



Designation: E 2131 – 01

Standard Practice for Assessing Loss, Damage, or Destruction of Property¹

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1. Scope

1.1 This practice covers the assessment of loss, damage, and destruction (LDD) of property, assets, or material. LDD occurs when such property is found to be missing, damaged, or destroyed. Such discoveries often are made as a result of a physical inventory, an analysis of material used, or routine audits.

1.2 Some occurrences of damage and destruction are the result of natural disasters or other incidents beyond the control of the company, agency, or institution, and are not subject to the standards in paragraph 7. However, the reporting of such instances in accordance with paragraph 8 is still required.

1.3 Some occurrences of LDD are a result of natural degradation or other incidents of fair wear and tear and are not addressed as a part of this practice.

1.4 Loss, damage and destruction, while three completely different occurrences, are addressed as one in this standard. For the purpose of this standard, reporting and evaluating loss, damage and destruction are the same.

1.5 Loss, damage and destruction are key aspects of risk management. Projecting the possibility or probability of LDD, reporting and managing, and minimizing LDD is a critical and economic factor in the success of any endeavor.

2. Referenced Documents

2.1 Risk Matrix:

DLAD 5000.4, Chapter 7.1, Contract Property Management, May 2000

2.2 Risk Management:

The NPMA Standard Property Book, First Edition, July 1999

2.3 Material Management and Accounting System (MMAS):

242.72 and 252.242-7004 Department of Defense Federal Acquisition Regulation Supplement, January 1, 2000

3. Terminology

3.1 Definitions of Terms Specific to This Standard:

3.1.1 *agency*—governmental agency, regardless of level (federal, state, or local).

3.1.2 *company*—for-profit organization.

3.1.3 *institution*—not-for-profit, non-governmental organization.

3.1.4 *customer property*—property in the possession of an entity to which it does not have title, e.g., items received for servicing, repair or refurbishment, or items received for integration into a higher assembly. Customer property does not normally include assets under a lien, such as land, to which title should or could eventually pass to the entity.

3.1.5 *risk*—the chance of loss, or the possibility of loss, or the probability of loss or the uncertainty of loss, damage, destruction or theft that surrounds an asset.

NPMA Standard Property Book

3.1.6 *risk management*—understanding the underlying principles of risk, recognizing those instances where a risk exists and acting to control those risks based upon sound economic principles and practices. NPMA Standard Property Book

3.1.7 *high-risk property*—that property either regulated by law (e.g. pharmaceuticals, medical supplies, firearms and ammunition, hazardous materials/waste) or in any way is potentially dangerous to public health or security.

3.1.8 Risk degrees and factors:

3.1.8.1 *high risk*—significant, recurring LDD, immediate corrective action is required. More than a 5 % variance.

3.1.8.2 *medium risk*—significant LDD which does not recur, or recurrent LDD of low value, corrective action is required. A 2 % to 5 % variance.

3.1.8.3 *low risk*—isolated, low value instances of LDD, continued monitoring is recommended. Less than a 2 % variance.

DLAD 5000.4

4. Significance and Use

4.1 LDD analysis can be an indicator of the adequacy of the control and security exercised over the assets in the possession of or under the cognizance of a company, agency or institution.

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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Excessive LDD can indicate weaknesses in awareness of control processes, physical security, procedures, and the like.

4.2 LDD creates concerns regarding effectiveness and efficiency indicating a negative impact on profitability or mission. Excessive LDD increases risk, and indicates at least a potential, if not real, weakness in procedures processes, and control.

5. Procedure

5.1 Upon discovering or determining LDD (e.g., vehicle damage, theft, negligence, misuse of property), report it as soon as possible, but not longer than 24 hours after the occurrence. Report LDD to a cognizant functional area in the company or institution such as security.

5.2 If the situation warrants, investigate LDD and prepare a written report. Submit the report within 30 calendar days, when possible. If not all the facts have been established within 30 days, prepare an interim report and submit it to the cognizant functional area. (See Section 8.) A warranted situation should be determined in accordance with paragraph 5.4 and Section 7.

5.3 Investigate excessive LDD, analyze the cause(s), and implement corrective action. Factors affecting the investigation include, but are not limited to, the circumstances surrounding the LDD, the cost of repair or replacement, insurance considerations, necessary corrective actions, and any other factors that could affect a final disposition of the LDD.

5.4 Examine LDD in the light of the type(s) of property or assets under consideration. For example, the LDD of capitalized property may merit more scrutiny than that of inexpensive material required for production. Likewise, inexpensive but easily pilfered items may require more oversight than material, but less oversight than capital. Highly pilferable and expensive items, such as precious metal, may require more oversight than capitalized property.

5.5 For Government accounting and in accordance with Generally Accepted Accounting Principles losses or impairments must be recognized as they occur.

6. Calculation of LDD Ratios

6.1 *Method 1: Overall Picture*—Divide the annual (fiscal year) losses by the average amount of like property (capital, material, or customer-owned) on hand (annual losses/average amount of like property).

6.1.1 For example, if the average monthly amount during the fiscal year of capital 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 capital assets is 1 % line items and 0.14 % dollars.

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

7. Acceptable LDD Ratios

7.1 This is a firm criterion, indicating that exceeding the threshold is a cause for investigation:

7.1.1 The acceptable LDD ratio for non high-risk Agency, Institutional or Company owned property is 2 % (\$ or quantity.)

7.1.2 The acceptable LDD ratio for high-risk property is 0 %.

7.2 The following are intended as guidelines against which individual policies and procedures may be modeled.

7.2.1 *Customer-owned Property*—This property is in the custody of or otherwise under the control or under the cognizance of a supplier (see 3.1.4). Such a situation could be as simple as an automobile service center or dry cleaners, or as complex as a multi-company effort to repair a very sophisticated item. An example of standards set for just such a situation appear in DLAD 5000.4, which defines risk assessment criteria for defense contractor's property control systems (see 3.1). These criteria, while subjective, are useful for evaluating LDD. DLAD 5000.4 also defines risk assessment criteria for physical inventory results (see 3.1). Since LDD is most frequently discovered as a result of inventories, these criteria may well be applied to LDD standards. Another example is that of a Material Management and Accounting System (MMAS), under which a 95 % inventory accuracy is required for an acceptable MMAS (see 2.3).

7.2.2 *ABC Type Method*—This method is a Pareto analysis performed upon the property to determine value density in the inventory population. ABC does not stand for "Activity Based Costing" in this context.

7.2.2.1 The rule of thumb of the analysis is:

7.2.2.2 80 % of the value of the property will be concentrated in 20 % of the assets (the 80/20 rule).

7.2.2.3 The next 15 % (95 % of the total) of the value will be concentrated in another 35 % (55 % of the total) of the assets.

7.2.2.4 The last 5 % (100 % of the total) of the value will be in the remaining 45 % (100 % of the total) of the assets.

7.2.2.5 When the analysis is complete, 80 % of the value will be concentrated in items that cost more than a certain amount, e.g., \$100. Therefore, those items are assigned an "A" code. Likewise, items in the next 15 % of the distribution are assigned a "B" code. The remaining items are assigned a "C" code.

7.2.2.6 Theory and practice dictate spending more time and effort on the 80/20 rule, because that is where the greatest risk exists. For example, inventory ABC codes could be assigned as follows:

7.2.2.7 Inventory all "A" coded items 3 times per year.

7.2.2.8 Inventory all "B" coded items 2 times per year.

7.2.2.9 Inventory all "C" coded items 1 time per year.

7.2.2.10 Assign ABC codes to levels of effort dedicated to investigating the cause(s) of LDD. For example:

7.2.2.11 Investigate "A" coded items for not more than 4 hours or days or weeks.

7.2.2.12 Investigate "B" coded items for not more than 2 hours or days or weeks.

7.2.2.13 Do not investigate "C" coded items, simply report the loss and adjust the records.