

Defense Health Agency TECHNICAL MANUAL

NUMBER 4165.01, Volume 4
September 6, 2018

DHA Facilities Enterprise

SUBJECT: Defense Medical Logistics Standard Support-Facilities Management
(DMLSS-FM): Volume 4: Facility Systems Inventory (FSI) Module

References: See Enclosure 1

1. PURPOSE. This Defense Health Agency-Technical Manual (DHA-TM), based on the authority of References (a) and (b), and in accordance with the guidance of References (c) and (d), establishes the Defense Health Agency's (DHA) procedures for managing data in the Military Health System's (MHS) Computer Aided Facility Management/Computerized Maintenance Management System (CAFM/CMMS) of record, DMLSS-FM.

2. APPLICABILITY. This DHA-TM applies to OSD, the Military Departments (MILDEPs), the Office of the Chairman of the Joint Chiefs of Staff and the Joint Staff, the Combatant Commands, the Office of the Inspector General of the DoD, the Defense Agencies, the DoD Field Activities, and all other organizational entities within the DoD (referred to collectively in this DHA-TM as the "DoD Components").

3. POLICY IMPLEMENTATION. It is DHA's instruction, pursuant to References (b) and (d), to:
 - a. Implement policy, administer the Defense Health Program's (DHP) Facilities Operations and Maintenance budgets, and perform financial oversight at an enterprise level in order to ensure consistency, optimize performance, and meet strategic priorities across the MHS facility's portfolio consistent with guidance from the Assistant Secretary of Defense for Health Affairs (ASD(HA)). Services retain responsibility for non-MTFs and Service-specific and readiness assets.

 - b. Develop consistent standards for medical facility management necessary for programmatic oversight of the DHP.

 - c. Establish DMLSS-FM as the database of record for all MHS facility inventory, maintenance, requirements, and project data including related financial data.

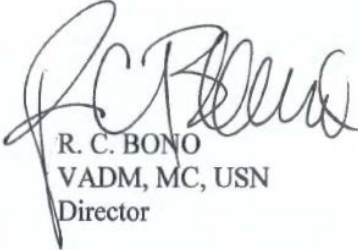
4. RESPONSIBILITIES. See Enclosure 2.

5. PROCEDURES. See Enclosure 3.

6. RELEASABILITY. **Cleared for public release**. This DHA-TM is available on the Internet from the DHA SharePoint site at: <http://www.health.mil/dhapublications>.

7. EFFECTIVE DATE. This DHA-TM:
 - a. Is effective upon signature.

 - b. Will expire 10 years from the date of signature if it has not been reissued or cancelled before this date in accordance with DHA-Procedural Instruction 5025.01 (Reference (c)).



R. C. BONO
VADM, MC, USN
Director

Enclosures

1. References
2. Responsibilities
3. Procedures

Glossary

ENCLOSURE 1

REFERENCES

- (a) DoD Directive 5136.01, “Assistant Secretary of Defense for Health Affairs (ASD(HA)),” September 30, 2013, as amended
- (b) DoD Directive 5136.13, “Defense Health Agency (DHA),” September 30, 2013
- (c) DHA-Procedural Instruction 5025.01, “Publication System,” August 21, 2015, as amended
- (d) DoD Instruction 6015.17, “Military Health System (MHS) Facility Portfolio Management,” January 13, 2012
- (e) DHA-Technical Manual 4165.01-M-VI, “Defense Medical Logistics Standard Support-Facilities Management (DMLSS-FM) Volume 1: Facilities Inventory Module,” July 10, 2017

ENCLOSURE 2
RESPONSIBILITIES

1. DIRECTOR, DHA. The Director, DHA, will:

a. Implement policy, guidance, and instructions consistent with references established in this DHA-TM.

b. Prepare and submit program and budget requirements for sustainment, restoration, and modernization pursuant to guidance from the ASD(HA) for the DoD Planning, Programming, Budgeting, and Execution process in accordance with Reference (b).

c. Provide programmatic oversight of the DHP Operations and Maintenance appropriations in accordance with instructions issued by the ASD(HA), fiscal guidance issued by the Under Secretary of Defense (Comptroller)/Chief Financial Officer, and applicable law.

2. CHIEF, FACILITIES ENTERPRISE, DHA. The Chief, Facilities Enterprise, DHA, will:

a. Establish DMLSS-FM data standards for effective CAFM/CMMS management and operations.

b. Monitor medical facilities' operations to ensure conformance with standards established in Paragraph 2a.

c. Program and budget for CAFM/CMMS maintenance requirements to be submitted by the Director, DHA, for the DoD Programming, Budgeting, and Execution process.

d. Develop and implement training for Services Facilities Staff on DHA-directed data management standards and reporting.

3. SECRETARIES OF THE MILDEPs. The Secretaries of the MILDEPs will:

a. Monitor and report the overall condition, readiness, utilization, and functionality of the MHS facility portfolio in accordance with Reference (d).

b. Establish internal controls to ensure compliance with established medical facility data management standards.

ENCLOSURE 3

PROCEDURES

1. FSI MODULE

a. Overview. The FSI module is designed to house data for Real Property Installed Equipment (RPIE). This DHA-TM covers equipment classified as Real Property Only, equipment classified as Personal Property will be covered in a separate DHA-TM. RPIE is defined as equipment which is affixed and built into a facility as an integral part of a facility.

(1) The FSI module is used in conjunction with the Maintenance Procedure and Preventive Maintenance (PM) Schedule modules to create recurring maintenance schedules accomplished via Work Request(s) (WRs). The FSI module also maintains an historical record of WRs associated with RPIE. When the RPIE is noted on the WR, it allows that WR to appear on the History tab of the FSI record identifying the work history.

(2) RPIE is automatically associated on the WR for recurring work generated through the PM module. For an unscheduled WR, the RPIE identification (ID) should be identified and manually added on the WR. RPIE can also be associated to requirements within the requirements module. When RPIE is associated to unfunded requirements/deficiencies they provide historical data, justification, BUILDER ID, and support project/requirements.

(3) An accurate RPIE inventory is the foundation of an effective maintenance program, and an RPIE validation in DMLSS is required every 5 years, in accordance with Reference (e).

b. Real Property System Standard (RPSS). The RPSS is a database containing standards for PM procedures, operational checks, and inspections, as well as the drivers, parameters, requirements, and accreditation mandates for the ongoing maintenance and sustainment. The RPSS also lists a standard naming convention for the RPIE ID, the life expectancy, whether the item should be grouped, minimum PM frequency, and the Maintenance Driver (such as National Fire Protection Association, The Joint Commission, or other compliance standards). The RPSS is accessible through the World Class Toolkit. The World Class Toolkit provides a library of tools that will enable planners, hospital staff, architects, engineers, agents, and facility managers to understand the meaning of World Class and how it will affect their facilities and their operations.

c. Index Number

(1) The Index Number, also referred to as the RPIE ID, is the unique ID for each piece of equipment. When creating a RPIE ID, a hyphen shall separate each "section". As-built identifiers shall be maintained on all systems if possible. For example, on electrical equipment (Distribution Panels, Main Distribution Panels, Transformers, Panels, etc.) which have previously been identified by the installer on a phenolic label, the existing name shall stay

intact (e.g., if a Distribution Panel on the second floor was called DP-2H154, identify it as 00123-DP-2H154-2.).

The standard for the creation of a RPIE ID is as follows:

| Section 1 5-digit Facility Number | Section 2 Nomenclature Acronym | Section 3 Unique Item Identifier | Section 4 Location | RPIE ID |
|---|--------------------------------------|--|-----------------------|-------------------------|
| 00123 | AHU | 001 | FLR-1 | 00123-AHU-001- FLR-1 |
| 00123 | AHU | 001 | R-NW | 00123-AHU-001-R- NW |

- Section 1 – A one-to-many alpha-numeric character field that may include special characters. USE: DMLSS-FM Facility Number, Facilities Inventory Module.
- Section 2 – Nomenclature Acronym: standardized acronyms are found in the RPSS.
- Section 3 – Unique Item Identifier: sequential number of units for each nomenclature or as-built identifier.
- Section 4 – Location: floor number, zone, and/or room number utilizing the standard naming convention below.
- Section 5 – If applicable, a fifth section can be added to designate a related component.

| LOCATION | ACRONYM | LOCATION | ACRONYM |
|-----------------------------|---------|-----------------|---------|
| ATTIC | A | EXTERIOR | EXT |
| BASEMENT | B | NORTH | EXT-N |
| CRAWLSPACE | CS | SOUTH | EXT-S |
| SUB-BASEMENT | SB | EAST | EXT-E |
| INTERSTITIAL SPACE | IS | WEST | EXT-W |
| MEZZANINE | M | NORTHWEST | EXT-NW |
| PENTHOUSE | P | NORTHEAST | EXT-NE |
| GROUND FLOOR | G | SOUTHWEST | EXT-SW |
| ALL ITEM IN NOMENCLATURE | ALL | SOUTHEAST | EXT-SE |
| | | | |
| FLOOR | FLR | ROOF | R |
| 1 ST FLOOR | FLR-1 | NORTH | R-N |
| 2 ND FLOOR | FLR-2 | SOUTH | R-S |
| | | EAST | R-E |
| ZONE | Z | WEST | R-W |
| ZONE 1 | Z-1 | NORTHWEST | R-NW |
| ZONE 2 | Z-2 | NORTHEAST | R-NE |
| ZONE A | Z-A | SOUTHWEST | R-SW |
| ZONE AB | Z-AB | SOUTHEAST | R-SE |

| | | COMBINATION FLOOR LOCATIONS EXAMPLES | |
|-------------|-----|--|-----------|
| WING | W | 1 ST FLOOR, WING A | FLR-1-W-A |
| WING A | W-A | ROOF 1, WEST SIDE OF BUILDING | R-1-W |
| WING B | W-B | BASEMENT, CRAWLSPACE | B-CS |
| WING (WEST) | W-W | 2 ND FLOOR, ALL ITEM IN NOMENCLATURE | FLR2-ALL |
| WING (EAST) | W-E | | |

(2) Labels on the RPIE should match identically to what is in DMLSS. If a piece of equipment needs to be renumbered, it must be changed both in DMLSS and on the physical label. The label must be created for the maintainer to affix during the next PM or sooner if appropriate.

2. DMLSS-FM STANDARDS FOR FSI FIELDS

a. Classification Tab

(1) Installation. Select the installation where the facility and RPIE reside.

(2) Facility. Select the facility where the RPIE is located.

(3) Room Number and/or Other Location. Select the Room Number in which the RPIE is physically located. If a room number does not exist in list, add it to the Room Inventory module. If RPIE is not physically located in a room or corridor, type the location in the "Other Loc" field, e.g., outside, interstitial space, etc. Use the other location field to provide additional description to a room, e.g., SW corner, in ceiling, next to (NT), etc.

(4) Facility System, Facility Subsystem, Assembly Category, and Nomenclature. Select the system hierarchy (Facility System, Facility Subsystem, Assembly Category, and Nomenclature) to which the RPIE belongs. This information can be found in the RPSS.

(5) Section Name. Select the Section Name to which the RPIE belongs.

Note: this field identifies the Section that the RPIE item is associated with. This field is used when the DMLSS-BUILDER Interface has been turned on and the databases have been reconciled.

(6) Index Number. Also referred to as the RPIE ID, this is the unique identifier for each piece of equipment.

(7) Bar Code Number. There is no Tri-service standard for this field. It does not relate to any Bar Code functionality. For sites with Public Works/Civil Engineering as their Real Property Maintainer, this field may be used to list the Public Works/Civil Engineering identifier number for equipment, as a cross reference.

(8) Engineering ID. There is no Tri-service standard for this field. This field may be used to store the equipment schedule identifier from the design/as-built drawings.

(9) Prime/Related Component. A RPIE item may have a prime/related component relationship. This means that one item (prime component) is comprised of other items (related components). If a RPIE item is the related component of a prime/related component relationship, the prime component is listed on the Classification tab of the FSI window. If a RPIE item is the prime component of a prime/related component relationship, you can view the related component items by using the Components option on the Data menu. When viewing any RPIE record, regardless of whether it is included in any prime/related component relationship, you can use the Data menu to view all RPIE prime/related component relationships.

(10) PM Schedule Required. If a check is present, it means this RPIE requires a PM schedule. If no PM is required on this RPIE, then no check mark will be present. The check is for information only and does not equate to an actual PM schedule for the RPIE item.

(11) PM Performed with Prime. If a check is present, it means that this is a related component RPIE, and the PM is performed with the prime component; therefore, there will not be a required PM on this RPIE. If this box is checked, the PM Schedule Required box should not be checked.

(12) RPIE Group and Risk. This field will automatically update with the RPIE Group Name as the necessary RPIE items are grouped. To group a RPIE, go to the Data Menu, and select Edit RPIE Group. To see which RPIE are recommended to be grouped, refer to the RPSS. The risk factor associated to the RPIE Group will appear on the Classification screen as the Risk Factor. The group risk factor will be the highest of any single RPIE risk factor in the group.

(a) Grouping identifies “like items” so that the required PM may be accomplished at the same time for efficiency. If not grouped, a PM schedule will be created for each individual item.

(b) When grouping RPIE, it is recommended to use the following format: 5-digit facility number-RPIE nomenclature Acronym-Group Identifier (Floor (FLR), Zone (Z), All). For example, 00123-CB-ALL or 00123-CB-Z1. 00123 = Facility Number. CB = Circuit Breaker, or the acronym for the nomenclature. Z1 = identifies the zone number area that is represented in the group. If RPIE groups are broken down by floor, it may read 00123-CB-FLR1. This acronym should match both that of the RPSS and the FSI records. In order to group RPIE, the equipment must have the same hierarchy, e.g., a circuit breaker cannot be grouped with a fire alarm panel. Only circuit breakers can be grouped together.

(13) Risk Factor. Refer to the RPSS as a recommendation for risk factors.

(14) Quality Assurance (QA)/Quality Control (QC) Inspection Method. The QA/QC Inspection Methods identified here apply to unscheduled WRs. Inspection Methods for PMs are identified in the PM Schedule module. The “Automatic” inspection method triggers QA/QC inspections for every unscheduled WR. The “Random” inspection method allows DMLSS-FM

to randomly select the RPIE during the End of Day process based on the criteria set-up in Site Preferences. The QA/QC criteria are set up under Site Preferences, QA/QC tab. The criteria must first be established in Site Preferences before the system will assign the selected inspection methods on the WR.

(15) Validation By and Date. Utilize this field to determine last assessment or validation of RPIE data. Enter the name of the person that researched and verified that all data elements entered in the FSI (RPIE) record are valid. Enter the date that the validation was completed.

b. Features Tab

(1) Nomenclature. This field defaults from the Classification Tab.

(2) RPIE Spare. There is no Tri-service guidance for this field.

(3) Capacity Unit and Value. Only one Capacity Unit and corresponding value can be selected.

(4) Specification Unit and Value. These fields are to capture the important specification data from the equipment, e.g., amps, hertz, volts, watts, belt size, Freon type, etc.

(5) Equipment Hazard. If there is a hazard pertaining to the RPIE, this is where to document it, e.g., confined space, noise, lead paint.

(6) Area Supported. If the RPIE supports a particular area, (e.g., D Wing), look for it in the drop down. If it does not appear, you may type it in. If typing into the drop-down field, be sure the terminology is recognizable by all FM staff.

(7) Rooms Supported. If the RPIE supports specific rooms, such as an Air Handling Unit, the rooms may be documented here. Select all rooms that the RPIE supports.

c. Condition Tab

(1) Nomenclature, Facility System, and Facility Subsystem. These fields are all unable to be edited and default in from the Classification tab. If any changes need to be made, do so on the Classification tab.

(2) Install/Major Upgrade Date. This is the date the RPIE was installed or its last major upgrade.

(3) Life Expectancy. Enter the number of years the equipment is expected to last. This can be found in the RPSS.

(4) Age. This is a calculation of the difference between the current year and the installation date.

- (5) Life Remaining. This is a calculation of the life expectancy minus the age.
- (6) Condition Assessment Required. A checkmark is placed in this box if a condition assessment is required on this RPIE.
- (7) By placing a check mark in the Condition Assessment Required checkbox, this enables searches and reports to be run on RPIE which require Condition Assessments. It does not create reminders in the system. Condition Assessment information can be documented on a RPIE without having the checkbox checked.
- (8) Assessment Organization. Select the Organization which performed the Condition Assessment from a drop-down list. This will typically be performed by the maintenance contractor.
- (9) Point of Contact (POC). Select the POC who performed the condition assessment from a drop-down list. This will typically be one of the maintenance technicians from within the local maintenance crew. Occasionally, this can be performed by an outside team. In that case, input and select "RPIE Validation Team".
- (10) Condition Code and Date. This is a condition assessment of the RPIE. The Condition Date field is not designed to automatically update; ensure to manually update the Condition Date.
- (11) Related Cause. This is the reason the condition assessment was performed. If it's during an annual PM, select "ANNUAL PM & CONDITION ASSESSMENT." If it is during a RPIE inventory, select "RPIE INVENTORY," etc. These values may first have to be entered into the Table Maintenance Utility, which is located within DMLSS System Services.
- (12) Life Used. This field is fully editable by the user. It is not linked in any way to the Life Remaining (years) field. The field can be used by the maintenance technician(s) to determine the remaining life of a piece of RPIE that may not have been properly maintained.
- (13) Condition Observation and Condition Recommendations. Document any necessary observations and/or recommendations found during the condition assessment in the corresponding fields. If necessary, from this screen, a Requirement or a WR can be generated, and the condition observations and recommendations will default into the description field.
- (14) Condition History. This will show the condition history of the RPIE.
- (15) Create Requirement. By selecting this, it will create a requirement on this RPIE with the information from the condition tab.
- (16) Create WR. By selecting this, it will create a WR on this RPIE with the information from the Condition tab. The WR classification defaults to RPIE Discrepancy, which must be manually changed to Unscheduled.

d. Manufacturer Tab

(1) Nomenclature, Facility System, and Facility Subsystem. These default in from the Classification Tab. If there is a need to change any of these fields, it needs to be done on the Classification Tab.

(2) Manufacturer. If the manufacturer of the RPIE is known, select the manufacturer from the drop down. If it does not appear, go to Navigate, Directory, to see if the record is populated for this manufacturer. The manufacturer may exist, but could be misspelled. If it does not exist, add it, ensuring that manufacturer is selected as the Organization Type. If it does exist, add manufacturer as an Organization Type to the existing record. If the RPIE has been evaluated, but the manufacturer is unknown, select RESEARCHED-UNKNOWN as the manufacturer.

(3) Model Number. If the Model Number of the RPIE is known, enter it here. If a manufacturer was selected, Model Number is required. If Model Number isn't known, enter either "Researched-Unknown", "Not Applicable (N/A)" or "N/A".

(4) Serial Number. If the Serial Number of the RPIE is known, enter it here. If not, enter "Researched-Unknown", "Not Applicable (N/A)" or "N/A".

(5) Catalog Number. There is no guidance for this field.

(6) Contractor and Contract. There is no guidance for this field.

(7) Reference Documents. There is no guidance for this field.

e. Warranty Tab

(1) Nomenclature, Facility System, and Facility Subsystem. These fields default in from the Classification Tab. If there is a need to change any of these fields, it needs to be done on the Classification Tab.

(2) Purchase Order #/Vendor/POC. These fields capture the original Purchase Order Number and Vendor/company by which the RPIE was purchased. The specific POC may also be captured.

(3) Warranty Start Date/Duration: Parts and Labor. On new equipment, enter the Warranty Start Date and the Duration under the Parts and Labor, and the system will notify the user when the warranty expires. Messages will appear in the DMLSS-FM inbox telling the user warranty has 6 months before it expires, 3 months before it expires, and 1 month on the day it expires.

f. Parts Tab. There is no guidance for this tab.

g. Cost Tab. The Cost Tab shows the Year-to-Date summary, as well as the Cumulative summary of how much money and how many hours were spent on this RPIE.

(1) Nomenclature, Facility System, and Facility Subsystem. These fields default in from the Classification Tab. If there is a need to change any of these fields, it needs to be done on the Classification Tab.

(2) Acquisition Cost. If the acquisition cost is known (cost to purchase RPIE), document that cost in this field.

(3) Replacement Cost. If the replacement cost is known, document it here.

h. History Tab. The History Tab is a read only tab and shows a summary of all Scheduled and Unscheduled WRs with which the RPIE is associated.

i. Additional Functions in FSI

(1) Draw. This function enables a search for room drawings associated with an RPIE item. When in the RPIE record, select the Draw button on the vertical toolbar. This will open Drawbase and display the room location of the RPIE item in a drawing. To locate all items with a specific hierarchy, navigate to the search window. The Draw button replaces the Detail button when a drawing query is run. After the query runs, view the results in the bottom half of the FSI/RPIE Search window. The Detail button opens the FSI window and displays the details of the record selected from the list. The Draw button opens Drawbase and highlights all rooms wherein the RPIE item(s) selected is found.

(2) File Attachment. The function enables attachment of one or more files, graphics, and drawings. This can be done by clicking the Attachment button or selecting it from the Data menu. Recommended items to attach include, but are not limited to, equipment photos, RPIE condition assessment reports, and maintenance manuals. The File Attachment can be located via the Data Tab or on the vertical toolbar.

(3) Notes. This function allows the capture of information about the RPIE item. Notes must be captured each time there is a change to RPIE or if the item is being set Inactive. The Notes can be located via the Data Tab or on the vertical toolbar.

(4) Standards. This function allows the capture of code/standard references pertaining to the RPIE item. Code/standard information is found in the RPSS. Multiple records can be entered for each RPIE item, including but not limited to, the maintenance driver agency, accreditation agency, and In Progress Inspection candidates. If the correct values do not exist in the dropdown lists, the values will need to be added in the Table Maintenance Utility in System Services.

j. Data Tab - System, Subsystem, Assembly Category, and Nomenclature. In the System, Subsystem, Assembly Category, and Nomenclature window, the list of nomenclatures for every RPIE item in the FM database is visible. For each nomenclature, the RPIE hierarchy consisting

of the assembly category, subsystem, and system classification the RPIE item falls under can be found.

k. Navigate Tab - Related Items. The Related Items function allows users to quickly jump to Projects, WRs, PM Schedules, and/or Requirements related to a RPIE record.

GLOSSARY

PART I. ABBREVIATIONS AND ACRONYMS

| | |
|----------|--|
| ASD(HA) | Assistant Secretary of Defense for Health Affairs |
| CAFM | Computer Aided Facility Management |
| CMMS | Computerized Maintenance Management System |
| DHA | Defense Health Agency |
| DHA-TM | Defense Health Agency-Technical Manual |
| DHP | Defense Health Program |
| DMLSS-FM | Defense Medical Logistics Standard Support-Facilities Management |
| FSI | Facility Systems Inventory |
| ID | identification |
| MHS | Military Health System |
| MILDEP | Military Department |
| N/A | not applicable |
| PM | Preventive Maintenance |
| POC | point of contact |
| QA | Quality Assurance |
| QC | Quality Control |
| RPCS | Real Property Categorization System |
| RPIE | Real Property Installed Equipment |
| RPSS | Real Property System Standard |
| RPUID | Real Property Unique Identifier |

PART II. DEFINITIONS

building. A roofed and floored facility enclosed by exterior walls and consisting of one or more levels that is suitable for single or multiple functions and that protects human beings and their properties from direct harsh effects of weather such as rain, wind, sun, etc.

CATCODE. The most detailed level of classification for real property. Denotes a specific real property type and function in accordance with the current version of the RPCS and each MILDEP's specific documentation.

FAC. A grouping of real property assets that have a common unit of measure (UM) and equivalent cost based on the unit of measure (UM). Included in this equivalent cost are costs associated with real property construction, maintenance, sustainment, and repair. Within the DoD, a FAC is represented by a four-digit numerical code, as found in the current version of the RPCS.

facility. A building, structure, or linear structure whose footprint extends to an imaginary line surrounding a facility at a distance of 5 feet from the foundation that, barring specific direction to the contrary such as a utility privatization agreement, denotes what is included in the basic record for the facility (e.g., landscaping, sidewalks, utility connections). This imaginary line is commonly referred to as the “5-foot line.” A facility will have a RPUID received from the DoD and entered into a Service real property inventory system as a unique real property record.

FYDP. Program and financial plan for the DoD, as approved by the Secretary of Defense. The FYDP arrays cost data, manpower, and force structure over a 6-year period (force structure for an additional 3 years), portraying this data by major force program for DoD internal review for the program and budget review submission. It is also provided to Congress in conjunction with the President’s budget.

internal control. An integral component of an organization’s management that provides reasonable assurance that the following objectives are being achieved:

- Effectiveness and efficiency of operations.
- Reliability of financial reporting.
- Compliance with applicable laws and regulations.

Synonymous with management control, helps government program managers achieve desired results through effective stewardship of public resources.

International Organization for Standardization. An organization founded in 1946 to standardize measurements for international industrial, commercial, and scientific purposes.

real property. Land and improvements to land (e.g., buildings, structures, and linear structures (see facility)).

RPIE. An item of equipment that is affixed and built into a facility as an integral part of that facility. To qualify as RPIE, the equipment must be necessary to make the facility complete, and if removed, would destroy or severely reduce the designed usefulness and operation of the facility. RPIE costs are included as a funded initial construction or renovation cost. RPIE may be accounted for as a real property equipment asset record, but not as a separate facility record in the Real Property Information database. RPIE includes such items as control systems, heating, cooling, electrical, emergency lighting, etc.