

PROPOSAL DATA ITEM DESCRIPTION (PDID)

PDID-TRMD RELIABILITY AND MAINTAINABILITY DATA

The Offeror shall include in his technical proposal a description of his approach to complying with the reliability and maintainability requirements as delineated in the product definition (purchase specification or catalog page) and other documents referenced in the pro-forma contract, and experience in meeting similar requirements. The description shall include the information contained in the following instructions.

INSTRUCTIONS:

1. Provide a summary of the reliability and maintainability (R&M) requirements in this solicitation and describe your recent experience in meeting similar requirements to those specified. Identify who in your organization will be responsible for performing the R&M requirements and provide their individual backgrounds.
2. Describe your approach to integrating R&M into the design and testing of the product. If your approach includes a system “refresh” as a means of complying with the quantitative R&M metrics in the solicitation, include a summary of your approach and why refresh is necessary to comply with the requirements.
3. Describe your proposed method and schedule for conducting the required R&M analyses and assessments, including operating system (OS)/software/firmware reliability and maintainability.
4. Describe your proposed method, facility and schedule for accomplishment of the required R&M tests.
5. Describe your proposed methods for failure reporting, failure analysis and prevention of future failures.
6. If the offered equipment contains circuit card assemblies, power supplies, semiconductors, or integrated circuits, describe your proposed method to accomplish environmental stress screening (ESS). If in non-compliance with the specification temperature range for ESS include a description of the temperature extremes the equipment will be tested to and your rationale for non-compliance.
7. Describe the R&M metrics that will be discussed during various design reviews, i.e. during the system requirement review, software specification review, preliminary design review, critical design review, etc.

8. FOR COMMERCIAL OFF THE SHELF (COTS) ITEMS. In addition to the above, if your proposal includes items you consider COTS you should:
- a. Identify those items you consider COTS in your offer.
 - b. Describe your use or your subcontractor's use of warranty and field failure data for any COTS items that support your product's reliability. Explain how this data is used to mitigate 'incipient failures' in the components on or within the COTS items. Identify the level of detail that your warranty or field failure data is retrieved in (i.e. system, equipment, subsystem, assembly, subassembly, etc.) and how you use that data to improve the reliability of your product.
 - c. Identify any reliability critical items and any life limitations of components contained within the COTS items. You should discuss any limitations with regard to changing technology that may cause obsolescence of components, maintenance procedures or test equipment. Discuss how your proposed refresh program will mitigate obsolescence.
 - d. Describe the logistic and maintenance concept under which the COTS items have been designed. These should include such features as built-in-test capability, line replaceable units, OS/software/firmware support and your approach to configuration management.