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# Standard Practice for Uniform Data Management in Asset Management Records Systems<sup>1</sup>

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## INTRODUCTION

Consistent asset data is a key element of any asset management records system. Standardized data in an asset management records system provides useful information for management decision support and better enables successful asset management outcomes. The management processes described in this practice will provide the basis for uniform data management.

### 1. Scope

1.1 This practice is intended to be used for records of all types of assets.

1.2 This practice provides guidance on establishing and maintaining uniform asset data within an asset management records system.

1.3 See ASTM E2604, Standard Practice for Data Characteristics of Equipment Asset Record, for mandatory and optional data characteristics required in the creation of an asset record.

1.4 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

### 2. Referenced Documents

2.1 *ASTM Standards:*<sup>2</sup>

- E2135 Terminology for Property and Asset Management
- E2499 Practice for Classification of Asset Physical Location Information
- E2604 Practice for Data Characteristics of Equipment Asset Record

<sup>1</sup> This practice is under the jurisdiction of ASTM Committee E53 on Asset Management and is the direct responsibility of Subcommittee E53.02 on Data Management.

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<sup>2</sup> For referenced ASTM standards, visit the ASTM website, [www.astm.org](http://www.astm.org), or contact ASTM Customer Service at [service@astm.org](mailto:service@astm.org). For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

### 3. Terminology

3.1 *Definitions*—For definitions relating to asset and asset management, refer to Terminology E2135.

3.1.1 *asset identifier, n*—an alphanumeric character sequence that corresponds to a specific asset record in an asset management records system.

### 4. Significance and Use

4.1 Uniform asset management data is intended to provide a means of enabling accurate summary level information and reports to improve operational and strategic management capabilities at all phases of the asset lifecycle.

4.2 Entities should manage the asset management records system in accordance with this practice to maintain data consistency, integrity, and usability and thus achieve uniform data.

### 5. Usage

5.1 Individual asset records in an asset management records system shall be given a unique asset identifier.

5.2 Asset descriptive data shall be uniformly entered and formatted throughout an asset management records system. Spelling and use of spacing, abbreviation, punctuation, ampersands, and other special characters shall be consistently applied.

5.2.1 Descriptive data elements that represent common characteristics of multiple asset records shall be *consistently entered or formatted* to ensure that the information is presented in the same manner each time it is used. Examples of common data elements found in many asset management records systems include:

- 5.2.1.1 Description (noun name).
- 5.2.1.2 Owner.
- 5.2.1.3 Manufacturer.
- 5.2.1.4 Model number.

5.2.1.5 Part number.

5.2.1.6 Unit of measure (ensure acronyms are consistent and consistently used across the entire entity, if used at all, that is, EA for each; LT for lot; BX for box; etc.)

5.2.1.7 User.

5.2.1.8 Location.

(1) Uniform location information may be achieved by applying the principles of this practice to Practice **E2499**.

5.2.1.9 Dates (calendar date including day, month, and year in a system-wide, standardized format, that is, dd/mm/yyyy; mm/dd/yy; mm/dd/yyyy; dd/mm/yy, etc.).

5.2.1.10 Currency values (that is, USD \$, Euro €, etc., with or without trailing decimals, that is, \$15.00 versus \$15).

5.2.1.11 This practice may be applied to additional data elements as required by the entity.

5.2.2 Entities may allow free-format entry for data elements where:

5.2.2.1 The format and content of data values to be entered are highly variable, such as notes or comments or;

5.2.2.2 Consistent data is not required by the entity for a particular data element and maintaining standardization would incur a level of effort that does not provide value to the entity.

5.3 Designated system users should perform a system query to determine if a suitable data value exists prior to establishing a new value.

5.4 Entities should consider limiting the privileges for creating/editing data elements/values within their asset management records system to as few individuals as possible. This mitigates the opportunity for the creation of near-duplicate values.

5.5 Entities should manage the data elements within their asset management records system to ensure the data management principles described in this practice are applied.

5.6 When entities are using acronyms, ensure that they are consistently applied and commonly known to individuals within the entity.

## **6. Keywords**

6.1 asset; data; records; uniform data

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