Phase
- Operational MDMS
- Future MDMS



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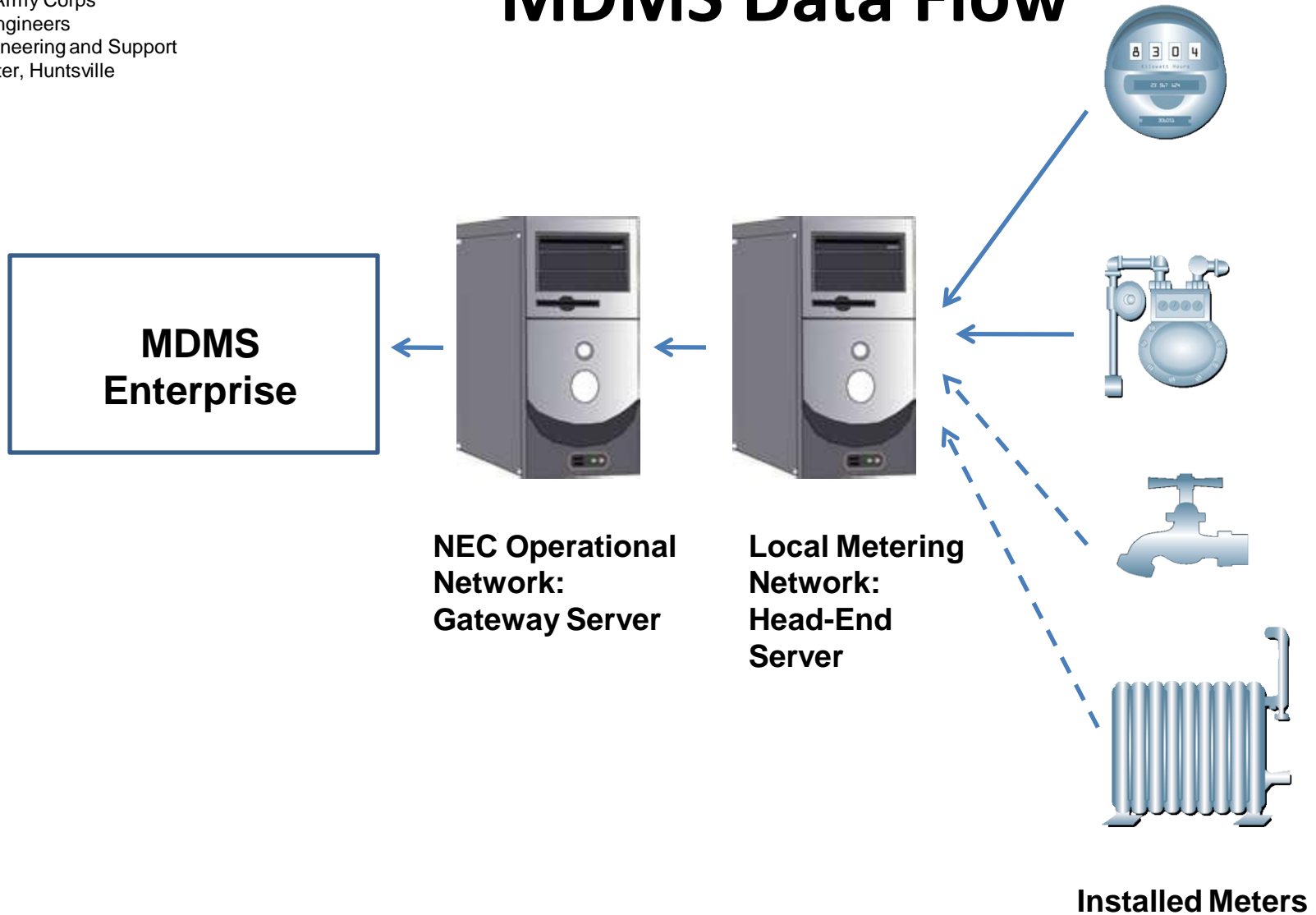
MDMS Pilot Phase

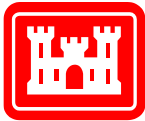
- Army has developed a MDMS pilot at Fort Carson and Fort Stewart. Effort included:
 - Developing MDMS architecture and software
 - Demonstrating proof of concept from installation to enterprise data and reporting system
 - Achieving Authority to Operate (ATO) effective 23 April 2010
 - Obtaining Defense Information Assurance Certification and Accreditation Process (DIACAP) and Certificate of Networkiness (CON) (Application submitted)



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MDMS Data Flow





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ARMY MDMS Reporting Portal



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ARMY METER DATA MANAGEMENT SYSTEM (MDMS)



REPORTING PORTAL

- HOME
- USER MANAGEMENT
- AVAILABLE SITES
- CONTACT Us

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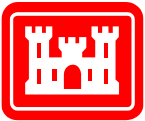
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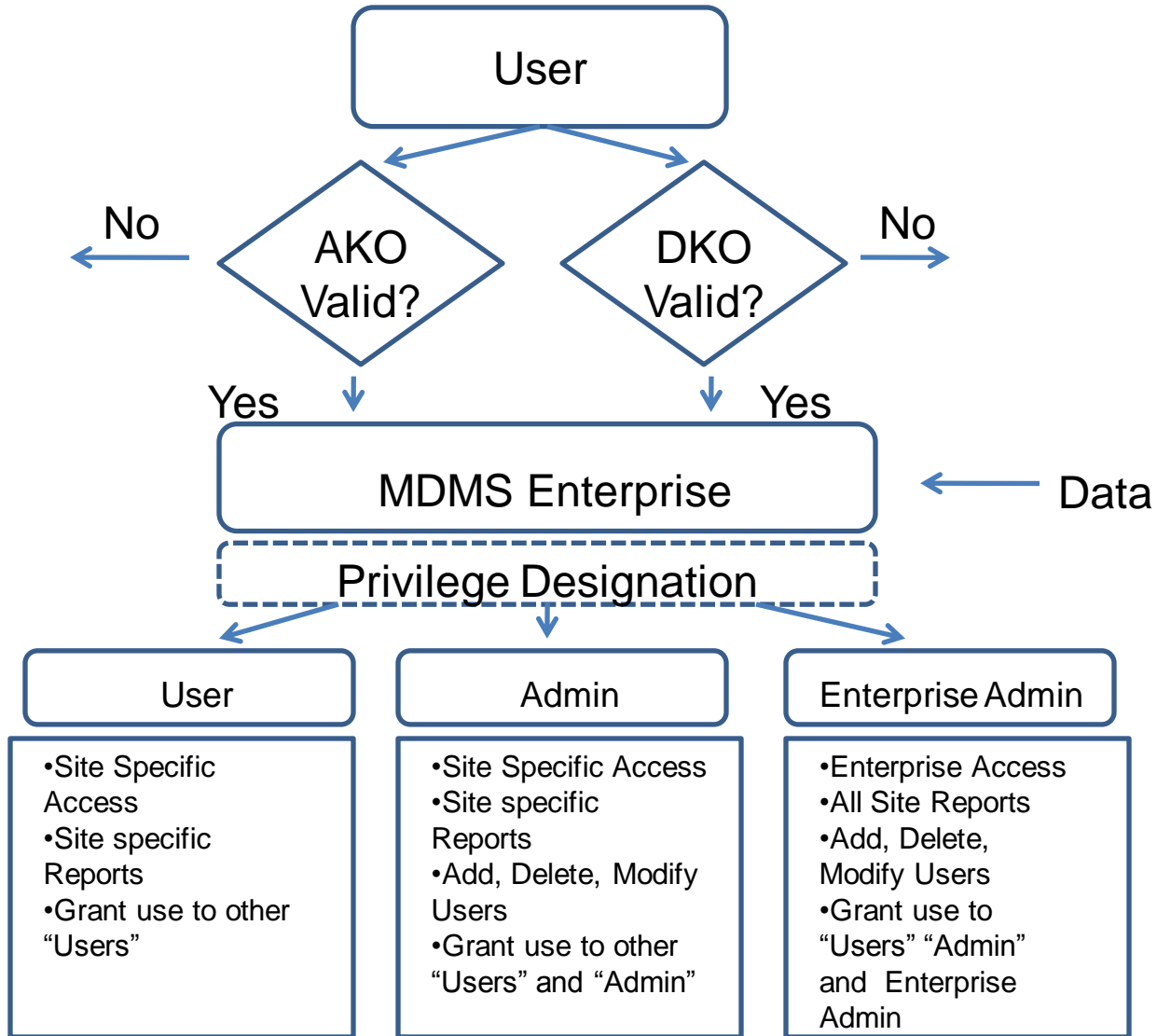
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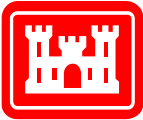
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MDMS Access Flow





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MDMS Pilot Sites



U.S. ARMY

ARMY METER DATA MANAGEMENT SYSTEM (MDMS)



REPORTING PORTAL

- Home
- User Management
- AVAILABLE SITES**
- Fort Carson
- Fort Lee
- Fort Stewart
- Contact Us

AVAILABLE SITES

WITHIN THIS SECTION OF THE PORTAL, YOU WILL BE ABLE TO NAVIGATE TO ANY SITE TO WHICH YOU HAVE ACCESS BASED ON YOUR ACCESS LEVEL. SHOULD YOU REQUIRE ACCESS TO SITES NOT LISTED BELOW YOU MUST CONTACT THE DPW FOR THAT SITE.

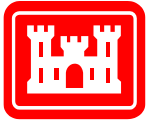
	<u>SITE NAME</u>	<u>ADDRESS1</u>	<u>ADDRESS2</u>	<u>CITY</u>	<u>STATE</u>	<u>POSTAL CODE</u>	<u>COUNTRY</u>
VIEW	FORT CARSON	ARMY COMMUNITY SERVICE	6303 WETZEL AVE	FORT CARSON	COLORADO	80913	UNITED STATES
VIEW	FORT LEE	500 LEE AVENUE		FORT LEE	VIRGINIA	23801	UNITED STATES
VIEW	FORT STEWART	55 PONY SOLDIER AVE		FORT STEWART	GEORGIA	31314	UNITED STATES

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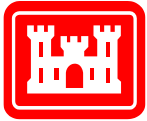


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MDMS Reports

MDMS has five available reports

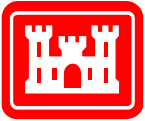
- Energy Glide Path- Presents report of summed MDMS-metered MMBTU/ KSqFt and degree days
- Energy Intensity – Presents report for MMBTU/KSqFt by the 57 Energy Classification Codes (ECC)
- Building Report - Presents report for MMBTU/KSqFt by building, commodity type (water/gas), and date
- Meter Reading Report – Excel export of all meter data
- Hourly Demand - Report presents 24-hour usage (MMBtu) by building, commodity type, and time



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MDMS Overview

- MDMS Pilot Phase
- **Operational MDMS**
- Future MDMS

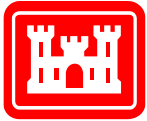


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Operational MDMS

Focus on...

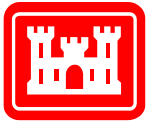
- Install MDMS at all Army installations
- Implement help desk support
- Integrate real property data
- Enhance reporting
 - Additional standard reports
 - Self-generation/ad-hoc reports



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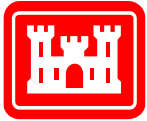


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Future MDMS

Focus on..

- Reducing energy waste in existing facilities.
 - Identify the most and least energy efficient facilities
 - Gain insight into what facility attributes and occupant practices contribute to the best of class
 - Directly measure the energy savings
- Reducing peak power demand to qualify for lower utility rates
- Facilitating private sector investment to build the new infrastructure for energy security and independence (e.g., ESPC).

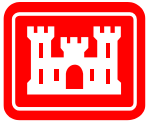


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Future MDMS Applications

Beyond Legislative Compliance...

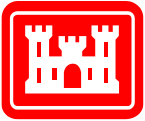
- Trending/Benchmarking
- Tenant Billing
- Efficiency Project Identification
- Measurement & Verification



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MDMS Stakeholders

- Proponent - Office of the Assistant Chief of Staff for Installation Management (OACSIM)
- Customer - Army Commands (ACOMs) and Installations
- Provider - CEHNC is responsible for implementing and executing MDMS and the AMP



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