



Standard Practice for Addressing and Reporting Loss, Damage, or Destruction of Tangible Property¹

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1. Scope

1.1 This practice focuses on addressing and reporting loss, damage, or destruction (LDD) of tangible property.

1.2 LDD events are key aspects of risk management. Projecting the possibility or probability of LDD, discovering, disclosing, reporting, managing, and minimizing LDD is a critical and economic factor in the success of the owning or holding entity. This practice also establishes acceptable levels of LDD.

1.3 LDD events are often discovered as a result of a physical inventory or other audit. An actual LDD event can occur at any time during the property life cycle.

1.4 LDD events resulting from natural disasters or other incidents beyond the control of an entity are not subject to the criteria in 1.7. Reporting LDD events is required.

1.5 Natural degradation or normal wear and tear are not considered LDD events and are not addressed in this practice (they may, however, be considered in establishing residual value).

1.6 Loss, damage, and destruction, while three completely different events, are addressed as one for the purposes of this practice.

1.7 This practice does not address situations where LDD is an expected outcome, for example, destructive testing.

1.8 Assessing pecuniary liability for loss, damage, or destruction is not addressed in this practice; such assessments are subject to law.

1.9 *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.*

¹ This practice is under the jurisdiction of ASTM Committee E53 on Property Management Systems and is the direct responsibility of Subcommittee E53.04 on Reutilization and Disposal.

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2. Referenced Documents

2.1 ASTM Standards:²

E2132 Practice for Physical Inventory of Durable, Moveable Property

E2135 Terminology for Property and Asset Management

E2279 Practice for Establishing the Guiding Principles of Property Management

E2378 Practice for the Recognition of Impaired or Retired Personal Property

E2608 Practice for Equipment Control Matrix (ECM)

3. Terminology

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

3.1.1 *book value, n*—the net amount at which an asset or liability is carried on the books of account. E2135

3.1.2 *custodial records, n*—memoranda in any form written or electronic that documents the life cycle of property. E2135

3.1.3 *fair value, n*—is the amount at which the asset (liability) could be bought (incurred) or sold (settled) in a current transaction between willing parties, that is, other than in a forced or liquidation sale. E2135

3.1.4 *tangible property, n*—property having physical existence and hence capable of being valued monetarily. Property other than intangible property. E2135

3.2 Definitions of Terms Specific to This Standard:

3.2.1 *acquisition cost, n*—the cost to buy goods, services, or assets, minus discounts and adding associated costs (except for taxes).

3.2.2 *entity, n*—an agency, company, or institution.

3.2.3 *normal wear and tear, n*—wear on a property item that takes place with normal or reasonable use for which the item is intended or provided.

² For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

3.2.4 *risk, n*—concept that denotes a potential negative impact.

3.2.5 *risk assessment, n*—determination of quantitative or qualitative value of risk related to a concrete situation and a recognized threat.

3.2.6 *risk management, n*—structured approach to managing uncertainty through risk assessment, developing strategies to manage it, and mitigation of risk using managerial resources.

3.2.7 *low risk property, n*—assets that are monitored and controlled at the discretion of asset managers and typically consists of low risk expendable or durable equipment and tooling valued under \$5000 excluding sensitive, controlled, serially managed, or mission essential property.

4. Summary

4.1 This practice has to do with addressing and reporting loss, damage, and destruction of tangible property.

5. Significance and Use

5.1 LDD is an indicator of the effectiveness of operations. Excessive LDD can indicate poor internal management and controls, policy or procedural weaknesses, or lack of compliance, any one of which can impact entity profitability, mission performance, or reputation.

5.2 Addressing and reporting LDD provides a guideline for action for decision makers.

5.3 Though the term *equipment* is used consistently throughout this practice, this process may be used for the other classes of property, for example, material.

6. Procedure

6.1 Entities adopting this practice must establish entity specific policies and procedures implementing this practice. These policies and procedures must be established in light of Practices **E2132**, **E2279**, **E2378**, and **E2608** and Terminology **E2135**.

6.2 Entity policies and procedures will be developed with special attention to Practice **E2608**. Practice **E2608** establishes *equipment control classes* (ECCs)—five classifications or groupings of equipment based on the consequences of the loss of control of the equipment:

6.2.1 *Equipment Control Class 1*—Consequence of loss of control is a societal safety/security impact, which is characterized by negative societal safety or security impact.

6.2.2 *Equipment Control Class 2*—Consequence of loss of control is a personal safety/security impact, which is characterized by negative personal safety or security impact that does not rise to the level of a societal safety or security impact.

6.2.3 *Equipment Control Class 3*—Consequence of loss of control is an operational impact, which is characterized by negative operational impact that does not rise to the level of a personal or societal safety or security impact.

6.2.4 *Equipment Control Class 4*—Consequence of loss of control is a compliance impact, which is characterized by negative compliance with applicable laws regulations or other relevant internal or external guidance that does not rise to the level of an operational impact.

6.2.5 *Equipment Control Class 5*—Consequence of loss of control is not discernible, which is characterized by having no visible or recognizable impact on the organization.

6.3 Entity policies and procedures will, in light of Practice **E2608**:

6.3.1 Establish specific guidelines for evaluating and measuring LDD,

6.3.2 Define when and how investigations are conducted,

6.3.3 Define when and how corrective action is appropriate and to be effected, and

6.3.4 Define the LDD reporting process.

7. Calculation of LDD Ratios

7.1 *Method 1*—Divide the annual (fiscal year) losses by the average amount of like property (ECC1, ECC2, etc., or as defined in entity procedures) on hand (annual losses/average amount of like property).

7.1.1 For example, if the average monthly amount during the fiscal year of ECC3 assets on hand is 10 000 line items at \$140 million, and losses for the same year equal 100 items at \$200 000, the loss ratio for ECC3 assets is 1 % line items and 0.14 % dollars.

7.2 *Method 2*—Calculate LDD at the end of a physical inventory by comparing physical inventory results with custodial records. Include this analysis as part of the inventory reconciliation process. This method can be applied to the various types of property inventoried, or to any one particular type or item of inventory (such as a particular line item of material).

8. Acceptable LDD Ratios

8.1 The following are firm criteria:

8.1.1 The acceptable LDD ratio for property in ECC1 is 0 %.

8.1.2 The acceptable LDD ratio for property in ECC2 is 0.5 % (dollar value or quantity).

8.1.3 The acceptable LDD ratio for property in ECC3 is 1 % (dollar value or quantity).

8.2 Entities must establish acceptable LDD ratios for ECC4 in accordance with applicable law, regulation or contractual guidance, otherwise 3 % (dollar value or quantity).

8.3 Entities may establish criteria more stringent than those shown in **8.1**. For example, for sensitive property, or other property regardless of dollar value.

9. Reporting LDD Events

9.1 Reporting LDD for tangible property in ECC1, ECC2, ECC3, or ECC4 is required. Entity policies and procedures must establish how, when, and in what timeframe for internal reporting for entity owned tangible property. Reporting of ECC5 property may be required if determined necessary by customer requirements, for example, a contractual requirement.

9.2 Entity policies and procedures must establish how, when, what format and in what timeframe for external reporting for equipment not owned by the entity.

9.3 Information to be considered for inclusion in LDD reports includes, but is not limited to:

9.3.1 Description of item(s) that were lost, damaged, or destroyed, along with identification number(s), based upon the custodial or property records (see Terminology **E2135**) (if available);

9.3.2 Whether the item(s) need to be or are able to be replaced or repaired;

9.3.3 Age of the item(s), if known, and the extent used;

9.3.4 Cost data. If actual cost data is unavailable, provide reasonable estimates;

9.3.4.1 Acquisition cost of the item(s).

9.3.4.2 Book value, if applicable.

9.3.4.3 Replacement cost of the item(s), at fair value, if replacement is indicated.

9.3.4.4 Repair cost of the item(s), if repair is indicated.

9.3.4.5 The fair value of the item(s).

9.3.4.6 Associated costs, such as damage to collocated/ adjacent items, the environment, etc.

9.3.5 Date and time of occurrence, probable cause, and actions taken;

9.3.6 Known interests in commingled property (when property not owned by the entity is involved);

9.3.7 Insurance considerations, if any, concerning the LDD;

9.3.8 Information to determine if the occurrence was or was not reasonably preventable as well as suggested actions, or actions taken, to prevent any future, similar occurrence;

9.3.9 Means by which the entity came into possession of property to which the entity did not have title, for example, a contractual document; and

9.3.10 Any other pertinent facts or extenuating circumstances relevant to determine liability and responsibility for repair or replacement.

10. Keywords

10.1 damage; destruction tangible property; LDD; loss

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