



DEPARTMENT OF THE ARMY
OFFICE OF THE ASSISTANT SECRETARY
RESEARCH DEVELOPMENT AND ACQUISITION
103 ARMY PENTAGON
WASHINGTON DC 20310-0103



REPLY TO
ATTENTION OF

15 FEB 1996

SARD-ZD

MEMORANDUM FOR COMMANDER, U. S. ARMY MATERIEL COMMAND,
5001 EISENHOWER AVENUE, ALEXANDRIA, VA
22333-0001
PROGRAM EXECUTIVE OFFICERS
PROGRAM MANAGERS

SUBJECT: Policy on Incorporating a Performance-Based Approach to
Reliability in Request for Proposals (RFPs)

Sound reliability requirements are important components of an RFP. This memorandum provides policy on reliability requirements in performance-based RFPs.

Reliability requirements should be included in RFPs by specifying:
(1) quantified reliability requirements and allowable uncertainties, (2) failure definitions and thresholds, (3) life-cycle usage conditions. Requirements for reliability predictions, reliability M&S, and reliability testing can be included to support the assessment of risk in achieving quantitative reliability requirements and to support the Program Manager's plan for risk management. RFPs should solicit adequate information for evaluating the source data, models, reasonableness of modeling assumptions, methods, results, risks and uncertainties. Requirements to use particular models or statistical test plans should not be specified in RFPs.

Failure definitions and life-cycle usage conditions are necessary to fully define the quantitative reliability requirements. The extent to which failures and usage conditions are defined should be determined on an acquisition-specific basis.

The best RFPs will directly specify performance-based reliability requirements and avoid citing any specification, standard or handbook. Language specifying "how to" design, manufacture or test for reliability is not to appear in RFPs. Use of any reliability specification, standard or handbook (military or not) in an RFP, even for guidance, requires a waiver using the existing waiver process for military specifications and standards. In particular, MIL HBK 217, Reliability Prediction of Electronic Equipment, is not to appear in an RFP as it has been shown to be unreliable and its use can lead to erroneous and misleading reliability predictions.

The Army Materiel Systems Analysis Activity will provide guidance to the field by April 15, 1996. Please work with AMSAA, the Army Standardization Improvement Executive's Executive Agent for Reliability and Maintainability Standardization Improvement, on the development and refinement of guidance to implement this policy.

Gilbert F. Decker
Assistant Secretary of the Army
(Research, Development and Acquisition)

CF:

Deputy Under Secretary of the Army, Rm 2E660
Principal Deputy for Acquisition, USAMC, Rm 1DN06
Director for Assessment and Evaluation, OASA(RDA), Rm 2E673
Director, U. S. Army Materiel Systems Analysis Activity