

DATA ITEM DESCRIPTION

Title: ASSESSMENT OF MANUFACTURING RISK AND READINESS

Number: DI-SESS-81974

Approval Date: 20150115

AMSC Number: F9511

Limitation: N/A

DTIC Applicable: No

GIDEP Applicable: No

Preparing Activity: 11 (AFRL/RXMS)

Project Number: SESS-2015-003

Applicable Forms: N/A

Use/relationship: The Assessment of Manufacturing Risk and Readiness report contains an identification of the Manufacturing Readiness Level (MRL) of program/system technologies, manufacturing risks associated with those technologies at the time of the assessment, and the strategy for mitigation of those risks.

- a. The Manufacturing Maturation Plan (MMP) identifies the steps and resources required to mitigate program/system manufacturing risks during development and implementation.
- b. This Data Item Description contains the format and content preparation instructions for the data product generated by the specific and discrete task requirement as delineated in the contract.

Requirements:

1. General. The Assessment of Manufacturing Risk and Readiness Report shall be in either an interim report or final report format as specified in the Contract Data Requirements List (CDRL).
2. Format. The contractor will determine the format for the Assessment of Manufacturing Risk and Readiness Report (text or annotated briefing). Format typically remains the same unless effective presentation would be degraded. The report shall be searchable with Microsoft[®] Office or Adobe[®] products.
3. Content. The Manufacturing Risk and Readiness Assessment report shall include:
 - a. Manufacturing Risk Assessment:
 - (1) A description of the technology, component, subsystem or system that was assessed; key objectives of the development, and discussion of the current state of the art
 - (2) A discussion of the companies responsible for the technologies that were assessed
 - (3) Assessment team members
 - (4) Dates and location(s) of development/production site visit(s)
 - (5) Description of the manufacturing processes on each subsystem, system, or the assessed technologies
 - (6) MRL ranking for each assessed technology based on MRL Criteria Matrix of nine MRL threads from www.dodmrl.com)

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- (7) Identification of manufacturing readiness shortfalls from target MRL including key factors/drivers
 - (8) The degree of potential risk that each poses to program success and the consequences of failure. [Note: A Failure Modes and Effects Criticality Analysis (FMECA) matrix is one possible method to identify program risks and consequences.] As a minimum, the risk assessment should include cost, schedule, and performance risk.
- b. Manufacturing Maturation Plan (MMP): Only if target maturity level is not reached
- (1) Assessment of potential solutions (options) and benefits/consequences of each option
 - (2) Preferred maturation plan with schedule (MRL timeline) and funding requirements
 - (3) Key milestones for each solution approach
 - (4) The latest that an alternative approach can be taken (technology insertion date)
 - (5) Funding status to implement MMP
 - (6) Required actions (what will be done, by whom, and by when)
 - (7) Prototype or manufacturing qualification article requirements/required tests
 - (8) Description of test environment relationship to manufacturing environment
 - (9) Threshold performance requirements.
4. End of DI-SESS-81974