DATA ITEM DESCRIPTION

TITLE: TRAINING SITUATION DOCUMENT
Number: DI-SESS-81517C **Approval Date: 20130524**
AMSC Number: N9379 **Limitation: N/A**
DTIC Applicable: N/A **GIDEP Applicable: N/A**
Office of Primary Responsibility: AS/PMA205/PMS339

Applicable Forms: None

Use/relationship: The Training Situation Document will be used to verify the efficiency of a training system to meet existing training needs and to survey training programs and technologies for applicability to new training needs.

a. This Data Item Description (DID) contains the preparation instructions for the content and format of the Training Situation Document.

b. This DID contains the format, content, and intended use information for the data product resulting from the performance requirements described by 3.2.1 of MIL-PRF-29612B, and is applicable to the acquisition of training data products. Data product performance evaluation criteria are specified in 4.3.1 of MIL-PRF-29612B.

c. It is not intended that all the requirements contained herein be applied to every program or program phase. Portions of this DID are subject to deletion tailoring depending upon the program phase in which it is applied in the contract. Any individual data requirement contained in this DID is subject to deletion tailoring.

d. This DID supersedes DI-SESS-81517B.

Requirements:

1. Format. The contractor format is acceptable. Standard digital data, when specified, must be in compliance with the content and format requirements specified in the DoD Data Architecture (DDA) and the Defense Data Dictionary System (DDDS).

2. Content. The Training Situation Document shall contain the following:

2.1 Front matter. The content of front matter shall be in accordance with Appendix A of MIL-PRF-29612B.

2.2 Part 1: Training situation requirements analysis data. This data shall provide a description of the analysis performed to verify the efficiency of the training system to meet existing training needs and to survey training programs for applicability to new training needs and shall include:.

2.2.1 Study background. The study background data shall include the following:
a. Reason for doing the study.
b. Principal result.
c. Main assumptions.

d. Major restrictions.
e. Scope of study.
f. Study objectives.
g. Basic methodological approach.
h. Study sponsor.
i. Study proponents.
j. Agency performing the study.
k. Data sources.

2.2.2 Introduction. The introduction shall contain an overview of the purpose and expected application of the data and the results compiled from this analysis. It shall describe how training capabilities and system requirements identified from this analysis will influence the eventual design, development, and operation of the training system.

2.2.3 Existing situation. The existing situation data shall include the following:

a. Training program mission statement.
b. A description of the historical background of the existing training situation.
c. An organization chart of all command relationships from the Chiefs of Staff level down to the subject training unit. (The purpose of this chart is to show where the command "fits" in the total organizational scheme.) An additional organization chart shall identify all unit departments, base commands, and other supporting commands or agencies involved in directing or supporting training roles. A brief description of the major roles and responsibilities of each identified command, agency, and office identifier shall be presented. In addition, specify the commands that use or rely on instructional materials developed and primarily used by the training unit. Also include a list of type(s) of training materials used by each identified command for ongoing training.
d. Manning and personnel authorization documentation.
e. A general description of existing curriculum for each training phase or course to include:
    (1) Major goals, content, length, and integration into curriculum.
    (2) Each phase with subsections describing academic, synthetic, operational equipment, and practical job training instructional units.
    (3) Performance measurement methods and applications.
    (4) Feedback and evaluation procedures.
f. Data relating to student population as follows:
    (1) Entry level requirements and noted exceptions.
    (2) Personnel qualification standard.
    (3) Pipeline source(s).
    (4) Attrition rates.
    (5) Current class size and range of anticipated size.
    (6) Prerequisite deficiencies to include learning deficiencies or problem levels including reading readiness, academic background, and aptitude.
g. A description of training equipment and materials presently used in the program of instruction. The description shall include the following:
    (1) Training simulators to include types, locations, numbers, capability assessment, deficiencies and planned modifications, and procurement.

(2) Operational equipment to include types, number available, utilization rates, and availability.
(3) Major weapon systems to include availability in terms of training requirements and schedules.
(4) Instructional media to include types, count, capability, configuration, reliability, and maintainability.
(5) Instructional materials to include types, subject content, authoring language, capability, authoring systems, version, and adequacy in terms of curriculum requirements.
(6) Media support capabilities to include facilities and maintenance in terms of specific categories of media.
(7) Command support to include photography, printing, graphics, quality, timeliness, coordination requirements, and funding requirements.
(8) Related task identifier for each item.

h. A brief description of each facility presently used for the conduct of training programs at all sites. The description shall contain the following information for each facility:
(1) The demand (use) for a specific facility.
(2) The condition of that facility. Illustrations, both interior and exterior, shall be included if available.
(3) The optimal condition of the facility in order to adequately accommodate the current and anticipated demand (e.g., human factors and adherence to safety, fire, and environmental regulations).
(4) Facility improvements required to meet the optimal condition.
(5) Training ranges to include types, capabilities, utilization, and planned modifications.
i. A description of financial support including the sources and types of money and authorizations used in the operation of the organization.
j. A description of any future development anticipated.
k. A description of environmental considerations for training equipment currently used.

2.2.4 Situation analysis. The situation analysis shall provide the results of an in-depth analysis of the situation(s) which affect the ability of the organization to perform its mission. The situation analysis shall include:

2.2.4.1 Situation statement. The situation statement shall describe single or multiple situations/events/occurrences which are having either positive or negative effects upon the ability of the organization to perform its mission. The situation statement shall also include a lessons learned narrative.

2.2.4.2 Impact statements. The impact statements shall include a full description of the specific resource deficiencies/excesses caused by the situation, and their impacts on mission performance. (It is possible that one situation may impact one or more of the following resources or that multiple situations may affect only one of the following resources.) The impact statements shall identify those resource areas that have been affected by the situation and shall include the following:

a. Personnel (e.g., military, civilian, contractor) to include:
   (1) Instructors.
   (2) Administrative personnel.
   (3) Support personnel (e.g., operation, maintenance).
   (4) Students.
b. Training equipment.
c. Facilities to include:
   (1) Instructional.
   (2) Administrative.
   (3) Support.
d. Training material.
e. Specific mission impacts.

2.2.4.3 Analytical methods and procedures. This data shall provide a description of the methods, procedures, data compilation, and analytical tools used to accomplish this analysis and derive the system requirements for the training system. It shall contain detailed flow diagrams of the process and describe each discrete event/step of the process. Any assumptions made during the course of the analytical process shall be described and rationale shall be provided.

2.2.4.4 Literature review. This data shall include the findings of any literature reviews related to the situation, impacts, alternatives, and recommendations.

2.2.4.5 Information sources and data collection. This data shall include a description of all information sources and data collected during the course of this analysis. It shall include all locations, organizations, and personnel contacted and used as information sources. It shall also describe the objective, utilization, and expected result for each informational event.

2.2.4.6 Solutions and alternatives. The solutions and alternatives data shall describe those alternatives which can realistically reduce or resolve the impact(s) upon the ability of an organization to perform its mission. Each alternative shall be described in terms of what has to be done to reduce or resolve the deficiency, what resources are needed, their predicted effectiveness, their associated life cycle costs, and the time to complete implementation of the alternative. The alternative(s) shall consider those instances where a resource is affected by more than one situation. (For example, if there are two distinct situations which affect the organization's instructor personnel, it is possible that one alternative may resolve both situations.) The solutions and alternatives shall include functional diagrams and descriptions of the hierarchy of requirements and show the relationship between program, system, and training requirements at all levels.

2.2.4.7 Recommendations. The recommendations shall identify the alternative selected as being most efficient and cost-effective. Cost data shall include any savings in resources that will result from adopting the recommendations. Each recommendation shall include the following:

a. A description and depiction of the organizational, support, and training concept(s) recommended for the training system under consideration. It shall describe the relationships among these concepts, functional capabilities, characteristics of training devices and media, and system requirements. It shall include block and flow diagrams for clarification. It

shall describe system level requirements for the chosen training system conceptual design.

b. Justification for selecting that recommendation.

c. A description of resources required to implement the recommendation to include:
   (1) Personnel quantity and type.
   (2) Funding amount and type.
   (3) Other applicable resources.
   (4) Return On Investment (ROI).

d. Milestones for implementing the recommendations.

e. The name of the principal action agency responsible for the recommendation.

f. The names of the agencies responsible for providing support to the principal action agency.

g. A description of the ramifications of not implementing the recommended alternative.

2.2.4.8 Summary. This data shall include a summary of all recommendations. It shall include brief statements highlighting each of the items described in the recommendations. A plan of action and milestones for the recommendations shall be included.

2.2.4.9 Appendices. The appendices contain supporting data and detail necessary to complement information provided in the existing situation. Appendices shall include detailed information on the subjects listed below:

a. Appendix A - Detailed Course Summaries, shall describe the courses in the existing training program. Provides statistical data, summary tables, and comparisons for courses and qualification levels and types of training provided.

b. Appendix B - System Requirements Document, shall specify program, system, and training requirements; operational limiting factors; and design constraints for the training system. This appendix shall include requirements for trainee throughput, surge, entry and qualification levels, performance, evaluation, and management. Also required are specific subsystem requirements for the training system to include design requirements for compliance with High Level Architecture (HLA).

2.3 Part 2: Training technology assessment data. The training technology assessment data contains information on technology used to provide training for existing systems which are similar to an emerging system for which training must be developed. It also provides an assessment of the training technologies in areas relevant to the training requirements for the emerging system and shall include the following:

2.3.1 Similar system analysis. The similar systems analysis shall include the results, assessments, and recommendations made from this analysis for each training program under consideration. It shall also include a matrix and description that compares training programs and depicts similarities and differences among programs for selected training features (e.g., simulators, computer-based instruction).

2.3.2 Associated training. The associated training data shall identify all major training programs similar to the training program under development.

2.3.3 Associated training equipment. The associated training equipment data shall contain a list of all major training equipment that supports training of personnel for each similar system. For each piece of training equipment listed, the following information shall be provided:

a. National Stock Number (NSN), serial number, nomenclature, part number(s), device designation, model number, manufacturer's name and Contractor and Government Entity (CAGE) code, date of manufacture, and procuring agency.

b. A description of missions, mission segments, and tasks or systems, subsystems, and tasks taught using the training equipment.
c. A list of learning objectives taught using the training equipment, along with evaluations of training effectiveness for each.
d. A description of simulation features and their assessed training effectiveness.
e. A description of instructional features and their assessed value to instructional processes.
f. A description of performance measurement capability.
g. Initial and life cycle cost amount.
h. A list of Engineering Change Proposals (ECPs) and their effective dates.
i. A list of facility requirements.
j. Availability, reliability, and maintainability figures.
k. A description of known problem areas, including constraints, design problems and utilization problems (e.g., human factors, adherence to safety, fire, and environmental regulations).
l. A description of indicated improvements or modifications.
m. Utilization in terms of hours or number of events per week or month.
n. A description of problem or scenario control capabilities.
o. A description of personnel and technical support requirements.

2.3.4 Commonality analysis. The commonality analysis data shall contain a description of the results of the commonality analysis performed on the training equipment identified and characterized in the associated training equipment listed above. This information shall include:

a. The optimal number and mix of training equipment required to support the training under study.
b. A description of the optimal simulation features for each type of equipment.
c. A description of the optimal instructional features for each type of equipment.
d. A description of common features, which fail to support training, as well as common causes for failure.
e. An estimate of criticality for each feature for each type of equipment.

2.3.5 State-of-the-art assessment. The state-of-the-art assessment data addresses the training program(s) under consideration. It shall include separate descriptions for results, assessments, and recommendations in the areas of training concepts, methods, techniques, technology, and system evaluation. It shall address the instructional and evaluative attributes of each area. It shall describe alternative and optimum

combinations of training concepts, methods, techniques, and technologies with rationale for the training system under consideration. Results of the assessment presented shall include the following:

a. Identification of features or technology which will upgrade training in areas where existing features are deficient.
b. Identification of new features which will expand training capability.
c. Identification of relevant features under development which could potentially be applicable to the evolving training program.
d. An estimate of criticality for each feature for each type of equipment.
e. An ROI.

2.3.6 Simulation and instructional features. The simulation and instructional features data shall provide summary information on simulation and instructional features identified in commonality and state-of-the-art assessment data referred to above.

2.4. Part 3: Business Case Analysis (BCA). The BCA should be structured methodology and document that aids decision by making the identifying and comparing alternatives by examining the mission and business impacts (both financial and non financial), risks and sensitivities.

2.4.1 Purpose. The BCA should provide the background, people, roles and responsibilities and data management involvement in creating the product. The process should provide the method of preparing the product, including research, data analysis and delivery.

2.4.1 Structure. There should be at least three major elements to include: purpose, process components and quality foundation.

a. Purpose
   (1) Problem Statement
   (2) Objectives
   (3) Desired Outcomes
   (4) Requirements
   (5) Metrics

b. Process Components
   (1) Executive Summary
   (2) Introduction
   (3) Desired Outcomes and Requirements
   (4) Assumptions and Methods
   (5) Alternatives
   (6) Mission and Business Impacts
   (7) Risk Analysis and Mitigation Plans
   (8) Sensitivity Analysis
   (9) Conclusion
   (10) Recommendations
   (11) Implementation Plan

c. Quality Foundation
   (1) Governance
   (2) Research
   (3) Data Management
   (4) Due Diligence

3. Standard digital data. Standard digital data shall be delivered for the Standard Data Elements (SDEs).

4. End of: DI-SESS-81517C.