

DATA ITEM DESCRIPTION

Title: Level of Repair Analysis (LORA) Report

Number: DI-SESS-81872

Approval: 20121024

AMSC Number: 9289

Limitation:

DTIC Applicable: No

GIDEP Applicable: No

Office of Primary Responsibility: TM

Applicable Forms:

Use/Relationship: The purpose of the LORA report is to document the results of the LORA program. This report documents and supports the contractor's conclusions, findings, and recommendations on the economic, noneconomic and operational impacts to the requiring authority concerning repair versus discard at failure; optimum repair levels; support equipment (which includes test program sets, built-in-test equipment, and test, measurement, and diagnostic equipment requirements); maintenance facility requirements; maintenance and supply support life cycle costs; spare parts provisioning; and specific design recommendations for each item undergoing the LORA.

- a. This Data Item Description (DID) contains the format and content preparation instructions for the LORA Report resulting from the work described by Activity 11.7 of TA-STD-0017, Product Support Analysis.
- b. This DID is applicable whenever a LORA is required.
- c. This DID is related to DI-SESS-81873, Level of Repair Analysis (LORA) Input Data.

Requirements:

1. Reference Documents. The applicable issue of documents cited herein, including their approval dates and dates of any applicable amendments, notices, and revisions, shall be cited in the current issue of the Department of Defense Index of Specifications and Standards (DODISS) at the time of the solicitation; or, for non DODISS-listed documents, as stated herein.

TA-STD-0017, Product Support Analysis
(Copies of this standard are available at TechAmerica©, 2500 Wilson Boulevard,
Arlington, VA 22201-309 3834; www.techamerica.org)

MIL-HDBK-502A (Appendix C), Acquisition Logistics

2. Format. The LORA report shall be in the contractor's format.
3. Contents. The LORA report shall include the following:
 - 3.1. A description of the system/equipment under analysis, including the breakdown structure of how the system was modeled.

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- 3.2. A discussion of similar systems and their maintenance concept which were compared against the system/equipment under analysis. This includes identification of specific items which have an established maintenance concept.
- 3.3. A discussion of the LORA performed which includes: the LORA model(s) used to perform the economic and sensitivity evaluations, including specific software and tool information; a description of the maintenance and support alternatives considered along with the associate support equipment; any assumptions made; and the operational scenario modeled.
- 3.4. A listing of the input data element titles and their corresponding values. This includes: identification of any values calculated or estimated along with explanation of the method used to establish these values; the standard values used and any deviation from these values; identification of the base year in which data elements related to cost have been adjusted or expressed; the rationale to support reliability and maintainability values used in the LORA; and the specific source(s) from which the values were obtained.
- 3.5. Summary of the results of the noneconomic and economic evaluations conducted.
- 3.6. A discussion of the noneconomic analysis performed. This shall include the affected maintenance level(s), support alternatives, or associated support equipment. Also, discuss any recommended repair or discard level decisions. Specifically, discuss the noneconomic factors which should be considered, or resulted in a different decision than the economic analysis determined at least cost.
- 3.7. The contractor's conclusions, including source, maintenance, and repair (SMR) codes, and level of repair or discard recommendations from each item undergoing LORA based on the evaluations conducted. Also include any recommendations for updating any maintenance and logistic support planning factors.
- 3.8. A detailed discussion of the sensitivity analysis performed. This discussion is intended to qualify the uncertainty of design characteristics by providing a measure of the validity of the LORA recommendations. The discussion includes:
 - a. Identification of the input data elements varied/analyzed during the sensitivity evaluations.
 - b. The rationale for the variance.
 - c. Numerical range over which the data element was varied and the rationale for that range.
 - d. The results obtained after executing the LORA model over this range.
 - e. The impacts on the most cost effective alternative.
- 3.9. A listing of formatted input records and the formatted model output reports.

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3.10. Identification of specific items which have established maintenance concepts that are to be used by the system/equipment under analysis.

3.11. A discussion of any recommendations to the equipment designer to incorporate the LORA decisions into the system/equipment.

4. End of DI-SESS-81872.