

Mission Need Statement

DOE G 413.3-17

Project Management Programs

December 2022

DOE G 413.3-17 – cont'd

- Purpose
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- Mission Need Statement

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Project Management Document Hierarchy

Agency/DOE Policy/Guidance

Federal/National Level Policy/Guidance

OMB Circular A-11: Part 7

Capital Programming Guide: References EIA-748 for EVMS Requirements

FAR Part 34: Major System Acquisition

General Describes Acquisition Policy and Procedures to OMB Circular A-109 and OMB A-11

FAR Part 34.2: Earned Value Management System

Describes policies and procedures for EVMS in major acquisitions defined in OMB A-11, Part 7

FAR Part 52.234-4: Earned Value Management System

Establishes compliance the Earned Value requirements of EIA-748

SAE International EIA 748™

Earned Value Management System

DOE EM Program Management Protocol

DOE-PM-SOP- Current Version

PM EVMS ECRSOP Compliance Assessment Guide

DOE 413.3B Current Version

Program and Project Management for the Acquisition of Capital Assets

DOE 413.3-1

Managing Design and Construction Using Systems Engineering

DOE 413.3-5A

Performance Baseline

DOE 413.3-7A

Risk Management

DOE G 413.3.9A

Project Reviews for Capital Asset Projects

DOE 413.3-10.B

Integrated Project Management Using the EVMS

DOE 413.3-12

Project Definition Rating Index

DOE 413.3-15A

Project Execution Plans

DOE 413.3-18A

Integrated Project Team Guide for formation and implementation

DOE 413.3-20

Change Control Management

DOE 413.3-21A

Cost Estimating Guide

Field Office/TOC Contract/ Contractor Policy/Guidance

Tank Operations Contract - DE-AC27-08RV14800
Performance-Based Cost-Plus-Award Fee Contract

TFC-PLN-84
Tank Operations Contract Project Execution Management Plan

TFC-PLN-147
TOC Project Controls System Description

RPP-PLAN-62858
TOC Project Execution Plan for TSCR, Tank Farm Upgrades, and Waste Feed Delivery

Tank Operations Contract

PURPOSE.

This Guide **provides authors of mission need statements**, as identified in DOE O 413.3, Program and Project Management for the Acquisition of Capital Assets, dated 7-28-06 **with suggested content, definitions, and examples for writing a clear statement** to support an acquisition executive's decision to initiate exploration of options to fulfill a capability gap, which may include a capital asset acquisition.

SCOPE.

- a. **A mission need statement is the primary document supporting the acquisition executive's decision** to initiate exploration of options to fulfill a capability gap including but not limited to acquisition of a new capital asset.
- b. Mission need statement development occurs during the project initiation phase **when a program identifies a capability gap** between its current capabilities and capacities and those required to achieve the goals articulated in its strategic plan and/or in the DOE Target Enterprise Architecture for capital asset projects. A **mission need statement is the translation of this gap into a high level requirement** that can only be met through material means. Mission need statements summarize the analytical process used by programs to evaluate and define the need.
- c. While **all projects over \$5M are required to have a defined and approved mission need**, DOE O 413.3 requires a mission need statement when the expected cost of a project will exceed \$20M.

MISSION NEED STATEMENT.

- a. The mission need statement document **identifies a capability gap between the current state of the program's mission and the mission plan**. It is the first step in the identification and execution of a DOE project.
- b. The **Critical Decision process starts with identification and approval of a mission need** and continues through project baseline development, definitive design, construction and closeout.
- c. The **mission need statement is NOT an engineering study or a proposed solution** to a capability gap in the mission. However, it is anticipated that before a mission need statement is submitted, **pre-conceptual level engineering/technical analyses would be developed to:**
 - 1) **explore the scope of the gap**
 - 2) **identify potential hazards** and their safety, security and risk implications
 - 3) **identify rough order of magnitude range estimates** (-50 percent to +100 percent, for example) of project cost and schedule based on the upper bound of the rough order of magnitude estimate.

- d. This initial **rough order of magnitude range estimate is only to provide decision-makers a frame of reference** relative to potential future resources and schedules the project could entail. These initial rough order of magnitude range estimates of project cost and schedule **are not the preliminary cost and schedule estimates** of the project since no particular capital asset alternative has been selected. **Nor are the rough order of magnitude range estimates budget quality data** since they are likely to change as the program develops more detailed project requirements. Therefore, **no judgment regarding project performance relative to the rough order of magnitude range estimates should be made.**
- e. **If the initial rough order of magnitude range estimate of project cost exceeds \$750M**, or if an environmental cleanup project exceeds \$1B (resulting in a potential major system project), **a mission validation independent project review is conducted** in conjunction with the development of the mission need statement as required by DOE O 413.3.
- f. Pre-conceptual **analyses and independent project reviews should be** referenced and **readily available as supporting data to the mission need statement.**

SUGGESTED MISSION NEED STATEMENT CONTENT. The suggested length for a mission need statement is no more than 15 pages and its content should include:

a. Title Page.

- (1) mission need statement title
- (2) designation as a major or non-major acquisition project
- (3) submission date
- (4) originator, including organization and phone number
- (5) approving official's name and signature

b. Statement of Mission Need.

Provide a clear and concise paragraph (a few sentences) that lays out the essential **summary of the mission need**. The section of the mission need statement dedicated to defining the capability gap should **describe the gap between the current state of the program's mission and the mission plan.**

c. Alignment.

- (1) **Describe how the stated mission need fits into the overall strategy** for accomplishing or advancing both the Department's and the program's strategic plan and mission.
- (2) **Describe the priority of fulfilling the mission need** relative to other programs and projects within the program office and Department and relative to other project/programs at the site, installation, laboratory, etc.
- (3) **Cite internal or external drivers for this mission need** (e.g., legal ruling, statute, regulation, international agreement, earmark, or Presidential, Congressional, or Secretarial direction/priority).

d. Capability Gap.

- (1) **Clearly describe the gap or shortcomings** the mission need statement is addressing in terms of an operational or functional performance capability, technological opportunity, or service.
- (2) **The mission need statement is a description of the mission as defined by a desired end-point**, not a contract statement of work. Therefore **descriptions of the capability gap in terms of** a construction of a physical system, decontamination and decommissioning, environmental restoration, procurement of a piece of equipment, construction of a facility, or other **specific material end item are not appropriate for a mission need statement.**

- 3) **The mission need statement should include the following.**
- a) **Explain how the effort to create the intended capability could be confirmed** (e.g., output, production level, quality level, waste shipments, buildings decontamination and decommissioning), and whether this need will evolve over time.
 - b) **Summarize why facilities, equipment, or services currently existing** or being acquired within the Department, other government agencies, public organizations, private entities, or international bodies **are not sufficient to address the gap.**
 - c) **Describe benefits that may accrue from closing the capability gap** (more efficient operations, increased safety, lower operational costs, or other savings).
 - d) **Discuss the strategic risk** to the overall mission of DOE of not filling the capability gap.
 - e) **Describe the impact on the program's ability to perform its mission if the capability shortfall is not resolved,** including the timeframe when this impact would occur.

- f) Describe the impacts to safety, health, environment, security, capacity, operations, maintenance, cost, productivity, efficiency, or other factors as appropriate if the capability shortfall is not resolved.
- g) Identify any high-level interdependencies (within or external to the program) with other mission needs or capabilities that may be impacted or may benefit from addressing this mission need. These include: interfaces with existing and planned acquisitions; requirements for compatibility with existing or future systems; or cooperative opportunities, such as a program addressing a similar need at another Department component.

e. Approach.

- 1) **Briefly describe what has been considered or what will be analyzed as potential strategies to meet the new mission need.** This should include a description of ongoing studies, a listing of potential technical or regulatory alternatives, or study approach (e.g. engineering studies, pilot scale projects). **A detailed alternative analysis will be conducted in support of Critical Decision-1; therefore, this section should summarize the planned approach to conducting this analysis.**
- 2) **Identify the mission-level assumptions** that may be necessary to complete the project and mission.
- 3) **Briefly describe** the functional, technical, operational, staffing, regulatory, safety, or financial **constraints that could apply** to the exploration and acceptance of potential solutions to satisfying the mission need.
- 4) **Describe, in general terms, any nuclear safety or safeguards and security issues that will need to be considered to address the mission need.** This discussion should also present all safety considerations that have been taken into account in developing the mission need in accordance with Section 3.1 of DOE Standard 1189, Integration of Safety Into the Design Process, dated March 2008. The mission need statement should communicate the expectations for the execution of safety activities during the design process.

e. Resource and Schedule Forecast.

- 1) **Provide a rough order of magnitude estimate of the project cost and schedule ranges** to acquire various capability alternatives which address the stated mission need.
- 2) To the extent possible, **identify the estimated dates** (fiscal year only) for meeting subsequent Critical Decisions.
- 3) To support programmatic strategic planning efforts and budget requests for the five-year planning period, **identify the currently projected rough order of magnitude resource planning funding profile with a breakout of project engineering and design funds**, and an explanation of funding needs to proceed from Critical Decision-0 to Critical Decision-1. This projection **should be based on the high end of the rough order of magnitude estimate** for the project to provide an upper bound estimate for the project.

5) MISSION NEED STATEMENT APPROVAL PROCESS.

- a. DOE O 413.3 requires that the Office of Program Analysis and Evaluation within the Office of the Chief Financial Officer review and provide a recommendation regarding approval for mission need statements when the expected cost of a project will exceed \$100M.
- b. To initiate the review, the program Secretarial Officer/Deputy Administrator or an appropriate Federal Headquarters program manager, as designated in writing by the program Secretarial Officer/Deputy Administrator to Program Analysis and Evaluation, submits the mission need statement to the Director of Program Analysis and Evaluation with a copy to the Energy Systems Acquisition Advisory Board Secretariat.
- c. The submittal of the mission need statement to the Program Analysis and Evaluation Director signifies that the Federal program managers responsible for the proposed project endorse the mission need.
- d. The program Secretarial Officer/Deputy Administrator may also submit draft mission need statements to Program Analysis and Evaluation prior to the official submission for informal review and developmental assistance.
- e. All other mission need statements where the expected cost of a project to acquire a capital asset will not exceed \$100M are submitted to the program Secretarial Officer/Deputy Administrator for approval determination.